# Men's 400m Hurdles Touchdown Times - by athlete

**LAST UPDATE: 15-Nov-23**

| Abdalmujied, Amor Ebed (QAT) (200 | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B FINAL** - 2021 Doha Diamond League (Doha, QAT) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 28-May-21 | time | 6.10 | 9.93 | 14.00 | 18.20 | 22.53 | 24.5 | 26.97 | 31.70 | 36.37 | 41.17 | 45.97 | | 51.40 | 3 / 3 | | | |
| reaction time | 0.168 | interval | | 3.83 | 4.07 | 4.20 | 4.33 | | 4.44 | 4.73 | 4.67 | 4.80 | 4.80 | 5.43 | PB | | 12.10 | 13.50 | 14.27 |
| | | velocity | 7.38 | 9.14 | 8.60 | 8.33 | 8.08 | 8.16 | 7.88 | 7.40 | 7.49 | 7.29 | 7.29 | 7.37 | 7.78 | | 8.68 | 7.78 | 7.36 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | | 15 | 15 | 15 | 18.7 | 155.7 | | | | |

| Abe, Takatoshi (JPN) (1991) | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Japanese National Championships (Osaka, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | |
| date | 26-Jun-21 | time | 5.93 | 9.57 | 13.36 | 17.15 | 21.02 | | 25.04 | 29.33 | 33.77 | 38.40 | 43.21 | | 48.87 | 5 / 2 | | | |
| reaction time | 0.173 | interval | | 3.64 | 3.79 | 3.79 | 3.87 | | 4.02 | 4.29 | 4.44 | 4.63 | 4.81 | 5.66 | | | 11.22 | 12.18 | 13.88 |
| | | velocity | 7.59 | 9.62 | 9.23 | 9.23 | 9.04 | | 8.71 | 8.16 | 7.88 | 7.56 | 7.28 | 7.07 | 8.18 | | 9.36 | 8.62 | 7.56 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |
| **FINAL** - 2021 Ready Steady Tokyo (Tokyo, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | |
| date | 09-May-21 | time | 5.96 | 9.61 | 13.36 | 17.25 | 21.25 | | 25.48 | 29.96 | 34.47 | 39.14 | 43.94 | | 49.45 | 5 / 4 | | | |
| reaction time | 0.164 | interval | | 3.65 | 3.75 | 3.89 | 4.00 | | 4.23 | 4.48 | 4.51 | 4.67 | 4.80 | 5.51 | | | 11.29 | 12.71 | 13.98 |
| | | velocity | 7.55 | 9.59 | 9.33 | 9.00 | 8.75 | | 8.27 | 7.81 | 7.76 | 7.49 | 7.29 | 7.26 | 8.09 | | 9.30 | 8.26 | 7.51 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |
| **FINAL** - 2021 Shizuoka International Athletics Meeting (Fukuroi, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | |
| date | 03-May-21 | time | 6.02 | 9.66 | 13.46 | 17.33 | 21.29 | | 25.49 | 29.85 | 34.40 | 39.16 | 44.09 | | 50.35 | 4 / 3 | | | |
| reaction time | 0.166 | interval | | 3.64 | 3.80 | 3.87 | 3.96 | | 4.20 | 4.36 | 4.55 | 4.76 | 4.93 | 6.26 | | | 11.31 | 12.52 | 14.24 |
| | | velocity | 7.48 | 9.62 | 9.21 | 9.04 | 8.84 | | 8.33 | 8.03 | 7.69 | 7.35 | 7.10 | 6.39 | 7.94 | | 9.28 | 8.39 | 7.37 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 19.2 | 165.2 | | | | |
| **FINAL** - 2020 Japanese National Championships (Niigata, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |
| date | 02-Oct-20 | time | 6.01 | 9.59 | 13.35 | 17.17 | 21.10 | | 25.28 | 29.68 | 34.23 | 39.01 | 43.94 | | 49.73 | 5 / 1 | | | |
| reaction time | 0.170 | interval | | 3.58 | 3.76 | 3.82 | 3.93 | | 4.18 | 4.40 | 4.55 | 4.78 | 4.93 | 5.79 | | | 11.16 | 12.51 | 14.26 |
| | | velocity | 7.49 | 9.78 | 9.31 | 9.16 | 8.91 | | 8.37 | 7.95 | 7.69 | 7.32 | 7.10 | 6.91 | 8.04 | | 9.41 | 8.39 | 7.36 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 19 | 163 | | | | |
| **FINAL** - 2020 All Japan Corporate Championships (Kumagaya, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |
| date | 20-Sep-20 | time | 6.04 | 9.71 | 13.48 | 17.32 | 21.25 | | 25.34 | 29.73 | 34.23 | 38.92 | 43.69 | | 49.38 | 6 / 1 | | | |
| reaction time | 0.196 | interval | | 3.67 | 3.77 | 3.84 | 3.93 | | 4.09 | 4.39 | 4.50 | 4.69 | 4.77 | 5.69 | | | 11.28 | 12.41 | 13.96 |
| | | velocity | 7.45 | 9.54 | 9.28 | 9.11 | 8.91 | | 8.56 | 7.97 | 7.78 | 7.46 | 7.34 | 7.03 | 8.10 | | 9.31 | 8.46 | 7.52 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |
| **FINAL** - 2020 Seiko Golden Grand Prix (Tokyo, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |
| date | 23-Aug-20 | time | 5.96 | 9.64 | 13.36 | 17.20 | 21.12 | | 25.23 | 29.58 | 34.08 | 38.79 | 43.66 | | 49.31 | 6 / 1 | | | |
| reaction time | 0.150 | interval | | 3.68 | 3.72 | 3.84 | 3.92 | | 4.11 | 4.35 | 4.50 | 4.71 | 4.87 | 5.65 | | | 11.24 | 12.38 | 14.08 |
| | | velocity | 7.55 | 9.51 | 9.41 | 9.11 | 8.93 | | 8.52 | 8.05 | 7.78 | 7.43 | 7.19 | 7.08 | 8.11 | | 9.34 | 8.48 | 7.46 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |
| **Semi-Final 3** - 2019 IAAF World Championships (Doha, QAT) | | | | | | | | | | | | | | | | *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships* | | | |
| date | 28-Sep-19 | time | 5.90 | 9.63 | 13.42 | 17.28 | 21.31 | | 25.44 | 29.82 | 34.30 | 38.88 | 43.53 | | 48.97 | 4 / 3 | | | |
| reaction time | 0.161 | interval | | 3.73 | 3.79 | 3.86 | 4.03 | | 4.13 | 4.38 | 4.48 | 4.58 | 4.65 | 5.44 | | | 11.38 | 12.54 | 13.71 |
| | | velocity | 7.63 | 9.38 | 9.23 | 9.07 | 8.68 | | 8.47 | 7.99 | 7.81 | 7.64 | 7.53 | 7.35 | 8.17 | | 9.23 | 8.37 | 7.66 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |
| **FINAL** - 2019 Müller Grand Prix (Birmingham, GBR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2019 year end hurdle report* | | | |
| date | 18-Aug-19 | time | 5.96 | 9.72 | 13.56 | 17.44 | 21.44 | 23.2 | 25.52 | 29.96 | 34.68 | 39.48 | 44.48 | | 50.36 | 2 / 6 | | | |
| reaction time | 0.148 | interval | | 3.76 | 3.84 | 3.88 | 4.00 | | 4.08 | 4.44 | 4.72 | 4.80 | 5.00 | 5.88 | | | 11.48 | 12.52 | 14.52 |
| | | velocity | 7.55 | 9.31 | 9.11 | 9.02 | 8.75 | 8.62 | 8.58 | 7.88 | 7.42 | 7.29 | 7.00 | 6.80 | 7.94 | | 9.15 | 8.39 | 7.23 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |
| **FINAL** - 2019 Japanese National Championships (Fukuoka, JPN) | | | | | | | | | | | | | | | | *Yamanaka (2019) - research on athlete performance and technique- 2019 data book* | | | |
| date | 29-Jun-19 | time | 5.96 | 9.63 | 13.45 | 17.26 | 21.15 | | 25.19 | 29.53 | 33.95 | 38.51 | 43.23 | | 48.80 | 8 / 1 | | | |
| reaction time | 0.140 | interval | | 3.67 | 3.82 | 3.81 | 3.89 | | 4.04 | 4.34 | 4.42 | 4.56 | 4.72 | 5.57 | | | 11.30 | 12.27 | 13.70 |
| | | velocity | 7.55 | 9.54 | 9.16 | 9.19 | 9.00 | | 8.66 | 8.06 | 7.92 | 7.68 | 7.42 | 7.18 | 8.20 | | 9.29 | 8.56 | 7.66 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18.2 | 162.2 | | | | |
| **FINAL** - 2019 Bislett Games (Oslo, NOR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2019 year end hurdle report* | | | |
| date | 13-Jun-19 | time | 6.02 | 9.78 | 13.68 | 17.58 | 21.72 | 23.5 | 25.92 | 30.29 | 34.83 | 39.54 | 44.31 | | 49.78 | 8 / 5 | | | |
| reaction time | 0.188 | interval | | 3.76 | 3.90 | 3.90 | 4.14 | | 4.20 | 4.37 | 4.54 | 4.71 | 4.77 | 5.47 | | | 11.56 | 12.71 | 14.02 |
| | | velocity | 7.48 | 9.31 | 8.97 | 8.97 | 8.45 | 8.51 | 8.33 | 8.01 | 7.71 | 7.43 | 7.34 | 7.31 | 8.04 | | 9.08 | 8.26 | 7.49 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 17.5 | 161.5 | | | | |
| **FINAL** - 2019 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2019 year end hurdle report* | | | |
| date | 06-Jun-19 | time | 5.87 | 9.62 | 13.49 | 17.56 | 21.66 | | 25.88 | 30.19 | 34.79 | 39.40 | 44.09 | | 49.57 | 7 / 3 | | | |
| reaction time | 0.164 | interval | | 3.75 | 3.87 | 4.07 | 4.10 | | 4.22 | 4.31 | 4.60 | 4.61 | 4.69 | 5.48 | | | 11.69 | 12.63 | 13.90 |
| | | velocity | 7.67 | 9.33 | 9.04 | 8.60 | 8.54 | | 8.29 | 8.12 | 7.61 | 7.59 | 7.46 | 7.30 | 8.07 | | 8.98 | 8.31 | 7.55 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 15 | 17.5 | 159.5 | | | | |
| **FINAL** - 2019 Asian Athletics Championships (Doha, QAT) | | | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |
| date | 22-Apr-19 | time | 5.97 | 9.64 | 13.33 | 17.10 | 21.04 | | 25.19 | 29.66 | 34.27 | 39.06 | 43.93 | | 49.74 | 7 / 5 | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.189 | interval | | 3.67 | 3.69 | 3.77 | 3.94 | 4.15 | 4.47 | 4.61 | 4.79 | 4.87 | 5.81 | | | 11.13 | 12.56 | 14.27 |
| | | velocity | 7.54 | 9.54 | 9.49 | 9.28 | 8.88 | 8.43 | 7.83 | 7.59 | 7.31 | 7.19 | 6.88 | 8.04 | | 9.43 | 8.36 | 7.36 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**FINAL** - 2018 IAAF Continental Cup (Ostrava, CZE) (TV Analysis) *Henson (2021) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-18 | time | 5.92 | 9.60 | 13.40 | 17.32 | 21.36 | 25.52 | 29.96 | 34.52 | 39.32 | 44.16 | | 49.80 | 7 / 6 | | | |
| reaction time | 0.192 | interval | | 3.68 | 3.80 | 3.92 | 4.04 | 4.16 | 4.44 | 4.56 | 4.80 | 4.84 | 5.64 | | | 11.40 | 12.64 | 14.20 |
| | | velocity | 7.60 | 9.51 | 9.21 | 8.93 | 8.66 | 8.41 | 7.88 | 7.68 | 7.29 | 7.23 | 7.09 | 8.03 | | 9.21 | 8.31 | 7.39 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 17.5 | 147.5 | | | | |

**FINAL** - 2018 Japanese National Championships (Yamaguchi, JPN) *Morioka (2018) - race pattern analysis of Japan's top 400m hurdles - main national competitions in 2018*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jun-18 | time | 5.98 | 9.65 | 13.39 | 17.24 | 21.21 | 25.33 | 29.80 | 34.40 | 39.10 | 43.87 | | 49.44 | 7 / 2 | | | |
| reaction time | 0.201 | interval | | 3.67 | 3.74 | 3.85 | 3.97 | 4.12 | 4.47 | 4.60 | 4.70 | 4.77 | 5.57 | | | 11.26 | 12.56 | 14.07 |
| | | velocity | 7.53 | 9.54 | 9.36 | 9.09 | 8.82 | 8.50 | 7.83 | 7.61 | 7.45 | 7.34 | 7.18 | 8.09 | | 9.33 | 8.36 | 7.46 |
| H1 lead leg | R | | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18 | 161 | | | | |

**FINAL** - 2018 Seiko Golden Grand Prix (Osaka, JPN) *Morioka (2018) - race pattern analysis of Japan's top 400m hurdles - main national competitions in 2018*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-May-18 | time | 5.91 | 9.51 | 13.16 | 16.90 | 20.74 | 24.74 | 29.03 | 33.60 | 38.47 | 43.41 | | 48.97 | 7 / 1 | | | |
| reaction time | 0.194 | interval | | 3.60 | 3.65 | 3.74 | 3.84 | 4.00 | 4.29 | 4.57 | 4.87 | 4.94 | 5.56 | | | 10.99 | 12.13 | 14.38 |
| | | velocity | 7.61 | 9.72 | 9.59 | 9.36 | 9.11 | 8.75 | 8.16 | 7.66 | 7.19 | 7.09 | 7.19 | 8.17 | | 9.55 | 8.66 | 7.30 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 16 | 15 | 18 | 161 | | | | |

**A FINAL** - 2018 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Morioka (2018) - race pattern analysis of Japan's top 400m hurdles - main national competitions in 2018*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-18 | time | 5.97 | 9.64 | 13.38 | 17.15 | 20.99 | 24.96 | 29.20 | 33.67 | 38.27 | 43.06 | | 48.68 | 6 / 1 | | | |
| reaction time | 0.222 | interval | | 3.67 | 3.74 | 3.77 | 3.84 | 3.97 | 4.24 | 4.47 | 4.60 | 4.79 | 5.62 | PB | | 11.18 | 12.05 | 13.86 |
| | | velocity | 7.54 | 9.54 | 9.36 | 9.28 | 9.11 | 8.82 | 8.25 | 7.83 | 7.61 | 7.31 | 7.12 | 8.22 | | 9.39 | 8.71 | 7.58 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18 | 161 | | | | |

**Semi-Final 2** - 2017 IAAF World Championships (London, GBR) *Morioka (2018) - Analysis of the race patterns of the top 400m hurdles in Japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Aug-17 | time | 5.98 | 9.65 | 13.39 | 17.16 | 21.06 | 25.10 | 29.50 | 34.20 | 39.10 | 44.07 | | 49.93 | 4 / 5 | | | |
| reaction time | 0.212 | interval | | 3.67 | 3.74 | 3.77 | 3.90 | 4.04 | 4.40 | 4.70 | 4.90 | 4.97 | 5.86 | | | 11.18 | 12.34 | 14.57 |
| | | velocity | 7.53 | 9.54 | 9.36 | 9.28 | 8.97 | 8.66 | 7.95 | 7.45 | 7.14 | 7.04 | 6.83 | 8.01 | | 9.39 | 8.51 | 7.21 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18 | 161 | | | | |

**Heat 1** - 2017 IAAF World Championships (London, GBR) *Morioka (2018) - Analysis of the race patterns of the top 400m hurdles in Japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-17 | time | 6.22 | 9.89 | 13.66 | 17.46 | 21.36 | 25.46 | 29.86 | 34.40 | 39.00 | 43.90 | | 49.65 | 3 / 2 | | | |
| reaction time | 0.316 | interval | | 3.67 | 3.77 | 3.80 | 3.90 | 4.10 | 4.40 | 4.54 | 4.60 | 4.90 | 5.75 | | | 11.24 | 12.40 | 14.04 |
| | | velocity | 7.23 | 9.54 | 9.28 | 9.21 | 8.97 | 8.54 | 7.95 | 7.71 | 7.61 | 7.14 | 6.96 | 8.06 | | 9.34 | 8.47 | 7.48 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18 | 161 | | | | |

**FINAL** - 2017 Japanese National Championships (Osaka, JPN) *Morioka (2018) - Analysis of the race patterns of the top 400m hurdles in Japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jun-17 | time | 6.01 | 9.71 | 13.53 | 17.37 | 21.39 | 25.54 | 29.98 | 34.50 | 39.17 | 43.91 | | 49.32 | / 1 | | | |
| reaction time | 0.193 | interval | | 3.70 | 3.82 | 3.84 | 4.02 | 4.15 | 4.44 | 4.52 | 4.67 | 4.74 | 5.41 | | | 11.36 | 12.61 | 13.93 |
| | | velocity | 7.49 | 9.46 | 9.16 | 9.11 | 8.71 | 8.43 | 7.88 | 7.74 | 7.49 | 7.38 | 7.39 | 8.11 | | 9.24 | 8.33 | 7.54 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**FINAL** - 2017 Seiko Golden Grand Prix (Kawasaki, JPN) *Morioka (2018) - Analysis of the race patterns of the top 400m hurdles in Japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-May-17 | time | 5.97 | 9.67 | 13.49 | 17.34 | 21.31 | 25.38 | 29.75 | 34.22 | 38.89 | 43.66 | | 49.20 | 2 / 2 | | | |
| reaction time | 0.191 | interval | | 3.70 | 3.82 | 3.85 | 3.97 | 4.07 | 4.37 | 4.47 | 4.67 | 4.77 | 5.54 | | | 11.37 | 12.41 | 13.91 |
| | | velocity | 7.54 | 9.46 | 9.16 | 9.09 | 8.82 | 8.60 | 8.01 | 7.83 | 7.49 | 7.34 | 7.22 | 8.13 | | 9.23 | 8.46 | 7.55 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18 | 161 | | | | |

**B FINAL** - 2017 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Morioka (2018) - Analysis of the race patterns of the top 400m hurdles in Japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-17 | time | 6.04 | 9.78 | 13.58 | 17.45 | 21.42 | 25.56 | 30.01 | 34.81 | 39.66 | 44.56 | | 50.15 | / 1 | | | |
| reaction time | | interval | | 3.74 | 3.80 | 3.87 | 3.97 | 4.14 | 4.45 | 4.80 | 4.85 | 4.90 | 5.59 | | | 11.41 | 12.56 | 14.55 |
| | | velocity | 7.45 | 9.36 | 9.21 | 9.04 | 8.82 | 8.45 | 7.87 | 7.29 | 7.22 | 7.14 | 7.16 | 7.98 | | 9.20 | 8.36 | 7.22 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 16 | 15 | 15 | | 125 | | | | |

**FINAL** - 2014 Seiko Golden Grand Prix (Tokyo, JPN) *Yasunori (2014) - race pattern analysis of Japanese top 400m hurdlers for major domestic competitions*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-May-14 | time | 6.14 | 9.94 | 13.78 | 17.70 | 21.74 | 25.84 | 30.28 | 34.87 | 39.82 | 44.94 | | 51.14 | / 7 | | | |
| reaction time | | interval | | 3.80 | 3.84 | 3.92 | 4.04 | 4.10 | 4.44 | 4.59 | 4.95 | 5.12 | 6.20 | | | 11.56 | 12.58 | 14.66 |
| | | velocity | 7.33 | 9.21 | 9.11 | 8.93 | 8.66 | 8.54 | 7.88 | 7.63 | 7.07 | 6.84 | 6.45 | 7.82 | | 9.08 | 8.35 | 7.16 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 16 | | 125 | | | | |

**A FINAL** - 2014 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Yasunori (2014) - race pattern analysis of Japanese top 400m hurdlers for major domestic competitions*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-14 | time | 6.19 | 10.04 | 13.96 | 18.03 | 22.12 | 26.42 | 30.77 | 35.26 | 39.91 | 44.68 | | 50.32 | / 3 | | | |
| reaction time | | interval | | 3.85 | 3.92 | 4.07 | 4.09 | 4.30 | 4.35 | 4.49 | 4.65 | 4.77 | 5.64 | | | 11.84 | 12.74 | 13.91 |
| | | velocity | 7.27 | 9.09 | 8.93 | 8.60 | 8.56 | 8.14 | 8.05 | 7.80 | 7.53 | 7.34 | 7.09 | 7.95 | | 8.87 | 8.24 | 7.55 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | | 123 | | | | |

**FINAL** - 2012 Japanese National Championships (Osaka, JPN) *Yasunori (2013) - race pattern analysis for the top Japanese 400m hurdlers in major domestic competitions*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-12 | time | 6.02 | 9.79 | 13.57 | 17.42 | 21.46 | 25.66 | 29.93 | 34.45 | 39.15 | 43.99 | | 49.57 | 4 / 5 | | | |
| reaction time | | interval | | 3.77 | 3.78 | 3.85 | 4.04 | 4.20 | 4.27 | 4.52 | 4.70 | 4.84 | 5.58 | | | 11.40 | 12.51 | 14.06 |
| | | velocity | 7.48 | 9.28 | 9.26 | 9.09 | 8.66 | 8.33 | 8.20 | 7.74 | 7.45 | 7.23 | 7.17 | 8.07 | | 9.21 | 8.39 | 7.47 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18.2 | 163 | | | | |

**FINAL** - 2011 Asian Championships (Kobe, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-11 | time | 6.03 | 9.75 | 13.55 | 17.44 | 21.39 | 25.56 | 29.86 | 34.38 | 39.20 | 44.05 | | 49.64 | / 1 | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.168 | interval | | 3.72 | 3.80 | 3.89 | 3.95 | 4.17 | 4.30 | 4.52 | 4.82 | 4.85 | 5.59 | | | 11.41 | 12.42 | 14.19 |
| | | velocity | 7.46 | 9.41 | 9.21 | 9.00 | 8.86 | 8.39 | 8.14 | 7.74 | 7.26 | 7.22 | 7.16 | 8.06 | | 9.20 | 8.45 | 7.40 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 16 | 15 | | 125 | | | | |

**FINAL** - 2011 Japanese National Championships (Kumagaya, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-11 | time | 6.19 | 10.08 | 14.02 | 18.02 | 22.14 | 26.41 | 30.71 | 35.20 | 39.74 | 44.41 | | 49.81 | / 3 | | | |
| reaction time | | interval | | 3.89 | 3.94 | 4.00 | 4.12 | 4.27 | 4.30 | 4.49 | 4.54 | 4.67 | 5.40 | | | 11.83 | 12.69 | 13.70 |
| | | velocity | 7.27 | 9.00 | 8.88 | 8.75 | 8.50 | 8.20 | 8.14 | 7.80 | 7.71 | 7.49 | 7.41 | 8.03 | | 8.88 | 8.27 | 7.66 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2009 Japanese National High School Championships (Nara, JPN) *Matsuo (2009) - 62nd high school championships: JAF scientific committee- biomechanics*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-09 | time | 6.11 | 10.05 | 14.17 | 18.39 | 22.76 | 27.15 | 31.62 | 36.22 | 40.96 | 45.76 | | 51.04 | / 1 | | | |
| reaction time | | interval | | 3.94 | 4.12 | 4.22 | 4.37 | 4.39 | 4.47 | 4.60 | 4.74 | 4.80 | 5.28 | | | 12.28 | 13.23 | 14.14 |
| | | velocity | 7.36 | 8.88 | 8.50 | 8.29 | 8.01 | 7.97 | 7.83 | 7.61 | 7.38 | 7.29 | 7.58 | 7.84 | | 8.55 | 7.94 | 7.43 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | | 127 | | | | |

**FINAL** - 2008 Japanese National High School Championships (Kumagaya, JPN) *Abe (2008) - 61st high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-08 | time | 6.42 | 10.57 | 14.76 | 19.00 | 23.25 | 27.56 | 32.01 | 36.57 | 41.37 | 46.41 | | 52.16 | / 3 | | | |
| reaction time | | interval | | 4.15 | 4.19 | 4.24 | 4.25 | 4.31 | 4.45 | 4.56 | 4.80 | 5.04 | 5.75 | | | 12.58 | 13.01 | 14.40 |
| | | velocity | 7.01 | 8.43 | 8.35 | 8.25 | 8.24 | 8.12 | 7.87 | 7.68 | 7.29 | 6.94 | 6.96 | 7.67 | | 8.35 | 8.07 | 7.29 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Aberkan, Saïd (MOR) (1963)**

**FINAL** - 1992 French National Championships (Narbonne, FRA) *Veney - split times from PJ*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Jun-92 | time | 6.44 | 10.38 | 14.32 | 18.36 | 22.42 | | 26.64 | 31.04 | 35.56 | 40.22 | 45.36 | | 51.27 | / 3 | | | |
| reaction time | | interval | | 3.94 | 3.94 | 4.04 | 4.06 | | 4.22 | 4.40 | 4.52 | 4.66 | 5.14 | 5.91 | | | 11.92 | 12.68 | 14.32 |
| | | velocity | 6.99 | 8.88 | 8.88 | 8.66 | 8.62 | | 8.29 | 7.95 | 7.74 | 7.51 | 6.81 | 6.77 | 7.80 | | 8.81 | 8.28 | 7.33 |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 16 | 19 | 171 | | | | |

**Abuaku, Joshua (GER) (1996)**

**FINAL** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-23 | time | 5.97 | 9.83 | 13.45 | 17.22 | 21.13 | | | 29.56 | 34.03 | 38.64 | 43.34 | | 48.53 | 2 / 8 | | | |
| reaction time | 0.156 | interval | | 3.86 | 3.62 | 3.77 | 3.91 | | | 8.43 | 4.47 | 4.61 | 4.70 | 5.19 | | | 11.25 | 12.34 | 13.78 |
| | | velocity | 7.54 | 9.07 | 9.67 | 9.28 | 8.95 | | | 8.30 | 7.83 | 7.59 | 7.45 | 7.71 | 8.24 | | 9.33 | 8.51 | 7.62 |
| H1 lead leg | L | strides | 20 | 13 | | 13 | 13 | | | | 14 | 14 | 14 | 18 | 119 | | | | |

**Semi-Final 3** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-23 | time | 5.90 | 9.68 | 13.31 | 16.92 | 20.79 | 24.83 | 29.19 | 33.63 | | 43.01 | | 48.39 | 8 / 4 | | | |
| reaction time | 0.179 | interval | | 3.78 | 3.63 | 3.61 | 3.87 | 4.04 | 4.36 | 4.44 | | 9.38 | 5.38 | | | 11.02 | 12.27 | 13.82 |
| | | velocity | 7.63 | 9.26 | 9.64 | 9.70 | 9.04 | 8.66 | 8.03 | 7.88 | | 7.46 | 7.43 | 8.27 | | 9.53 | 8.56 | 7.60 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | | | 18 | 131 | | | | |

**Heat 4** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 6.03 | 9.83 | 13.50 | 17.27 | 21.03 | 25.10 | | 33.77 | 38.36 | 43.03 | | 48.32 | 5 / 1 | | | |
| reaction time | 0.207 | interval | | 3.80 | 3.67 | 3.77 | 3.76 | 4.07 | | 8.67 | 4.59 | 4.67 | 5.29 | PB | | 11.24 | | |
| | | velocity | 7.46 | 9.21 | 9.54 | 9.28 | 9.31 | 8.60 | | 8.07 | 7.63 | 7.49 | 7.56 | 8.28 | | 9.34 | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | | | 14 | 14 | 18 | 131 | | | | |

**FINAL** - 2023 FBK Games (Hengelo, NED) *Omega Timing (2023) - continental tour race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jun-23 | time | 5.83 | 9.51 | 13.27 | 17.07 | 21.02 | 25.23 | 29.62 | 34.17 | 38.87 | 43.70 | | 49.23 | 8 / 3 | | | |
| reaction time | 0.207 | interval | | 3.68 | 3.76 | 3.80 | 3.95 | 4.21 | 4.39 | 4.55 | 4.70 | 4.83 | 5.53 | | | 11.24 | 12.55 | 14.08 |
| | | velocity | 7.72 | 9.51 | 9.31 | 9.21 | 8.86 | 8.31 | 7.97 | 7.69 | 7.45 | 7.25 | 7.23 | 8.13 | | 9.34 | 8.37 | 7.46 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18 | 161 | | | | |

**FINAL** - 2022 ISTAF (Berlin, GER) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Sep-22 | time | 5.96 | | | | 20.92 | 25.04 | 29.44 | 33.92 | 38.52 | 43.24 | | 48.55 | 5 / 3 | | | |
| reaction time | 0.174 | interval | | | | | 14.96 | 4.12 | 4.40 | 4.48 | 4.60 | 4.72 | 5.31 | PB | | | | 13.80 |
| | | velocity | 7.55 | | | | 9.36 | 8.50 | 7.95 | 7.81 | 7.61 | 7.42 | 7.53 | 8.24 | | | | 7.61 |
| H1 lead leg | R | strides | 20 | | | | | 13 | 14 | 14 | 15 | 15 | 18 | 109 | | | | |

**FINAL** - 2022 European Athletics Championships (Munich, GER) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Aug-22 | time | 5.85 | 9.54 | | 17.08 | 20.98 | 22.62 | 25.11 | 29.52 | 33.97 | 38.58 | 43.36 | | 48.79 | 7 / 5 | | |
| reaction time | 0.168 | interval | | 3.69 | | 7.54 | 3.90 | | 4.13 | 4.41 | 4.45 | 4.61 | 4.78 | 5.43 | PB | | 11.23 | 12.44 | 13.84 |
| | | velocity | 7.69 | 9.49 | | 9.28 | 8.97 | 8.84 | 8.47 | 7.94 | 7.87 | 7.59 | 7.32 | 7.37 | 8.20 | | 9.35 | 8.44 | 7.59 |
| H1 lead leg | L | strides | 20 | 13 | | | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 135 | | | | |

**Ackermann, Uwe (GDR) (1960)**

**FINAL** - 1982 European Championships (Athens, GRE) *(1982) - XIII championnats d'Europe d'Atlletisma, Athens 1982*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-82 | time | 5.9 | 9.7 | 13.5 | 17.3 | 21.3 | | 25.6 | 30.0 | 34.2 | 38.7 | 43.3 | | 48.64 | 6 / 3 | | | |
| reaction time | | interval | | 3.80 | 3.80 | 3.80 | 4.00 | | 4.30 | 4.40 | 4.20 | 4.50 | 4.60 | 5.34 | | | 11.40 | 12.70 | 13.30 |
| | | velocity | 7.63 | 9.21 | 9.21 | 9.21 | 8.75 | | 8.14 | 7.95 | 8.33 | 7.78 | 7.61 | 7.49 | 8.22 | | 9.21 | 8.27 | 7.89 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 15 | 15 | 15 | 15 | 15 | 18.2 | 165.2 | | | | |

**Semi-Final 2** - 1982 European Championships (Athens, GRE) *(1982) - XIII championnats d'Europe d'Atlletisma, Athens 1982*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Sep-82 | time | | | | | 21.5 | | | | | | | | 49.32 | / 1 | | |
| reaction time | | interval | | | | | | | | | | | | | | | | |
| | | velocity | | | | | 8.62 | | | | | | | | 8.11 | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 1982 GDR vs. USA (Karl-Marx-Stadt, GDR) *Heß (1985) - entwicklungsaspekte die leichtathletischen sprint-/hürdendisziplinen im olympiazyklus 1981/84*

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-82 | time | 5.97 | | | 21.67 | | | | | 43.34 | | 48.50 | / 1 | | | |
| reaction time | | interval | | | | 15.70 | | | | | 21.67 | 5.16 | PB | | | | |
| | | velocity | 7.54 | | | 8.92 | | | | | 8.08 | 7.75 | 8.25 | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | |

**Adkins, Derrick (USA) (1970)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1996 Olympic Games (Atlanta, GA) *McFarlane (2000) - the science of hurdling and speed* | | | | | | | | | | | | | | | | | | | |
| date | 01-Aug-96 | time | 5.83 | 9.59 | 13.40 | 17.16 | 21.12 | | 25.12 | 29.21 | 33.44 | 37.74 | 42.25 | | 47.54 | 6 / 1 | | | |
| reaction time | 0.294 | interval | | 3.76 | 3.81 | 3.76 | 3.96 | | 4.00 | 4.09 | 4.23 | 4.30 | 4.51 | 5.29 | =PB | | 11.33 | 12.05 | 13.04 |
| | | velocity | 7.72 | 9.31 | 9.19 | 9.31 | 8.84 | | 8.75 | 8.56 | 8.27 | 8.14 | 7.76 | 7.56 | 8.41 | | 9.27 | 8.71 | 8.05 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | | 141 | | | | |
| **FINAL** - 1996 USA Olympic Trials (Atlanta, GA) *McNichols - Hurdle technique study through video analysis* | | | | | | | | | | | | | | | | | | | |
| date | 16-Jun-96 | time | 5.77 | 9.45 | 13.17 | 16.88 | 20.76 | 21.43 | 24.82 | 29.07 | 33.47 | 37.98 | 42.65 | | 48.18 | 5 / 2 | | | |
| reaction time | | interval | | 3.68 | 3.72 | 3.71 | 3.88 | | 4.06 | 4.25 | 4.40 | 4.51 | 4.67 | 5.53 | | | 11.11 | 12.19 | 13.58 |
| | | velocity | 7.80 | 9.51 | 9.41 | 9.43 | 9.02 | 9.33 | 8.62 | 8.24 | 7.95 | 7.76 | 7.49 | 7.23 | 8.30 | | 9.45 | 8.61 | 7.73 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | | 141 | | | | |
| **Semi-Final 1** - 1996 USA Olympic Trials (Atlanta, GA) *Lyle - miscellaneous coaching notes* | | | | | | | | | | | | | | | | | | | |
| date | 15-Jun-96 | time | 5.51 | 9.32 | 13.24 | 17.09 | 21.11 | | 25.18 | 29.42 | 33.96 | 38.44 | 42.81 | | 48.33 | / 1 | | | |
| reaction time | | interval | | 3.81 | 3.92 | 3.85 | 4.02 | | 4.07 | 4.24 | 4.54 | 4.48 | 4.37 | 5.52 | | | 11.58 | 12.33 | 13.39 |
| | | velocity | 8.17 | 9.19 | 8.93 | 9.09 | 8.71 | | 8.60 | 8.25 | 7.71 | 7.81 | 8.01 | 7.25 | 8.28 | | 9.07 | 8.52 | 7.84 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **FINAL** - 1995 IAAF World Championships (Göteborg, SWE) *Behm (1999) - Les chiffres: Les podiums de tous le championnats* | | | | | | | | | | | | | | | | | | | |
| date | 10-Aug-95 | time | | | | | 20.8 | | | | | | | | 47.98 | 4 / 1 | | | |
| reaction time | | interval | | | | | | | | | | | | | | | | | |
| | | velocity | | | | | 8.89 | | | | | | | | 8.34 | | | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 18.7 | 160 | | | | |

**Agyekum, Emil (GER) (1999)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 2** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | | | | | | | | | | | | | | | | | |
| date | 21-Aug-23 | time | 6.10 | 9.98 | 13.68 | 17.28 | 21.12 | | | 29.56 | 34.06 | 38.70 | 43.41 | | 48.71 | 3 / 5 | | | |
| reaction time | 0.196 | interval | | 3.88 | 3.70 | 3.60 | 3.84 | | | 8.44 | 4.50 | 4.64 | 4.71 | 5.30 | PB | | 11.18 | 12.28 | 13.85 |
| | | velocity | 7.38 | 9.02 | 9.46 | 9.72 | 9.11 | | | 8.29 | 7.78 | 7.54 | 7.43 | 7.55 | 8.21 | | 9.39 | 8.55 | 7.58 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | | | 14 | 15 | 15 | 18 | 135 | | | | |
| **Heat 5** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | | | | | | | | | | | | | | | | | |
| date | 20-Aug-23 | time | 6.16 | | 13.83 | | 21.43 | | | 29.86 | 34.33 | 39.03 | 43.76 | | 49.00 | 1 / 6 | | | |
| reaction time | 0.232 | interval | | | 7.67 | | 7.60 | | | 8.43 | 4.47 | 4.70 | 4.73 | 5.24 | | | | | 13.90 |
| | | velocity | 7.31 | | 9.13 | | 9.21 | | | 8.30 | 7.83 | 7.45 | 7.40 | 7.63 | 8.16 | | | | 7.55 |
| H1 lead leg | R | strides | 20 | | | | | | 13 | | 14 | 15 | 15 | 18 | 95 | | | | |

**Akabusi, Kriss (GBR) (1958)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1992 Olympic Games (Barcelona, ESP) *Arnold (1992) - Hurdling* | | | | | | | | | | | | | | | | | | | |
| date | 06-Aug-92 | time | 6.0 | 9.7 | 13.6 | 17.4 | 21.3 | 23.1 | 25.4 | 29.5 | 33.8 | 38.2 | 42.7 | | 47.82 | 5 / 3 | | | |
| reaction time | | interval | | 3.70 | 3.90 | 3.80 | 3.90 | | 4.10 | 4.10 | 4.30 | 4.40 | 4.50 | 5.12 | NR | | 11.40 | 12.10 | 13.20 |
| | | velocity | 7.50 | 9.46 | 8.97 | 9.21 | 8.97 | 8.66 | 8.54 | 8.54 | 8.14 | 7.95 | 7.78 | 7.81 | 8.36 | | 9.21 | 8.68 | 7.95 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 15 | 18 | 159 | | | | |
| **FINAL** - 1991 IAAF World Championships (Tokyo, JPN) *Behm (1995) - la tactique du 400 haies* | | | | | | | | | | | | | | | | | | | |
| date | 27-Aug-91 | time | 6.0 | 9.7 | 13.4 | 17.2 | 21.1 | | 25.1 | 29.1 | 33.4 | 37.8 | 42.3 | | 47.86 | 4 / 3 | | | |
| reaction time | | interval | | 3.70 | 3.70 | 3.80 | 3.90 | | 4.00 | 4.00 | 4.30 | 4.40 | 4.50 | 5.56 | NR | | 11.20 | 11.90 | 13.20 |
| | | velocity | 7.50 | 9.46 | 9.46 | 9.21 | 8.97 | | 8.75 | 8.75 | 8.14 | 7.95 | 7.78 | 7.19 | 8.36 | | 9.38 | 8.82 | 7.95 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 19 | 160 | | | | |
| **FINAL** - 1991 European Cup (Frankfurt, GER) *Federle (2003) - http://www.fgs.uni-halle.de* | | | | | | | | | | | | | | | | | | | |
| date | 29-Jun-91 | time | 6.13 | 9.90 | 13.73 | 17.52 | 21.41 | | 25.43 | 29.53 | 33.85 | 38.41 | 43.04 | | 48.39 | / 1 | | | |
| reaction time | | interval | | 3.77 | 3.83 | 3.79 | 3.89 | | 4.02 | 4.10 | 4.32 | 4.56 | 4.63 | 5.35 | | | 11.39 | 12.01 | 13.51 |
| | | velocity | 7.34 | 9.28 | 9.14 | 9.23 | 9.00 | | 8.71 | 8.54 | 8.10 | 7.68 | 7.56 | 7.48 | 8.27 | | 9.22 | 8.74 | 7.77 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **FINAL** - 1990 European Championships (Split, CRO) *Arnold (1992) - Hurdling* | | | | | | | | | | | | | | | | | | | |
| date | 29-Aug-90 | time | 6.0 | 9.7 | 13.6 | 17.4 | 21.3 | 23.1 | 25.4 | 29.5 | 33.8 | 38.2 | 42.7 | | 47.92 | 5 / 1 | | | |
| reaction time | | interval | | 3.70 | 3.90 | 3.80 | 3.90 | | 4.10 | 4.10 | 4.30 | 4.40 | 4.50 | 5.22 | NR | | 11.40 | 12.10 | 13.20 |
| | | velocity | 7.50 | 9.46 | 8.97 | 9.21 | 8.97 | 8.66 | 8.54 | 8.54 | 8.14 | 7.95 | 7.78 | 7.66 | 8.35 | | 9.21 | 8.68 | 7.95 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 15 | 16 | 157 | | | | |
| **FINAL** - 1988 Olympic Games (Seoul, KOR) *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988* | | | | | | | | | | | | | | | | | | | |
| date | 25-Sep-88 | time | 6.08 | 9.80 | 13.57 | 17.41 | 21.41 | | 25.62 | 29.82 | 34.22 | 38.75 | 43.47 | | 48.69 | 7 / 6 | | | |
| reaction time | 0.223 | interval | | 3.72 | 3.77 | 3.84 | 4.00 | | 4.21 | 4.20 | 4.40 | 4.53 | 4.72 | 5.22 | | | 11.33 | 12.41 | 13.65 |
| | | velocity | 7.40 | 9.41 | 9.28 | 9.11 | 8.75 | | 8.31 | 8.33 | 7.95 | 7.73 | 7.42 | 7.66 | 8.22 | | 9.27 | 8.46 | 7.69 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 15 | 18 | 161 | | | | |
| **Semi-Final 1** - 1988 Olympic Games (Seoul, KOR) *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988* | | | | | | | | | | | | | | | | | | | |
| date | 24-Sep-88 | time | 6.14 | 9.93 | 13.81 | 17.74 | 21.78 | | 25.87 | 30.11 | 34.49 | 39.20 | 43.92 | | 49.22 | 6 / 4 | | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | | interval | | 3.79 | 3.88 | 3.93 | 4.04 | | 4.09 | 4.24 | 4.38 | 4.71 | 4.72 | 5.30 | | | 11.60 | 12.37 | 13.81 |
| | | velocity | 7.33 | 9.23 | 9.02 | 8.91 | 8.66 | | 8.56 | 8.25 | 7.99 | 7.43 | 7.42 | 7.55 | 8.13 | | 9.05 | 8.49 | 7.60 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |

**Akii-Bua, John (UGA) (1949)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1972 Olympic Games (Munich, FRG) | | | | | | | | | | | | | | | *McFarlane (1981) - understanding the 400m hurdles (in Jarver (ed) - the hurdles, 1981)* | | | | |
| date | 03-Sep-72 | time | 6.1 | 9.8 | 13.6 | 17.4 | 21.3 | 23.0 | 25.4 | 29.5 | 33.7 | 38.1 | 42.6 | | 47.82 | 1 / 1 | | | |
| reaction time | | interval | | 3.70 | 3.80 | 3.80 | 3.90 | | 4.10 | 4.10 | 4.20 | 4.40 | 4.50 | 5.22 | **WR** | | 11.30 | 12.10 | 13.10 |
| | | velocity | 7.38 | 9.46 | 9.21 | 9.21 | 8.97 | 8.70 | 8.54 | 8.54 | 8.33 | 7.95 | 7.78 | 7.66 | 8.36 | | 9.29 | 8.68 | 8.02 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 15 | 18 | 163 | | | | |
| **Semi-Final 1** - 1972 Olympic Games (Munich, FRG) | | | | | | | | | | | | | | | *Schmidt (1973) - vorolympishces training von john akii-bua über 400 hürden* | | | | |
| date | 02-Sep-72 | time | | | | | 21.0 | | | 29.9 | | | 43.6 | | 49.25 | 2 / 1 | | | |
| reaction time | | interval | | | | | | | | 8.90 | | | 13.70 | 5.65 | | | | | 13.70 |
| | | velocity | | | | | 8.81 | | | 7.87 | | | 7.66 | 7.08 | 8.12 | | | | 7.66 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **Heat 4** - 1972 Olympic Games (Munich, FRG) | | | | | | | | | | | | | | | *Schmidt (1973) - vorolympishces training von john akii-bua über 400 hürden* | | | | |
| date | 01-Sep-72 | time | | | | | 21.5 | | | 29.9 | | | 43.3 | | 50.35 | 2 / 1 | | | |
| reaction time | | interval | | | | | | | | 8.40 | | | 13.40 | 7.05 | | | | | 13.40 |
| | | velocity | | | | | 8.60 | | | 8.33 | | | 7.84 | 5.67 | 7.94 | | | | 7.84 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Al-Najem, Zahirudin (SYR) (1977)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 5** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | | |
| date | 24-Sep-00 | time | 6.00 | 9.84 | 13.72 | 17.68 | 21.76 | | 26.00 | 30.68 | 35.60 | 41.16 | | | 52.70 | 6 / 7 | | | |
| reaction time | 0.160 | interval | | 3.84 | 3.88 | 3.96 | 4.08 | | 4.24 | 4.68 | 4.92 | 5.56 | | | | | 11.68 | 17.92 | |
| | | velocity | 7.50 | 9.11 | 9.02 | 8.84 | 8.58 | | 8.25 | 7.48 | 7.11 | 6.29 | | | 7.59 | | 8.99 | 5.86 | |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 16 | 16 | | | 132 | | | | |

**Al-Nubi, Mubarak Sultan (QAT) (1977**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2003 IAAF World Championships (Paris, FRA) | | | | | | | | | | | | | | | *Behm (2003) - Paris 2003:Le quatrache masculn - féminin* | | | | |
| date | 29-Aug-03 | time | 6.0 | 9.7 | 13.7 | 17.7 | 21.7 | | 25.9 | 30.4 | 35.2 | 40.1 | 44.7 | | 52.64 | 1 / 7 | | | |
| reaction time | 0.164 | interval | | 3.70 | 4.00 | 4.00 | 4.00 | | 4.20 | 4.50 | 4.80 | 4.90 | 4.60 | 7.94 | | | 11.70 | 12.70 | 14.30 |
| | | velocity | 7.50 | 9.46 | 8.75 | 8.75 | 8.75 | | 8.33 | 7.78 | 7.29 | 7.14 | 7.61 | 5.04 | 7.60 | | 8.97 | 8.27 | 7.34 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | | 144 | | | | |
| **FINAL** - 2002 IAAF World Cup (Madrid, ESP) | | | | | | | | | | | | | | | *Sanchez (2002) - copa del mundo de Madrid '02: análisis de la carreras con villas* | | | | |
| date | 20-Sep-02 | time | 6.07 | 9.94 | 13.80 | 17.77 | 21.88 | | 25.99 | 30.15 | 34.51 | 38.87 | 43.63 | | 48.96 | 7 / 2 | | | |
| reaction time | 0.158 | interval | | 3.87 | 3.86 | 3.97 | 4.11 | | 4.11 | 4.16 | 4.36 | 4.36 | 4.76 | 5.33 | | | 11.70 | 12.38 | 13.48 |
| | | velocity | 7.41 | 9.04 | 9.07 | 8.82 | 8.52 | | 8.52 | 8.41 | 8.03 | 8.03 | 7.35 | 7.50 | 8.17 | | 8.97 | 8.48 | 7.79 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 16.5 | 156.5 | | | | |

**Al-Somaily, Hadi Sou'an (KSA) (1976**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2001 IAAF World Championships (Edmonton, CAN) | | | | | | | | | | | | | | | *Behm (2001) - Edmonton: Le quatrache: les finales* | | | | |
| date | 10-Aug-01 | time | 5.8 | 9.4 | 13.1 | 16.9 | 20.9 | | 24.9 | 28.9 | 33.1 | 37.7 | 42.4 | | 47.99 | 1 / 4 | | | |
| reaction time | 0.164 | interval | | 3.60 | 3.70 | 3.80 | 4.00 | | 4.00 | 4.00 | 4.20 | 4.60 | 4.70 | 5.59 | | | 11.10 | 12.00 | 13.50 |
| | | velocity | 7.76 | 9.72 | 9.46 | 9.21 | 8.75 | | 8.75 | 8.75 | 8.33 | 7.61 | 7.45 | 7.16 | 8.34 | | 9.46 | 8.75 | 7.78 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 17.5 | 156.5 | | | | |
| **FINAL** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | | |
| date | 27-Sep-00 | time | 5.94 | 9.66 | 13.42 | 17.26 | 21.14 | 22.62 | 25.14 | 29.18 | 33.38 | 37.82 | 42.34 | | 47.53 | 4 / 2 | | | |
| reaction time | 0.437 | interval | | 3.72 | 3.76 | 3.84 | 3.88 | | 4.00 | 4.04 | 4.20 | 4.44 | 4.52 | 5.19 | **AR** | | 11.32 | 11.92 | 13.16 |
| | | velocity | 7.58 | 9.41 | 9.31 | 9.11 | 9.02 | 8.84 | 8.75 | 8.66 | 8.33 | 7.88 | 7.74 | 7.71 | 8.42 | | 9.28 | 8.81 | 7.98 |
| H1 lead leg | | strides | 22 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 17 | 157 | | | | |
| **Semi-Final 1** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | | |
| date | 25-Sep-00 | time | 5.94 | 9.74 | 13.58 | 17.46 | 21.42 | 22.94 | 25.50 | 29.62 | 33.94 | 39.30 | 42.82 | | 48.14 | 6 / 1 | | | |
| reaction time | 0.316 | interval | | 3.80 | 3.84 | 3.88 | 3.96 | | 4.08 | 4.12 | 4.32 | 5.36 | 3.52 | 5.32 | **AR** | | 11.52 | 12.16 | 13.20 |
| | | velocity | 7.58 | 9.21 | 9.11 | 9.02 | 8.84 | 8.72 | 8.58 | 8.50 | 8.10 | 6.53 | 9.94 | 7.52 | 8.31 | | 9.11 | 8.63 | 7.95 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 17 | 156 | | | | |
| **Heat 6** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | | |
| date | 24-Sep-00 | time | 5.98 | 9.66 | 13.50 | 17.38 | 21.34 | | 25.42 | 29.78 | 34.34 | 38.98 | 43.70 | | 49.28 | 1 / 1 | | | |
| reaction time | 0.174 | interval | | 3.68 | 3.84 | 3.88 | 3.96 | | 4.08 | 4.36 | 4.56 | 4.64 | 4.72 | 5.58 | | | 11.40 | 12.40 | 13.92 |
| | | velocity | 7.53 | 9.51 | 9.11 | 9.02 | 8.84 | | 8.58 | 8.03 | 7.68 | 7.54 | 7.42 | 7.17 | 8.12 | | 9.21 | 8.47 | 7.54 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17.7 | 158.7 | | | | |

**Allen, CJ (USA) (1995)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2023 Prefontaine Classic (Eugene, OR) | | | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | | |
| date | 16-Sep-23 | time | 5.70 | 9.33 | 13.05 | 16.85 | 20.75 | | 24.77 | 28.94 | 33.31 | 37.93 | 42.73 | | 48.62 | 2 / 9 | | | |
| reaction time | 0.137 | interval | | 3.63 | 3.72 | 3.80 | 3.90 | | 4.02 | 4.17 | 4.37 | 4.62 | 4.80 | 5.89 | | | 11.15 | 12.09 | 13.79 |
| | | velocity | 7.89 | 9.64 | 9.41 | 9.21 | 8.97 | | 8.71 | 8.39 | 8.01 | 7.58 | 7.29 | 6.79 | 8.23 | | 9.42 | 8.68 | 7.61 |
| H1 lead leg | L | strides | 20 | | | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | | 115 | | | | |
| **FINAL** - 2023 Weltklasse (Zürich, SUI) | | | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | | |
| date | 31-Aug-23 | time | 5.64 | 9.23 | 12.94 | 16.74 | 20.64 | | 24.63 | 28.73 | 33.07 | 37.63 | 42.36 | | 48.28 | 3 / 4 | | | |
| reaction time | 0.141 | interval | | 3.59 | 3.71 | 3.80 | 3.90 | | 3.99 | 4.10 | 4.34 | 4.56 | 4.73 | 5.92 | | | 11.10 | 11.99 | 13.63 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.98 | 9.75 | 9.43 | 9.21 | 8.97 | 8.77 | 8.54 | 8.06 | 7.68 | 7.40 | 6.76 | 8.29 | | 9.46 | 8.76 | 7.70 |
| H1 lead leg | L | strides | 20 | 13 | | | 13 | 13 | 13 | | | 14 | 18 | 104 | | | | |

**Semi-Final 1** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-23 | time | 5.83 | 9.73 | 13.43 | 17.07 | 20.93 | 25.00 | 29.23 | 33.56 | 38.17 | 42.96 | | 48.44 | 6 / 3 | | | |
| reaction time | 0.152 | interval | | 3.90 | 3.70 | 3.64 | 3.86 | 4.07 | 4.23 | 4.33 | 4.61 | 4.79 | 5.48 | | | 11.24 | 12.16 | 13.73 |
| | | velocity | 7.72 | 8.97 | 9.46 | 9.62 | 9.07 | 8.60 | 8.27 | 8.08 | 7.59 | 7.31 | 7.30 | 8.26 | | 9.34 | 8.63 | 7.65 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.2 | 158.2 | | | | |

**Heat 4** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 5.90 | 9.73 | 13.50 | 17.36 | 21.13 | 25.17 | | 33.70 | 38.23 | 42.90 | | 48.36 | 9 / 2 | | | |
| reaction time | 0.167 | interval | | 3.83 | 3.77 | 3.86 | 3.77 | 4.04 | | 8.53 | 4.53 | 4.67 | 5.46 | | | 11.46 | | |
| | | velocity | 7.63 | 9.14 | 9.28 | 9.07 | 9.28 | 8.66 | | 8.21 | 7.73 | 7.49 | 7.33 | 8.27 | | 9.16 | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | | | 14 | 14 | 17 | 130 | | | | |

**FINAL** - 2023 Herculis Meeting International d'Athlétisme (Monaco, MON) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jul-23 | time | 5.64 | 9.25 | 12.92 | 16.67 | 20.54 | 24.53 | 28.66 | 32.99 | 37.55 | 42.29 | | 47.84 | 5 / 3 | | | |
| reaction time | 0.148 | interval | | 3.61 | 3.67 | 3.75 | 3.87 | 3.99 | 4.13 | 4.33 | 4.56 | 4.74 | 5.55 | | | 11.03 | 11.99 | 13.63 |
| | | velocity | 7.98 | 9.70 | 9.54 | 9.33 | 9.04 | 8.77 | 8.47 | 8.08 | 7.68 | 7.38 | 7.21 | 8.36 | | 9.52 | 8.76 | 7.70 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | | | 13 | 14 | 14 | 15 | | 115 | | | | |

**FINAL** - 2023 USATF National Championships (Eugene, OR) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-23 | time | 5.87 | 9.54 | 13.24 | 17.01 | 20.82 | 24.79 | 28.86 | 33.23 | 37.80 | 42.54 | | 48.18 | 4 / 2 | | | |
| reaction time | | interval | | 3.67 | 3.70 | 3.77 | 3.81 | 3.97 | 4.07 | 4.37 | 4.57 | 4.74 | 5.64 | | | 11.14 | 11.85 | 13.68 |
| | | velocity | 7.67 | 9.54 | 9.46 | 9.28 | 9.19 | 8.82 | 8.60 | 8.01 | 7.66 | 7.38 | 7.09 | 8.30 | | 9.43 | 8.86 | 7.68 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17.7 | 156.7 | | | | |

**FINAL** - 2023 Bislett Games (Oslo, NOR) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Jun-23 | time | 5.64 | 9.28 | 12.99 | 16.80 | 20.68 | 24.64 | 28.75 | 33.09 | 37.50 | 42.06 | | 47.58 | 6 / 2 | | | |
| reaction time | 0.170 | interval | | 3.64 | 3.71 | 3.81 | 3.88 | 3.96 | 4.11 | 4.34 | 4.41 | 4.56 | 5.52 | **PB** | | 11.16 | 11.95 | 13.31 |
| | | velocity | 7.98 | 9.62 | 9.43 | 9.19 | 9.02 | 8.84 | 8.52 | 8.06 | 7.94 | 7.68 | 7.25 | 8.41 | | 9.41 | 8.79 | 7.89 |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17 | 160 | | | | |

**FINAL** - 2023 Meeting de Paris (Paris, FRA) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-23 | time | 5.72 | 9.43 | 13.27 | 17.20 | 21.14 | 25.08 | 29.10 | 33.34 | 37.78 | 42.36 | | 47.92 | 7 / 1 | | | |
| reaction time | 0.138 | interval | | 3.71 | 3.84 | 3.93 | 3.94 | 3.94 | 4.02 | 4.24 | 4.44 | 4.58 | 5.56 | | | 11.48 | 11.90 | 13.26 |
| | | velocity | 7.87 | 9.43 | 9.11 | 8.91 | 8.88 | 8.88 | 8.71 | 8.25 | 7.88 | 7.64 | 7.19 | 8.35 | | 9.15 | 8.82 | 7.92 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17 | 157 | | | | |

**FINAL** - 2023 FBK Games (Hengelo, NED) *Omega Timing (2023) - continental tour race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jun-23 | time | 5.75 | 9.46 | 13.29 | 17.17 | 21.12 | 25.14 | 29.27 | 33.59 | 38.10 | 42.73 | | 48.24 | 6 / 1 | | | |
| reaction time | 0.166 | interval | | 3.71 | 3.83 | 3.88 | 3.95 | 4.02 | 4.13 | 4.32 | 4.51 | 4.63 | 5.51 | | | 11.42 | 12.10 | 13.46 |
| | | velocity | 7.83 | 9.43 | 9.14 | 9.02 | 8.86 | 8.71 | 8.47 | 8.10 | 7.76 | 7.56 | 7.26 | 8.29 | | 9.19 | 8.68 | 7.80 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17 | 158 | | | | |

**FINAL** - 2023 Doha Diamond League (Doha, QAT) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-23 | time | 5.66 | 9.29 | 13.06 | 16.93 | 20.89 | 24.94 | 29.12 | 33.47 | 37.96 | 42.49 | | 47.93 | 3 / 2 | | | |
| reaction time | 0.144 | interval | | 3.63 | 3.77 | 3.87 | 3.96 | 4.05 | 4.18 | 4.35 | 4.49 | 4.53 | 5.44 | **PB** | | 11.27 | 12.19 | 13.37 |
| | | velocity | 7.95 | 9.64 | 9.28 | 9.04 | 8.84 | 8.64 | 8.37 | 8.05 | 7.80 | 7.73 | 7.35 | 8.35 | | 9.32 | 8.61 | 7.85 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17 | 157 | | | | |

**FINAL** - 2022 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-22 | time | 5.74 | 9.41 | | 17.05 | 20.92 | 22.43 | 24.89 | 28.96 | 33.30 | 37.80 | 42.64 | | 48.21 | 3 / 3 | | |
| reaction time | 0.159 | interval | | 3.67 | | 7.64 | 3.87 | | 3.97 | 4.07 | 4.34 | 4.50 | 4.84 | 5.57 | | | 11.31 | 11.91 | 13.68 |
| | | velocity | 7.84 | 9.54 | | 9.16 | 9.04 | 8.92 | 8.82 | 8.60 | 8.06 | 7.78 | 7.23 | 7.18 | 8.30 | | 9.28 | 8.82 | 7.68 |
| H1 lead leg | L | strides | 20 | 13 | | | 13 | | 13 | 13 | 14 | 14 | 15 | 17.5 | 132.5 | | | | |

**FINAL** - 2022 Memorial van Damme (Brussels, BEL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Sep-22 | time | 5.80 | 9.47 | 13.28 | | 21.12 | 22.77 | 25.19 | 29.29 | 33.56 | 38.04 | 42.61 | | 47.96 | 2 / ~~3~~ | | |
| reaction time | 0.178 | interval | | 3.67 | 3.81 | | 7.84 | | 2.42 | 4.10 | 4.27 | 4.48 | 4.57 | 5.35 | **DQ** | | | 13.32 |
| | | velocity | 7.76 | 9.54 | 9.19 | | 8.93 | 8.78 | 14.46 | 8.54 | 8.20 | 7.81 | 7.66 | 7.48 | 8.34 | | | 7.88 |
| H1 lead leg | L | strides | 20 | 13 | 13 | | | | 13 | 13 | 13 | 14 | 14 | 17 | 130 | | | |

**FINAL** - 2022 NACAC Championships (Freeport, BAH) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-22 | time | 5.73 | 9.50 | 13.36 | 17.20 | 21.16 | 25.23 | 29.33 | 33.60 | 38.00 | | | 48.23 | 3 / 3 | | | |
| reaction time | | interval | | 3.77 | 3.86 | 3.84 | 3.96 | 4.07 | 4.10 | 4.27 | 4.40 | | | | | 11.47 | 12.13 | |
| | | velocity | 7.85 | 9.28 | 9.07 | 9.11 | 8.84 | 8.60 | 8.54 | 8.20 | 7.95 | | | 8.29 | | 9.15 | 8.66 | |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | 13 | | 14 | 14 | | | 93 | | | | |

**FINAL** - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-22 | time | 5.86 | 9.56 | 13.50 | 17.46 | 21.53 | 23.21 | 25.66 | 29.93 | 34.30 | 38.83 | 43.53 | | 49.01 | 7 / 6 | | |
| reaction time | 0.152 | interval | | 3.70 | 3.94 | 3.96 | 4.07 | | 4.13 | 4.27 | 4.37 | 4.53 | 4.70 | 5.48 | | | 11.60 | 12.47 | 13.60 |
| | | velocity | 7.68 | 9.46 | 8.88 | 8.84 | 8.60 | 8.62 | 8.47 | 8.20 | 8.01 | 7.73 | 7.45 | 7.30 | 8.16 | | 9.05 | 8.42 | 7.72 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | | 15 | 18 | 146 | | | |

**FINAL** - 2022 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-22 | time | 5.86 | 9.64 | 13.46 | 17.38 | 21.34 | 22.98 | 25.38 | 29.54 | 33.84 | 38.22 | 42.86 | | 48.28 | 3 / 2 | | |
| reaction time | 0.138 | interval | | 3.78 | 3.82 | 3.92 | 3.96 | | 4.04 | 4.16 | 4.30 | 4.38 | 4.64 | 5.42 | | | 11.52 | 12.16 | 13.32 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.68 | 9.26 | 9.16 | 8.93 | 8.84 | 8.70 | 8.66 | 8.41 | 8.14 | 7.99 | 7.54 | 7.38 | 8.29 | | 9.11 | 8.63 | 7.88 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 15 | 17.5 | 158.5 | | | | |

**FINAL** - 2022 USATF National Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-22 | time | 6.04 | 9.77 | 13.61 | 17.51 | 21.52 | 23.15 | 25.55 | 29.76 | 34.03 | 38.44 | 42.94 | | 48.17 | 8 / 4 | | | |
| reaction time | | interval | | 3.73 | 3.84 | 3.90 | 4.01 | | 4.03 | 4.21 | 4.27 | 4.41 | 4.50 | 5.23 | PB | | 11.47 | 12.25 | 13.18 |
| | | velocity | 7.45 | 9.38 | 9.11 | 8.97 | 8.73 | 8.64 | 8.68 | 8.31 | 8.20 | 7.94 | 7.78 | 7.65 | 8.30 | | 9.15 | 8.57 | 7.97 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.5 | 158.5 | | | | |

**FINAL** - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-22 | time | 5.70 | 9.36 | 13.13 | 17.00 | 21.00 | 22.74 | 25.10 | 29.33 | 33.70 | 38.33 | 43.13 | | 48.76 | 5 / 6 | | | |
| reaction time | 0.156 | interval | | 3.66 | 3.77 | 3.87 | 4.00 | | 4.10 | 4.23 | 4.37 | 4.63 | 4.80 | 5.63 | | | 11.30 | 12.33 | 13.80 |
| | | velocity | 7.89 | 9.56 | 9.28 | 9.04 | 8.75 | 8.80 | 8.54 | 8.27 | 8.01 | 7.56 | 7.29 | 7.10 | 8.20 | | 9.29 | 8.52 | 7.61 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 15 | 15 | | 142 | | | | |

**Semi-Final 1** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jun-21 | time | 6.10 | 10.00 | 13.90 | 17.87 | 21.97 | | 26.10 | 30.47 | 34.93 | 39.50 | 44.30 | | 49.72 | 3 / 4 | | | |
| reaction time | 0.225 | interval | | 3.90 | 3.90 | 3.97 | 4.10 | | 4.13 | 4.37 | 4.46 | 4.57 | 4.80 | 5.42 | | | 11.77 | 12.60 | 13.83 |
| | | velocity | 7.38 | 8.97 | 8.97 | 8.82 | 8.54 | | 8.47 | 8.01 | 7.85 | 7.66 | 7.29 | 7.38 | 8.05 | | 8.92 | 8.33 | 7.59 |
| H1 lead leg | L | strides | 19 | 13 | 13 | 13 | 13 | | | 13 | 14 | 15 | 15 | 18.2 | 146.2 | | | | |

**Heat 2** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jun-21 | time | 5.94 | 9.71 | 13.54 | 17.55 | 21.65 | | 25.89 | 30.30 | 34.67 | 39.26 | 43.91 | | 49.45 | 4 / 4 | | | |
| reaction time | 0.235 | interval | | 3.77 | 3.83 | 4.01 | 4.10 | | 4.24 | 4.41 | 4.37 | 4.59 | 4.65 | 5.54 | | | 11.61 | 12.75 | 13.61 |
| | | velocity | 7.58 | 9.28 | 9.14 | 8.73 | 8.54 | | 8.25 | 7.94 | 8.01 | 7.63 | 7.53 | 7.22 | 8.09 | | 9.04 | 8.24 | 7.71 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | | 14 | 14 | 15 | 15 | 18 | 128 | | | | |

**Alonso, José (ESP) (1957)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Semi-Final 1** - 1988 Olympic Games (Seoul, KOR) *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-88 | time | 6.05 | 9.89 | 13.77 | 17.70 | 21.74 | | 25.95 | 30.26 | 34.71 | 39.40 | 44.20 | | 49.57 | 8 / 6 | | | |
| reaction time | | interval | | 3.84 | 3.88 | 3.93 | 4.04 | | 4.21 | 4.31 | 4.45 | 4.69 | 4.80 | 5.37 | | | 11.65 | 12.56 | 13.94 |
| | | velocity | 7.44 | 9.11 | 9.02 | 8.91 | 8.66 | | 8.31 | 8.12 | 7.87 | 7.46 | 7.29 | 7.45 | 8.07 | | 9.01 | 8.36 | 7.53 |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 168 | | | | |

**Alozíds, Minás (GRE) (1984)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2006 European Championships (Göteborg, SWE) *Behm (2006) - Göteborg 2006: Le quatrache*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-06 | time | 5.9 | 9.5 | 13.4 | 17.4 | 21.4 | | 25.5 | 29.7 | 34.3 | 38.9 | 43.8 | | 49.61 | / 7 | | | |
| reaction time | | interval | | 3.60 | 3.90 | 4.00 | 4.00 | | 4.10 | 4.20 | 4.60 | 4.60 | 4.90 | 5.81 | | | 11.50 | 12.30 | 14.10 |
| | | velocity | 7.63 | 9.72 | 8.97 | 8.75 | 8.75 | | 8.54 | 8.33 | 7.61 | 7.61 | 7.14 | 6.88 | 8.06 | | 9.13 | 8.54 | 7.45 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 15 | 15 | 15 | 16 | | 149 | | | | |

**Andersson, Isak (SWE) (1996)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2017 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Jun-17 | time | 6.08 | 9.96 | | 18.16 | 22.36 | | 26.64 | 31.12 | 35.64 | 40.24 | 44.92 | | 50.50 | 1 / 7 | | | |
| reaction time | 0.202 | interval | | 3.88 | | 8.20 | 4.20 | | 4.28 | 4.48 | 4.52 | 4.60 | 4.68 | 5.58 | PB | | 12.08 | 12.96 | 13.80 |
| | | velocity | 7.40 | 9.02 | | 8.54 | 8.33 | | 8.18 | 7.81 | 7.74 | 7.61 | 7.48 | 7.17 | 7.92 | | 8.69 | 8.10 | 7.61 |
| H1 lead leg | R | strides | 23 | 15 | | | 15 | | 15 | 15 | | 15 | 15 | | 113 | | | | |

**Anderson, Jeshua (USA) (1989)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2016 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-16 | time | 6.00 | 9.67 | 13.45 | 17.35 | 21.39 | | 25.49 | 29.73 | 34.13 | 38.74 | 43.58 | | 49.42 | 8 / ~~6~~ | | | |
| reaction time | 0.191 | interval | | 3.67 | 3.78 | 3.90 | 4.04 | | 4.10 | 4.24 | 4.40 | 4.61 | 4.84 | 5.84 | DQ | | 11.35 | 12.38 | 13.85 |
| | | velocity | 7.50 | 9.54 | 9.26 | 8.97 | 8.66 | | 8.54 | 8.25 | 7.95 | 7.59 | 7.23 | 6.85 | 8.09 | | 9.25 | 8.48 | 7.58 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17 | 156 | | | | |

**Angela, Ramsey (NED) (1999)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-22 | time | 6.03 | 9.73 | 13.70 | 17.73 | 21.90 | 29.90 | | | | 40.03 | | | 50.98 | 1 / 9 | | | |
| reaction time | 0.188 | interval | | 3.70 | 3.97 | 4.03 | 4.17 | | | | | 18.13 | | | | | 11.70 | | |
| | | velocity | 7.46 | 9.46 | 8.82 | 8.68 | 8.39 | 6.69 | | | | 7.72 | | | 7.85 | | 8.97 | | |
| H1 lead leg | R | strides | 22 | 15 | 15 | | 14 | | | | | | | | 66 | | | | |

**Semi-Final 1** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.90 | 9.70 | 13.57 | 17.56 | 21.67 | 23.51 | 25.90 | 30.17 | 34.67 | 39.40 | 44.23 | | 49.77 | 4 / 4 | | | |
| reaction time | 0.155 | interval | | 3.80 | 3.87 | 3.99 | 4.11 | | 4.23 | 4.27 | 4.50 | 4.73 | 4.83 | 5.54 | | | 11.66 | 12.61 | 14.06 |
| | | velocity | 7.63 | 9.21 | 9.04 | 8.77 | 8.52 | 8.51 | 8.27 | 8.20 | 7.78 | 7.40 | 7.25 | 7.22 | 8.04 | | 9.01 | 8.33 | 7.47 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.2 | 171.2 | | | | |

**Heat 5** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 6.17 | 10.13 | 14.13 | 18.16 | 22.33 | 24.10 | | 30.77 | 35.17 | 39.70 | 44.26 | | 49.62 | 3 / 2 | | | |
| reaction time | 0.182 | interval | | 3.96 | 4.00 | 4.03 | 4.17 | | | 8.44 | 4.40 | 4.53 | 4.56 | 5.36 | | | 11.99 | 12.61 | 13.49 |
| | | velocity | 7.29 | 8.84 | 8.75 | 8.68 | 8.39 | 8.30 | | 8.29 | 7.95 | 7.73 | 7.68 | 7.46 | 8.06 | | 8.76 | 8.33 | 7.78 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | | | 15 | 15 | 15 | 18 | 141 | | | | |

**FINAL** - 2022 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jun-22 | time | 5.92 | 9.68 | 13.52 | 17.52 | 21.84 | 23.62 | 26.18 | 30.58 | 34.78 | 39.68 | 44.52 | | 50.21 | 2 / 8 | | | |
| reaction time | 0.184 | interval | | 3.76 | 3.84 | 4.00 | 4.32 | | 4.34 | 4.40 | 4.20 | 4.90 | 4.84 | 5.69 | | | 11.60 | 13.06 | 13.94 |
| | | velocity | 7.60 | 9.31 | 9.11 | 8.75 | 8.10 | 8.47 | 8.06 | 7.95 | 8.33 | 7.14 | 7.23 | 7.03 | 7.97 | | 9.05 | 8.04 | 7.53 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 16 | | 15 | | 15 | 15 | 15 | 18.5 | 158.5 | | | | |

**FINAL** - 2021 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Sep-21 | time | 6.04 | | | | 21.72 | 23.4 | 25.92 | 30.24 | | 39.28 | 44.00 | | 49.39 | 2 / 6 | | | |
| reaction time | 0.167 | interval | | | | | 15.68 | | 4.20 | 4.32 | | 9.04 | 4.72 | 5.39 | | | | | 13.76 |
| | | velocity | 7.45 | | | | 8.93 | 8.55 | 8.33 | 8.10 | | 7.74 | 7.42 | 7.42 | 8.10 | | | | 7.63 |
| H1 lead leg | R | strides | 22 | | | | | | 15 | 15 | | | | 18 | 70 | | | | |

**FINAL** - 2021 Memorial van Damme (Brussels, BEL) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Sep-21 | time | 6.08 | 9.96 | 13.80 | 17.84 | 21.92 | 23.7 | 26.12 | 30.44 | 34.88 | 39.48 | 44.24 | | 49.53 | 2 / 6 | | | |
| reaction time | 0.197 | interval | | 3.88 | 3.84 | 4.04 | 4.08 | | 4.20 | 4.32 | 4.44 | 4.60 | 4.76 | 5.29 | | | 11.76 | 12.60 | 13.80 |
| | | velocity | 7.40 | 9.02 | 9.11 | 8.66 | 8.58 | 8.44 | 8.33 | 8.10 | 7.88 | 7.61 | 7.35 | 7.56 | 8.08 | | 8.93 | 8.33 | 7.61 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18 | 171 | | | | |

**FINAL** - 2021 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jul-21 | time | 6.08 | 9.96 | | 18.02 | 22.16 | | 26.44 | | 35.26 | 39.90 | 44.54 | | 49.81 | 1 / 6 | | | |
| reaction time | 0.199 | interval | | 3.88 | | 8.06 | 4.14 | | 4.28 | | 8.82 | 4.64 | 4.64 | 5.27 | | | 11.94 | | |
| | | velocity | 7.40 | 9.02 | | 8.68 | 8.45 | | 8.18 | | 7.94 | 7.54 | 7.54 | 7.59 | 8.03 | | 8.79 | | |
| H1 lead leg | R | strides | 22 | 14 | | | | | 15 | | | 15 | 15 | | 81 | | | | |

**FINAL** - 2020 ISTAF (Berlin, GER) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Sep-20 | time | 5.96 | 9.84 | 13.68 | 17.72 | 22.00 | | 26.36 | 30.88 | 35.52 | 40.36 | | | 51.25 | 8 / 7 | | | |
| reaction time | 0.195 | interval | | 3.88 | 3.84 | 4.04 | 4.28 | | 4.36 | 4.52 | 4.64 | 4.84 | | | | | 11.76 | 13.16 | |
| | | velocity | 7.55 | 9.02 | 9.11 | 8.66 | 8.18 | | 8.03 | 7.74 | 7.54 | 7.23 | | | 7.80 | | 8.93 | 7.98 | |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | | 14 | | | 122 | | | | |

**FINAL** - 2020 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-20 | time | 6.16 | | 13.90 | 17.94 | 22.12 | 24.0 | 26.44 | | 35.58 | 40.42 | 45.50 | | 51.90 | 1 / 8 | | | |
| reaction time | 0.210 | interval | | | 7.74 | 4.04 | 4.18 | | 4.32 | | 9.14 | 4.84 | 5.08 | 6.40 | | | 11.78 | | |
| | | velocity | 7.31 | | 9.04 | 8.66 | 8.37 | 8.33 | 8.10 | | 7.66 | 7.23 | 6.89 | 6.25 | 7.71 | | 8.91 | | |
| H1 lead leg | R | strides | 21 | 14 | | 14 | 14 | | 15 | | | 15 | 16 | | 109 | | | | |

**Arisaka, Tomotaka (JPN) (1999)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2017 Japanese National High School Championships (Yamagata, JPN) *Kota (2017) - 70th high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-17 | time | 6.26 | 10.36 | 14.56 | 18.94 | 23.47 | | 28.13 | 32.75 | 37.49 | 42.29 | 47.13 | | 52.58 | 4 / 5 | | | |
| reaction time | 0.200 | interval | | 4.10 | 4.20 | 4.38 | 4.53 | | 4.66 | 4.62 | 4.74 | 4.80 | 4.84 | 5.45 | | | 12.68 | 13.81 | 14.38 |
| | | velocity | 7.19 | 8.54 | 8.33 | 7.99 | 7.73 | | 7.51 | 7.58 | 7.38 | 7.29 | 7.23 | 7.34 | 7.61 | | 8.28 | 7.60 | 7.30 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**FINAL** - 2016 Japanese National High School Championships (Okayama, JPN) *Kota (2016) - 69th high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-16 | time | 6.21 | 10.23 | 14.48 | 18.85 | 23.17 | | 27.71 | 32.33 | 37.07 | 41.81 | 46.48 | | 51.81 | 2 / 2 | | | |
| reaction time | 0.147 | interval | | 4.02 | 4.25 | 4.37 | 4.32 | | 4.54 | 4.62 | 4.74 | 4.74 | 4.67 | 5.33 | | | 12.64 | 13.48 | 14.15 |
| | | velocity | 7.25 | 8.71 | 8.24 | 8.01 | 8.10 | | 7.71 | 7.58 | 7.38 | 7.38 | 7.49 | 7.50 | 7.72 | | 8.31 | 7.79 | 7.42 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Arkhipenko, Vasiliy (URS) (1957)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1980 Olympic Games (Moscow, URS) *Behm (1999) - Les chiffres: Les podiums de tous les championnates*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | time | | | | | 21.5 | | | | | | | | 48.86 | 2 / 2 | | | |
| reaction time | 0.137 | interval | | | | | | | | | | | | | | | | | |
| | | velocity | | | | | 8.60 | | | | | | | | 8.19 | | | | |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**Armstrong, Sherman (USA) (1978)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2003 USATF National Championships (Palo Alto, CA) *USATF Women's Sprint Development (2003)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Jun-03 | time | 5.97 | 9.81 | 13.71 | 17.62 | 21.71 | | 26.01 | 30.40 | 34.87 | 39.49 | 44.33 | | 49.89 | 7 / ~~5~~ 4 | | | |
| reaction time | | interval | | 3.84 | 3.90 | 3.91 | 4.09 | | 4.30 | 4.39 | 4.47 | 4.62 | 4.84 | 5.56 | | | 11.65 | 12.78 | 13.93 |
| | | velocity | 7.54 | 9.11 | 8.97 | 8.95 | 8.56 | | 8.14 | 7.97 | 7.83 | 7.58 | 7.23 | 7.19 | 8.02 | | 9.01 | 8.22 | 7.54 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Babineaux, Ricky (USA) (1990)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2016 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-16 | time | 6.00 | 9.84 | 13.68 | 17.62 | 21.59 | | 25.66 | 30.03 | 34.53 | 39.10 | 43.74 | | 48.88 | 4 / 4 | | | |
| reaction time | 0.187 | interval | | 3.84 | 3.84 | 3.94 | 3.97 | | 4.07 | 4.37 | 4.50 | 4.57 | 4.64 | 5.14 | PB | | 11.62 | 12.41 | 13.71 |
| | | velocity | 7.50 | 9.11 | 9.11 | 8.88 | 8.82 | | 8.60 | 8.01 | 7.78 | 7.66 | 7.54 | 7.78 | 8.18 | | 9.04 | 8.46 | 7.66 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.5 | 158.5 | | | | |

**Bäckman, Mattias (SWE) (1991)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2011 Fridrott (Stockholm, SWE) *Blomkvist (2011) - www.elitlandslag.se/SprintHäck/LängSprintHäck.aspx*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-11 | time | 6.72 | 11.00 | 15.44 | 19.78 | 24.34 | | 29.02 | 33.90 | 38.66 | 43.90 | 49.04 | | 54.66 | / 1 | | | |
| reaction time | | interval | | 4.28 | 4.44 | 4.34 | 4.56 | | 4.68 | 4.88 | 4.76 | 5.24 | 5.14 | 5.62 | | | 13.06 | 14.12 | 15.14 |
| | | velocity | 6.70 | 8.18 | 7.88 | 8.06 | 7.68 | | 7.48 | 7.17 | 7.35 | 6.68 | 6.81 | 7.12 | 7.32 | | 8.04 | 7.44 | 6.94 |
| H1 lead leg | L | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 19 | 154 | | | | |

**Bai Jiarui (CHN) (1995)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 2** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.63 | 10.87 | 15.15 | 19.53 | 24.00 | | 28.74 | 33.65 | 38.52 | | | | 54.19 | 8 / 5 | | | |
| reaction time | 0.299 | interval | | 4.24 | 4.28 | 4.38 | 4.47 | | 4.74 | 4.91 | 4.87 | | | | | | 12.90 | 14.12 | |
| | | velocity | 6.79 | 8.25 | 8.18 | 7.99 | 7.83 | | 7.38 | 7.13 | 7.19 | | | | 7.38 | | 8.14 | 7.44 | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | | | | 121 | | | | |

**FINAL** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.51 | 10.76 | 15.09 | 19.56 | 24.10 | 28.75 | 33.50 | 38.40 | 43.38 | 48.40 | | 53.92 | 8 / 7 | | | |
| reaction time | 0.279 | interval | | 4.25 | 4.33 | 4.47 | 4.54 | 4.65 | 4.75 | 4.90 | 4.98 | 5.02 | 5.52 | | | 13.05 | 13.94 | 14.90 |
| | | velocity | 6.91 | 8.24 | 8.08 | 7.83 | 7.71 | 7.53 | 7.37 | 7.14 | 7.03 | 6.97 | 7.25 | 7.42 | | 8.05 | 7.53 | 7.05 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 17 | 168 | | | | |

**Heat 2** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.41 | 10.58 | 14.83 | 19.13 | 23.49 | 27.93 | 32.51 | 37.17 | 42.04 | 46.96 | | 52.34 | 5 / 3 | | | |
| reaction time | 0.233 | interval | | 4.17 | 4.25 | 4.30 | 4.36 | 4.44 | 4.58 | 4.66 | 4.87 | 4.92 | 5.38 | | | 12.72 | 13.38 | 14.45 |
| | | velocity | 7.02 | 8.39 | 8.24 | 8.14 | 8.03 | 7.88 | 7.64 | 7.51 | 7.19 | 7.11 | 7.43 | 7.64 | | 8.25 | 7.85 | 7.27 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 17 | 168 | | | | |

**Bailey, Aldrich (USA) (1994)**

**FINAL** - 2022 USATF National Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-22 | time | 6.00 | 9.71 | 13.48 | 17.25 | 21.12 | 22.83 | 25.22 | 29.79 | 34.40 | 39.14 | 43.91 | | 49.43 | 9 / 7 | | | |
| reaction time | | interval | | 3.71 | 3.77 | 3.77 | 3.87 | | 4.10 | 4.57 | 4.61 | 4.74 | 4.77 | 5.52 | | | 11.25 | 12.54 | 14.12 |
| | | velocity | 7.50 | 9.43 | 9.28 | 9.28 | 9.04 | 8.76 | 8.54 | 7.66 | 7.59 | 7.38 | 7.34 | 7.25 | 8.09 | | 9.33 | 8.37 | 7.44 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 12 | 12 | | 13 | 14 | 13 | 14 | 14 | | 139 | | | | |

**FINAL** - 2021 Herculis Meeting International d'Athletisme (Monaco, MON) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-21 | time | 5.94 | 9.64 | 13.44 | 17.31 | 21.33 | 23.4 | 25.52 | 29.96 | 34.40 | | | | dnf | 8 / -- | | |
| reaction time | 0.225 | interval | | 3.70 | 3.80 | 3.87 | 4.02 | | 4.19 | 4.44 | 4.44 | | | | | | 11.37 | 12.65 | |
| | | velocity | 7.58 | 9.46 | 9.21 | 9.04 | 8.71 | 8.55 | 8.35 | 7.88 | 7.88 | | | | | | 9.23 | 8.30 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | | | | 114 | | | | |

**FINAL** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 5.80 | 9.61 | 13.48 | 17.35 | 21.32 | | 25.42 | 29.79 | 34.20 | 38.64 | 43.17 | | 48.55 | 3 / 4 | | |
| reaction time | 0.228 | interval | | 3.81 | 3.87 | 3.87 | 3.97 | | 4.10 | 4.37 | 4.41 | 4.44 | 4.53 | 5.38 | PB | | 11.55 | 12.44 | 13.38 |
| | | velocity | 7.76 | 9.19 | 9.04 | 9.04 | 8.82 | | 8.54 | 8.01 | 7.94 | 7.88 | 7.73 | 7.43 | 8.24 | | 9.09 | 8.44 | 7.85 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | | 14 | 14 | 14 | 14 | 17.2 | 125.2 | | | | |

**Semi-Final 2** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jun-21 | time | 6.10 | 9.94 | 13.84 | 17.71 | 21.84 | | 25.99 | 30.46 | 34.92 | 39.50 | 44.11 | | 49.20 | 2 / 4 | | |
| reaction time | 0.188 | interval | | 3.84 | 3.90 | 3.87 | 4.13 | | 4.15 | 4.47 | 4.46 | 4.58 | 4.61 | 5.09 | PB | | 11.61 | 12.75 | 13.65 |
| | | velocity | 7.38 | 9.11 | 8.97 | 9.04 | 8.47 | | 8.43 | 7.83 | 7.85 | 7.64 | 7.59 | 7.86 | 8.13 | | 9.04 | 8.24 | 7.69 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | | 14 | 14 | 14 | 14 | 17 | 125 | | | | |

**Baluch, Matej (SVK) (2000)**

**FINAL** - 2020 Golden Spike (Ostrava, CZE) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-20 | time | 6.00 | 9.78 | | 17.55 | 21.55 | | | 30.26 | 35.13 | 40.07 | 45.14 | | 50.74 | 4 / 4 | | | |
| reaction time | 0.154 | interval | | 3.78 | | 7.77 | 4.00 | | | 8.71 | 4.87 | 4.94 | 5.07 | 5.60 | =PB | | 11.55 | 12.71 | 14.88 |
| | | velocity | 7.50 | 9.26 | | 9.01 | 8.75 | | | 8.04 | 7.19 | 7.09 | 6.90 | 7.14 | 7.88 | | 9.09 | 8.26 | 7.06 |
| H1 lead leg | R | strides | 23 | 15 | | | 15 | | | | | 17 | 17 | | 87 | | | | |

**Barr, Thomas (IRL) (1992)**

**FINAL** - 2023 FBK Games (Hengelo, NED) *Omega Timing (2023) - continental tour race analysis*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jun-23 | time | 5.95 | 9.76 | 13.60 | 17.50 | 21.50 | | 25.73 | 30.15 | 34.76 | 39.45 | 44.11 | | 49.52 | 2 / 5 | | | |
| reaction time | 0.167 | interval | | 3.81 | 3.84 | 3.90 | 4.00 | | 4.23 | 4.42 | 4.61 | 4.69 | 4.66 | 5.41 | | | 11.55 | 12.65 | 13.96 |
| | | velocity | 7.56 | 9.19 | 9.11 | 8.97 | 8.75 | | 8.27 | 7.92 | 7.59 | 7.46 | 7.51 | 7.39 | 8.08 | | 9.09 | 8.30 | 7.52 |
| H1 lead leg | L | strides | 20 | 13 | | | | | | | | 14 | 14 | 17.7 | 78.7 | | | | |

**FINAL** - 2023 Doha Diamond League (Doha, QAT) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-23 | time | 5.95 | 9.79 | 13.71 | 17.77 | 21.92 | | 26.26 | 30.76 | 35.30 | 39.89 | 44.53 | | 49.88 | 8 / 7 | | |
| reaction time | 0.159 | interval | | 3.84 | 3.92 | 4.06 | 4.15 | | 4.34 | 4.50 | 4.54 | 4.59 | 4.64 | 5.35 | | | 11.82 | 12.99 | 13.77 |
| | | velocity | 7.56 | 9.11 | 8.93 | 8.62 | 8.43 | | 8.06 | 7.78 | 7.71 | 7.63 | 7.54 | 7.48 | 8.02 | | 8.88 | 8.08 | 7.63 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | | 14 | 14 | | 127 | | | | |

**Semi-Final 1** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.96 | 9.77 | 13.62 | 17.57 | 21.67 | 23.53 | 25.93 | 30.30 | 34.80 | 39.57 | 44.40 | | 50.08 | 5 / 3 | | |
| reaction time | 0.157 | interval | | 3.81 | 3.85 | 3.95 | 4.10 | | 4.26 | 4.37 | 4.50 | 4.77 | 4.83 | 5.68 | | | 11.61 | 12.73 | 14.10 |
| | | velocity | 7.55 | 9.19 | 9.09 | 8.86 | 8.54 | 8.50 | 8.22 | 8.01 | 7.78 | 7.34 | 7.25 | 7.04 | 7.99 | | 9.04 | 8.25 | 7.45 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |

**Heat 4** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 6.23 | 10.16 | 14.10 | 17.96 | 21.96 | 23.65 | 26.17 | 30.53 | 34.93 | 39.46 | 44.06 | | 49.15 | 8 / 2 | | |
| reaction time | 0.160 | interval | | 3.93 | 3.94 | 3.86 | 4.00 | | 4.21 | 4.36 | 4.40 | 4.53 | 4.60 | 5.09 | | | 11.73 | 12.57 | 13.53 |
| | | velocity | 7.22 | 8.91 | 8.88 | 9.07 | 8.75 | 8.46 | 8.31 | 8.03 | 7.95 | 7.73 | 7.61 | 7.86 | 8.14 | | 8.95 | 8.35 | 7.76 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.7 | 158.7 | | | | |

**FINAL** - 2022 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-May-22 | time | 5.90 | 9.67 | 13.58 | 17.65 | 21.85 | 23.6 | 26.16 | | 35.33 | 39.91 | 44.44 | | 49.67 | 2 / 3 | | |
| reaction time | 0.171 | interval | | 3.77 | 3.91 | 4.07 | 4.20 | | 4.31 | | 9.17 | 4.58 | 4.53 | 5.23 | | | 11.75 | | |
| | | velocity | 7.63 | 9.28 | 8.95 | 8.60 | 8.33 | 8.47 | 8.12 | | 7.63 | 7.64 | 7.73 | 7.65 | 8.05 | | 8.94 | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | | | 14 | 14 | | 113 | | | | |

**FINAL** - 2021 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jul-21 | time | 5.98 | 9.78 | | | | | | | | | | | | dnf | 4 / -- | | | | |
| reaction time | 0.147 | interval | | 3.80 | | | | | | | | | | | | | | | | | |
| | | velocity | 7.53 | 9.21 | | | | | | | | | | | | | | | | | |
| H1 lead leg | R | strides | 21 | 14 | | | | | | | | | | | | 35 | | | | | |

**FINAL** - 2021 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-21 | time | 6.07 | 9.94 | | | | 23.9 | | | 35.50 | 40.09 | 44.68 | | | 49.91 | 1 / 7 | | | | |
| reaction time | 0.204 | interval | | 3.87 | | | | | | | 25.56 | 4.59 | 4.59 | 5.23 | | | | | | | |
| | | velocity | 7.41 | 9.04 | | | | 8.37 | | | 8.22 | 7.63 | 7.63 | 7.65 | 8.01 | | | | | | |
| H1 lead leg | L | strides | 20 | 13 | | | | | | | | 14 | 14 | | 61 | | | | | | |

**FINAL** - 2020 ISTAF (Berlin, GER) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Sep-20 | time | 6.08 | | 13.76 | 17.72 | | | 26.12 | 30.64 | 35.20 | 40.04 | | | | 50.41 | 3 / 4 | | | | |
| reaction time | 0.179 | interval | | | 7.68 | 3.96 | | | 8.40 | 4.52 | 4.56 | 4.84 | | | | | | | 11.64 | 12.92 | |
| | | velocity | 7.40 | | 9.11 | 8.84 | | | 8.33 | 7.74 | 7.68 | 7.23 | | | | 7.93 | | | 9.02 | 8.13 | |
| H1 lead leg | L | strides | 21 | | | 13 | | | | | 14 | 15 | | | | 63 | | | | | |

**Semi-Final 3** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 5.87 | 9.62 | 13.44 | 17.31 | 21.34 | | 25.47 | 29.85 | 34.28 | 38.83 | 43.51 | | | 49.02 | 7 / 4 | | | | |
| reaction time | 0.131 | interval | | 3.75 | 3.82 | 3.87 | 4.03 | | 4.13 | 4.38 | 4.43 | 4.55 | 4.68 | 5.51 | | | | | 11.44 | 12.54 | 13.66 |
| | | velocity | 7.67 | 9.33 | 9.16 | 9.04 | 8.68 | | 8.47 | 7.99 | 7.90 | 7.69 | 7.48 | 7.26 | 8.16 | | | | 9.18 | 8.37 | 7.69 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 18.2 | 160.2 | | | | | | |

**FINAL** - 2019 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Aug-19 | time | 5.98 | 9.76 | | 17.60 | 21.62 | 23.3 | 25.72 | 30.06 | | 39.16 | 43.84 | | | 49.17 | 1 / 6 | | | | |
| reaction time | 0.127 | interval | | 3.78 | | 7.84 | 4.02 | | 4.10 | 4.34 | | 9.10 | 4.68 | 5.33 | | | | | 11.62 | 12.46 | 13.78 |
| | | velocity | 7.53 | 9.26 | | 8.93 | 8.71 | 8.58 | 8.54 | 8.06 | | 7.69 | 7.48 | 7.50 | 8.14 | | | | 9.04 | 8.43 | 7.62 |
| H1 lead leg | L | strides | 21 | 13 | | | 13 | | 13 | 14 | | | 14 | | 88 | | | | | | |

**FINAL** - 2019 Meeting de Paris (Paris, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-19 | time | 5.92 | 9.68 | 13.52 | 17.42 | 21.40 | 23.1 | 25.58 | 30.04 | 34.58 | 39.34 | 44.04 | | | 49.32 | 1 / 7 | | | | |
| reaction time | 0.148 | interval | | 3.76 | 3.84 | 3.90 | 3.98 | | 4.18 | 4.46 | 4.54 | 4.76 | 4.70 | 5.28 | | | | | 11.50 | 12.62 | 14.00 |
| | | velocity | 7.60 | 9.31 | 9.11 | 8.97 | 8.79 | 8.66 | 8.37 | 7.85 | 7.71 | 7.35 | 7.45 | 7.58 | 8.11 | | | | 9.13 | 8.32 | 7.50 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | | | |

**FINAL** - 2019 Müller Grand Prix (Birmingham, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-19 | time | 6.08 | 9.96 | 13.84 | 17.80 | 21.88 | 23.7 | 26.12 | 30.68 | 35.28 | 39.92 | | | | 50.16 | 8 / 5 | | | | |
| reaction time | 0.171 | interval | | 3.88 | 3.88 | 3.96 | 4.08 | | 4.24 | 4.56 | 4.60 | 4.64 | | | | | | | 11.72 | 12.88 | |
| | | velocity | 7.40 | 9.02 | 9.02 | 8.84 | 8.58 | 8.44 | 8.25 | 7.68 | 7.61 | 7.54 | | | | 7.97 | | | 8.96 | 8.15 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | | | | 129 | | | | | |

**FINAL** - 2019 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Jun-19 | time | 5.98 | 9.71 | 13.53 | | 21.45 | 23.2 | 25.68 | 29.99 | 34.43 | 39.00 | 43.73 | | | 49.11 | 3 / 2 | | | | |
| reaction time | 0.175 | interval | | 3.73 | 3.82 | | 7.92 | | 4.23 | 4.31 | 4.44 | 4.57 | 4.73 | 5.38 | | | | | | 29.99 | 13.74 |
| | | velocity | 7.53 | 9.38 | 9.16 | | 8.84 | 8.62 | 8.27 | 8.12 | 7.88 | 7.66 | 7.40 | 7.43 | 8.14 | | | | | 3.50 | 7.64 |
| H1 lead leg | L | strides | 21 | 13 | 13 | | | | 13 | 14 | 14 | 14 | 15 | 18 | 135 | | | | | | |

**FINAL** - 2019 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jun-19 | time | 5.93 | 9.70 | 13.63 | 17.68 | 21.78 | | 25.98 | 30.28 | 34.75 | 39.48 | 44.28 | | | 49.65 | 5 / 4 | | | | |
| reaction time | 0.194 | interval | | 3.77 | 3.93 | 4.05 | 4.10 | | 4.20 | 4.30 | 4.47 | 4.73 | 4.80 | 5.37 | | | | | 11.75 | 12.60 | 14.00 |
| | | velocity | 7.59 | 9.28 | 8.91 | 8.64 | 8.54 | | 8.33 | 8.14 | 7.83 | 7.40 | 7.29 | 7.45 | 8.06 | | | | 8.94 | 8.33 | 7.50 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 15 | 15 | 18 | 160 | | | | | | |

**FINAL** - 2019 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-May-19 | time | 6.06 | 9.85 | 13.96 | 18.00 | 22.00 | 23.7 | 26.36 | 30.76 | 35.33 | 40.26 | 44.93 | | | 50.28 | 5 / 3 | | | | |
| reaction time | 0.196 | interval | | 3.79 | 4.11 | 4.04 | 4.00 | | 4.36 | 4.40 | 4.57 | 4.93 | 4.67 | 5.35 | | | | | 11.94 | 12.76 | 14.17 |
| | | velocity | 7.43 | 9.23 | 8.52 | 8.66 | 8.75 | 8.44 | 8.03 | 7.95 | 7.66 | 7.10 | 7.49 | 7.48 | 7.96 | | | | 8.79 | 8.23 | 7.41 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 16 | 15 | 18 | 164 | | | | | | |

**FINAL** - 2018 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jul-18 | time | 6.04 | 9.84 | 13.76 | 17.76 | 21.80 | | 25.96 | 30.40 | 34.80 | 39.28 | 43.80 | | | 48.99 | 8 / 3 | | | | |
| reaction time | 0.186 | interval | | 3.80 | 3.92 | 4.00 | 4.04 | | 4.16 | 4.44 | 4.40 | 4.48 | 4.52 | 5.19 | | | | | 11.72 | 12.64 | 13.40 |
| | | velocity | 7.45 | 9.21 | 8.93 | 8.75 | 8.66 | | 8.41 | 7.88 | 7.95 | 7.81 | 7.74 | 7.71 | 8.16 | | | | 8.96 | 8.31 | 7.84 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 18 | 160 | | | | | | |

**FINAL** - 2018 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-18 | time | 5.96 | 9.72 | | | 21.52 | 23.4 | 25.84 | 30.24 | 34.80 | 39.48 | 44.16 | | | 49.53 | 1 / 8 | | | | |
| reaction time | 0.197 | interval | | 3.76 | | | 11.80 | | 4.32 | 4.40 | 4.56 | 4.68 | 4.68 | 5.37 | | | | | | | 13.92 |
| | | velocity | 7.55 | 9.31 | | | 8.90 | 8.55 | 8.10 | 7.95 | 7.68 | 7.48 | 7.48 | 7.45 | 8.08 | | | | | | 7.54 |
| H1 lead leg | L | strides | 21 | 13 | | | | | 14 | 14 | 14 | 14 | 15 | 18 | 123 | | | | | | |

**FINAL** - 2017 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Jun-17 | time | 6.13 | 9.83 | 13.60 | | | | 25.83 | 30.23 | 34.70 | 39.26 | 43.80 | | | 48.95 | 1 / 3 | | | | |
| reaction time | 0.193 | interval | | 3.70 | 3.77 | | | | 12.23 | 4.40 | 4.47 | 4.56 | 4.54 | 5.15 | | | | | | | 13.57 |
| | | velocity | 7.34 | 9.46 | 9.28 | | | | 8.59 | 7.95 | 7.83 | 7.68 | 7.71 | 7.77 | 8.17 | | | | | | 7.74 |
| H1 lead leg | L | strides | 22 | 13 | 13 | | | | | 14 | 14 | 14 | 15 | 18.5 | 123.5 | | | | | | |

**FINAL** - 2016 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-16 | time | 6.04 | 9.80 | 13.68 | 17.60 | 21.72 | | 25.84 | 30.20 | 34.64 | 39.28 | 44.00 | | 49.34 | 4 / 6 | | | |
| reaction time | 0.174 | interval | | 3.76 | 3.88 | 3.92 | 4.12 | | 4.12 | 4.36 | 4.44 | 4.64 | 4.72 | 5.34 | | | 11.56 | 12.60 | 13.80 |
| | | velocity | 7.45 | 9.31 | 9.02 | 8.93 | 8.50 | | 8.50 | 8.03 | 7.88 | 7.54 | 7.42 | 7.49 | 8.11 | | 9.08 | 8.33 | 7.61 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |

**Bassitt, Trevor (USA) (1998)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2023 Prefontaine Classic (Eugene, OR) | | | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | | |
| date | 16-Sep-23 | time | 5.89 | 9.70 | 13.54 | 17.53 | 21.61 | | 25.76 | 29.99 | 34.34 | 38.81 | 43.29 | | 48.42 | 8 / 8 | | | |
| reaction time | 0.154 | interval | | 3.81 | 3.84 | 3.99 | 4.08 | | 4.15 | 4.23 | 4.35 | 4.47 | 4.48 | 5.13 | | | 11.64 | 12.46 | 13.30 |
| | | velocity | 7.64 | 9.19 | 9.11 | 8.77 | 8.58 | | 8.43 | 8.27 | 8.05 | 7.83 | 7.81 | 7.80 | 8.26 | | 9.02 | 8.43 | 7.89 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | | | | 111 | | | | |
| **FINAL** - 2023 Weltklasse (Zürich, SUI) | | | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | | |
| date | 31-Aug-23 | time | 5.83 | 9.55 | 13.33 | 17.13 | 21.09 | | 25.27 | 29.55 | 34.02 | 38.72 | 43.62 | | 49.39 | 8 / 6 | | | |
| reaction time | 0.171 | interval | | 3.72 | 3.78 | 3.80 | 3.96 | | 4.18 | 4.28 | 4.47 | 4.70 | 4.90 | 5.77 | | | 11.30 | 12.42 | 14.07 |
| | | velocity | 7.72 | 9.41 | 9.26 | 9.21 | 8.84 | | 8.37 | 8.18 | 7.83 | 7.45 | 7.14 | 6.93 | 8.10 | | 9.29 | 8.45 | 7.46 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | | | | 111 | | | | |
| **FINAL** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | | |
| date | 23-Aug-23 | time | 5.93 | 9.78 | 13.33 | 17.05 | 20.92 | | | 29.16 | 33.56 | 38.20 | 42.98 | | 48.22 | 3 / 6 | | | |
| reaction time | 0.164 | interval | | 3.85 | 3.55 | 3.72 | 3.87 | | | 8.24 | 4.40 | 4.64 | 4.78 | 5.24 | | | 11.12 | 12.11 | 13.82 |
| | | velocity | 7.59 | 9.09 | 9.86 | 9.41 | 9.04 | | | 8.50 | 7.95 | 7.54 | 7.32 | 7.63 | 8.30 | | 9.44 | 8.67 | 7.60 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | | | 13 | 13 | 14 | 17 | 129 | | | | |
| **Semi-Final 3** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | | |
| date | 21-Aug-23 | time | 5.87 | 9.71 | 13.41 | 17.08 | 20.92 | | 24.87 | 29.00 | 33.28 | | 42.37 | | 47.38 | 9 / 3 | | | |
| reaction time | 0.187 | interval | | 3.84 | 3.70 | 3.67 | 3.84 | | 3.95 | 4.13 | 4.28 | | 9.09 | 5.01 | PB | | 11.21 | 11.92 | 13.37 |
| | | velocity | 7.67 | 9.11 | 9.46 | 9.54 | 9.11 | | 8.86 | 8.47 | 8.18 | | 7.70 | 7.98 | 8.44 | | 9.37 | 8.81 | 7.85 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | | | 17 | 128 | | | | |
| **Heat 2** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | | |
| date | 20-Aug-23 | time | 5.97 | 9.73 | | 17.23 | 21.13 | | 25.23 | 29.47 | 33.90 | 38.60 | 43.43 | | 48.73 | 8 / 3 | | | |
| reaction time | 0.164 | interval | | 3.76 | | 7.50 | 3.90 | | 4.10 | 4.24 | 4.43 | 4.70 | 4.83 | 5.30 | | | 11.26 | 12.24 | 13.96 |
| | | velocity | 7.54 | 9.31 | | 9.33 | 8.97 | | 8.54 | 8.25 | 7.90 | 7.45 | 7.25 | 7.55 | 8.21 | | 9.33 | 8.58 | 7.52 |
| H1 lead leg | R | strides | 20 | 13 | | | 13 | | 13 | 13 | 13 | 14 | 14 | 16.2 | 129.2 | | | | |
| **FINAL** - 2023 USATF National Championships (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | | |
| date | 09-Jul-23 | time | 5.94 | 9.64 | 13.38 | 17.18 | 21.15 | | 25.25 | 29.49 | 33.80 | 38.30 | 43.01 | | 48.26 | 6 / 3 | | | |
| reaction time | | interval | | 3.70 | 3.74 | 3.80 | 3.97 | | 4.10 | 4.24 | 4.31 | 4.50 | 4.71 | 5.25 | | | 11.24 | 12.31 | 13.52 |
| | | velocity | 7.58 | 9.46 | 9.36 | 9.21 | 8.82 | | 8.54 | 8.25 | 8.12 | 7.78 | 7.43 | 7.62 | 8.29 | | 9.34 | 8.53 | 7.77 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 12 | 12 | | 13 | 13 | 13 | 14 | 14 | 17 | 154 | | | | |
| **FINAL** - 2023 Bislett Games (Oslo, NOR) | | | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | | |
| date | 15-Jun-23 | time | 5.72 | 9.40 | 13.20 | 17.04 | 21.00 | | 25.07 | 29.27 | 33.60 | 38.31 | 43.05 | | 48.63 | 4 / 5 | | | |
| reaction time | 0.185 | interval | | 3.68 | 3.80 | 3.84 | 3.96 | | 4.07 | 4.20 | 4.33 | 4.71 | 4.74 | 5.58 | | | 11.32 | 12.23 | 13.78 |
| | | velocity | 7.87 | 9.51 | 9.21 | 9.11 | 8.84 | | 8.60 | 8.33 | 8.08 | 7.43 | 7.38 | 7.17 | 8.23 | | 9.28 | 8.59 | 7.62 |
| H1 lead leg | R | strides | 20 | | | 13 | 13 | | 13 | | | 14 | 13 | | 86 | | | | |
| **FINAL** - 2023 Meeting de Paris (Paris, FRA) | | | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | | |
| date | 09-Jun-23 | time | 5.69 | 9.35 | 13.18 | 17.09 | 21.13 | | 25.19 | 29.34 | 33.69 | 38.22 | 42.87 | | 48.28 | 4 / 3 | | | |
| reaction time | 0.164 | interval | | 3.66 | 3.83 | 3.91 | 4.04 | | 4.06 | 4.15 | 4.35 | 4.53 | 4.65 | 5.41 | | | 11.40 | 12.25 | 13.53 |
| | | velocity | 7.91 | 9.56 | 9.14 | 8.95 | 8.66 | | 8.62 | 8.43 | 8.05 | 7.73 | 7.53 | 7.39 | 8.29 | | 9.21 | 8.57 | 7.76 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 17 | 155 | | | | |
| **FINAL** - 2023 Doha Diamond League (Doha, QAT) | | | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | | |
| date | 05-May-23 | time | 5.89 | 9.67 | 13.54 | 17.50 | 21.57 | | 25.77 | 30.13 | 34.61 | 39.32 | 43.99 | | 49.52 | 7 / 5 | | | |
| reaction time | 0.158 | interval | | 3.78 | 3.87 | 3.96 | 4.07 | | 4.20 | 4.36 | 4.48 | 4.71 | 4.67 | 5.53 | | | 11.61 | 12.63 | 13.86 |
| | | velocity | 7.64 | 9.26 | 9.04 | 8.84 | 8.60 | | 8.33 | 8.03 | 7.81 | 7.43 | 7.49 | 7.23 | 8.08 | | 9.04 | 8.31 | 7.58 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 20 | 158 | | | | |
| **FINAL** - 2022 World Athletics Championships (Eugene, OR) | | | | | | | | | | | | | | | *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season* | | | | |
| date | 19-Jul-22 | time | 5.86 | 9.54 | 13.21 | 16.90 | 20.69 | 22.28 | 24.72 | 28.98 | 33.30 | 37.77 | 42.33 | | 47.39 | 8 / 3 | | | |
| reaction time | 0.147 | interval | | 3.68 | 3.67 | 3.69 | 3.79 | | 4.03 | 4.26 | 4.32 | 4.47 | 4.56 | 5.06 | PB | | 11.04 | 12.08 | 13.35 |
| | | velocity | 7.68 | 9.51 | 9.54 | 9.49 | 9.23 | 8.98 | 8.68 | 8.22 | 8.10 | 7.83 | 7.68 | 7.91 | 8.44 | | 9.51 | 8.69 | 7.87 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 12 | 12 | | 13 | 13 | 13 | 13 | 13 | 16.2 | 151.2 | | | | |
| **Semi-Final 2** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | | |
| date | 17-Jul-22 | time | 5.83 | 9.63 | 13.37 | 17.13 | 21.10 | 22.80 | 25.17 | 29.43 | 33.83 | 38.30 | 42.83 | | 48.17 | 7 / 2 | | | |
| reaction time | 0.144 | interval | | 3.80 | 3.74 | 3.76 | 3.97 | | 4.07 | 4.26 | 4.40 | 4.47 | 4.53 | 5.34 | | | 11.30 | 12.30 | 13.40 |
| | | velocity | 7.72 | 9.21 | 9.36 | 9.31 | 8.82 | 8.77 | 8.60 | 8.22 | 7.95 | 7.83 | 7.73 | 7.49 | 8.30 | | 9.29 | 8.54 | 7.84 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16 | 153 | | | | |
| **Heat 4** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | | |
| date | 16-Jul-22 | time | 6.03 | 9.93 | 13.86 | 17.76 | 21.80 | 23.45 | | 30.16 | 34.66 | 39.26 | 43.90 | | 49.17 | 3 / 4 | | | |
| reaction time | 0.146 | interval | | 3.90 | 3.93 | 3.90 | 4.04 | | | 8.36 | 4.50 | 4.60 | 4.64 | 5.27 | | | 11.73 | 12.40 | 13.74 |
| | | velocity | 7.46 | 8.97 | 8.91 | 8.97 | 8.66 | 8.53 | | 8.37 | 7.78 | 7.61 | 7.54 | 7.59 | 8.14 | | 8.95 | 8.47 | 7.64 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | | | 13 | 13 | 13 | 16 | 127 | | | | |

**FINAL** - 2022 USATF National Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-22 | time | 5.97 | 9.67 | 13.44 | 17.25 | 21.19 | 22.78 | 25.22 | 29.43 | 33.70 | 38.10 | 42.54 | | 47.47 | 5 / 2 | | | |
| reaction time | | interval | | 3.70 | 3.77 | 3.81 | 3.94 | | 4.03 | 4.21 | 4.27 | 4.40 | 4.44 | 4.93 | PB | | 11.28 | 12.18 | 13.11 |
| | | velocity | 7.54 | 9.46 | 9.28 | 9.19 | 8.88 | 8.78 | 8.68 | 8.31 | 8.20 | 7.95 | 7.88 | 8.11 | 8.43 | | 9.31 | 8.62 | 8.01 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16 | 153 | | | | |

**FINAL** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 5.88 | 9.64 | 13.51 | 17.45 | 21.55 | | 25.76 | 30.20 | 34.87 | 39.54 | 44.38 | | 50.03 | 2 / 8 | | | |
| reaction time | 0.206 | interval | | 3.76 | 3.87 | 3.94 | 4.10 | | 4.21 | 4.44 | 4.67 | 4.67 | 4.84 | 5.65 | | | 11.57 | 12.75 | 14.18 |
| | | velocity | 7.65 | 9.31 | 9.04 | 8.88 | 8.54 | | 8.31 | 7.88 | 7.49 | 7.49 | 7.23 | 7.08 | 8.00 | | 9.08 | 8.24 | 7.40 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | | 14 | 14 | 14 | 14 | | 108 | | | | |

**Semi-Final 2** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jun-21 | time | 6.00 | 9.81 | 13.68 | 17.62 | 21.82 | | 26.09 | 30.56 | 35.10 | 39.60 | 44.21 | | 49.37 | 3 / 5 | | | |
| reaction time | 0.176 | interval | | 3.81 | 3.87 | 3.94 | 4.20 | | 4.27 | 4.47 | 4.54 | 4.50 | 4.61 | 5.16 | | | 11.62 | 12.94 | 13.65 |
| | | velocity | 7.50 | 9.19 | 9.04 | 8.88 | 8.33 | | 8.20 | 7.83 | 7.71 | 7.78 | 7.59 | 7.75 | 8.10 | | 9.04 | 8.11 | 7.69 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | | 13 | 14 | 13 | 14 | 17 | 123 | | | | |

**Beck, Volker (GDR) (1956)**

**FINAL** - 1981 USSR vs. GDR (Tbilisi, URS) *Breizer (1982) - in the distance: volker beck*

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-81 | time | 6.27 | 9.95 | 13.83 | 17.68 | 21.92 | | 25.91 | 30.27 | 34.70 | 39.13 | 44.01 | | 49.14 | / 1 | | | |
| reaction time | | interval | | 3.68 | 3.88 | 3.85 | 4.24 | | 3.99 | 4.36 | 4.43 | 4.43 | 4.88 | 5.13 | | | 11.41 | 12.59 | 13.74 |
| | | velocity | 7.18 | 9.51 | 9.02 | 9.09 | 8.25 | | 8.77 | 8.03 | 7.90 | 7.90 | 7.17 | 7.80 | 8.14 | | 9.20 | 8.34 | 7.64 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 18 | 158 | | | | |

**FINAL** - 1980 Olympic Games (Moscow, URS) *Lamare (1980) - resultats complets et commentaires- Moscow 1980*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jul-80 | time | 6.2 | 10.1 | 13.8 | 17.7 | 21.7 | | 25.8 | 30.1 | 34.5 | 39.0 | 43.6 | | 48.70 | 8 / 1 | | | |
| reaction time | 0.161 | interval | | 3.90 | 3.70 | 3.90 | 4.00 | | 4.10 | 4.30 | 4.40 | 4.50 | 4.60 | 5.10 | | | 11.50 | 12.40 | 13.50 |
| | | velocity | 7.26 | 8.97 | 9.46 | 8.97 | 8.75 | | 8.54 | 8.14 | 7.95 | 7.78 | 7.61 | 7.84 | 8.21 | | 9.13 | 8.47 | 7.78 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | | 123 | | | | |

**Beckenham, Matt (AUS) (1976)**

**Heat 6** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.18 | 10.10 | 14.26 | 18.42 | 22.74 | | 27.30 | 31.86 | 36.38 | | | | 51.27 | 8 / 7 | | | |
| reaction time | 0.176 | interval | | 3.92 | 4.16 | 4.16 | 4.32 | | 4.56 | 4.56 | 4.52 | | | | | | 12.24 | 13.44 | |
| | | velocity | 7.28 | 8.93 | 8.41 | 8.41 | 8.10 | | 7.68 | 7.68 | 7.74 | | | | 7.80 | | 8.58 | 7.81 | |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | | | | 122 | | | | |

**Bédi, Tibor (HUN) (1974)**

**Heat 5** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.92 | 9.68 | 13.64 | 17.64 | 21.80 | | 26.00 | 30.36 | 35.04 | 40.24 | 45.48 | | 51.54 | 7 / 3 | | | |
| reaction time | 0.169 | interval | | 3.76 | 3.96 | 4.00 | 4.16 | | 4.20 | 4.36 | 4.68 | 5.20 | 5.24 | 6.06 | | | 11.72 | 12.72 | 15.12 |
| | | velocity | 7.60 | 9.31 | 8.84 | 8.75 | 8.41 | | 8.33 | 8.03 | 7.48 | 6.73 | 6.68 | 6.60 | 7.76 | | 8.96 | 8.25 | 6.94 |
| H1 lead leg | | strides | 21.00 | 13.00 | 14.00 | 14.00 | 14.00 | | 14.00 | 15.00 | 15.00 | 17.00 | 17.00 | 20.90 | 174.90 | | | | |

**Semi-Final 2** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-99 | time | 5.65 | 9.53 | 13.57 | 17.62 | 21.72 | | 25.93 | 30.16 | 34.50 | 38.85 | 43.28 | | 49.00 | 8 / 6 | | | |
| reaction time | 0.215 | interval | | 3.88 | 4.04 | 4.05 | 4.10 | | 4.21 | 4.23 | 4.34 | 4.35 | 4.43 | 5.72 | PB | | 11.97 | 12.54 | 13.12 |
| | | velocity | 7.96 | 9.02 | 8.66 | 8.64 | 8.54 | | 8.31 | 8.27 | 8.06 | 8.05 | 7.90 | 6.99 | 8.16 | | 8.77 | 8.37 | 8.00 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 19.5 | 171.5 | | | | |

**Bekrić, Emir (SRB) (1991)**

**FINAL** - 2014 European Championships (Zurich, SUI) *Green (2015) - twitter.com/jackpgreen (from Behm?)*

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-14 | time | 6.00 | 9.78 | 13.58 | 17.46 | 21.42 | | 25.46 | 29.78 | 34.30 | 39.06 | 44.06 | | 49.90 | / 6 | | | |
| reaction time | 0.233 | interval | | 3.78 | 3.80 | 3.88 | 3.96 | | 4.04 | 4.32 | 4.52 | 4.76 | 5.00 | 5.84 | | | 11.46 | 12.32 | 14.28 |
| | | velocity | 7.50 | 9.26 | 9.21 | 9.02 | 8.84 | | 8.66 | 8.10 | 7.74 | 7.35 | 7.00 | 6.85 | 8.02 | | 9.16 | 8.52 | 7.35 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | | 121 | | | | |

**FINAL** - 2013 IAAF World Championships (Moscow, RUS) (TV Analysis) *Henson (2021) - Athlete First: major championships report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-13 | time | 5.90 | 9.50 | 13.20 | 17.00 | 20.87 | | 24.93 | 29.23 | 33.63 | 38.20 | 42.73 | | 48.05 | 8 / 3 | | | |
| reaction time | 0.202 | interval | | 3.60 | 3.70 | 3.80 | 3.87 | | 4.06 | 4.30 | 4.40 | 4.57 | 4.53 | 5.32 | NR PB | | 11.10 | 12.23 | 13.50 |
| | | velocity | 7.63 | 9.72 | 9.46 | 9.21 | 9.04 | | 8.62 | 8.14 | 7.95 | 7.66 | 7.73 | 7.52 | 8.32 | | 9.46 | 8.59 | 7.78 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 16.7 | 158.7 | | | | |

**Bellaabouss, Fadil (FRA) (1986)**

**FINAL** - 2010 European Championships (Barcelona, ESP) *Behm (2010) - les haies bases*

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-10 | time | 6.2 | 10.3 | 14.5 | | | | | | | | | | 62.94 | 8 / 8 | | | |
| reaction time | 0.180 | interval | | 4.10 | 4.20 | | | | | | | | | | | | | | |
| | | velocity | 7.26 | 8.54 | 8.33 | | | | | | | | | | 6.36 | | | | |
| H1 lead leg | L | strides | 21 | 14 | 14 | | | | | | | | | | 49 | | | | |

**Bencosme, José Reynaldo (ITA) (199**

**FINAL** - 2019 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jun-19 | time | 5.97 | 9.75 | 13.71 | 17.71 | 21.78 | | 25.95 | 30.40 | 34.86 | 39.63 | 44.52 | | 50.36 | 2 / 7 | | | |
| reaction time | 0.165 | interval | | 3.78 | 3.96 | 4.00 | 4.07 | | 4.17 | 4.45 | 4.46 | 4.77 | 4.89 | 5.84 | | | 11.74 | 12.69 | 14.12 |
| | | velocity | 7.54 | 9.26 | 8.84 | 8.75 | 8.60 | | 8.39 | 7.87 | 7.85 | 7.34 | 7.16 | 6.85 | 7.94 | | 8.94 | 8.27 | 7.44 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18.5 | 161.5 | | | | |

**FINAL** - 2018 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Aug-18 | time | 6.04 | 9.88 | 13.76 | | 21.96 | 23.8 | 26.12 | 30.48 | | 39.52 | 44.32 | | 50.01 | 1 / 6 | | |
| reaction time | 0.151 | interval | | 3.84 | 3.88 | | 8.20 | | 4.16 | 4.36 | | 9.04 | 4.80 | 5.69 | | | | 13.84 |
| | | velocity | 7.45 | 9.11 | 9.02 | | 8.54 | 8.40 | 8.41 | 8.03 | | 7.74 | 7.29 | 7.03 | 8.00 | | | 7.59 |
| H1 lead leg | L | strides | 20 | 13 | 13 | | | | 13 | 14 | | | 15 | | 88 | | | |

**FINAL** - 2018 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-May-18 | time | 6.04 | 9.80 | 13.64 | 17.52 | 21.48 | | 25.60 | 30.00 | 34.48 | 39.28 | 44.12 | | 49.79 | 2 / 7 | | |
| reaction time | 0.153 | interval | | 3.76 | 3.84 | 3.88 | 3.96 | | 4.12 | 4.40 | 4.48 | 4.80 | 4.84 | 5.67 | | | 11.48 | 12.48 | 14.12 |
| | | velocity | 7.45 | 9.31 | 9.11 | 9.02 | 8.84 | | 8.50 | 7.95 | 7.81 | 7.29 | 7.23 | 7.05 | 8.03 | | 9.15 | 8.41 | 7.44 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 143 | | | |

**FINAL** - 2012 Italian National Championships (Napoli, ITA) *FIDAL - Centro Studi & Ricerche (2012) - www.youtube.com/watch?v=Jmz79eerIOs*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Jul-12 | time | 6.20 | 10.00 | 13.93 | 17.93 | 21.97 | | 26.05 | 30.36 | 34.75 | 39.24 | 43.91 | | 49.33 | 6 / 1 | | |
| reaction time | | interval | | 3.80 | 3.93 | 4.00 | 4.04 | | 4.08 | 4.31 | 4.39 | 4.49 | 4.67 | 5.42 | PB | | 11.73 | 12.43 | 13.55 |
| | | velocity | 7.26 | 9.21 | 8.91 | 8.75 | 8.66 | | 8.58 | 8.12 | 7.97 | 7.80 | 7.49 | 7.38 | 8.11 | | 8.95 | 8.45 | 7.75 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Benjamin, Rai (USA) (1997)**

**FINAL** - 2023 Prefontaine Classic (Eugene, OR) *Omega Timing (2023) - diamond league race analysis*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Sep-23 | time | 5.74 | 9.40 | 13.10 | 16.86 | 20.68 | | 24.61 | 28.60 | 32.70 | 36.97 | 41.36 | | 46.39 | 5 / 1 | | | |
| reaction time | 0.154 | interval | | 3.66 | 3.70 | 3.76 | 3.82 | | 3.93 | 3.99 | 4.10 | 4.27 | 4.39 | 5.03 | | | 11.12 | 11.74 | 12.76 |
| | | velocity | 7.84 | 9.56 | 9.46 | 9.31 | 9.16 | | 8.91 | 8.77 | 8.54 | 8.20 | 7.97 | 7.95 | 8.62 | | 9.44 | 8.94 | 8.23 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 12 | 12 | | 13 | 13 | 13 | 13 | 13 | 17 | 152 | | | | |

**FINAL** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-23 | time | 5.64 | 9.37 | 12.81 | 16.42 | 20.29 | | 24.26 | 28.31 | 32.59 | 37.13 | 41.98 | | 47.56 | 6 / 3 | | |
| reaction time | 0.168 | interval | | 3.73 | 3.44 | 3.61 | 3.87 | | 3.97 | 4.05 | 4.28 | 4.54 | 4.85 | 5.58 | | | 10.78 | 11.89 | 13.67 |
| | | velocity | 7.98 | 9.38 | 10.17 | 9.70 | 9.04 | | 8.82 | 8.64 | 8.18 | 7.71 | 7.22 | 7.17 | 8.41 | | 9.74 | 8.83 | 7.68 |
| H1 lead leg | R | strides | 20 | 13 | 12 | 12 | 12 | | 13 | 13 | 13 | 13 | 14 | 17 | 152 | | | | |

**Semi-Final 2** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-23 | time | 5.77 | 9.54 | 13.08 | 16.92 | 20.82 | | 24.82 | 28.93 | 33.21 | 37.61 | 42.14 | | 47.24 | 7 / 1 | | |
| reaction time | 0.169 | interval | | 3.77 | 3.54 | 3.84 | 3.90 | | 4.00 | 4.11 | 4.28 | 4.40 | 4.53 | 5.10 | | | 11.15 | 12.01 | 13.21 |
| | | velocity | 7.80 | 9.28 | 9.89 | 9.11 | 8.97 | | 8.75 | 8.52 | 8.18 | 7.95 | 7.73 | 7.84 | 8.47 | | 9.42 | 8.74 | 7.95 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16.5 | 153.5 | | | | |

**Heat 5** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 5.83 | 9.60 | 13.46 | 17.37 | 21.23 | | 25.33 | 29.40 | 33.66 | 38.23 | 42.96 | | 48.35 | 5 / 1 | | |
| reaction time | 0.176 | interval | | 3.77 | 3.86 | 3.91 | 3.86 | | 4.10 | 4.07 | 4.26 | 4.57 | 4.73 | 5.39 | | | 11.54 | 12.03 | 13.56 |
| | | velocity | 7.72 | 9.28 | 9.07 | 8.95 | 9.07 | | 8.54 | 8.60 | 8.22 | 7.66 | 7.40 | 7.42 | 8.27 | | 9.10 | 8.73 | 7.74 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16.7 | 153.7 | | | | |

**FINAL** - 2023 USATF National Championships (Eugene, OR) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-23 | time | 5.81 | 9.44 | 13.14 | 16.92 | 20.75 | | 24.70 | 28.69 | 32.76 | 37.00 | 41.47 | | 46.62 | 5 / 1 | | |
| reaction time | | interval | | 3.63 | 3.70 | 3.78 | 3.83 | | 3.95 | 3.99 | 4.07 | 4.24 | 4.47 | 5.15 | | | 11.11 | 11.77 | 12.78 |
| | | velocity | 7.75 | 9.64 | 9.46 | 9.26 | 9.14 | | 8.86 | 8.77 | 8.60 | 8.25 | 7.83 | 7.77 | 8.58 | | 9.45 | 8.92 | 8.22 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 17 | 154 | | | | |

**FINAL** - 2023 Doha Diamond League (Doha, QAT) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-23 | time | 5.63 | 9.27 | 12.97 | 16.86 | 20.80 | | 24.81 | 28.99 | 33.29 | 37.80 | 42.42 | | 47.78 | 6 / 1 | | |
| reaction time | 0.169 | interval | | 3.64 | 3.70 | 3.89 | 3.94 | | 4.01 | 4.18 | 4.30 | 4.51 | 4.62 | 5.36 | | | 11.23 | 12.13 | 13.43 |
| | | velocity | 7.99 | 9.62 | 9.46 | 9.00 | 8.88 | | 8.73 | 8.37 | 8.14 | 7.76 | 7.58 | 7.46 | 8.37 | | 9.35 | 8.66 | 7.82 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 17 | 154 | | | | |

**FINAL** - 2022 World Athletics Championships (Eugene, OR) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Jul-22 | time | 5.76 | 9.33 | 13.03 | 16.75 | 20.45 | 21.97 | 24.32 | 28.38 | 32.60 | 36.94 | 41.47 | | 46.89 | 3 / 2 | | |
| reaction time | 0.157 | interval | | 3.57 | 3.70 | 3.72 | 3.70 | | 3.87 | 4.06 | 4.22 | 4.34 | 4.53 | 5.42 | | | 10.99 | 11.63 | 13.09 |
| | | velocity | 7.81 | 9.80 | 9.46 | 9.41 | 9.46 | 9.10 | 9.04 | 8.62 | 8.29 | 8.06 | 7.73 | 7.38 | 8.53 | | 9.55 | 9.03 | 8.02 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 12 | | 12 | 13 | 13 | 13 | 13 | 16.5 | 151.5 | | | | |

**Semi-Final 1** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.73 | 9.40 | 13.35 | 17.33 | 21.47 | 23.22 | 25.56 | 29.73 | 33.97 | 38.33 | 42.87 | | 48.44 | 6 / 1 | | |
| reaction time | 0.181 | interval | | 3.67 | 3.95 | 3.98 | 4.14 | | 4.09 | 4.17 | 4.24 | 4.36 | 4.54 | 5.57 | | | 11.60 | 12.40 | 13.14 |
| | | velocity | 7.85 | 9.54 | 8.86 | 8.79 | 8.45 | 8.61 | 8.56 | 8.39 | 8.25 | 8.03 | 7.71 | 7.18 | 8.26 | | 9.05 | 8.47 | 7.99 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16 | 153 | | | | |

**Heat 1** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 6.00 | 9.77 | 13.66 | 17.60 | 21.67 | 23.39 | 25.77 | 29.87 | 34.17 | 38.63 | 43.33 | | 49.06 | 4 / 1 | | |
| reaction time | 0.156 | interval | | 3.77 | 3.89 | 3.94 | 4.07 | | 4.10 | 4.10 | 4.30 | 4.46 | 4.70 | 5.73 | | | 11.60 | 12.27 | 13.46 |
| | | velocity | 7.50 | 9.28 | 9.00 | 8.88 | 8.60 | 8.55 | 8.54 | 8.54 | 8.14 | 7.85 | 7.45 | 6.98 | 8.15 | | 9.05 | 8.56 | 7.80 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16.5 | 153.5 | | | | |

**FINAL** - 2022 USATF National Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-22 | time | 5.84 | 9.51 | 13.34 | 17.34 | 21.35 | 22.97 | 25.36 | 29.43 | 33.60 | 37.80 | 42.14 | | 47.04 | 7 / 1 | | |
| reaction time | | interval | | 3.67 | 3.83 | 4.00 | 4.01 | | 4.01 | 4.07 | 4.17 | 4.20 | 4.34 | 4.90 | | | 11.50 | 12.09 | 12.71 |
| | | velocity | 7.71 | 9.54 | 9.14 | 8.75 | 8.73 | 8.71 | 8.73 | 8.60 | 8.39 | 8.33 | 8.06 | 8.16 | 8.50 | | 9.13 | 8.68 | 8.26 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16 | 153 | | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

**FINAL** - 2022 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-May-22 | time | 5.60 | 9.18 | 13.01 | 16.98 | 21.12 | 22.8 | 25.24 | 29.30 | 33.56 | 37.87 | 42.27 | | 47.49 | 6 / 2 | | | |
| reaction time | 0.206 | interval | | 3.58 | 3.83 | 3.97 | 4.14 | | 4.12 | 4.06 | 4.26 | 4.31 | 4.40 | 5.22 | | | 11.38 | 12.32 | 12.97 |
| | | velocity | 8.04 | 9.78 | 9.14 | 8.82 | 8.45 | 8.77 | 8.50 | 8.62 | 8.22 | 8.12 | 7.95 | 7.66 | 8.42 | | 9.23 | 8.52 | 8.10 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | | 137 | | | | |

**FINAL** - 2022 Seiko Golden Grand Prix (Tokyo, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-22 | time | 5.89 | 9.56 | 13.25 | 17.02 | 20.89 | 24.91 | 29.08 | 33.63 | 38.39 | 43.23 | | 48.60 | 6 / 1 | | | |
| reaction time | 0.219 | interval | | 3.67 | 3.69 | 3.77 | 3.87 | 4.02 | 4.17 | 4.55 | 4.76 | 4.84 | 5.37 | | | 11.13 | 12.06 | 14.15 |
| | | velocity | 7.64 | 9.54 | 9.49 | 9.28 | 9.04 | 8.71 | 8.39 | 7.69 | 7.35 | 7.23 | 7.45 | 8.23 | | 9.43 | 8.71 | 7.42 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17 | 156 | | | | |

**FINAL** - 2020 Olympic Games (Tokyo, JPN) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-21 | time | 5.64 | 9.20 | 12.84 | 16.52 | 20.28 | 24.16 | 28.16 | 32.24 | 36.44 | 40.80 | | 46.17 | 5 / 2 | | | |
| reaction time | 0.168 | interval | | 3.56 | 3.64 | 3.68 | 3.76 | 3.88 | 4.00 | 4.08 | 4.20 | 4.36 | 5.37 | **AR** | | 10.88 | 11.64 | 12.64 |
| | | velocity | 7.98 | 9.83 | 9.62 | 9.51 | 9.31 | 9.02 | 8.75 | 8.58 | 8.33 | 8.03 | 7.45 | 8.66 | | 9.65 | 9.02 | 8.31 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 17 | 154 | | | | |

**Semi-Final 1** - 2020 Olympic Games (Tokyo, JPN) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Aug-21 | time | 5.57 | 9.11 | 12.78 | 16.51 | 20.45 | 24.42 | 28.56 | 32.86 | 37.30 | 41.92 | | 47.37 | 5 / 2 | | | |
| reaction time | 0.184 | interval | | 3.54 | 3.67 | 3.73 | 3.94 | 3.97 | 4.14 | 4.30 | 4.44 | 4.62 | 5.45 | | | 10.94 | 12.05 | 13.36 |
| | | velocity | 8.08 | 9.89 | 9.54 | 9.38 | 8.88 | 8.82 | 8.45 | 8.14 | 7.88 | 7.58 | 7.34 | 8.44 | | 9.60 | 8.71 | 7.86 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 16.7 | 153.7 | | | | |

**FINAL** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 5.77 | 9.47 | 13.30 | 17.17 | 21.09 | 25.06 | 29.06 | 33.20 | 37.50 | 41.84 | | 46.83 | 5 / 1 | | | |
| reaction time | 0.235 | interval | | 3.70 | 3.83 | 3.87 | 3.92 | 3.97 | 4.00 | 4.14 | 4.30 | 4.34 | 4.99 | **PB** | | 11.40 | 11.89 | 12.78 |
| | | velocity | 7.80 | 9.46 | 9.14 | 9.04 | 8.93 | 8.82 | 8.75 | 8.45 | 8.14 | 8.06 | 8.02 | 8.54 | | 9.21 | 8.83 | 8.22 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 16 | 153 | | | | |

**Semi-Final 2** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jun-21 | time | 5.80 | 9.46 | 13.20 | 17.02 | 20.98 | 25.02 | 29.25 | 33.56 | 38.04 | 43.01 | | 48.61 | 6 / 1 | | | |
| reaction time | 0.197 | interval | | 3.66 | 3.74 | 3.82 | 3.96 | 4.04 | 4.23 | 4.31 | 4.48 | 4.97 | 5.60 | | | 11.22 | 12.23 | 13.76 |
| | | velocity | 7.76 | 9.56 | 9.36 | 9.16 | 8.84 | 8.66 | 8.27 | 8.12 | 7.81 | 7.04 | 7.14 | 8.23 | | 9.36 | 8.59 | 7.63 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 17 | 155 | | | | |

**Heat 2** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jun-21 | time | 5.80 | 9.51 | 13.31 | 17.38 | 21.45 | 25.69 | 30.03 | 34.37 | 38.80 | 43.61 | | 49.12 | 6 / 1 | | | |
| reaction time | 0.252 | interval | | 3.71 | 3.80 | 4.07 | 4.07 | 4.24 | 4.34 | 4.34 | 4.43 | 4.81 | 5.51 | | | 11.58 | 12.65 | 13.58 |
| | | velocity | 7.76 | 9.43 | 9.21 | 8.60 | 8.60 | 8.25 | 8.06 | 8.06 | 7.90 | 7.28 | 7.26 | 8.14 | | 9.07 | 8.30 | 7.73 |
| H1 lead leg | R | strides | 20 | 13 | 12 | 14 | 13 | 13 | 13 | 13 | 13 | 14 | 17 | 155 | | | | |

**FINAL** - 2021 USATF Golden Games (Walnut, CA) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-May-21 | time | 5.84 | 9.44 | 13.21 | 17.08 | 21.02 | 24.99 | 29.09 | 33.37 | 37.67 | 42.11 | | 47.13 | 5 / 1 | | | |
| reaction time | | interval | | 3.60 | 3.77 | 3.87 | 3.94 | 3.97 | 4.10 | 4.28 | 4.30 | 4.44 | 5.02 | | | 11.24 | 12.01 | 13.02 |
| | | velocity | 7.71 | 9.72 | 9.28 | 9.04 | 8.88 | 8.82 | 8.54 | 8.18 | 8.14 | 7.88 | 7.97 | 8.49 | | 9.34 | 8.74 | 8.06 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 16 | 153 | | | | |

**FINAL** - 2021 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-21 | time | 5.80 | 9.54 | 13.38 | 17.38 | 21.39 | 23.0 | 25.44 | 29.53 | 33.73 | 37.97 | 42.24 | | 47.38 | 5 / 1 | | | |
| reaction time | 0.203 | interval | | 3.74 | 3.84 | 4.00 | 4.01 | | 4.05 | 4.09 | 4.20 | 4.24 | 4.27 | 5.14 | | | 11.58 | 12.15 | 12.71 |
| | | velocity | 7.76 | 9.36 | 9.11 | 8.75 | 8.73 | 8.70 | 8.64 | 8.56 | 8.33 | 8.25 | 8.20 | 7.78 | 8.44 | | 9.07 | 8.64 | 8.26 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | | | 13 | 13 | 13 | 13 | 13 | 16.2 | 140.2 | | | | |

**FINAL** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Sep-19 | time | 5.78 | 9.35 | 13.03 | 16.83 | 20.80 | 24.84 | 29.01 | 33.24 | 37.57 | 42.15 | | 47.66 | 7 / 2 | | | |
| reaction time | 0.205 | interval | | 3.57 | 3.68 | 3.80 | 3.97 | 4.04 | 4.17 | 4.23 | 4.33 | 4.58 | 5.51 | | | 11.05 | 12.18 | 13.14 |
| | | velocity | 7.79 | 9.80 | 9.51 | 9.21 | 8.82 | 8.66 | 8.39 | 8.27 | 8.08 | 7.64 | 7.26 | 8.39 | | 9.50 | 8.62 | 7.99 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 17 | 154 | | | | |

**Semi-Final 3** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 5.82 | 9.47 | 13.24 | 17.17 | 21.24 | 25.38 | 29.56 | 33.88 | 38.32 | 42.93 | | 48.52 | 6 / 1 | | | |
| reaction time | 0.215 | interval | | 3.65 | 3.77 | 3.93 | 4.07 | 4.14 | 4.18 | 4.32 | 4.44 | 4.61 | 5.59 | | | 11.35 | 12.39 | 13.37 |
| | | velocity | 7.73 | 9.59 | 9.28 | 8.91 | 8.60 | 8.45 | 8.37 | 8.10 | 7.88 | 7.59 | 7.16 | 8.24 | | 9.25 | 8.47 | 7.85 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 16.7 | 153.7 | | | | |

**Heat 4** - 2019 IAAF World Championships (Doha, QAT) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Sep-19 | time | 5.92 | 9.64 | 13.40 | 17.40 | 21.40 | 25.56 | 29.92 | 34.48 | 39.32 | 44.28 | | 49.62 | 4 / 1 | | | |
| reaction time | 0.217 | interval | | 3.72 | 3.76 | 4.00 | 4.00 | 4.16 | 4.36 | 4.56 | 4.84 | 4.96 | 5.34 | | | 11.48 | 12.52 | 14.36 |
| | | velocity | 7.60 | 9.41 | 9.31 | 8.75 | 8.75 | 8.41 | 8.03 | 7.68 | 7.23 | 7.06 | 7.49 | 8.06 | | 9.15 | 8.39 | 7.31 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 14 | 16.5 | 157 | | | | |

**FINAL** - 2019 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Aug-19 | time | 5.74 | 9.34 | 12.98 | 16.74 | 20.62 | 22.2 | 24.54 | 28.61 | 32.80 | 37.18 | 41.84 | | 46.98 | 5 / 2 | | | |
| reaction time | 0.173 | interval | | 3.60 | 3.64 | 3.76 | 3.88 | | 3.92 | 4.07 | 4.19 | 4.38 | 4.66 | 5.14 | **PB** | | 11.00 | 11.87 | 13.23 |
| | | velocity | 7.84 | 9.72 | 9.62 | 9.31 | 9.02 | 9.01 | 8.93 | 8.60 | 8.35 | 7.99 | 7.51 | 7.78 | 8.51 | | 9.55 | 8.85 | 7.94 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 17 | 155 | | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

**FINAL** - 2019 Prefontaine Classic (Stanford, CA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-19 | time | 5.83 | 9.53 | 13.33 | 17.30 | 21.33 | | 25.33 | 29.43 | 33.63 | 37.85 | 42.10 | | 47.16 | 5 / 1 | | | |
| reaction time | 0.216 | interval | | 3.70 | 3.80 | 3.97 | 4.03 | | 4.00 | 4.10 | 4.20 | 4.22 | 4.25 | 5.06 | | | 11.47 | 12.13 | 12.67 |
| | | velocity | 7.72 | 9.46 | 9.21 | 8.82 | 8.68 | | 8.75 | 8.54 | 8.33 | 8.29 | 8.24 | 7.91 | 8.48 | | 9.15 | 8.66 | 8.29 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16.2 | 153.2 | | | | |

**FINAL** - 2019 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jun-19 | time | 5.66 | 9.26 | 12.99 | 16.91 | 20.91 | | 24.85 | 28.91 | 33.13 | 37.59 | 42.26 | | 47.58 | 6 / 1 | | | |
| reaction time | 0.160 | interval | | 3.60 | 3.73 | 3.92 | 4.00 | | 3.94 | 4.06 | 4.22 | 4.46 | 4.67 | 5.32 | | | 11.25 | 12.00 | 13.35 |
| | | velocity | 7.95 | 9.72 | 9.38 | 8.93 | 8.75 | | 8.88 | 8.62 | 8.29 | 7.85 | 7.49 | 7.52 | 8.41 | | 9.33 | 8.75 | 7.87 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 17 | 155 | | | | |

**FINAL** - 2019 Shanghai Diamond League (Shanghai, CHN) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-May-19 | time | 5.73 | 9.36 | 13.16 | 17.03 | 21.16 | 23.0 | 25.26 | 29.40 | 33.50 | 37.73 | 42.33 | | 47.80 | 5 / 2 | | | |
| reaction time | 0.155 | interval | | 3.63 | 3.80 | 3.87 | 4.13 | | 4.10 | 4.14 | 4.10 | 4.23 | 4.60 | 5.47 | | | 11.30 | 12.37 | 12.93 |
| | | velocity | 7.85 | 9.64 | 9.21 | 9.04 | 8.47 | 8.70 | 8.54 | 8.45 | 8.54 | 8.27 | 7.61 | 7.31 | 8.37 | | 9.29 | 8.49 | 8.12 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 17 | 155 | | | | |

*Benjamin, Rai (ANT) (1997)*

**FINAL** - 2018 NCAA Championships (Eugene, OR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Jun-18 | time | 5.83 | 9.56 | 13.33 | 17.06 | 21.00 | | 25.00 | 29.03 | 33.23 | 37.46 | 41.90 | | 47.02 | 5 / 1 | | | |
| reaction time | | interval | | 3.73 | 3.77 | 3.73 | 3.94 | | 4.00 | 4.03 | 4.20 | 4.23 | 4.44 | 5.12 | AR PB | | 11.23 | 11.97 | 12.87 |
| | | velocity | 7.72 | 9.38 | 9.28 | 9.38 | 8.88 | | 8.75 | 8.68 | 8.33 | 8.27 | 7.88 | 7.81 | 8.51 | | 9.35 | 8.77 | 8.16 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16.2 | 153.2 | | | | |

**Bennett, LaRon (USA) (1982)**

**FINAL** - 2008 USA Olympic Trials (Eugene, OR) *USATF Hurdle Development (2008)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jun-08 | time | 6.16 | 10.11 | 13.99 | 18.10 | 22.29 | | 26.21 | 31.18 | 35.77 | 40.39 | 45.18 | | 50.89 | 1 / 8 | | | |
| reaction time | | interval | | 3.95 | 3.88 | 4.11 | 4.19 | | 3.92 | 4.97 | 4.59 | 4.62 | 4.79 | 5.71 | | | 11.94 | 13.08 | 14.00 |
| | | velocity | 7.31 | 8.86 | 9.02 | 8.52 | 8.35 | | 8.93 | 7.04 | 7.63 | 7.58 | 7.31 | 7.01 | 7.86 | | 8.79 | 8.03 | 7.50 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 153 | | | | |

**Heat 4** - 2007 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2007)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-07 | time | 6.25 | 10.23 | 14.11 | 18.20 | 22.31 | | 26.59 | 30.89 | 35.25 | 39.76 | 44.23 | | 49.46 | 7 / 3 | | | |
| reaction time | | interval | | 3.98 | 3.88 | 4.09 | 4.11 | | 4.28 | 4.30 | 4.36 | 4.51 | 4.47 | 5.23 | | | 11.95 | 12.69 | 13.34 |
| | | velocity | 7.20 | 8.79 | 9.02 | 8.56 | 8.52 | | 8.18 | 8.14 | 8.03 | 7.76 | 7.83 | 7.65 | 8.09 | | 8.79 | 8.27 | 7.87 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 16 | 15 | 15 | 15 | | 154 | | | | |

**Bergström, Carl (SWE) (2000)**

**Semi-Final 2** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.83 | 9.67 | 13.63 | 17.63 | 21.68 | 23.48 | 25.93 | 30.23 | 34.63 | 39.10 | 43.70 | | 48.75 | 8 / 4 | | | |
| reaction time | 0.161 | interval | | 3.84 | 3.96 | 4.00 | 4.05 | | 4.25 | 4.30 | 4.40 | 4.47 | 4.60 | 5.05 | | | 11.80 | 12.60 | 13.47 |
| | | velocity | 7.72 | 9.11 | 8.84 | 8.75 | 8.64 | 8.52 | 8.24 | 8.14 | 7.95 | 7.83 | 7.61 | 7.92 | 8.21 | | 8.90 | 8.33 | 7.80 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.2 | 171.2 | | | | |

**Heat 5** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 5.93 | 9.73 | 13.77 | 17.83 | 21.93 | 23.68 | | 30.46 | 34.86 | 39.56 | 44.26 | | 49.64 | 8 / 3 | | | |
| reaction time | 0.169 | interval | | 3.80 | 4.04 | 4.06 | 4.10 | | | 8.53 | 4.40 | 4.70 | 4.70 | 5.38 | | | 11.90 | 12.63 | 13.80 |
| | | velocity | 7.59 | 9.21 | 8.66 | 8.62 | 8.54 | 8.45 | | 8.21 | 7.95 | 7.45 | 7.45 | 7.43 | 8.06 | | 8.82 | 8.31 | 7.61 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | | | 15 | 15 | 15 | 18 | 141 | | | | |

**FINAL** - 2022 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-22 | time | 5.82 | 9.58 | 13.38 | 17.32 | 21.36 | 23.06 | 25.58 | 29.90 | 34.32 | 38.92 | 43.70 | | 48.97 | 7 / 5 | | | |
| reaction time | 0.178 | interval | | 3.76 | 3.80 | 3.94 | 4.04 | | 4.22 | 4.32 | 4.42 | 4.60 | 4.78 | 5.27 | | | 11.50 | 12.58 | 13.80 |
| | | velocity | 7.73 | 9.31 | 9.21 | 8.88 | 8.66 | 8.67 | 8.29 | 8.10 | 7.92 | 7.61 | 7.32 | 7.59 | 8.17 | | 9.13 | 8.35 | 7.61 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 19 | 172 | | | | |

**FINAL** - 2022 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jun-22 | time | 5.76 | 9.44 | 13.28 | 17.16 | 21.16 | 22.93 | 25.44 | 29.80 | 34.20 | 38.88 | 43.72 | | 49.31 | 5 / 4 | | | |
| reaction time | 0.172 | interval | | 3.68 | 3.84 | 3.88 | 4.00 | | 4.28 | 4.36 | 4.40 | 4.68 | 4.84 | 5.59 | | | 11.40 | 12.64 | 13.92 |
| | | velocity | 7.81 | 9.51 | 9.11 | 9.02 | 8.75 | 8.72 | 8.18 | 8.03 | 7.95 | 7.48 | 7.23 | 7.16 | 8.11 | | 9.21 | 8.31 | 7.54 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 19.2 | 172.2 | | | | |

**FINAL** - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-22 | time | 5.70 | 9.46 | 13.27 | 17.17 | 21.17 | 23.02 | 25.33 | 29.58 | 33.93 | 38.53 | 43.26 | | 48.52 | 9 / 4 | | | |
| reaction time | 0.172 | interval | | 3.76 | 3.81 | 3.90 | 4.00 | | 4.16 | 4.25 | 4.35 | 4.60 | 4.73 | 5.26 | PB | | 11.47 | 12.41 | 13.68 |
| | | velocity | 7.89 | 9.31 | 9.19 | 8.97 | 8.75 | 8.69 | 8.41 | 8.24 | 8.05 | 7.61 | 7.40 | 7.60 | 8.24 | | 9.15 | 8.46 | 7.68 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 153 | | | | |

**FINAL** - 2020 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-20 | time | 5.82 | | 13.90 | 17.96 | 22.18 | 24.0 | 26.50 | 30.92 | 35.50 | 40.20 | 44.94 | | 50.21 | 6 / 7 | | | |
| reaction time | 0.187 | interval | | | 8.08 | 4.06 | 4.22 | | 4.32 | 4.42 | 4.58 | 4.70 | 4.74 | 5.27 | | | 12.14 | 12.96 | 14.02 |
| | | velocity | 7.73 | | 8.66 | 8.62 | 8.29 | 8.33 | 8.10 | 7.92 | 7.64 | 7.45 | 7.38 | 7.59 | 7.97 | | 8.65 | 8.10 | 7.49 |
| H1 lead leg | L | strides | 21 | 14 | | 14 | 14 | | 15 | | 15 | 15 | 15 | | 123 | | | | |

**FINAL** - 2019 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-May-19 | time | 5.93 | 9.83 | 14.00 | 18.13 | 22.43 | 24.2 | 26.86 | | 35.96 | 40.90 | 45.76 | | 51.35 | 8 / 7 | | | |
| reaction time | 0.190 | interval | | 3.90 | 4.17 | 4.13 | 4.30 | | 4.43 | | 9.10 | 4.94 | 4.86 | 5.59 | | | 12.20 | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.59 | 8.97 | 8.39 | 8.47 | 8.14 | 8.26 | 7.90 | | 7.69 | 7.09 | 7.20 | 7.16 | 7.79 | | 8.61 | |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | | | 15 | 15 | | 123 | | | |

**Bett, Nicholas (KEN) (1990)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2018 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2018 year end hurdle report* | | | |
| date 31-May-18 time | 5.96 | 9.68 | 13.48 | 17.40 | 21.52 | | 25.76 | 30.12 | 34.76 | 39.52 | 44.36 | | 49.95 | 8 / 8 | | | |
| reaction time 0.180 interval | | 3.72 | 3.80 | 3.92 | 4.12 | | 4.24 | 4.36 | 4.64 | 4.76 | 4.84 | 5.59 | | | 11.44 | 12.72 | 14.24 |
| velocity | 7.55 | 9.41 | 9.21 | 8.93 | 8.50 | | 8.25 | 8.03 | 7.54 | 7.35 | 7.23 | 7.16 | 8.01 | | 9.18 | 8.25 | 7.37 |
| H1 lead leg R strides | 22 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | | 145 | | | | |
| **FINAL** - 2017 Shanghai Diamond League (Shanghai, CHN) (TV Analysis) | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2017 year end hurdle report* | | | |
| date 13-May-17 time | 6.04 | 9.72 | 13.52 | 17.40 | 21.40 | | 25.52 | 30.00 | 34.64 | 39.52 | | | 51.09 | 5 / 8 | | | |
| reaction time 0.189 interval | | 3.68 | 3.80 | 3.88 | 4.00 | | 4.12 | 4.48 | 4.64 | 4.88 | | | | | 11.36 | 12.60 | |
| velocity | 7.45 | 9.51 | 9.21 | 9.02 | 8.75 | | 8.50 | 7.81 | 7.54 | 7.17 | | | 7.83 | | 9.24 | 8.33 | |
| H1 lead leg R strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | | 142 | | | | |
| **FINAL** - 2017 Doha Diamond League (Doha, QAT) (TV Analysis) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2017 year end hurdle report* | | | |
| date 05-May-17 time | 6.23 | 9.96 | 13.70 | 17.63 | 21.63 | | 25.83 | 30.13 | 34.53 | 39.16 | 44.16 | | 49.70 | 5 / 4 | | | |
| reaction time 0.168 interval | | 3.73 | 3.74 | 3.93 | 4.00 | | 4.20 | 4.30 | 4.40 | 4.63 | 5.00 | 5.54 | | | 11.40 | 12.50 | 14.03 |
| velocity | 7.22 | 9.38 | 9.36 | 8.91 | 8.75 | | 8.33 | 8.14 | 7.95 | 7.56 | 7.00 | 7.22 | 8.05 | | 9.21 | 8.40 | 7.48 |
| H1 lead leg R strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 17 | 157 | | | | |
| **FINAL** - 2016 Meeting Paris (Saint-Denis, FRA) (TV Analysis) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2016 year end hurdle report* | | | |
| date 27-Aug-16 time | 6.04 | 9.72 | 13.48 | 17.32 | 21.24 | | 25.24 | 29.28 | 33.52 | 37.96 | 42.72 | | 48.01 | 7 / 1 | | | |
| reaction time 0.167 interval | | 3.68 | 3.76 | 3.84 | 3.92 | | 4.00 | 4.04 | 4.24 | 4.44 | 4.76 | 5.29 | | | 11.28 | 11.96 | 13.44 |
| velocity | 7.45 | 9.51 | 9.31 | 9.11 | 8.93 | | 8.75 | 8.66 | 8.25 | 7.88 | 7.35 | 7.56 | 8.33 | | 9.31 | 8.78 | 7.81 |
| H1 lead leg R strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 17 | 157 | | | | |
| **FINAL** - 2016 Athletissime (Laussane, SUI) (TV Analysis) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2016 year end hurdle report* | | | |
| date 25-Aug-16 time | 5.90 | 9.56 | 13.36 | 17.30 | 21.33 | | 25.36 | 29.50 | 33.93 | 38.46 | 43.20 | | 48.68 | 6 / 2 | | | |
| reaction time 0.162 interval | | 3.66 | 3.80 | 3.94 | 4.03 | | 4.03 | 4.14 | 4.43 | 4.53 | 4.74 | 5.48 | | | 11.40 | 12.20 | 13.70 |
| velocity | 7.63 | 9.56 | 9.21 | 8.88 | 8.68 | | 8.68 | 8.45 | 7.90 | 7.73 | 7.38 | 7.30 | 8.22 | | 9.21 | 8.61 | 7.66 |
| H1 lead leg R strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | 17 | 160 | | | | |
| **FINAL** - 2016 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2016 year end hurdle report* | | | |
| date 16-Jun-16 time | 6.20 | 9.93 | | 17.73 | 21.87 | | 26.07 | 30.43 | 34.87 | 39.67 | 44.93 | | 51.14 | 2 / 5 | | | |
| reaction time 0.159 interval | | 3.73 | | 7.80 | 4.14 | | 4.20 | 4.36 | 4.44 | 4.80 | 5.26 | 6.21 | | | 11.53 | 12.70 | 14.50 |
| velocity | 7.26 | 9.38 | | 8.97 | 8.45 | | 8.33 | 8.03 | 7.88 | 7.29 | 6.65 | 6.44 | 7.82 | | 9.11 | 8.27 | 7.24 |
| H1 lead leg R strides | 21 | 13 | | | 13 | | 13 | 13 | | 15 | 15 | 17.5 | 120.5 | | | | |
| **FINAL** - 2016 Bislett Games (Oslo, NOR) (TV Analysis) | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2016 year end hurdle report* | | | |
| date 09-Jun-16 time | 6.08 | 9.72 | 13.48 | 17.40 | 21.52 | | 25.72 | 30.00 | 34.44 | 39.04 | 44.00 | | 49.85 | 4 / 6 | | | |
| reaction time 0.177 interval | | 3.64 | 3.76 | 3.92 | 4.12 | | 4.20 | 4.28 | 4.44 | 4.60 | 4.96 | 5.85 | | | 11.32 | 12.60 | 14.00 |
| velocity | 7.40 | 9.62 | 9.31 | 8.93 | 8.50 | | 8.33 | 8.18 | 7.88 | 7.61 | 7.06 | 6.84 | 8.02 | | 9.28 | 8.33 | 7.50 |
| H1 lead leg R strides | 21 | 13 | | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 17.2 | 146.2 | | | | |
| **FINAL** - 2016 Prefontaine Classic (Eugene, OR) (TV Analysis) | | | | | | | | *(H8 5m short)* | | | | | | *Henson (2020) - Athlete First: 2016 year end hurdle report* | | | |
| date 28-May-16 time | 6.24 | 10.04 | 13.88 | 17.96 | 22.20 | | 26.52 | 31.00 | 35.08 | 40.48 | 45.44 | | 51.33 | 5 / 8 | | | |
| reaction time interval | | 3.80 | 3.84 | 4.08 | 4.24 | | 4.32 | 4.48 | 4.08 | 5.40 | 4.96 | 5.89 | | | 11.72 | 13.04 | 14.44 |
| velocity | 7.21 | 9.21 | 9.11 | 8.58 | 8.25 | | 8.10 | 7.81 | 7.35 | 7.41 | 7.06 | 6.79 | 7.79 | | 8.96 | 8.05 | 7.27 |
| H1 lead leg R strides | 21 | 13 | 13 | 13 | 13 | | 13 | | 13 | 17 | 15 | | 131 | | | | |
| **FINAL** - 2016 Shanghai Golden Grand Prix (Shanghai, CHN) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2016 year end hurdle report* | | | |
| date 14-May-16 time | 5.96 | 9.76 | 13.56 | 17.56 | 21.68 | | 25.88 | 30.12 | 34.40 | 39.00 | 43.64 | | 49.31 | 5 / 6 | | | |
| reaction time 0.150 interval | | 3.80 | 3.80 | 4.00 | 4.12 | | 4.20 | 4.24 | 4.28 | 4.60 | 4.64 | 5.67 | | | 11.60 | 12.56 | 13.52 |
| velocity | 7.55 | 9.21 | 9.21 | 8.75 | 8.50 | | 8.33 | 8.25 | 8.18 | 7.61 | 7.54 | 7.05 | 8.11 | | 9.05 | 8.36 | 7.77 |
| H1 lead leg R strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 13 | 17.2 | 157.2 | | | | |
| **FINAL** - 2015 IAAF World Championships (Beijing, CHN) (TV Analysis) | | | | | | | | | | | | | | *Henson (2021) - Athlete First: major championships report* | | | |
| date 25-Aug-15 time | 6.04 | 9.76 | 13.48 | 17.24 | 21.24 | | 25.28 | 29.40 | 33.60 | 37.96 | 42.56 | | 47.79 | 9 / 1 | | | |
| reaction time 0.162 interval | | 3.72 | 3.72 | 3.76 | 4.00 | | 4.04 | 4.12 | 4.20 | 4.36 | 4.60 | 5.23 | **NR PB** | | 11.20 | 12.16 | 13.16 |
| velocity | 7.45 | 9.41 | 9.41 | 9.31 | 8.75 | | 8.66 | 8.50 | 8.33 | 8.03 | 7.61 | 7.65 | 8.37 | | 9.38 | 8.63 | 7.98 |
| H1 lead leg R strides | | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 17 | 136 | | | | |

**Blondel, Alain (FRA) (1962)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1987 French National Championships (Annecy, FRA) | | | | | | | | | | | | | | *Veney - split times from PJ* | | | |
| date 09-Aug-87 time | 6.00 | 10.20 | 14.50 | 18.70 | 22.90 | | 27.20 | 31.50 | 36.05 | 40.70 | 45.40 | | 51.16 | / 4 | | | |
| reaction time interval | | 4.20 | 4.30 | 4.20 | 4.20 | | 4.30 | 4.30 | 4.55 | 4.65 | 4.70 | 5.76 | | | 12.70 | 12.80 | 13.90 |
| velocity | 7.50 | 8.33 | 8.14 | 8.33 | 8.33 | | 8.14 | 8.14 | 7.69 | 7.53 | 7.45 | 6.94 | 7.82 | | 8.27 | 8.20 | 7.55 |
| H1 lead leg strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**Boino, Mowen (PNG) (1979)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2002 IAAF World Cup (Madrid, ESP) | | | | | | | | | | | | | | *Sanchez (2002) - copa del mundo de Madrid '02: análisis de la carreras con villas* | | | |
| date 20-Sep-02 time | 6.14 | 10.18 | 14.34 | 18.47 | 22.65 | | 27.01 | 31.43 | 36.00 | 40.70 | 45.57 | | 51.66 | 9 / 9 | | | |
| reaction time 0.058 interval | | 4.04 | 4.16 | 4.13 | 4.18 | | 4.36 | 4.42 | 4.57 | 4.70 | 4.87 | 6.09 | | | 12.33 | 12.96 | 14.14 |
| velocity | 7.33 | 8.66 | 8.41 | 8.47 | 8.37 | | 8.03 | 7.92 | 7.66 | 7.45 | 7.19 | 6.57 | 7.74 | | 8.52 | 8.10 | 7.43 |
| H1 lead leg R strides | 21 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 18 | 174 | | | | |

**Heat 7** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.16 | 10.28 | 14.52 | 18.76 | 23.04 | | 27.52 | 32.08 | 36.48 | | | | 51.38 | 4 / 8 | | |
| reaction time | 0.406 | interval | | 4.12 | 4.24 | 4.24 | 4.28 | | 4.48 | 4.56 | 4.40 | | | | NR | | 12.60 | 13.32 |
| | | velocity | 7.31 | 8.50 | 8.25 | 8.25 | 8.18 | | 7.81 | 7.68 | 7.95 | | | | 7.79 | | 8.33 | 7.88 |
| H1 lead leg | | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | | | | 127 | | | |

**Bonvin, Julien (SUI) (1999)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2023 Weltklasse (Zürich, SUI) | | | | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | |
| date | 31-Aug-23 | time | 5.76 | 9.44 | 13.22 | 17.10 | 21.12 | | 25.37 | 29.85 | 34.53 | 39.50 | 44.57 | | 50.34 | 1 / 7 | | | |
| reaction time | 0.149 | interval | | 3.68 | 3.78 | 3.88 | 4.02 | | 4.25 | 4.48 | 4.68 | 4.97 | 5.07 | 5.77 | | | 11.34 | 12.75 | 14.72 |
| | | velocity | 7.81 | 9.51 | 9.26 | 9.02 | 8.71 | | 8.24 | 7.81 | 7.48 | 7.04 | 6.90 | 6.93 | 7.95 | | 9.26 | 8.24 | 7.13 |
| H1 lead leg | L | strides | 21 | 13 | | | 13 | | 14 | 14 | | | | | 75 | | | | |
| **Semi-Final 2** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | |
| date | 21-Aug-23 | time | 5.90 | 9.67 | 13.38 | 17.05 | 20.99 | | 25.29 | 29.66 | 34.30 | 39.11 | 44.08 | | 49.75 | 4 / 8 | | | |
| reaction time | 0.175 | interval | | 3.77 | 3.71 | 3.67 | 3.94 | | 4.30 | 4.37 | 4.64 | 4.81 | 4.97 | 5.67 | | | 11.15 | 12.61 | 14.42 |
| | | velocity | 7.63 | 9.28 | 9.43 | 9.54 | 8.88 | | 8.14 | 8.01 | 7.54 | 7.28 | 7.04 | 7.05 | 8.04 | | 9.42 | 8.33 | 7.28 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | | 18 | 148 | | | | |
| **Heat 1** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | |
| date | 20-Aug-23 | time | 5.96 | 9.73 | 13.46 | 17.13 | 21.13 | | 25.40 | 29.73 | 34.23 | 38.97 | | | 49.19 | 5 / 3 | | | |
| reaction time | 0.188 | interval | | 3.77 | 3.73 | 3.67 | 4.00 | | 4.27 | 4.33 | 4.50 | 4.74 | | 10.22 | | | 11.17 | 12.60 | |
| | | velocity | 7.55 | 9.28 | 9.38 | 9.54 | 8.75 | | 8.20 | 8.08 | 7.78 | 7.38 | | 7.34 | 8.13 | | 9.40 | 8.33 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | | | 131 | | | | |
| **FINAL** - 2022 Weltklasse (Zürich, SUI) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date | 08-Sep-22 | time | 5.77 | 9.34 | | 16.95 | 20.89 | 22.46 | 24.99 | 29.43 | 34.04 | 38.80 | 43.84 | | 49.63 | 2 / 7 | | | |
| reaction time | 0.154 | interval | | 3.57 | | 7.61 | 3.94 | | 4.10 | 4.44 | 4.61 | 4.76 | 5.04 | 5.79 | | | 11.18 | 12.48 | 14.41 |
| | | velocity | 7.80 | 9.80 | | 9.20 | 8.88 | 8.90 | 8.54 | 7.88 | 7.59 | 7.35 | 6.94 | 6.91 | 8.06 | | 9.39 | 8.41 | 7.29 |
| H1 lead leg | L | strides | 20 | 13 | | | 13 | | 13 | 14 | 14 | 15 | 15 | 18.2 | 135.2 | | | | |
| **FINAL** - 2022 European Athletics Championships (Munich, GER) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date | 19-Aug-22 | time | 5.77 | 9.38 | | 17.05 | 21.10 | 22.74 | 25.43 | 29.88 | 34.57 | 39.47 | 44.52 | | 50.24 | 1 / 7 | | | |
| reaction time | 0.216 | interval | | 3.61 | | 7.67 | 4.05 | | 4.33 | 4.45 | 4.69 | 4.90 | 5.05 | 5.72 | | | 11.28 | 12.83 | 14.64 |
| | | velocity | 7.80 | 9.70 | | 9.13 | 8.64 | 8.80 | 8.08 | 7.87 | 7.46 | 7.14 | 6.93 | 6.99 | 7.96 | | 9.31 | 8.18 | 7.17 |
| H1 lead leg | L | strides | 21 | 13 | | | 13 | | 14 | 14 | 15 | 15 | 15 | 18 | 138 | | | | |

**Borsumato, Anthony (GBR) (1973)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 2** - 2002 European Championships (Munich, GER) | | | | | | | | | | | | | | | | *Graubner (2009) - http://www.fgs.uni-halle.de* | | | |
| date | 07-Aug-02 | time | 6.09 | 9.87 | 13.73 | 17.69 | 21.69 | | 25.81 | 30.13 | 34.65 | 39.46 | 44.32 | | 49.93 | / 2 | | | |
| reaction time | | interval | | 3.78 | 3.86 | 3.96 | 4.00 | | 4.12 | 4.32 | 4.52 | 4.81 | 4.86 | 5.61 | | | 11.60 | 12.44 | 14.19 |
| | | velocity | 7.39 | 9.26 | 9.07 | 8.84 | 8.75 | | 8.50 | 8.10 | 7.74 | 7.28 | 7.20 | 7.13 | 8.01 | | 9.05 | 8.44 | 7.40 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **Heat 6** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 24-Sep-00 | time | 6.10 | 9.86 | 13.74 | 17.70 | 21.70 | | 25.90 | 30.50 | 35.02 | 39.90 | | | 50.73 | 4 / 5 | | | |
| reaction time | 0.155 | interval | | 3.76 | 3.88 | 3.96 | 4.00 | | 4.20 | 4.60 | 4.52 | 4.88 | | | | | 11.60 | 12.80 | |
| | | velocity | 7.38 | 9.31 | 9.02 | 8.84 | 8.75 | | 8.33 | 7.61 | 7.74 | 7.17 | | | 7.88 | | 9.05 | 8.20 | |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 15 | 15 | 16 | | | 133 | | | | |

**Brazell, Bennie (USA) (1982)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2005 NCAA Championships (Sacramento, CA) | | | | | | | | | | | | | | | | *Shaver (2008) - hurdle training* | | | |
| date | 11-Jun-05 | time | 6.06 | 9.76 | 13.60 | 17.45 | 21.34 | | 25.37 | 29.59 | 33.85 | 38.23 | 42.64 | | 47.67 | 5 / 2 | | | |
| reaction time | | interval | | 3.70 | 3.84 | 3.85 | 3.89 | | 4.03 | 4.22 | 4.26 | 4.38 | 4.41 | 5.03 | PB | | 11.39 | 12.14 | 13.05 |
| | | velocity | 7.43 | 9.46 | 9.11 | 9.09 | 9.00 | | 8.68 | 8.29 | 8.22 | 7.99 | 7.94 | 7.95 | 8.39 | | 9.22 | 8.65 | 8.05 |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 16 | 19 | 167 | | | | |
| **FINAL** - 2004 Olympic Games (Athîna, GRE) | | | | | | | | | | | | | | | | *Behm (2005) - Athènes 2004: Les Haies Basses* | | | |
| date | 26-Aug-04 | time | 6.0 | 9.6 | 13.3 | 17.1 | 21.1 | | 25.2 | 29.4 | 33.7 | 38.3 | 43.1 | | 49.51 | 8 / 8 | | | |
| reaction time | 0.390 | interval | | 3.60 | 3.70 | 3.80 | 4.00 | | 4.10 | 4.20 | 4.30 | 4.60 | 4.80 | 6.41 | | | 11.10 | 12.30 | 13.70 |
| | | velocity | 7.50 | 9.72 | 9.46 | 9.21 | 8.75 | | 8.54 | 8.33 | 8.14 | 7.61 | 7.29 | 6.24 | 8.08 | | 9.46 | 8.54 | 7.66 |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 14 | | 14 | 14 | 15 | 15 | 16 | | 149 | | | | |

**Brockman, Charles (USA) (1999)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 2** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 25-Jun-21 | time | 6.14 | 10.01 | 14.01 | 18.05 | 22.22 | | 26.56 | 31.03 | 35.50 | 40.00 | 44.47 | | 49.54 | 9 / 7 | | | |
| reaction time | 0.241 | interval | | 3.87 | 4.00 | 4.04 | 4.17 | | 4.34 | 4.47 | 4.47 | 4.50 | 4.47 | 5.07 | | | 11.91 | 12.98 | 13.44 |
| | | velocity | 7.33 | 9.04 | 8.75 | 8.66 | 8.39 | | 8.06 | 7.83 | 7.83 | 7.78 | 7.83 | 7.89 | 8.07 | | 8.82 | 8.09 | 7.81 |
| H1 lead leg | R | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.7 | 149.7 | | | | |
| **FINAL** - 2021 NCAA Championships (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 11-Jun-21 | time | 6.03 | 9.77 | 13.60 | 17.50 | 21.53 | | 25.77 | 30.27 | 34.83 | 39.50 | 44.33 | | 49.92 | 5 / 8 | | | |
| reaction time | 0.190 | interval | | 3.74 | 3.83 | 3.90 | 4.03 | | 4.24 | 4.50 | 4.56 | 4.67 | 4.83 | 5.59 | | | 11.47 | 12.77 | 14.06 |
| | | velocity | 7.46 | 9.36 | 9.14 | 8.97 | 8.68 | | 8.25 | 7.78 | 7.68 | 7.49 | 7.25 | 7.16 | 8.01 | | 9.15 | 8.22 | 7.47 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 13 | 14 | | 15 | 15 | 15 | 15 | 15 | | 152 | | | | |

**Bronson, Bryan (USA) (1972)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1997 IAAF World Championships (Athens, GRE) | | | | | | | | | | | | | | | | *Hommel (1999) - biomechanical research project, athens 1997: final report* | | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Aug-97 | time | 6.03 | 9.66 | 13.32 | 17.08 | 20.95 | | 25.08 | 29.28 | 33.62 | 38.08 | 42.62 | | 47.88 | 3 / 3 | | | |
| reaction time | 0.247 | interval | | 3.63 | 3.66 | 3.76 | 3.87 | | 4.13 | 4.20 | 4.34 | 4.46 | 4.54 | 5.26 | | | 11.05 | 12.20 | 13.34 |
| | | velocity | 7.46 | 9.64 | 9.56 | 9.31 | 9.04 | | 8.47 | 8.33 | 8.06 | 7.85 | 7.71 | 7.60 | 8.35 | | 9.50 | 8.61 | 7.87 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 1996 USA Olympic Trials (Atlanta, GA) *McNichols - Hurdle technique study through video analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jun-96 | time | 6.01 | 9.69 | 13.37 | 17.03 | 20.97 | 22.78 | 25.23 | 29.39 | 33.67 | 38.11 | 42.67 | | 47.98 | 8 / 1 | | | |
| reaction time | | interval | | 3.68 | 3.68 | 3.66 | 3.94 | | 4.26 | 4.16 | 4.28 | 4.44 | 4.56 | 5.31 | PB | | 11.02 | 12.36 | 13.28 |
| | | velocity | 7.49 | 9.51 | 9.51 | 9.56 | 8.88 | 8.78 | 8.22 | 8.41 | 8.18 | 7.88 | 7.68 | 7.53 | 8.34 | | 9.53 | 8.50 | 7.91 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 15 | 15 | 15 | 15 | 15 | | 148 | | | | |

**Buckley, Markino (JAM) (1986)**

**FINAL** - 2008 IAAF World Athletics Final (Stuttgart, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Sep-08 | time | 6.29 | 10.11 | 13.99 | 17.87 | 21.90 | | 26.09 | 30.49 | 34.94 | 39.48 | 44.11 | | 49.52 | 1 / 4 | | | |
| reaction time | 0.276 | interval | | 3.82 | 3.88 | 3.88 | 4.03 | | 4.19 | 4.40 | 4.45 | 4.54 | 4.63 | 5.41 | | | 11.58 | 12.62 | 13.62 |
| | | velocity | 7.15 | 9.16 | 9.02 | 9.02 | 8.68 | | 8.35 | 7.95 | 7.87 | 7.71 | 7.56 | 7.39 | 8.08 | | 9.07 | 8.32 | 7.71 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2008 Olympic Games (Beijing, CHN) *Behm (2008)- Pekin 2008: Le quatrache masculin - féminin*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-08 | time | 5.9 | 9.9 | 13.9 | 17.8 | 21.7 | | 25.9 | 30.2 | 34.5 | 39.0 | 43.5 | | 48.60 | 9 / 7 | | | |
| reaction time | 0.264 | interval | | 4.00 | 4.00 | 3.90 | 3.90 | | 4.20 | 4.30 | 4.30 | 4.50 | 4.50 | 5.10 | | | 11.90 | 12.40 | 13.30 |
| | | velocity | 7.63 | 8.75 | 8.75 | 8.97 | 8.97 | | 8.33 | 8.14 | 8.14 | 7.78 | 7.78 | 7.84 | 8.23 | | 8.82 | 8.47 | 7.89 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 14 | 17 | 160 | | | | |

**Budko, Vladimir (RUS) (1965)**

**FINAL** - 1991 European Cup (Frankfurt, GER) *Federle (2003) - http://www.fgs.uni-halle.de*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jun-91 | time | 6.31 | 10.15 | 14.07 | 18.03 | 22.05 | | 26.17 | 30.49 | 34.89 | 39.51 | 44.35 | | 49.96 | / 4 | | | |
| reaction time | | interval | | 3.84 | 3.92 | 3.96 | 4.02 | | 4.12 | 4.32 | 4.40 | 4.62 | 4.84 | 5.61 | | | 11.72 | 12.46 | 13.86 |
| | | velocity | 7.13 | 9.11 | 8.93 | 8.84 | 8.71 | | 8.50 | 8.10 | 7.95 | 7.58 | 7.23 | 7.13 | 8.01 | | 8.96 | 8.43 | 7.58 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Bultheel, Michaël (BEL) (1986)**

**FINAL** - 2007 European Cup (Munich, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jun-07 | time | 6.16 | 10.03 | 13.99 | 17.99 | 22.10 | | 26.42 | 30.92 | 35.61 | 40.40 | 45.30 | | 50.87 | / 7 | | | |
| reaction time | 0.149 | interval | | 3.87 | 3.96 | 4.00 | 4.11 | | 4.32 | 4.50 | 4.69 | 4.79 | 4.90 | 5.57 | | | 11.83 | 12.93 | 14.38 |
| | | velocity | 7.31 | 9.04 | 8.84 | 8.75 | 8.52 | | 8.10 | 7.78 | 7.46 | 7.31 | 7.14 | 7.18 | 7.86 | | 8.88 | 8.12 | 7.30 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Burrell, Sean (USA) (2002)**

**FINAL** - 2021 NCAA Championships (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-21 | time | 5.87 | 9.70 | | 17.43 | 21.33 | | | 29.56 | 33.97 | 38.40 | 42.83 | | 47.85 | 8 / 1 | | | |
| reaction time | 0.194 | interval | | 3.83 | | 7.73 | 3.90 | | | 8.23 | 4.41 | 4.43 | 4.43 | 5.02 | WJR | | 11.56 | 12.13 | 13.27 |
| | | velocity | 7.67 | 9.14 | | 9.06 | 8.97 | | | 8.51 | 7.94 | 7.90 | 7.90 | 7.97 | 8.36 | | 9.08 | 8.66 | 7.91 |
| H1 lead leg | L | strides | 22 | 14 | | | 14 | | | | 15 | 15 | 15 | 18.2 | 113.2 | | | | |

**Burton, Jereme (USA) (1984)**

**FINAL** - 2003 USATF National Junior Championships (Palo Alto, CA) *USATF Women's Sprint Development (2003)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Jun-03 | time | 6.16 | 10.04 | 14.01 | 18.00 | 22.21 | | 26.56 | 31.08 | 35.80 | 40.79 | 45.91 | | 51.92 | 5 / 4 | | | |
| reaction time | | interval | | 3.88 | 3.97 | 3.99 | 4.21 | | 4.35 | 4.52 | 4.72 | 4.99 | 5.12 | 6.01 | PB | | 11.84 | 13.08 | 14.83 |
| | | velocity | 7.31 | 9.02 | 8.82 | 8.77 | 8.31 | | 8.05 | 7.74 | 7.42 | 7.01 | 6.84 | 6.66 | 7.70 | | 8.87 | 8.03 | 7.08 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Büttner, Dieter (FRG) (1949)**

**Semi-Final 2** - 1972 Olympic Games (Munich, FRG) *Schmidt (1973) - vorolympishces training von john akii-bua über 400 hürden*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Sep-72 | time | | | | | 21.4 | | | 30.2 | | | 44.7 | | dnf | 2 / -- | | | |
| reaction time | | interval | | | | | | | | 8.80 | | | 14.50 | | | | | | 14.50 |
| | | velocity | | | | | 8.64 | | | 7.95 | | | 7.24 | | | | | | 7.24 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Heat 1** - 1972 Olympic Games (Munich, FRG) *Schmidt (1973) - vorolympishces training von john akii-bua über 400 hürden*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-72 | time | | | | | 21.5 | | | 30.4 | | | | | 49.78 | 1 / 1 | | | |
| reaction time | | interval | | | | | | | | 8.90 | | | | | | | | | |
| | | velocity | | | | | 8.60 | | | 7.87 | | | | | 8.04 | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Cai Jungi (CHN) (1996)**

**Heat 4** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.32 | 10.31 | 14.38 | 18.59 | 22.94 | | 27.39 | 31.85 | 36.37 | 40.99 | 45.73 | | 51.60 | 3 / 3 | | | |
| reaction time | 0.229 | interval | | 3.99 | 4.07 | 4.21 | 4.35 | | 4.45 | 4.46 | 4.52 | 4.62 | 4.74 | 5.87 | | | 12.27 | 13.26 | 13.88 |
| | | velocity | 7.12 | 8.77 | 8.60 | 8.31 | 8.05 | | 7.87 | 7.85 | 7.74 | 7.58 | 7.38 | 6.81 | 7.75 | | 8.56 | 7.92 | 7.56 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 18.5 | 175.5 | | | | |

**FINAL** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.26 | 10.34 | 14.50 | 18.70 | 23.03 | | 27.38 | 31.80 | 36.27 | 40.80 | 45.33 | | 50.64 | 7 / 1 | | | |
| reaction time | 0.178 | interval | | 4.08 | 4.16 | 4.20 | 4.33 | | 4.35 | 4.42 | 4.47 | 4.53 | 4.53 | 5.31 | | | 12.44 | 13.10 | 13.53 |
| | | velocity | 7.19 | 8.58 | 8.41 | 8.33 | 8.08 | | 8.05 | 7.92 | 7.83 | 7.73 | 7.73 | 7.53 | 7.90 | | 8.44 | 8.02 | 7.76 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 18.5 | 175.5 | | | | |

**Heat 2** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.38 | 10.52 | 14.84 | 19.20 | 23.62 | 28.06 | 32.54 | 36.98 | 41.50 | 46.08 | | 51.88 | 6 / 1 | | | |
| reaction time | 0.204 | interval | | 4.14 | 4.32 | 4.36 | 4.42 | 4.44 | 4.48 | 4.44 | 4.52 | 4.58 | 5.80 | | | 12.82 | 13.34 | 13.54 |
| | | velocity | 7.05 | 8.45 | 8.10 | 8.03 | 7.92 | 7.88 | 7.81 | 7.88 | 7.74 | 7.64 | 6.90 | 7.71 | | 8.19 | 7.87 | 7.75 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 176 | | | | |

**FINAL** - 2019 Chinese National Grand Prix Final (Daqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-19 | time | 6.34 | 10.31 | 14.30 | 18.40 | 22.66 | 26.98 | 31.42 | 36.02 | 40.76 | 45.70 | | 51.69 | 3 / 6 | | | |
| reaction time | 0.201 | interval | | 3.97 | 3.99 | 4.10 | 4.26 | 4.32 | 4.44 | 4.60 | 4.74 | 4.94 | 5.99 | | | 12.06 | 13.02 | 14.28 |
| | | velocity | 7.10 | 8.82 | 8.77 | 8.54 | 8.22 | 8.10 | 7.88 | 7.61 | 7.38 | 7.09 | 6.68 | 7.74 | | 8.71 | 8.06 | 7.35 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19.5 | 176.5 | | | | |

**Heat 1** - 2019 Chinese National Grand Prix Final (Daqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Aug-19 | time | 6.39 | 10.53 | 14.80 | 19.17 | 23.54 | 27.99 | 32.57 | 37.17 | 41.91 | 46.76 | | 52.42 | 6 / 3 | | | |
| reaction time | 0.199 | interval | | 4.14 | 4.27 | 4.37 | 4.37 | 4.45 | 4.58 | 4.60 | 4.74 | 4.85 | 5.66 | | | 12.78 | 13.40 | 14.19 |
| | | velocity | 7.04 | 8.45 | 8.20 | 8.01 | 8.01 | 7.87 | 7.64 | 7.61 | 7.38 | 7.22 | 7.07 | 7.63 | | 8.22 | 7.84 | 7.40 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 176 | | | | |

**FINAL** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-19 | time | 6.24 | 10.21 | 14.36 | 18.40 | 22.50 | 26.74 | 31.05 | 35.47 | 40.03 | 44.86 | | 50.46 | 3 / ~~3~~ 2 | | | |
| reaction time | 0.196 | interval | | 3.97 | 4.15 | 4.04 | 4.10 | 4.24 | 4.31 | 4.42 | 4.56 | 4.83 | 5.60 | | | 12.16 | 12.65 | 13.81 |
| | | velocity | 7.21 | 8.82 | 8.43 | 8.66 | 8.54 | 8.25 | 8.12 | 7.92 | 7.68 | 7.25 | 7.14 | 7.93 | | 8.63 | 8.30 | 7.60 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19.5 | 176.5 | | | | |

**Heat 2** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-19 | time | 6.35 | 10.41 | 14.49 | 18.69 | 22.90 | 27.21 | 31.60 | 36.06 | 40.62 | 45.36 | | 51.22 | 6 / ~~3~~ 2 | | | |
| reaction time | 0.189 | interval | | 4.06 | 4.08 | 4.20 | 4.21 | 4.31 | 4.39 | 4.46 | 4.56 | 4.74 | 5.86 | | | 12.34 | 12.91 | 13.76 |
| | | velocity | 7.09 | 8.62 | 8.58 | 8.33 | 8.31 | 8.12 | 7.97 | 7.85 | 7.68 | 7.38 | 6.83 | 7.81 | | 8.51 | 8.13 | 7.63 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19.5 | 176.5 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 1 (Zhaoqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Apr-19 | time | 6.22 | 10.30 | 14.50 | 18.68 | 22.94 | 27.20 | 31.56 | 36.04 | 40.56 | 45.18 | | 50.56 | 5 / 1 | | | |
| reaction time | 0.179 | interval | | 4.08 | 4.20 | 4.18 | 4.26 | 4.26 | 4.36 | 4.48 | 4.52 | 4.62 | 5.38 | | | 12.46 | 12.88 | 13.62 |
| | | velocity | 7.23 | 8.58 | 8.33 | 8.37 | 8.22 | 8.22 | 8.03 | 7.81 | 7.74 | 7.58 | 7.43 | 7.91 | | 8.43 | 8.15 | 7.71 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 176 | | | | |

**Campbell, Basil (USA) (1985)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2003 USATF National Junior Championships (Palo Alto, CA) *USATF Women's Sprint Development (2003)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Jun-03 | time | 6.12 | 10.23 | 14.41 | 18.48 | 22.86 | 27.51 | 32.06 | 36.72 | 41.65 | 46.88 | | 53.41 | 6 / 6 | | | |
| reaction time | | interval | | 4.11 | 4.18 | 4.07 | 4.38 | 4.65 | 4.55 | 4.66 | 4.93 | 5.23 | 6.53 | | | 12.36 | 13.58 | 14.82 |
| | | velocity | 7.35 | 8.52 | 8.37 | 8.60 | 7.99 | 7.53 | 7.69 | 7.51 | 7.10 | 6.69 | 6.13 | 7.49 | | 8.50 | 7.73 | 7.09 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Campbell, Luke (GER) (1994)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Semi-Final 2** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 5.82 | 9.47 | 13.17 | 17.00 | 21.02 | 25.25 | 29.66 | 34.27 | 39.00 | 44.01 | | 50.00 | 3 / 6 | | | |
| reaction time | 0.146 | interval | | 3.65 | 3.70 | 3.83 | 4.02 | 4.23 | 4.41 | 4.61 | 4.73 | 5.01 | 5.99 | | | 11.18 | 12.66 | 14.35 |
| | | velocity | 7.73 | 9.59 | 9.46 | 9.14 | 8.71 | 8.27 | 7.94 | 7.59 | 7.40 | 6.99 | 6.68 | 8.00 | | 9.39 | 8.29 | 7.32 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 19 | 165 | | | | |

**Cao Xiong (CHN) (2001)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2020 Chinese National Championships (Shaoxing, CHN) *CAA Hurdle Development (2020)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Sep-20 | time | 6.05 | 10.17 | 14.37 | 18.66 | 23.12 | 27.79 | 32.62 | 37.62 | | 48.08 | | 53.96 | 8 / 8 | | | |
| reaction time | | interval | | 4.12 | 4.20 | 4.29 | 4.46 | 4.67 | 4.83 | 5.00 | | 10.46 | 5.88 | | | 12.61 | 13.96 | 15.46 |
| | | velocity | 7.44 | 8.50 | 8.33 | 8.16 | 7.85 | 7.49 | 7.25 | 7.00 | | 6.69 | 6.80 | 7.41 | | 8.33 | 7.52 | 6.79 |
| H1 lead leg | L | strides | | 15 | 15 | 15 | 15 | 15 | 15 | 16 | | | 18.5 | 125 | | | | |

**U20 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.28 | 10.46 | 14.54 | 18.68 | 22.96 | 27.52 | 32.14 | 36.87 | 41.79 | 46.88 | | 52.31 | 8 / 6 | | | |
| reaction time | 0.203 | interval | | 4.18 | 4.08 | 4.14 | 4.28 | 4.56 | 4.62 | 4.73 | 4.92 | 5.09 | 5.43 | PB | | 12.40 | 13.46 | 14.74 |
| | | velocity | 7.17 | 8.37 | 8.58 | 8.45 | 8.18 | 7.68 | 7.58 | 7.40 | 7.11 | 6.88 | 7.37 | 7.65 | | 8.47 | 7.80 | 7.12 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 16 | 19 | 177 | | | | |

**U20 Heat 2** - 2019 Chinese National Youth Games (Taiyuan, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.46 | 10.73 | 15.00 | 19.32 | 23.70 | 28.37 | 33.07 | 37.84 | 42.86 | 48.06 | | 54.20 | 7 / 2 | | | |
| reaction time | 0.197 | interval | | 4.27 | 4.27 | 4.32 | 4.38 | 4.67 | 4.70 | 4.77 | 5.02 | 5.20 | 6.14 | | | 12.86 | 13.75 | 14.99 |
| | | velocity | 6.97 | 8.20 | 8.20 | 8.10 | 7.99 | 7.49 | 7.45 | 7.34 | 6.97 | 6.73 | 6.51 | 7.38 | | 8.16 | 7.64 | 7.00 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 16 | 19 | 177 | | | | |

**Carabelli, Gianni (ITA) (1979)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2006 European Championships (Göteborg, SWE) *Behm (2006) - Göteborg 2006: Le quatrache*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-06 | time | 5.9 | 9.7 | 13.5 | 17.3 | 21.3 | 25.4 | 29.7 | 34.3 | 38.8 | 43.6 | | 49.60 | / 6 | | | |
| reaction time | | interval | | 3.80 | 3.80 | 3.80 | 4.00 | 4.10 | 4.30 | 4.60 | 4.50 | 4.80 | 6.00 | | | 11.40 | 12.40 | 13.90 |
| | | velocity | 7.63 | 9.21 | 9.21 | 9.21 | 8.75 | 8.54 | 8.14 | 7.61 | 7.78 | 7.29 | 6.67 | 8.06 | | 9.21 | 8.47 | 7.55 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 18.5 | 160.5 | | | | |

**Carbe, Jonathan (SWE) (1990)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2011 Poks Memorial (Hässleholm, SWE) *Blomkvist (2011) - www.elitlandslag.se/SprintHäck/LängSprintHäck.aspx*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Jun-11 | time | 6.44 | 10.58 | 14.84 | 19.26 | 23.70 | 28.42 | 33.16 | 37.94 | 42.94 | 47.94 | | 53.59 | / 1 | | | | |
| reaction time | | interval | | 4.14 | 4.26 | 4.42 | 4.44 | 4.72 | 4.74 | 4.78 | 5.00 | 5.00 | 5.65 | | | 12.82 | 13.90 | 14.78 | |
| | | velocity | 6.99 | 8.45 | 8.22 | 7.92 | 7.88 | 7.42 | 7.38 | 7.32 | 7.00 | 7.00 | 7.08 | 7.46 | | 8.19 | 7.55 | 7.10 | |
| H1 lead leg | L | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 19 | 150 | | | | | |

**Caristan, Stéphane (FRA) (1964)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1992 Olympic Games (Barcelona, ESP) | | | | | | | | | | | | | | | | *Belloc (1992) - Diagana: 45.18 / 48.13 : 3" d'ecart; incompressibles?* | | | |
| date | 06-Aug-92 | time | 5.90 | 9.75 | 13.60 | 17.50 | 21.45 | 25.75 | 30.00 | 34.40 | 38.95 | 43.50 | | 48.86 | 1 / 7 | | | | |
| reaction time | | interval | | 3.85 | 3.85 | 3.90 | 3.95 | 4.30 | 4.25 | 4.40 | 4.55 | 4.55 | 5.36 | PB | | 11.60 | 12.50 | 13.50 | |
| | | velocity | 7.63 | 9.09 | 9.09 | 8.97 | 8.86 | 8.14 | 8.24 | 7.95 | 7.69 | 7.69 | 7.46 | 8.19 | | 9.05 | 8.40 | 7.78 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18.1 | 164.1 | | | | | |
| **FINAL** - 1991 European Cup (Frankfurt, GER) | | | | | | | | | | | | | | | | *Federle (2003) - http://www.fgs.uni-halle.de* | | | |
| date | 29-Jun-91 | time | 6.06 | 9.84 | 13.70 | 17.58 | 21.52 | 25.62 | 30.07 | 34.54 | 39.17 | 43.95 | | 49.43 | / 2 | | | | |
| reaction time | | interval | | 3.78 | 3.86 | 3.88 | 3.94 | 4.10 | 4.45 | 4.47 | 4.63 | 4.78 | 5.48 | | | 11.52 | 12.49 | 13.88 | |
| | | velocity | 7.43 | 9.26 | 9.07 | 9.02 | 8.88 | 8.54 | 7.87 | 7.83 | 7.56 | 7.32 | 7.30 | 8.09 | | 9.11 | 8.41 | 7.56 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Carne, Ben (GBR) (1986)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2007 European Cup (Munich, GER) | | | | | | | | | | | | | | | | *Graubner (2007) - http://www.fgs.uni-halle.de* | | | |
| date | 23-Jun-07 | time | 6.15 | 10.13 | 14.06 | 18.10 | 22.30 | 26.56 | 30.93 | 35.50 | 40.17 | 45.06 | | 50.74 | / 6 | | | | |
| reaction time | 0.212 | interval | | 3.98 | 3.93 | 4.04 | 4.20 | 4.26 | 4.37 | 4.57 | 4.67 | 4.89 | 5.68 | | | 11.95 | 12.83 | 14.13 | |
| | | velocity | 7.32 | 8.79 | 8.91 | 8.66 | 8.33 | 8.22 | 8.01 | 7.66 | 7.49 | 7.16 | 7.04 | 7.88 | | 8.79 | 8.18 | 7.43 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Carter, James (USA) (1978)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2007 IAAF World Athletics Final (Stuttgart, GER) | | | | | | | | | | | | | | | | *Graubner (2007) - http://www.fgs.uni-halle.de* | | | |
| date | 22-Sep-07 | time | 6.00 | 9.52 | 13.35 | 17.14 | 21.18 | 25.30 | 29.54 | 33.92 | 38.52 | 43.16 | | 48.36 | 5 / 3 | | | | |
| reaction time | 0.132 | interval | | 3.52 | 3.83 | 3.79 | 4.04 | 4.12 | 4.24 | 4.38 | 4.60 | 4.64 | 5.20 | | | 11.14 | 12.40 | 13.62 | |
| | | velocity | 7.50 | 9.94 | 9.14 | 9.23 | 8.66 | 8.50 | 8.25 | 7.99 | 7.61 | 7.54 | 7.69 | 8.27 | | 9.43 | 8.47 | 7.71 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **FINAL** - 2007 IAAF World Championships (Osaka, JPN) | | | | | | | | | | | | | | | | *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers* | | | |
| date | 28-Aug-07 | time | 5.76 | 9.45 | 13.19 | 17.04 | 21.04 | 25.18 | 29.40 | 33.65 | 38.14 | 42.84 | | 48.40 | 6 / 4 | | | | |
| reaction time | 0.152 | interval | | 3.69 | 3.74 | 3.85 | 4.00 | 4.14 | 4.22 | 4.25 | 4.49 | 4.70 | 5.56 | | | 11.28 | 12.36 | 13.44 | |
| | | velocity | 7.81 | 9.49 | 9.36 | 9.09 | 8.75 | 8.45 | 8.29 | 8.24 | 7.80 | 7.45 | 7.19 | 8.26 | | 9.31 | 8.50 | 7.81 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.7 | 160 | | | | | |
| **Heat 2** - 2007 USATF National Championships (Indianapolis, IN) | | | | | | | | | | | | | | | | *USATF Men's Hurdle Development (2007)* | | | |
| date | 21-Jun-07 | time | 5.97 | 9.68 | 13.56 | 17.58 | 21.65 | 25.86 | 30.24 | 34.65 | 39.22 | 43.91 | | 49.07 | 8 / 1 | | | | |
| reaction time | | interval | | 3.71 | 3.88 | 4.02 | 4.07 | 4.21 | 4.38 | 4.41 | 4.57 | 4.69 | 5.16 | | | 11.61 | 12.66 | 13.67 | |
| | | velocity | 7.54 | 9.43 | 9.02 | 8.71 | 8.60 | 8.31 | 7.99 | 7.94 | 7.66 | 7.46 | 7.75 | 8.15 | | 9.04 | 8.29 | 7.68 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | | 142 | | | | | |
| **FINAL** - 2007 Osaka Grand Prix (Osaka, JPN) | | | | | | | | | | | | | | | | *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers* | | | |
| date | 05-May-07 | time | 5.79 | 9.49 | 13.24 | 17.21 | 21.28 | 25.40 | 29.62 | 33.94 | 38.36 | 42.95 | | 48.22 | / 2 | | | | |
| reaction time | | interval | | 3.70 | 3.75 | 3.97 | 4.07 | 4.12 | 4.22 | 4.32 | 4.42 | 4.59 | 5.27 | | | 11.42 | 12.41 | 13.33 | |
| | | velocity | 7.77 | 9.46 | 9.33 | 8.82 | 8.60 | 8.50 | 8.29 | 8.10 | 7.92 | 7.63 | 7.59 | 8.30 | | 9.19 | 8.46 | 7.88 | |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | | 121 | | | | | |
| **FINAL** - 2006 USATF National Championships (Indianapolis, IN) | | | | | | | | | | | | | | | | *USATF Men's Hurdle Development (2006)* | | | |
| date | 24-Jun-06 | time | 5.99 | 9.76 | 13.58 | 17.45 | 21.46 | 25.53 | 29.76 | 34.07 | 38.52 | 43.11 | | 48.44 | 3 / 3 | | | | |
| reaction time | | interval | | 3.77 | 3.82 | 3.87 | 4.01 | 4.07 | 4.23 | 4.31 | 4.45 | 4.59 | 5.33 | | | 11.46 | 12.31 | 13.35 | |
| | | velocity | 7.51 | 9.28 | 9.16 | 9.04 | 8.73 | 8.60 | 8.27 | 8.12 | 7.87 | 7.63 | 7.50 | 8.26 | | 9.16 | 8.53 | 7.87 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17 | 159 | | | | | |
| **FINAL** - 2005 Osaka Grand Prix (Osaka, JPN) | | | | | | | | | | | | | | | | *Yasunori (2006) - race pattern analysis of top Japanese 400m hurdlers* | | | |
| date | 07-May-05 | time | 5.77 | 9.47 | 13.21 | 17.13 | 21.23 | 25.48 | 29.82 | 34.26 | 38.71 | 43.25 | | 48.42 | / 1 | | | | |
| reaction time | | interval | | 3.70 | 3.74 | 3.92 | 4.10 | 4.25 | 4.34 | 4.44 | 4.45 | 4.54 | 5.17 | | | 11.36 | 12.69 | 13.43 | |
| | | velocity | 7.80 | 9.46 | 9.36 | 8.93 | 8.54 | 8.24 | 8.06 | 7.88 | 7.87 | 7.71 | 7.74 | 8.26 | | 9.24 | 8.27 | 7.82 | |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 14 | | 122 | | | | | |
| **FINAL** - 2004 Olympic Games (Athîna, GRE) | | | | | | | | | | | | | | | | *Ruiz (2004) - las carreras con vallas de juegos olimpicos de atenas '04* | | | |
| date | 26-Aug-04 | time | 5.78 | 9.29 | 13.10 | 16.76 | 20.70 | 24.69 | 28.96 | 33.29 | 37.80 | 42.71 | | 48.58 | 4 / 4 | | | | |
| reaction time | 0.223 | interval | | 3.51 | 3.81 | 3.66 | 3.94 | 3.99 | 4.27 | 4.33 | 4.51 | 4.91 | 5.87 | | | 10.98 | 12.20 | 13.75 | |
| | | velocity | 7.79 | 9.97 | 9.19 | 9.56 | 8.88 | 8.77 | 8.20 | 8.08 | 7.76 | 7.13 | 6.81 | 8.23 | | 9.56 | 8.61 | 7.64 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 18 | 161 | | | | | |
| **FINAL** - 2003 USATF National Championships (Palo Alto, CA) | | | | | | | | | | | | | | | | *USATF Women's Sprint Development (2003)* | | | |
| date | 22-Jun-03 | time | 5.82 | 9.64 | 13.61 | 17.68 | 22.01 | 26.39 | 30.70 | 35.10 | 39.52 | 44.03 | | 49.23 | 6 / ~~4~~ 3 | | | | |
| reaction time | | interval | | 3.82 | 3.97 | 4.07 | 4.33 | 4.38 | 4.31 | 4.40 | 4.42 | 4.51 | 5.20 | | | 11.86 | 13.02 | 13.33 | |
| | | velocity | 7.73 | 9.16 | 8.82 | 8.60 | 8.08 | 7.99 | 8.12 | 7.95 | 7.92 | 7.76 | 7.69 | 8.13 | | 8.85 | 8.06 | 7.88 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **FINAL** - 2002 IAAF World Cup (Madrid, ESP) | | | | | | | | | | | | | | | | *Sanchez (2002) - copa del mundo de Madrid '02: análisis de la carreras con villas* | | | |
| date | 20-Sep-02 | time | 5.65 | 9.42 | 13.23 | 17.04 | 21.00 | 25.09 | 29.36 | 33.68 | 38.27 | 42.89 | | 48.27 | 6 / 1 | | | | |
| reaction time | 0.131 | interval | | 3.77 | 3.81 | 3.81 | 3.96 | 4.09 | 4.27 | 4.32 | 4.59 | 4.62 | 5.38 | | | 11.39 | 12.32 | 13.53 | |
| | | velocity | 7.96 | 9.28 | 9.19 | 9.19 | 8.84 | 8.56 | 8.20 | 8.10 | 7.63 | 7.58 | 7.43 | 8.29 | | 9.22 | 8.52 | 7.76 | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.5 | 159.5 | | | |

**FINAL** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Sep-00 | time | 5.78 | 9.50 | 13.26 | 17.10 | 21.06 | 22.58 | 25.14 | 29.26 | 33.62 | 38.02 | 42.62 | | 48.04 | 5 / 4 | | |
| reaction time | 0.421 | interval | | 3.72 | 3.76 | 3.84 | 3.96 | | 4.08 | 4.12 | 4.36 | 4.40 | 4.60 | 5.42 | PB | | 11.32 | 12.16 | 13.36 |
| | | velocity | 7.79 | 9.41 | 9.31 | 9.11 | 8.84 | 8.86 | 8.58 | 8.50 | 8.03 | 7.95 | 7.61 | 7.38 | 8.33 | | 9.28 | 8.63 | 7.86 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17 | 159 | | | |

**Semi-Final 3** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 5.70 | 9.46 | 13.14 | 16.90 | 20.86 | 22.38 | 24.90 | 29.14 | 33.54 | 38.10 | 42.96 | | 48.48 | 3 / 1 | | |
| reaction time | 0.202 | interval | | 3.76 | 3.68 | 3.76 | 3.96 | | 4.04 | 4.24 | 4.40 | 4.56 | 4.86 | 5.52 | | | 11.20 | 12.24 | 13.82 |
| | | velocity | 7.89 | 9.31 | 9.51 | 9.31 | 8.84 | 8.94 | 8.66 | 8.25 | 7.95 | 7.68 | 7.20 | 7.25 | 8.25 | | 9.38 | 8.58 | 7.60 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 18 | 161 | | | |

**Heat 6** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.74 | 9.50 | 13.46 | 17.38 | 21.46 | | 25.70 | 30.26 | 34.78 | 39.30 | 43.94 | | 49.41 | 7 / 2 | | |
| reaction time | 0.174 | interval | | 3.76 | 3.96 | 3.92 | 4.08 | | 4.24 | 4.56 | 4.52 | 4.52 | 4.64 | 5.47 | | | 11.64 | 12.88 | 13.68 |
| | | velocity | 7.84 | 9.31 | 8.84 | 8.93 | 8.58 | | 8.25 | 7.68 | 7.74 | 7.74 | 7.54 | 7.31 | 8.10 | | 9.02 | 8.15 | 7.68 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.9 | 159.9 | | | |

**Cato, Roxroy (JAM) (1988)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2016 Racers Grand Prix (Kingston, JAM) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-16 | time | 5.73 | 9.57 | | 17.60 | 21.93 | | 26.23 | 30.47 | 34.72 | 39.07 | | | 48.98 | 7 / 2 | | |
| reaction time | | interval | | 3.84 | | 8.03 | 4.33 | | 4.30 | 4.24 | 4.25 | 4.35 | | | | | 11.87 | 12.87 | |
| | | velocity | 7.85 | 9.11 | | 8.72 | 8.08 | | 8.14 | 8.25 | 8.24 | 8.05 | | | 8.17 | | 8.85 | 8.16 | |
| H1 lead leg | L | strides | 22 | 14 | | | 14 | | 15 | 15 | 15 | 15 | | | 110 | | | | |

**Cavanaugh, Caleb (USA) (2001)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2023 NCAA Championships (Austin, TX) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-23 | time | 5.85 | 9.50 | 13.30 | 17.18 | 21.17 | | 25.39 | 29.86 | 34.47 | 39.10 | 43.84 | | 49.20 | 9 / 6 | | |
| reaction time | | interval | | 3.65 | 3.80 | 3.88 | 3.99 | | 4.22 | 4.47 | 4.61 | 4.63 | 4.74 | 5.36 | | | 11.33 | 12.68 | 13.98 |
| | | velocity | 7.69 | 9.59 | 9.21 | 9.02 | 8.77 | | 8.29 | 7.83 | 7.59 | 7.56 | 7.38 | 7.46 | 8.13 | | 9.27 | 8.28 | 7.51 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 15 | 17.7 | 162.7 | | | |

**Cawley, Rex (USA) (1940)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1964 Olympic Games (Tokyo, JPN) *Breitschaft (1965) - die leichtathletik wettkampfe der 1964 olympischen sommerspielen - 400m hürdenlauf*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Oct-64 | time | 5.9 | | 13.8 | | 21.8 | | | 30.3 | | 38.9 | | | 49.6 | 6 / 1 | | |
| reaction time | | interval | | | 7.90 | | 8.00 | | | 8.50 | | 8.60 | | 10.70 | | | | |
| | | velocity | 7.63 | | 8.86 | | 8.75 | | | 8.24 | | 8.14 | | 7.01 | 8.06 | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Chalmers, Alastair (GBR) (2000)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Semi-Final 1** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.77 | 9.57 | 13.60 | 17.60 | 21.87 | 23.76 | 26.20 | 30.67 | 35.20 | 40.07 | 44.90 | | 50.54 | 1 / 6 | | |
| reaction time | 0.157 | interval | | 3.80 | 4.03 | 4.00 | 4.27 | | 4.33 | 4.47 | 4.53 | 4.87 | 4.83 | 5.64 | | | 11.83 | 13.07 | 14.23 |
| | | velocity | 7.80 | 9.21 | 8.68 | 8.75 | 8.20 | 8.42 | 8.08 | 7.83 | 7.73 | 7.19 | 7.25 | 7.09 | 7.91 | | 8.88 | 8.03 | 7.38 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18 | 163 | | | |

**Chalyy, Timofey (RUS) (1994)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2014 European Championships (Zurich, SUI) *Green (2015) - twitter.com/jackpgreen (from Behm?)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-14 | time | 6.08 | 9.88 | 13.84 | 17.84 | 21.92 | | 26.08 | 30.56 | 35.12 | 39.80 | 44.52 | | 49.56 | / 4 | | |
| reaction time | 0.159 | interval | | 3.80 | 3.96 | 4.00 | 4.08 | | 4.16 | 4.48 | 4.56 | 4.68 | 4.72 | 5.04 | | | 11.76 | 12.72 | 13.96 |
| | | velocity | 7.40 | 9.21 | 8.84 | 8.75 | 8.58 | | 8.41 | 7.81 | 7.68 | 7.48 | 7.42 | 7.94 | 8.07 | | 8.93 | 8.25 | 7.52 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | | 121 | | | |

**Chen Chieh (TPE) (1992)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2022 Seiko Golden Grand Prix (Tokyo, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-22 | time | 5.96 | 9.61 | 13.35 | 17.15 | 21.15 | | 25.43 | 29.88 | 34.38 | 39.08 | 43.94 | | 49.39 | 9 / 3 | | |
| reaction time | 0.178 | interval | | 3.65 | 3.74 | 3.80 | 4.00 | | 4.28 | 4.45 | 4.50 | 4.70 | 4.86 | 5.45 | | | 11.19 | 12.73 | 14.06 |
| | | velocity | 7.55 | 9.59 | 9.36 | 9.21 | 8.75 | | 8.18 | 7.87 | 7.78 | 7.45 | 7.20 | 7.34 | 8.10 | | 9.38 | 8.25 | 7.47 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18 | 164 | | | |

**FINAL** - 2022 Michitaka Kinami Memorial (Osaka, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-May-22 | time | 5.97 | 9.64 | 13.41 | 17.27 | 21.22 | | 25.51 | 29.93 | 34.47 | 39.16 | 43.96 | | 49.31 | 7 / 2 | | |
| reaction time | 0.171 | interval | | 3.67 | 3.77 | 3.86 | 3.95 | | 4.29 | 4.42 | 4.54 | 4.69 | 4.80 | 5.35 | | | 11.30 | 12.66 | 14.03 |
| | | velocity | 7.54 | 9.54 | 9.28 | 9.07 | 8.86 | | 8.16 | 7.92 | 7.71 | 7.46 | 7.29 | 7.48 | 8.11 | | 9.29 | 8.29 | 7.48 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 125 | | | |

**FINAL** - 2021 Ready Steady Tokyo (Tokyo, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-May-21 | time | 6.17 | 10.16 | 14.18 | 18.34 | 22.62 | | 27.14 | 31.78 | 36.57 | 41.44 | 46.43 | | 52.08 | 1 / 9 | | |
| reaction time | 0.177 | interval | | 3.99 | 4.02 | 4.16 | 4.28 | | 4.52 | 4.64 | 4.79 | 4.87 | 4.99 | 5.65 | | | 12.17 | 13.44 | 14.65 |
| | | velocity | 7.29 | 8.77 | 8.71 | 8.41 | 8.18 | | 7.74 | 7.54 | 7.31 | 7.19 | 7.01 | 7.08 | 7.68 | | 8.63 | 7.81 | 7.17 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 125 | | | |

**FINAL** - 2019 Seiko Golden Grand Prix (Osaka, JPN) *Hirokawa (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-May-19 | time | 5.92 | 9.58 | 13.37 | 17.18 | 21.20 | | 25.41 | 30.03 | 35.00 | 40.09 | 45.20 | | 51.05 | 8 / 5 | | |
| reaction time | 0.190 | interval | | 3.66 | 3.79 | 3.81 | 4.02 | | 4.21 | 4.62 | 4.97 | 5.09 | 5.11 | 5.85 | | | 11.26 | 12.85 | 15.17 |
| | | velocity | 7.60 | 9.56 | 9.23 | 9.19 | 8.71 | | 8.31 | 7.58 | 7.04 | 6.88 | 6.85 | 6.84 | 7.84 | | 9.33 | 8.17 | 6.92 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 15 | 16 | 15 | 19 | 165 | | | | |

**A FINAL** - 2019 Kinami Memorial (Osaka, JPN) *Matsubayashi (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-May-19 | time | 5.99 | 9.76 | 13.60 | 17.52 | 21.62 | 25.86 | 30.35 | 34.92 | 39.61 | 44.44 | | 49.86 | 7 / 3 | | | |
| reaction time | | interval | | 3.77 | 3.84 | 3.92 | 4.10 | 4.24 | 4.49 | 4.57 | 4.69 | 4.83 | 5.42 | | | 11.53 | 12.83 | 14.09 |
| | | velocity | 7.51 | 9.28 | 9.11 | 8.93 | 8.54 | 8.25 | 7.80 | 7.66 | 7.46 | 7.25 | 7.38 | 8.02 | | 9.11 | 8.18 | 7.45 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18.2 | 162.2 | | | | |

**A FINAL** - 2019 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Kobayashi (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-19 | time | 5.96 | 9.58 | 13.28 | 17.13 | 21.10 | 25.26 | 29.76 | 34.35 | 39.24 | 44.33 | | 50.05 | 7 / 2 | | | |
| reaction time | | interval | | 3.62 | 3.70 | 3.85 | 3.97 | 4.16 | 4.50 | 4.59 | 4.89 | 5.09 | 5.72 | | | 11.17 | 12.63 | 14.57 |
| | | velocity | 7.55 | 9.67 | 9.46 | 9.09 | 8.82 | 8.41 | 7.78 | 7.63 | 7.16 | 6.88 | 6.99 | 7.99 | | 9.40 | 8.31 | 7.21 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18.5 | 162.5 | | | | |

**FINAL** - 2019 Asian Athletics Championships (Doha, QAT) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Apr-19 | time | 5.84 | 9.49 | 13.19 | 16.98 | 20.92 | 25.00 | 29.41 | 33.92 | 38.57 | 43.37 | | 48.92 | 6 / 2 | | | |
| reaction time | 0.195 | interval | | 3.65 | 3.70 | 3.79 | 3.94 | 4.08 | 4.41 | 4.51 | 4.65 | 4.80 | 5.55 | PB | | 11.14 | 12.43 | 13.96 |
| | | velocity | 7.71 | 9.59 | 9.46 | 9.23 | 8.88 | 8.58 | 7.94 | 7.76 | 7.53 | 7.29 | 7.21 | 8.18 | | 9.43 | 8.45 | 7.52 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 17.5 | 161.5 | | | | |

**Chen Tien-Wen (TPE) (1978)**

**Semi-Final 1** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 5.98 | 9.82 | 13.82 | 17.82 | 21.86 | 23.42 | 25.98 | 30.38 | 34.86 | 39.46 | | | 50.52 | 8 / 8 | | | |
| reaction time | 0.182 | interval | | 3.84 | 4.00 | 4.00 | 4.04 | | 4.12 | 4.40 | 4.48 | 4.60 | | | | | 11.84 | 12.56 | |
| | | velocity | 7.53 | 9.11 | 8.75 | 8.75 | 8.66 | 8.54 | 8.50 | 7.95 | 7.81 | 7.61 | | | 7.92 | | 8.87 | 8.36 | |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | | | 136 | | | | |

**Heat 2** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.10 | 9.90 | 13.82 | 17.86 | 21.94 | 26.26 | 34.98 | 39.54 | 44.34 | | 49.93 | 2 / 5 | | | | |
| reaction time | 0.180 | interval | | 3.80 | 3.92 | 4.04 | 4.08 | 4.32 | 8.72 | 4.56 | 4.80 | 5.59 | NR | | 11.76 | | | |
| | | velocity | 7.38 | 9.21 | 8.93 | 8.66 | 8.58 | 8.10 | 8.03 | 7.68 | 7.29 | 7.16 | 8.01 | | 8.93 | | | |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 19.1 | 169.1 | | | | |

**Chevychalov, Georgiy (URS) (1935)**

**FINAL** - 1961 Universiade (Sofia, BUL) *Bartusek (1969) - 400-meter training and technique*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-61 | time | 5.8 | 10.1 | 14.1 | 18.1 | 22.4 | | 26.9 | 31.5 | 36.0 | 40.6 | 45.8 | | 51.7 | / 2 | | | |
| reaction time | | interval | | 4.30 | 4.00 | 4.00 | 4.30 | | 4.50 | 4.60 | 4.50 | 4.60 | 5.20 | 5.90 | | | 12.30 | 13.40 | 14.30 |
| | | velocity | 7.76 | 8.14 | 8.75 | 8.75 | 8.14 | | 7.78 | 7.61 | 7.78 | 7.61 | 6.73 | 6.78 | 7.74 | | 8.54 | 7.84 | 7.34 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Chiba, Yoshihiro (JPN) (1979)**

**FINAL** - 2006 Seiko Super Grand Prix (Yokohama, JPN) *Yasunori (2007) - race pattern analysis of top Japanese 400m hurdlers*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-06 | time | 5.99 | 9.76 | 13.61 | 17.65 | 21.79 | | 26.06 | 30.48 | 34.95 | 39.45 | 44.09 | | 49.65 | / 5 | | | |
| reaction time | | interval | | 3.77 | 3.85 | 4.04 | 4.14 | | 4.27 | 4.42 | 4.47 | 4.50 | 4.64 | 5.56 | | | 11.66 | 12.83 | 13.61 |
| | | velocity | 7.51 | 9.28 | 9.09 | 8.66 | 8.45 | | 8.20 | 7.92 | 7.83 | 7.78 | 7.54 | 7.19 | 8.06 | | 9.01 | 8.18 | 7.71 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | | 130 | | | | |

**FINAL** - 2006 Osaka Grand Prix (Osaka, JPN) *Yasunori (2007) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-May-06 | time | 6.04 | 9.79 | 13.56 | 17.45 | 21.40 | 25.46 | 29.61 | 33.95 | 38.47 | 43.22 | | 48.83 | / 5 | | | |
| reaction time | | interval | | 3.75 | 3.77 | 3.89 | 3.95 | 4.06 | 4.15 | 4.34 | 4.52 | 4.75 | 5.61 | | | 11.41 | 12.16 | 13.61 |
| | | velocity | 7.45 | 9.33 | 9.28 | 9.00 | 8.86 | 8.62 | 8.43 | 8.06 | 7.74 | 7.37 | 7.13 | 8.19 | | 9.20 | 8.63 | 7.71 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | | 130 | | | | |

**FINAL** - 2004 Osaka Grand Prix (Osaka, JPN) *Yasunori (2005) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-04 | time | 6.02 | 9.92 | 13.96 | 18.08 | 22.28 | 26.60 | 30.99 | 35.58 | 40.28 | 45.12 | | 50.86 | / 9 | | | |
| reaction time | | interval | | 3.90 | 4.04 | 4.12 | 4.20 | 4.32 | 4.39 | 4.59 | 4.70 | 4.84 | 5.74 | | | 12.06 | 12.91 | 14.13 |
| | | velocity | 7.48 | 8.97 | 8.66 | 8.50 | 8.33 | 8.10 | 7.97 | 7.63 | 7.45 | 7.23 | 6.97 | 7.86 | | 8.71 | 8.13 | 7.43 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Chiba, Yuto (JPN) (1992)**

**FINAL** - 2010 Japanese National High School Championships (Okinawa, JPN) *Matsuo (2010) - 63rd high school championships: JAF scientific committee- biomechanics data*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-10 | time | 6.37 | 10.37 | 14.46 | 18.61 | 22.86 | | 27.25 | 31.82 | 36.61 | 41.70 | 46.87 | | 52.47 | / 3 | | | |
| reaction time | | interval | | 4.00 | 4.09 | 4.15 | 4.25 | | 4.39 | 4.57 | 4.79 | 5.09 | 5.17 | 5.60 | | | 12.24 | 13.21 | 15.05 |
| | | velocity | 7.06 | 8.75 | 8.56 | 8.43 | 8.24 | | 7.97 | 7.66 | 7.31 | 6.88 | 6.77 | 7.14 | 7.62 | | 8.58 | 7.95 | 6.98 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 16 | | 137 | | | | |

**Christensson, Jim (SWE) (1989)**

**FINAL** - 2011 Poks Memorial (Hässleholm, SWE) *Blomkvist (2011) - www.elitlandslag.se/SprintHäck/LängSprintHäck.aspx*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Jun-11 | time | 6.60 | 10.90 | 15.36 | 19.80 | 24.28 | | 28.84 | 33.44 | 38.16 | 43.16 | 48.16 | | 53.73 | / 2 | | | |
| reaction time | | interval | | 4.30 | 4.46 | 4.44 | 4.48 | | 4.56 | 4.60 | 4.72 | 5.00 | 5.00 | 5.57 | | | 13.20 | 13.64 | 14.72 |
| | | velocity | 6.82 | 8.14 | 7.85 | 7.88 | 7.81 | | 7.68 | 7.61 | 7.42 | 7.00 | 7.00 | 7.18 | 7.44 | | 7.95 | 7.70 | 7.13 |
| H1 lead leg | L | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 16 | 19 | 156 | | | | |

**Cisneros, Omar (CUB) (1989)**

**FINAL** - 2013 IAAF World Championships (Moscow, RUS) (TV Analysis) *Henson (2021) - Athlete First: major championships report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-13 | time | 5.80 | 9.33 | 13.03 | 16.87 | 20.77 | | 24.83 | 29.07 | 33.43 | 38.00 | 42.63 | | 48.12 | 5 / 4 | | | |
| reaction time | 0.219 | interval | | 3.53 | 3.70 | 3.84 | 3.90 | | 4.06 | 4.24 | 4.36 | 4.57 | 4.63 | 5.49 | | | 11.07 | 12.20 | 13.56 |
| | | velocity | 7.76 | 9.92 | 9.46 | 9.11 | 8.97 | | 8.62 | 8.25 | 8.03 | 7.66 | 7.56 | 7.29 | 8.31 | | 9.49 | 8.61 | 7.74 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.5 | 159.5 | | | |

**Clarke, Roshawn (JAM) (2004)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2023 Weltklasse (Zürich, SUI) | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | | |
| date 31-Aug-23 time | 5.70 | 9.48 | 13.31 | 17.18 | 21.21 | | 26.79 | | | | | | dnf | 4 / -- | | | |
| reaction time 0.175 interval | | 3.78 | 3.83 | 3.87 | 4.03 | | 5.58 | | | | | | | | 11.48 | | |
| velocity | 7.89 | 9.26 | 9.14 | 9.04 | 8.68 | | 6.27 | | | | | | | | 9.15 | | |
| H1 lead leg L strides | 22 | 14 | | | 14 | | | | | | | | 50 | | | | |
| **FINAL** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | | |
| date 23-Aug-23 time | 5.71 | 9.46 | 12.97 | 16.65 | 20.52 | | | 28.96 | 33.40 | 37.97 | 42.68 | | 48.07 | 5 / 4 | | | |
| reaction time 0.164 interval | | 3.75 | 3.51 | 3.68 | 3.87 | | | 8.44 | 4.44 | 4.57 | 4.71 | 5.39 | | | 10.94 | 12.31 | 13.72 |
| velocity | 7.88 | 9.33 | 9.97 | 9.51 | 9.04 | | | 8.29 | 7.88 | 7.66 | 7.43 | 7.42 | 8.32 | | 9.60 | 8.53 | 7.65 |
| H1 lead leg R strides | 21 | 13 | 13 | 13 | 13 | | 14 | | 15 | 15 | 15 | 18.2 | 150.2 | | | | |
| **Semi-Final 3** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | | |
| date 21-Aug-23 time | 5.77 | 9.48 | 13.08 | 16.61 | 20.42 | | 24.49 | 28.66 | 33.01 | 37.54 | 42.14 | | 47.34 | 7 / 2 | | | |
| reaction time 0.198 interval | | 3.71 | 3.60 | 3.53 | 3.81 | | 4.07 | 4.17 | 4.35 | 4.53 | 4.60 | 5.20 | **WJR** | | 10.84 | 12.05 | 13.48 |
| velocity | 7.80 | 9.43 | 9.72 | 9.92 | 9.19 | | 8.60 | 8.39 | 8.05 | 7.73 | 7.61 | 7.69 | 8.45 | | 9.69 | 8.71 | 7.79 |
| H1 lead leg R strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 164.5 | | | | |
| **Heat 4** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | | |
| date 20-Aug-23 time | 5.83 | 9.70 | 13.53 | 17.53 | 21.43 | | 25.46 | 29.67 | 33.90 | 38.36 | 43.06 | | 48.39 | 3 / 3 | | | |
| reaction time 0.183 interval | | 3.87 | 3.83 | 4.00 | 3.90 | | 4.03 | 4.21 | 4.23 | 4.46 | 4.70 | 5.33 | | | 11.70 | 12.14 | 13.39 |
| velocity | 7.72 | 9.04 | 9.14 | 8.75 | 8.97 | | 8.68 | 8.31 | 8.27 | 7.85 | 7.45 | 7.50 | 8.27 | | 8.97 | 8.65 | 7.84 |
| H1 lead leg L strides | 22 | 14 | 14 | 13 | 14 | | 14 | 14 | 14 | 15 | 15 | 18.2 | 167.2 | | | | |

**Clement, Kerron (USA) (1985)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2018 Müller Anniversary Games (London, GBR) (TV Analysis) | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2018 year end hurdle report* | | | | |
| date 21-Jul-18 time | 5.88 | 9.68 | | | 21.40 | | 25.60 | 29.96 | 34.56 | 39.24 | 44.00 | | 49.43 | 6 / 6 | | | |
| reaction time 0.205 interval | | 3.80 | | | 11.72 | | 4.20 | 4.36 | 4.60 | 4.68 | 4.76 | 5.43 | | | | | 14.04 |
| velocity | 7.65 | 9.21 | | | 8.96 | | 8.33 | 8.03 | 7.61 | 7.48 | 7.35 | 7.37 | 8.09 | | | | 7.48 |
| H1 lead leg R strides | 20 | 13 | | | | | 13 | 13 | 14 | 14 | 14 | 16.5 | 117.5 | | | | |
| **FINAL** - 2018 Meeting de Paris (Paris, FRA) (TV Analysis) | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2018 year end hurdle report* | | | | |
| date 30-Jun-18 time | 5.92 | 9.64 | 13.32 | 17.16 | 21.16 | 22.9 | 25.44 | 29.80 | 34.28 | 38.80 | 43.48 | | 48.83 | 8 / 5 | | | |
| reaction time 0.233 interval | | 3.72 | 3.68 | 3.84 | 4.00 | | 4.28 | 4.36 | 4.48 | 4.52 | 4.68 | 5.35 | | | 11.24 | 12.64 | 13.68 |
| velocity | 7.60 | 9.41 | 9.51 | 9.11 | 8.75 | 8.73 | 8.18 | 8.03 | 7.81 | 7.74 | 7.48 | 7.48 | 8.19 | | 9.34 | 8.31 | 7.68 |
| H1 lead leg R strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16 | 153 | | | | |
| **FINAL** - 2018 Bislett Games (Oslo, NOR) (TV Analysis) | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2018 year end hurdle report* | | | | |
| date 07-Jun-18 time | 5.84 | 9.56 | 13.32 | 17.20 | 21.32 | 23.1 | 25.64 | 30.04 | 34.56 | 39.20 | 43.84 | | 49.30 | 6 / 5 | | | |
| reaction time 0.159 interval | | 3.72 | 3.76 | 3.88 | 4.12 | | 4.32 | 4.40 | 4.52 | 4.64 | 4.64 | 5.46 | | | 11.36 | 12.84 | 13.80 |
| velocity | 7.71 | 9.41 | 9.31 | 9.02 | 8.50 | 8.66 | 8.10 | 7.95 | 7.74 | 7.54 | 7.54 | 7.33 | 8.11 | | 9.24 | 8.18 | 7.61 |
| H1 lead leg R strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16 | 153 | | | | |
| **FINAL** - 2018 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2018 year end hurdle report* | | | | |
| date 31-May-18 time | 5.88 | 9.64 | 13.44 | 17.40 | 21.44 | | 25.68 | 30.04 | 34.52 | 39.08 | 43.96 | | 49.48 | 6 / 6 | | | |
| reaction time 0.159 interval | | 3.76 | 3.80 | 3.96 | 4.04 | | 4.24 | 4.36 | 4.48 | 4.56 | 4.88 | 5.52 | | | 11.52 | 12.64 | 13.92 |
| velocity | 7.65 | 9.31 | 9.21 | 8.84 | 8.66 | | 8.25 | 8.03 | 7.81 | 7.68 | 7.17 | 7.25 | 8.08 | | 9.11 | 8.31 | 7.54 |
| H1 lead leg R strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 16.5 | 154.5 | | | | |
| **FINAL** - 2018 Doha Diamond League (Doha, QAT) (TV Analysis) | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2018 year end hurdle report* | | | | |
| date 04-May-18 time | 6.16 | 10.00 | 13.88 | 17.88 | 22.08 | | 26.40 | 30.76 | 35.24 | 39.96 | 44.76 | | 50.19 | 6 / 6 | | | |
| reaction time 0.276 interval | | 3.84 | 3.88 | 4.00 | 4.20 | | 4.32 | 4.36 | 4.48 | 4.72 | 4.80 | 5.43 | | | 11.72 | 12.88 | 14.00 |
| velocity | 7.31 | 9.11 | 9.02 | 8.75 | 8.33 | | 8.10 | 8.03 | 7.81 | 7.42 | 7.29 | 7.37 | 7.97 | | 8.96 | 8.15 | 7.50 |
| H1 lead leg R strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | | 139 | | | | |
| **FINAL** - 2017 Weltklasse (Zürich, SUI) (TV Analysis) | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2017 year end hurdle report* | | | | |
| date 24-Aug-17 time | 5.96 | 9.68 | 13.44 | 17.28 | 21.32 | | 25.52 | 29.80 | 34.16 | 38.72 | 43.56 | | 49.20 | 7 / 4 | | | |
| reaction time 0.167 interval | | 3.72 | 3.76 | 3.84 | 4.04 | | 4.20 | 4.28 | 4.36 | 4.56 | 4.84 | 5.64 | | | 11.32 | 12.52 | 13.76 |
| velocity | 7.55 | 9.41 | 9.31 | 9.11 | 8.66 | | 8.33 | 8.18 | 8.03 | 7.68 | 7.23 | 7.09 | 8.13 | | 9.28 | 8.39 | 7.63 |
| H1 lead leg R strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | | 15 | 17 | 143 | | | | |
| **FINAL** - 2017 IAAF World Championships (London, GBR) (TV Analysis) | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2017 year end hurdle report* | | | | |
| date 09-Aug-17 time | 5.92 | 9.72 | 13.52 | 17.28 | 21.20 | | 25.32 | 29.52 | 33.84 | 38.32 | 43.12 | | 48.52 | 4 / 3 | | | |
| reaction time 0.153 interval | | 3.80 | 3.80 | 3.76 | 3.92 | | 4.12 | 4.20 | 4.32 | 4.48 | 4.80 | 5.40 | | | 11.36 | 12.24 | 13.60 |
| velocity | 7.60 | 9.21 | 9.21 | 9.31 | 8.93 | | 8.50 | 8.33 | 8.10 | 7.81 | 7.29 | 7.41 | 8.24 | | 9.24 | 8.58 | 7.72 |
| H1 lead leg R strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 17 | 155 | | | | |
| **FINAL** - 2017 Müller's Anniversary Games (London, GBR) (TV Analysis) | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2017 year end hurdle report* | | | | |
| date 09-Jul-17 time | 6.00 | 9.72 | 13.44 | 17.24 | 21.24 | | 25.48 | 29.80 | 34.16 | 38.60 | 43.08 | | 48.02 | 7 / 1 | | | |
| reaction time 0.157 interval | | 3.72 | 3.72 | 3.80 | 4.00 | | 4.24 | 4.32 | 4.36 | 4.44 | 4.48 | 4.94 | | | 11.24 | 12.56 | 13.28 |
| velocity | 7.50 | 9.41 | 9.41 | 9.21 | 8.75 | | 8.25 | 8.10 | 8.03 | 7.88 | 7.81 | 8.10 | 8.33 | | 9.34 | 8.36 | 7.91 |
| H1 lead leg R strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16 | 153 | | | | |
| **FINAL** - 2017 USATF Championships (Sacramento, CA) (TV Analysis) | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2017 year end hurdle report* | | | | |
| date 25-Jun-17 time | 6.07 | 9.90 | 13.69 | 17.48 | 21.41 | | 25.55 | 29.86 | 34.21 | 38.79 | 43.45 | | 48.91 | 5 / 7 | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | | interval | | 3.83 | 3.79 | 3.79 | 3.93 | 4.14 | 4.31 | 4.35 | 4.58 | 4.66 | 5.46 | | | 11.41 | 12.38 | 13.59 |
| | | velocity | 7.41 | 9.14 | 9.23 | 9.23 | 8.91 | 8.45 | 8.12 | 8.05 | 7.64 | 7.51 | 7.33 | 8.18 | | 9.20 | 8.48 | 7.73 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 16.5 | 153.5 | | | | |

**FINAL** - 2017 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Jun-17 | time | 5.90 | 9.53 | 13.16 | 16.93 | 20.83 | 25.03 | 29.53 | 34.36 | 39.20 | 44.46 | | 50.52 | 6 / 8 | | | |
| reaction time | 0.164 | interval | | 3.63 | 3.63 | 3.77 | 3.90 | 4.20 | 4.50 | 4.83 | 4.84 | 5.26 | 6.06 | | | 11.03 | 12.60 | 14.93 |
| | | velocity | 7.63 | 9.64 | 9.64 | 9.28 | 8.97 | 8.33 | 7.78 | 7.25 | 7.23 | 6.65 | 6.60 | 7.92 | | 9.52 | 8.33 | 7.03 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 14 | 16 | | 145 | | | | |

**FINAL** - 2017 Shanghai Diamond League (Shanghai, CHN) (TV Analysis) *Henson (2021) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-May-17 | time | 5.96 | 9.72 | 13.48 | 17.36 | 21.40 | 25.60 | 29.96 | 34.48 | 39.24 | 44.04 | | 49.43 | 6 / 4 | | | |
| reaction time | 0.155 | interval | | 3.76 | 3.76 | 3.88 | 4.04 | 4.20 | 4.36 | 4.52 | 4.76 | 4.80 | 5.39 | | | 11.40 | 12.60 | 14.08 |
| | | velocity | 7.55 | 9.31 | 9.31 | 9.02 | 8.66 | 8.33 | 8.03 | 7.74 | 7.35 | 7.29 | 7.42 | 8.09 | | 9.21 | 8.33 | 7.46 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 16.5 | 155.5 | | | | |

**FINAL** - 2017 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-17 | time | 6.06 | 9.86 | 13.60 | 17.40 | 21.40 | 25.60 | 29.90 | 34.36 | 39.20 | 44.06 | | 49.40 | 6 / 2 | | | |
| reaction time | 0.176 | interval | | 3.80 | 3.74 | 3.80 | 4.00 | 4.20 | 4.30 | 4.46 | 4.84 | 4.86 | 5.34 | | | 11.34 | 12.50 | 14.16 |
| | | velocity | 7.43 | 9.21 | 9.36 | 9.21 | 8.75 | 8.33 | 8.14 | 7.85 | 7.23 | 7.20 | 7.49 | 8.10 | | 9.26 | 8.40 | 7.42 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 16 | 155 | | | | |

**FINAL** - 2016 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-16 | time | 5.88 | 9.56 | 13.32 | 17.04 | 21.04 | 25.20 | 29.52 | 33.96 | 38.80 | 43.64 | | 48.72 | 6 / 1 | | | |
| reaction time | 0.132 | interval | | 3.68 | 3.76 | 3.72 | 4.00 | 4.16 | 4.32 | 4.44 | 4.84 | 4.84 | 5.08 | | | 11.16 | 12.48 | 14.12 |
| | | velocity | 7.65 | 9.51 | 9.31 | 9.41 | 8.75 | 8.41 | 8.10 | 7.88 | 7.23 | 7.23 | 7.87 | 8.21 | | 9.41 | 8.41 | 7.44 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 16.2 | 155.2 | | | | |

**FINAL** - 2016 Meeting Paris (Saint-Denis, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Aug-16 | time | 5.88 | 9.60 | 13.32 | 17.08 | 21.00 | 25.08 | 29.24 | 33.56 | 38.04 | 42.92 | | 48.19 | 6 / 2 | | | |
| reaction time | 0.137 | interval | | 3.72 | 3.72 | 3.76 | 3.92 | 4.08 | 4.16 | 4.32 | 4.48 | 4.88 | 5.27 | | | 11.20 | 12.16 | 13.68 |
| | | velocity | 7.65 | 9.41 | 9.41 | 9.31 | 8.93 | 8.58 | 8.41 | 8.10 | 7.81 | 7.17 | 7.59 | 8.30 | | 9.38 | 8.63 | 7.68 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 16.7 | 154.7 | | | | |

**FINAL** - 2016 Olympic Games (Rio de Janeiro, BRA) *Zhou (2020) - analysis of competetive performance charactersitics of outstanding men's 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-16 | time | 5.6 | 9.2 | 12.8 | 16.6 | 20.5 | 24.4 | 28.7 | 32.9 | 37.4 | 41.9 | | 47.73 | 5 / 1 | | | |
| reaction time | 0.227 | interval | | 3.60 | 3.60 | 3.80 | 3.90 | 3.90 | 4.30 | 4.20 | 4.50 | 4.50 | 5.83 | | | 11.00 | 12.10 | 13.20 |
| | | velocity | 8.04 | 9.72 | 9.72 | 9.21 | 8.97 | 8.97 | 8.14 | 8.33 | 7.78 | 7.78 | 6.86 | 8.38 | | 9.55 | 8.68 | 7.95 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | 14 | 15 | 15 | 15 | 15 | 18 | 165 | | | | |

**FINAL** - 2016 London Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jul-16 | time | 5.92 | 9.68 | 13.44 | 17.28 | 21.36 | 25.64 | 29.96 | 34.36 | 38.76 | 43.28 | | 48.40 | 7 / 1 | | | |
| reaction time | 0.164 | interval | | 3.76 | 3.76 | 3.84 | 4.08 | 4.28 | 4.32 | 4.40 | 4.40 | 4.52 | 5.12 | | | 11.36 | 12.68 | 13.32 |
| | | velocity | 7.60 | 9.31 | 9.31 | 9.11 | 8.58 | 8.18 | 8.10 | 7.95 | 7.95 | 7.74 | 7.81 | 8.26 | | 9.24 | 8.28 | 7.88 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 16 | 153 | | | | |

**FINAL** - 2016 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-16 | time | 6.00 | 9.71 | 13.34 | 17.18 | 21.15 | 25.26 | 29.53 | 33.93 | 38.50 | 43.24 | | 48.50 | 7 / 1 | | | |
| reaction time | 0.180 | interval | | 3.71 | 3.63 | 3.84 | 3.97 | 4.11 | 4.27 | 4.40 | 4.57 | 4.74 | 5.26 | | | 11.18 | 12.35 | 13.71 |
| | | velocity | 7.50 | 9.43 | 9.64 | 9.11 | 8.82 | 8.52 | 8.20 | 7.95 | 7.66 | 7.38 | 7.60 | 8.25 | | 9.39 | 8.50 | 7.66 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 16.5 | 153.5 | | | | |

**FINAL** - 2016 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jun-16 | time | 5.97 | 9.73 | 13.53 | 17.37 | 21.47 | 25.73 | 30.17 | 34.70 | 39.37 | 44.37 | | 49.87 | 6 / 2 | | | |
| reaction time | 0.150 | interval | | 3.76 | 3.80 | 3.84 | 4.10 | 4.26 | 4.44 | 4.53 | 4.67 | 5.00 | 5.50 | | | 11.40 | 12.80 | 14.20 |
| | | velocity | 7.54 | 9.31 | 9.21 | 9.11 | 8.54 | 8.22 | 7.88 | 7.73 | 7.49 | 7.00 | 7.27 | 8.02 | | 9.21 | 8.20 | 7.39 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 17.2 | 155.2 | | | | |

**FINAL** - 2016 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2021) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-16 | time | 5.96 | 9.72 | 13.56 | 17.48 | 21.68 | 25.92 | 30.28 | 34.72 | 39.28 | 44.08 | | 49.61 | 6 / 4 | | | |
| reaction time | 0.194 | interval | | 3.76 | 3.84 | 3.92 | 4.20 | 4.24 | 4.36 | 4.44 | 4.56 | 4.80 | 5.53 | | | 11.52 | 12.80 | 13.80 |
| | | velocity | 7.55 | 9.31 | 9.11 | 8.93 | 8.33 | 8.25 | 8.03 | 7.88 | 7.68 | 7.29 | 7.23 | 8.06 | | 9.11 | 8.20 | 7.61 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 16.5 | 153.5 | | | | |

**FINAL** - 2016 Prefontaine Classic (Eugene, OR) (TV Analysis) *(H8 5m short)* *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-16 | time | 6.08 | 9.92 | 13.72 | 17.72 | | 26.00 | 30.28 | 34.04 | 39.08 | 43.68 | | 48.87 | 7 / 2 | | | |
| reaction time | | interval | | 3.84 | 3.80 | 4.00 | | 8.28 | 4.28 | 3.76 | 5.04 | 4.60 | 5.19 | | | 11.64 | 12.56 | 13.40 |
| | | velocity | 7.40 | 9.11 | 9.21 | 8.75 | | 8.45 | 8.18 | 7.98 | 7.94 | 7.61 | 7.71 | 8.18 | | 9.02 | 8.36 | 7.84 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | | | 13 | 13 | | 15 | 17 | 117 | | | | |

**FINAL** - 2016 Shanghai Golden Grand Prix (Shanghai, CHN) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-May-16 | time | 6.00 | 9.76 | 13.64 | 17.48 | 21.48 | 25.72 | 30.08 | 34.60 | 39.28 | 44.08 | | 49.56 | 3 / 7 | | | |
| reaction time | 0.180 | interval | | 3.76 | 3.88 | 3.84 | 4.00 | 4.24 | 4.36 | 4.52 | 4.68 | 4.80 | 5.48 | | | 11.48 | 12.60 | 14.00 |
| | | velocity | 7.50 | 9.31 | 9.02 | 9.11 | 8.75 | 8.25 | 8.03 | 7.74 | 7.48 | 7.29 | 7.30 | 8.07 | | 9.15 | 8.33 | 7.50 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 16.5 | 153.5 | | | | |

**FINAL** - 2015 IAAF World Championships (Beijing, CHN) (TV Analysis) *Henson (2021) - Athlete First: major championships report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-15 | time | 5.96 | 9.68 | 13.40 | 17.16 | 21.12 | 25.20 | 29.32 | 33.60 | 38.16 | 42.96 | | 48.18 | 8 / 4 | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.174 | interval | | 3.72 | 3.72 | 3.76 | 3.96 | 4.08 | 4.12 | 4.28 | 4.56 | 4.80 | 5.22 | | | 11.20 | 12.16 | 13.64 |
| | | velocity | 7.55 | 9.41 | 9.41 | 9.31 | 8.84 | 8.58 | 8.50 | 8.18 | 7.68 | 7.29 | 7.66 | 8.30 | | 9.38 | 8.63 | 7.70 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 17 | 138 | | | | |

**FINAL** - 2013 IAAF World Championships (Moscow, RUS) (TV Analysis) *Henson (2021) - Athlete First: major championships report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-13 | time | 5.93 | 9.70 | 13.53 | 17.33 | 21.27 | 25.37 | 29.50 | 34.03 | 38.70 | 43.50 | | 49.08 | 1 / 8 | | | |
| reaction time | 0.165 | interval | | 3.77 | 3.83 | 3.80 | 3.94 | 4.10 | 4.13 | 4.53 | 4.67 | 4.80 | 5.58 | | | 11.40 | 12.17 | 14.00 |
| | | velocity | 7.59 | 9.28 | 9.14 | 9.21 | 8.88 | 8.54 | 8.47 | 7.73 | 7.49 | 7.29 | 7.17 | 8.15 | | 9.21 | 8.63 | 7.50 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | | 15 | 15 | 16.7 | 144.7 | | | | |

**FINAL** - 2012 Olympic Games (London, GBR) *Hillier (2012) - uka 2012 olympic games report: 400m hurdles*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-12 | time | 5.87 | 9.54 | 13.10 | 16.86 | 20.78 | 22.58 | 24.89 | 29.20 | 33.78 | 38.56 | 43.44 | | 49.15 | 2 / 8 | | |
| reaction time | 0.148 | interval | | 3.67 | 3.56 | 3.76 | 3.92 | | 4.11 | 4.31 | 4.58 | 4.78 | 4.88 | 5.71 | | | 10.99 | 12.34 | 14.24 |
| | | velocity | 7.67 | 9.54 | 9.83 | 9.31 | 8.93 | 8.86 | 8.52 | 8.12 | 7.64 | 7.32 | 7.17 | 7.01 | 8.14 | | 9.55 | 8.51 | 7.37 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | | 144 | | | |

**FINAL** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-09 | time | 5.92 | 9.60 | 13.32 | 17.15 | 21.09 | 25.26 | 29.49 | 33.85 | 38.35 | 42.90 | | 47.91 | 3 / 1 | | | |
| reaction time | 0.176 | interval | | 3.68 | 3.72 | 3.83 | 3.94 | 4.17 | 4.23 | 4.36 | 4.50 | 4.55 | 5.01 | | | 11.23 | 12.34 | 13.41 |
| | | velocity | 7.60 | 9.51 | 9.41 | 9.14 | 8.88 | 8.39 | 8.27 | 8.03 | 7.78 | 7.69 | 7.98 | 8.35 | | 9.35 | 8.51 | 7.83 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 16.2 | 153.2 | | | | |

**Semi-Final 1** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Aug-09 | time | 5.97 | 9.72 | 13.44 | 17.22 | 21.12 | 25.24 | 29.48 | 33.82 | 38.28 | 42.89 | | 48.00 | 3 / 1 | | | |
| reaction time | 0.158 | interval | | 3.75 | 3.72 | 3.78 | 3.90 | 4.12 | 4.24 | 4.34 | 4.46 | 4.61 | 5.11 | | | 11.25 | 12.26 | 13.41 |
| | | velocity | 7.54 | 9.33 | 9.41 | 9.26 | 8.97 | 8.50 | 8.25 | 8.06 | 7.85 | 7.59 | 7.83 | 8.33 | | 9.33 | 8.56 | 7.83 |
| H1 lead leg | | strides | | | | | | 13 | 13 | 13 | 13 | 13 | 16 | 81 | | | | |

**Heat 3** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-09 | time | 6.07 | 9.83 | 13.64 | 17.49 | 21.47 | 25.63 | 29.89 | 34.17 | 38.71 | 43.33 | | 48.39 | 5 / 1 | | | |
| reaction time | 0.169 | interval | | 3.76 | 3.81 | 3.85 | 3.98 | 4.16 | 4.26 | 4.28 | 4.54 | 4.62 | 5.06 | | | 11.42 | 12.40 | 13.44 |
| | | velocity | 7.41 | 9.31 | 9.19 | 9.09 | 8.79 | 8.41 | 8.22 | 8.18 | 7.71 | 7.58 | 7.91 | 8.27 | | 9.19 | 8.47 | 7.81 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 2008 IAAF World Athletics Final (Stuttgart, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Sep-08 | time | 6.09 | 9.88 | 13.72 | 17.62 | 21.68 | 25.82 | 30.14 | 34.56 | 39.06 | 43.86 | | 48.96 | 4 / 1 | | | |
| reaction time | 0.175 | interval | | 3.79 | 3.84 | 3.90 | 4.06 | 4.14 | 4.32 | 4.42 | 4.50 | 4.80 | 5.10 | | | 11.53 | 12.52 | 13.72 |
| | | velocity | 7.39 | 9.23 | 9.11 | 8.97 | 8.62 | 8.45 | 8.10 | 7.92 | 7.78 | 7.29 | 7.84 | 8.17 | | 9.11 | 8.39 | 7.65 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 2008 Olympic Games (Beijing, CHN) *Behm (2008)- Pekin 2008: Le quatrache masculin - féminin*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-08 | time | 5.9 | 9.5 | 13.1 | 16.9 | 20.7 | 24.7 | 28.9 | 33.2 | 37.7 | 42.5 | | 47.98 | 4 / 2 | | | |
| reaction time | 0.265 | interval | | 3.60 | 3.60 | 3.80 | 3.80 | 4.00 | 4.20 | 4.30 | 4.50 | 4.80 | 5.48 | | | 11.00 | 12.00 | 13.60 |
| | | velocity | 7.63 | 9.72 | 9.72 | 9.21 | 9.21 | 8.75 | 8.33 | 8.14 | 7.78 | 7.29 | 7.30 | 8.34 | | 9.55 | 8.75 | 7.72 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 17 | 156 | | | | |

**FINAL** - 2008 USA Olympic Trials (Eugene, OR) *USATF Hurdle Development (2008)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jun-08 | time | 6.04 | 9.78 | 13.55 | 17.50 | 21.60 | 25.74 | 30.03 | 34.45 | 38.87 | 43.43 | | 48.36 | 5 / 2 | | | |
| reaction time | | interval | | 3.74 | 3.77 | 3.95 | 4.10 | 4.14 | 4.29 | 4.42 | 4.42 | 4.56 | 4.93 | | | 11.46 | 12.53 | 13.40 |
| | | velocity | 7.45 | 9.36 | 9.28 | 8.86 | 8.54 | 8.45 | 8.16 | 7.92 | 7.92 | 7.68 | 8.11 | 8.27 | | 9.16 | 8.38 | 7.84 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | | 139 | | | | |

**FINAL** - 2007 IAAF World Athletics Final (Stuttgart, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Sep-07 | time | 6.26 | 9.80 | 13.54 | 17.36 | 21.32 | 25.44 | 29.85 | 34.43 | 38.96 | 43.57 | | 48.35 | 6 / 2 | | | |
| reaction time | 0.178 | interval | | 3.54 | 3.74 | 3.82 | 3.96 | 4.12 | 4.41 | 4.58 | 4.53 | 4.61 | 4.78 | | | 11.10 | 12.49 | 13.72 |
| | | velocity | 7.19 | 9.89 | 9.36 | 9.16 | 8.84 | 8.50 | 7.94 | 7.64 | 7.73 | 7.59 | 8.37 | 8.27 | | 9.46 | 8.41 | 7.65 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 2007 IAAF World Championships (Osaka, JPN) *Ae (2008) - IAAF biomechanics team - a booklet of biomechanics data*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Aug-07 | time | 5.92 | 9.60 | 13.30 | 16.98 | 20.80 | 24.82 | 28.98 | 33.28 | 37.86 | 42.52 | | 47.61 | 4 / 1 | | | |
| reaction time | 0.169 | interval | | 3.68 | 3.70 | 3.68 | 3.82 | 4.02 | 4.16 | 4.30 | 4.58 | 4.66 | 5.09 | | | 11.06 | 12.00 | 13.54 |
| | | velocity | 7.60 | 9.51 | 9.46 | 9.51 | 9.16 | 8.71 | 8.41 | 8.14 | 7.64 | 7.51 | 7.86 | 8.40 | | 9.49 | 8.75 | 7.75 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 16.5 | 157.5 | | | | |

**Heat 1** - 2007 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2007)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-07 | time | 5.99 | 9.78 | 13.65 | 17.60 | 21.79 | 26.04 | 30.41 | 34.87 | 39.57 | 44.38 | | 49.72 | 6 / 1 | | | |
| reaction time | | interval | | 3.79 | 3.87 | 3.95 | 4.19 | 4.25 | 4.37 | 4.46 | 4.70 | 4.81 | 5.34 | | | 11.61 | 12.81 | 13.97 |
| | | velocity | 7.51 | 9.23 | 9.04 | 8.86 | 8.35 | 8.24 | 8.01 | 7.85 | 7.45 | 7.28 | 7.49 | 8.05 | | 9.04 | 8.20 | 7.52 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | | 141 | | | | |

**FINAL** - 2006 Seiko Super Grand Prix (Yokohama, JPN) *Yasunori (2007) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-06 | time | 6.01 | 9.83 | 13.67 | 17.51 | 21.55 | 25.70 | 29.94 | 34.26 | 38.68 | 43.24 | | 48.36 | / 1 | | | |
| reaction time | | interval | | 3.82 | 3.84 | 3.84 | 4.04 | 4.15 | 4.24 | 4.32 | 4.42 | 4.56 | 5.12 | | | 11.50 | 12.43 | 13.30 |
| | | velocity | 7.49 | 9.16 | 9.11 | 9.11 | 8.66 | 8.43 | 8.25 | 8.10 | 7.92 | 7.68 | 7.81 | 8.27 | | 9.13 | 8.45 | 7.89 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | | 117 | | | | |

**FINAL** - 2006 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2006)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jun-06 | time | 5.97 | 9.65 | 13.38 | 17.15 | 21.05 | 25.06 | 29.19 | 33.40 | 37.80 | 42.41 | | 47.39 | 4 / 1 | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | | interval | | 3.68 | 3.73 | 3.77 | 3.90 | | 4.01 | 4.13 | 4.21 | 4.40 | 4.61 | 4.98 | | | 11.18 | 12.04 | 13.22 |
| | | velocity | 7.54 | 9.51 | 9.38 | 9.28 | 8.97 | | 8.73 | 8.47 | 8.31 | 7.95 | 7.59 | 8.03 | 8.44 | | 9.39 | 8.72 | 7.94 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 17 | 156 | | | | |

**FINAL** - 2005 NCAA National Championships (Sacramento, CA) *gh (2005) - trackandfieldnews.com forum*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-05 | time | 5.9 | 9.5 | 13.2 | 17.1 | 21.0 | | 25.0 | 29.2 | 33.6 | 38.2 | 42.8 | | 47.56 | 6 / 1 | | | |
| reaction time | | interval | | 3.60 | 3.70 | 3.90 | 3.90 | | 4.00 | 4.20 | 4.40 | 4.60 | 4.60 | 4.76 | | | 11.20 | 12.10 | 13.60 |
| | | velocity | 7.63 | 9.72 | 9.46 | 8.97 | 8.97 | | 8.75 | 8.33 | 7.95 | 7.61 | 7.61 | 8.40 | 8.41 | | 9.38 | 8.68 | 7.72 |
| H1 lead leg | R | strides | 22 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | 16.7 | 162 | | | | |

**Cooper, John (GBR) (1940)**

**FINAL** - 1964 Olympic Games (Tokyo, JPN) *Breitschaft (1965) - die leichtathletik wettkampfe der 1964 olympischen sommerspielen - 400m hürdenlauf*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Oct-64 | time | 5.8 | | 13.8 | | 22.0 | | | 30.8 | | 40.0 | | | 50.1 | 4 / 2 | | | |
| reaction time | | interval | | | 8.00 | | 8.20 | | | 8.80 | | 9.20 | | 10.10 | | | | | |
| | | velocity | 7.76 | | 8.75 | | 8.54 | | | 7.95 | | 7.61 | | 7.43 | 7.98 | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Copello, Yasmani (TUR) (1987)**

**Semi-Final 3** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-23 | time | 5.97 | 9.77 | | 17.23 | 21.12 | | | 29.57 | 34.03 | 38.64 | 43.25 | | 48.66 | 3 / 6 | | | |
| reaction time | 0.220 | interval | | 3.80 | | 7.46 | 3.89 | | | 8.45 | 4.46 | 4.61 | 4.61 | 5.41 | | | 11.26 | 12.34 | 13.68 |
| | | velocity | 7.54 | 9.21 | | 9.38 | 9.00 | | | 8.29 | 7.84 | 7.59 | 7.59 | 7.39 | 8.22 | | 9.33 | 8.51 | 7.67 |
| H1 lead leg | R | strides | 20 | 13 | | | 13 | | | | 14 | 14 | 14 | 17.5 | 105.5 | | | | |

**Heat 5** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 6.00 | 9.83 | 13.66 | 17.56 | 21.50 | | 25.63 | 29.96 | 34.40 | 38.93 | 43.56 | | 48.92 | 6 / 5 | | | |
| reaction time | 0.244 | interval | | 3.83 | 3.83 | 3.90 | 3.94 | | 4.13 | 4.33 | 4.44 | 4.53 | 4.63 | 5.36 | | | 11.56 | 12.40 | 13.60 |
| | | velocity | 7.50 | 9.14 | 9.14 | 8.97 | 8.88 | | 8.47 | 8.08 | 7.88 | 7.73 | 7.56 | 7.46 | 8.18 | | 9.08 | 8.47 | 7.72 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.5 | 158.5 | | | | |

**FINAL** - 2023 Bauhaus Galan (Stockholm, SWE) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Jul-23 | time | 5.97 | 9.76 | 13.61 | 17.44 | 21.42 | | 25.58 | 30.00 | 34.66 | 39.61 | 44.61 | | 50.59 | 2 / 8 | | | |
| reaction time | 0.186 | interval | | 3.79 | 3.85 | 3.83 | 3.98 | | 4.16 | 4.42 | 4.66 | 4.95 | 5.00 | 5.98 | | | 11.47 | 12.56 | 14.61 |
| | | velocity | 7.54 | 9.23 | 9.09 | 9.14 | 8.79 | | 8.41 | 7.92 | 7.51 | 7.07 | 7.00 | 6.69 | 7.91 | | 9.15 | 8.36 | 7.19 |
| H1 lead leg | R | strides | 20 | 13 | | 13 | 13 | | 13 | 14 | | 15 | 15 | | 116 | | | | |

**FINAL** - 2022 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-22 | time | 5.90 | 9.54 | | 17.28 | 21.29 | 22.88 | 25.42 | 29.86 | 34.29 | 38.94 | 43.61 | | 49.10 | 4 / 6 | | | |
| reaction time | 0.172 | interval | | 3.64 | | 7.74 | 4.01 | | 4.13 | 4.44 | 4.43 | 4.65 | 4.67 | 5.49 | | | 11.38 | 12.58 | 13.75 |
| | | velocity | 7.63 | 9.62 | | 9.04 | 8.73 | 8.74 | 8.47 | 7.88 | 7.90 | 7.53 | 7.49 | 7.29 | 8.15 | | 9.23 | 8.35 | 7.64 |
| H1 lead leg | R | strides | 20 | 13 | | | 13 | | 13 | 14 | 14 | 14 | 14 | 17.5 | 132.5 | | | | |

**FINAL** - 2022 Memorial van Damme (Brussels, BEL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Sep-22 | time | 5.90 | 9.64 | 13.38 | | 21.22 | 22.93 | 25.29 | 29.66 | 34.13 | 38.70 | 43.37 | | 48.83 | 3 / ~~7~~ 6 | | | |
| reaction time | 0.190 | interval | | 3.74 | 3.74 | | 7.84 | | 2.36 | 4.37 | 4.47 | 4.57 | 4.67 | 5.46 | | | | | 13.71 |
| | | velocity | 7.63 | 9.36 | 9.36 | | 8.93 | 8.72 | 14.83 | 8.01 | 7.83 | 7.66 | 7.49 | 7.33 | 8.19 | | | | 7.66 |
| H1 lead leg | R | strides | 20 | 13 | 13 | | | | 13 | 14 | 14 | 14 | 14 | 17.2 | 132.2 | | | | |

**FINAL** - 2022 European Athletics Championships (Munich, GER) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Aug-22 | time | 5.97 | 9.71 | 13.63 | 17.45 | 21.50 | 23.11 | 25.63 | 29.96 | 34.37 | 38.86 | 43.44 | | 48.78 | 6 / 3 | | | |
| reaction time | 0.240 | interval | | 3.74 | 3.92 | 3.82 | 4.05 | | 4.13 | 4.33 | 4.41 | 4.49 | 4.58 | 5.34 | | | 11.48 | 12.51 | 13.48 |
| | | velocity | 7.54 | 9.36 | 8.93 | 9.16 | 8.64 | 8.65 | 8.47 | 8.08 | 7.94 | 7.80 | 7.64 | 7.49 | 8.20 | | 9.15 | 8.39 | 7.79 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.2 | 158.2 | | | | |

**Semi-Final 1** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.93 | 9.80 | 13.80 | 17.77 | 22.00 | 23.97 | 26.40 | 30.97 | 35.56 | 40.48 | 45.46 | | 51.49 | 2 / 7 | | | |
| reaction time | 0.166 | interval | | 3.87 | 4.00 | 3.97 | 4.23 | | 4.40 | 4.57 | 4.59 | 4.92 | 4.98 | 6.03 | | | 11.84 | 13.20 | 14.49 |
| | | velocity | 7.59 | 9.04 | 8.75 | 8.82 | 8.27 | 8.34 | 7.95 | 7.66 | 7.63 | 7.11 | 7.03 | 6.63 | 7.77 | | 8.87 | 7.95 | 7.25 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 14 | 18 | 161 | | | | |

**FINAL** - 2022 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jun-22 | time | 5.86 | 9.56 | 13.40 | 17.28 | 21.20 | 22.94 | 25.40 | 29.72 | 34.12 | 38.76 | 43.64 | | 49.36 | 4 / 5 | | | |
| reaction time | 0.177 | interval | | 3.70 | 3.84 | 3.88 | 3.92 | | 4.20 | 4.32 | 4.40 | 4.64 | 4.88 | 5.72 | | | 11.42 | 12.44 | 13.92 |
| | | velocity | 7.68 | 9.46 | 9.11 | 9.02 | 8.93 | 8.72 | 8.33 | 8.10 | 7.95 | 7.54 | 7.17 | 6.99 | 8.10 | | 9.19 | 8.44 | 7.54 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 15 | 18 | 159 | | | | |

**FINAL** - FINAL - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jun-22 | time | 5.87 | 9.60 | 13.30 | 17.20 | 21.17 | 22.89 | 25.27 | 29.67 | 34.17 | 38.87 | 43.67 | | 49.29 | 5 / 4 | | | |
| reaction time | 0.177 | interval | | 3.73 | 3.70 | 3.90 | 3.97 | | 4.10 | 4.40 | 4.50 | 4.70 | 4.80 | 5.62 | | | 11.33 | 12.47 | 14.00 |
| | | velocity | 7.67 | 9.38 | 9.46 | 8.97 | 8.82 | 8.74 | 8.54 | 7.95 | 7.78 | 7.45 | 7.29 | 7.12 | 8.12 | | 9.27 | 8.42 | 7.50 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | | 141 | | | | |

**FINAL** - 2022 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-May-22 | time | 5.97 | 9.84 | 13.91 | 18.15 | 22.35 | 24.2 | 26.73 | | 35.87 | 40.51 | | | 50.30 | 5 / 6 | | | |
| reaction time | 0.191 | interval | | 3.87 | 4.07 | 4.24 | 4.20 | | 4.38 | | 9.14 | 4.64 | | | | | 12.18 | | |
| | | velocity | 7.54 | 9.04 | 8.60 | 8.25 | 8.33 | 8.26 | 7.99 | | 7.66 | 7.54 | | | 7.95 | | 8.62 | | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | | | 14 | | | 99 | | | | |

**FINAL** - 2021 Memorial van Damme (Brussels, BEL) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Sep-21 | time | 5.84 | 9.56 | 13.32 | 17.24 | 21.20 | 25.32 | 29.72 | 34.12 | 38.60 | 43.16 | 48.45 | 4 / 3 | | | | |
| reaction time | 0.149 | interval | | 3.72 | 3.76 | 3.92 | 3.96 | 4.12 | 4.40 | 4.40 | 4.48 | 4.56 | 5.29 | | 11.40 | 12.48 | 13.44 | |
| | | velocity | 7.71 | 9.41 | 9.31 | 8.93 | 8.84 | 8.50 | 7.95 | 7.95 | 7.81 | 7.68 | 7.56 | 8.26 | 9.21 | 8.41 | 7.81 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.7 | 158.7 | | | | |

**FINAL** - 2020 Olympic Games (Tokyo, JPN) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-21 | time | 5.72 | 9.36 | 13.04 | 16.80 | 20.68 | 24.72 | 29.08 | 33.44 | 37.96 | 42.48 | 47.81 | 3 / 6 | | | | |
| reaction time | 0.166 | interval | | 3.64 | 3.68 | 3.76 | 3.88 | 4.04 | 4.36 | 4.36 | 4.52 | 4.52 | 5.33 | **=NR =PB** | 11.08 | 12.28 | 13.40 | |
| | | velocity | 7.87 | 9.62 | 9.51 | 9.31 | 9.02 | 8.66 | 8.03 | 8.03 | 7.74 | 7.74 | 7.50 | 8.37 | 9.48 | 8.55 | 7.84 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.2 | 158.2 | | | | |

**Semi-Final 1** - 2020 Olympic Games (Tokyo, JPN) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Aug-21 | time | 5.77 | 9.41 | 13.14 | 16.95 | 20.89 | 24.92 | 29.23 | 33.57 | 38.04 | 42.54 | 47.88 | 4 / 3 | | | | |
| reaction time | 0.183 | interval | | 3.64 | 3.73 | 3.81 | 3.94 | 4.03 | 4.31 | 4.34 | 4.47 | 4.50 | 5.34 | | 11.18 | 12.28 | 13.31 | |
| | | velocity | 7.80 | 9.62 | 9.38 | 9.19 | 8.88 | 8.68 | 8.12 | 8.06 | 7.83 | 7.78 | 7.49 | 8.35 | 9.39 | 8.55 | 7.89 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | | 14 | 17.2 | 144.2 | | | | |

**FINAL** - 2021 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jul-21 | time | 5.76 | 9.48 | 13.36 | 17.24 | 21.20 | 22.9 | 25.20 | 29.52 | 33.88 | 38.36 | 42.88 | 48.19 | 4 / 2 | | | |
| reaction time | 0.167 | interval | | 3.72 | 3.88 | 3.88 | 3.96 | | 4.00 | 4.32 | 4.36 | 4.48 | 4.52 | 5.31 | | 11.48 | 12.28 | 13.36 |
| | | velocity | 7.81 | 9.41 | 9.02 | 9.02 | 8.84 | 8.73 | 8.75 | 8.10 | 8.03 | 7.81 | 7.74 | 7.53 | 8.30 | 9.15 | 8.55 | 7.86 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.7 | 158.7 | | | |

**FINAL** - 2021 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jul-21 | time | 5.82 | 9.50 | 13.26 | 17.14 | 21.06 | 25.14 | | 33.56 | 38.46 | 43.26 | 48.86 | 5 / 3 | | | | |
| reaction time | 0.198 | interval | | 3.68 | 3.76 | 3.88 | 3.92 | 4.08 | | 8.42 | 4.90 | 4.80 | 5.60 | | 11.32 | | | |
| | | velocity | 7.73 | 9.51 | 9.31 | 9.02 | 8.93 | 8.58 | | 8.31 | 7.14 | 7.29 | 7.14 | 8.19 | 9.28 | | | |
| H1 lead leg | R | strides | 20 | 13 | 13 | | 13 | 13 | 13 | | 14 | 15 | | 114 | | | | |

**FINAL** - 2021 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-21 | time | 5.84 | 9.54 | 13.45 | 17.52 | 21.69 | 23.4 | | 34.77 | 39.30 | 43.81 | 49.11 | 2 / 6 | | | | |
| reaction time | 0.203 | interval | | 3.70 | 3.91 | 4.07 | 4.17 | | | 13.08 | 4.53 | 4.51 | 5.30 | | 11.68 | | | |
| | | velocity | 7.71 | 9.46 | 8.95 | 8.60 | 8.39 | 8.55 | | 8.03 | 7.73 | 7.76 | 7.55 | 8.14 | 8.99 | | | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | | | | | 14 | 14 | 17.5 | 104.5 | | | | |

**FINAL** - 2020 Herculis Meeting International d'Athletisme (Monaco, MON) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-Aug-20 | time | 5.81 | 9.44 | 13.25 | 17.15 | 21.12 | 25.25 | 29.63 | 34.07 | 38.67 | 43.44 | 49.04 | 5 / 2 | | | | |
| reaction time | 0.192 | interval | | 3.63 | 3.81 | 3.90 | 3.97 | 4.13 | 4.38 | 4.44 | 4.60 | 4.77 | 5.60 | | 11.34 | 12.48 | 13.81 | |
| | | velocity | 7.75 | 9.64 | 9.19 | 8.97 | 8.82 | 8.47 | 7.99 | 7.88 | 7.61 | 7.34 | 7.14 | 8.16 | 9.26 | 8.41 | 7.60 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 18 | 159 | | | | |

**FINAL** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Sep-19 | time | 5.87 | 9.50 | 13.17 | 16.94 | 20.82 | 24.84 | 29.08 | 33.50 | 37.98 | 42.75 | 48.25 | 6 / 6 | | | | |
| reaction time | 0.177 | interval | | 3.63 | 3.67 | 3.77 | 3.88 | 4.02 | 4.24 | 4.42 | 4.48 | 4.77 | 5.50 | | 11.07 | 12.14 | 13.67 | |
| | | velocity | 7.67 | 9.64 | 9.54 | 9.28 | 9.02 | 8.71 | 8.25 | 7.92 | 7.81 | 7.34 | 7.27 | 8.29 | 9.49 | 8.65 | 7.68 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 18 | 159 | | | | |

**Semi-Final 1** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 5.97 | 9.66 | 13.46 | 17.32 | 21.29 | 25.41 | 29.61 | 34.03 | 38.41 | 43.08 | 48.39 | 3 / 2 | | | | |
| reaction time | 0.232 | interval | | 3.69 | 3.80 | 3.86 | 3.97 | 4.12 | 4.20 | 4.42 | 4.38 | 4.67 | 5.31 | | 11.35 | 12.29 | 13.47 | |
| | | velocity | 7.54 | 9.49 | 9.21 | 9.07 | 8.82 | 8.50 | 8.33 | 7.92 | 7.99 | 7.49 | 7.53 | 8.27 | 9.25 | 8.54 | 7.80 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18 | 161 | | | | |

**FINAL** - 2019 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Aug-19 | time | 5.80 | 9.46 | | 17.10 | 21.08 | 22.7 | 25.16 | 29.38 | | 38.42 | 43.20 | 48.58 | 4 / 4 | | | |
| reaction time | 0.167 | interval | | 3.66 | | 7.64 | 3.98 | | 4.08 | 4.22 | | 9.04 | 4.78 | 5.38 | | 11.30 | 12.28 | 13.82 |
| | | velocity | 7.76 | 9.56 | | 9.16 | 8.79 | 8.81 | 8.58 | 8.29 | | 7.74 | 7.32 | 7.43 | 8.23 | 9.29 | 8.55 | 7.60 |
| H1 lead leg | R | strides | 20 | 13 | | | 13 | | 13 | 13 | | | 14 | | 86 | | | |

**FINAL** - 2019 Müller Grand Prix (Birmingham, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-19 | time | 5.88 | 9.68 | 13.52 | 17.40 | 21.40 | 23.2 | 25.60 | 30.08 | 34.56 | 39.12 | 43.68 | 49.08 | 6 / 1 | | | |
| reaction time | 0.173 | interval | | 3.80 | 3.84 | 3.88 | 4.00 | | 4.20 | 4.48 | 4.48 | 4.56 | 4.56 | 5.40 | | 11.52 | 12.68 | 13.60 |
| | | velocity | 7.65 | 9.21 | 9.11 | 9.02 | 8.75 | 8.6207 | 8.33 | 7.81 | 7.81 | 7.68 | 7.68 | 7.41 | 8.15 | 9.11 | 8.28 | 7.72 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 18 | 159 | | | |

**FINAL** - 2019 Meeting de Paris (Paris, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-19 | time | 5.78 | 9.42 | 13.18 | 17.04 | 21.00 | 22.7 | 25.08 | 29.32 | 33.74 | 38.28 | 43.00 | 48.47 | 4 / 4 | | | |
| reaction time | 0.192 | interval | | 3.64 | 3.76 | 3.86 | 3.96 | | 4.08 | 4.24 | 4.42 | 4.54 | 4.72 | 5.47 | | 11.26 | 12.28 | 13.68 |
| | | velocity | 7.79 | 9.62 | 9.31 | 9.07 | 8.84 | 8.81 | 8.58 | 8.25 | 7.92 | 7.71 | 7.42 | 7.31 | 8.25 | 9.33 | 8.55 | 7.68 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17.7 | 157.7 | | | |

**FINAL** - 2019 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Jul-19 | time | 5.96 | 9.72 | 13.52 | 17.44 | 21.48 | 23.1 | 25.60 | | 34.40 | 38.96 | 43.64 | 48.93 | 4 / 2 | | | |
| reaction time | 0.183 | interval | | 3.76 | 3.80 | 3.92 | 4.04 | | 4.12 | | 8.80 | 4.56 | 4.68 | 5.29 | | 11.48 | | |
| | | velocity | 7.55 | 9.31 | 9.21 | 8.93 | 8.66 | 8.66 | 8.50 | | 7.95 | 7.68 | 7.48 | 7.56 | 8.17 | 9.15 | | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | | | 14 | 14 | 17.7 | 130.7 | | | |

**FINAL** - 2019 Prefontaine Classic (Stanford, CA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-19 | time | 5.90 | 9.73 | 13.63 | 17.63 | 21.70 | 25.86 | 30.36 | 34.90 | 39.46 | 44.00 | 49.37 | 3 / 3 | | | | |
| reaction time | 0.201 | interval | | 3.83 | 3.90 | 4.00 | 4.07 | 4.16 | 4.50 | 4.54 | 4.56 | 4.54 | 5.37 | | 11.73 | 12.73 | 13.64 | |
| | | velocity | 7.63 | 9.14 | 8.97 | 8.75 | 8.60 | 8.41 | 7.78 | 7.71 | 7.68 | 7.71 | 7.45 | 8.10 | 8.95 | 8.25 | 7.70 | |
| H1 lead leg | R | strides | 20 | 14 | 13 | 13 | 13 | 13 | 14 | 14 | | 14 | 17.5 | 145.5 | | | | |

**FINAL** - 2018 IAAF Continental Cup (Ostrava, CZE) (TV Analysis) *Henson (2021) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-18 | time | 5.76 | 9.52 | 13.28 | 17.20 | 21.24 | 25.32 | 29.56 | 34.00 | 38.68 | 43.32 | 48.65 | 8 / 4 | | | | |
| reaction time | 0.184 | interval | | 3.76 | 3.76 | 3.92 | 4.04 | 4.08 | 4.24 | 4.44 | 4.68 | 4.64 | 5.33 | | 11.44 | 12.36 | 13.76 | |
| | | velocity | 7.81 | 9.31 | 9.31 | 8.93 | 8.66 | 8.58 | 8.25 | 7.88 | 7.48 | 7.54 | 7.50 | 8.22 | 9.18 | 8.50 | 7.63 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 17.5 | 143.5 | | | | |

**FINAL** - 2018 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Aug-18 | time | 5.72 | 9.44 | 13.20 | | 21.04 | 22.9 | 25.16 | 29.40 | 33.80 | 38.48 | 43.16 | 48.73 | 4 / 3 | | | |
| reaction time | 0.158 | interval | | 3.72 | 3.76 | | 7.84 | | 4.12 | 4.24 | 4.40 | 4.68 | 4.68 | 5.57 | | | | 13.76 |
| | | velocity | 7.87 | 9.41 | 9.31 | | 8.93 | 8.73 | 8.50 | 8.25 | 7.95 | 7.48 | 7.48 | 7.18 | 8.21 | | | 7.63 |
| H1 lead leg | R | strides | 20 | 13 | 13 | | | | 13 | 13 | 13 | | 14 | 18 | 117 | | | |

**FINAL** - 2018 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jul-18 | time | 5.88 | 9.60 | | | 21.28 | | 25.36 | 29.56 | 33.96 | 38.48 | 43.12 | 48.44 | 5 / 2 | | | |
| reaction time | 0.151 | interval | | 3.72 | | | 11.68 | | 4.08 | 4.20 | 4.40 | 4.52 | 4.64 | 5.32 | | | | 13.56 |
| | | velocity | 7.65 | 9.41 | | | 8.99 | | 8.58 | 8.33 | 7.95 | 7.74 | 7.54 | 7.52 | 8.26 | | | 7.74 |
| H1 lead leg | R | strides | 20 | 13 | | | | | 13 | 13 | 14 | 14 | 14 | 17.5 | 118.5 | | | |

**FINAL** - 2018 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jul-18 | time | 5.80 | 9.56 | 13.36 | | 21.12 | | 25.20 | 29.54 | 33.92 | 38.52 | 43.20 | 48.85 | 3 / 3 | | | |
| reaction time | 0.183 | interval | | 3.76 | 3.80 | | 7.76 | | 4.08 | 4.34 | 4.38 | 4.60 | 4.68 | 5.65 | | | | 13.66 |
| | | velocity | 7.76 | 9.31 | 9.21 | | 9.02 | | 8.58 | 8.06 | 7.99 | 7.61 | 7.48 | 7.08 | 8.19 | | | 7.69 |
| H1 lead leg | R | strides | 20 | 13 | 13 | | | | 13 | 14 | 14 | 14 | 14 | 18 | 133 | | | |

**FINAL** - 2018 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jun-18 | time | 5.80 | 9.60 | 13.48 | 17.44 | 21.52 | 25.68 | 30.00 | 34.40 | 38.92 | 43.48 | 48.91 | 6 / 3 | | | | |
| reaction time | 0.202 | interval | | 3.80 | 3.88 | 3.96 | 4.08 | 4.16 | 4.32 | 4.40 | 4.52 | 4.56 | 5.43 | | 11.64 | 12.56 | 13.48 | |
| | | velocity | 7.76 | 9.21 | 9.02 | 8.84 | 8.58 | 8.41 | 8.10 | 7.95 | 7.74 | 7.68 | 7.37 | 8.18 | 9.02 | 8.36 | 7.79 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.5 | 158.5 | | | | |

**FINAL** - 2018 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-18 | time | 5.84 | 9.48 | | | 21.16 | 23.0 | 25.20 | 29.44 | 33.84 | 38.28 | 43.00 | 48.54 | 4 / 3 | | | |
| reaction time | 0.210 | interval | | 3.64 | | | 11.68 | | 4.04 | 4.24 | 4.40 | 4.44 | 4.72 | 5.54 | | | | 13.56 |
| | | velocity | 7.71 | 9.62 | | | 8.99 | 8.70 | 8.66 | 8.25 | 7.95 | 7.88 | 7.42 | 7.22 | 8.24 | | | 7.74 |
| H1 lead leg | R | strides | 20 | 13 | 13 | | | | 13 | 13 | 14 | 14 | 14 | 18 | 132 | | | |

**FINAL** - 2018 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-May-18 | time | 5.84 | 9.56 | 13.32 | 17.16 | 21.12 | 25.20 | 29.40 | 33.84 | 38.36 | 43.12 | 48.63 | 5 / 3 | | | | |
| reaction time | 0.205 | interval | | 3.72 | 3.76 | 3.84 | 3.96 | 4.08 | 4.20 | 4.44 | 4.52 | 4.76 | 5.51 | | 11.32 | 12.24 | 13.72 | |
| | | velocity | 7.71 | 9.41 | 9.31 | 9.11 | 8.84 | 8.58 | 8.33 | 7.88 | 7.74 | 7.35 | 7.26 | 8.23 | 9.28 | 8.58 | 7.65 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 18 | 158 | | | | |

**FINAL** - 2018 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-May-18 | time | 6.04 | 9.80 | 13.72 | 17.68 | 21.76 | 25.92 | 30.32 | 34.80 | 39.48 | 44.28 | 49.95 | 3 / 4 | | | | |
| reaction time | 0.224 | interval | | 3.76 | 3.92 | 3.96 | 4.08 | 4.16 | 4.40 | 4.48 | 4.68 | 4.80 | 5.67 | | 11.64 | 12.64 | 13.96 | |
| | | velocity | 7.45 | 9.31 | 8.93 | 8.84 | 8.58 | 8.41 | 7.95 | 7.81 | 7.48 | 7.29 | 7.05 | 8.01 | 9.02 | 8.31 | 7.52 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | | 14 | 18.2 | 145.2 | | | | |

**FINAL** - 2017 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-17 | time | 5.84 | 9.56 | 13.36 | | 21.28 | | 25.48 | 29.88 | 34.40 | 39.08 | 43.80 | 49.23 | 5 / 5 | | | |
| reaction time | 0.181 | interval | | 3.72 | 3.80 | | 7.92 | | 4.20 | 4.40 | 4.52 | 4.68 | 4.72 | 5.43 | | | | 13.92 |
| | | velocity | 7.71 | 9.41 | 9.21 | | 8.84 | | 8.33 | 7.95 | 7.74 | 7.48 | 7.42 | 7.37 | 8.13 | | | 7.54 |
| H1 lead leg | R | strides | 20 | 13 | 13 | | | | 13 | 14 | 14 | | 14 | 17.5 | 118.5 | | | |

**FINAL** - 2017 IAAF World Championships (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-17 | time | 5.92 | 9.60 | 13.36 | 17.24 | 21.24 | 25.44 | 29.72 | 34.16 | 38.64 | 43.16 | 48.49 | 8 / 2 | | | | |
| reaction time | 0.211 | interval | | 3.68 | 3.76 | 3.88 | 4.00 | 4.20 | 4.28 | 4.44 | 4.48 | 4.52 | 5.33 | | 11.32 | 12.48 | 13.44 | |
| | | velocity | 7.60 | 9.51 | 9.31 | 9.02 | 8.75 | 8.33 | 8.18 | 7.88 | 7.81 | 7.74 | 7.50 | 8.25 | 9.28 | 8.41 | 7.81 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 18 | 159 | | | | |

**FINAL** - 2017 Müller's Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-17 | time | 6.00 | 9.68 | 13.52 | 17.40 | 21.40 | 25.52 | 29.88 | 34.32 | 38.76 | 43.16 | 48.24 | 8 / 3 | | | | |
| reaction time | 0.187 | interval | | 3.68 | 3.84 | 3.88 | 4.00 | 4.12 | 4.36 | 4.44 | 4.44 | 4.40 | 5.08 | | 11.40 | 12.48 | 13.28 | |
| | | velocity | 7.50 | 9.51 | 9.11 | 9.02 | 8.75 | 8.50 | 8.03 | 7.88 | 7.88 | 7.95 | 7.87 | 8.29 | 9.21 | 8.41 | 7.91 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.2 | 158.2 | | | | |

**FINAL** - 2017 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Jun-17 | time | 6.00 | 9.72 | | 17.48 | 21.56 | 25.72 | 30.12 | 34.60 | 39.20 | 43.84 | 49.18 | 6 / 3 | | | | |
| reaction time | 0.178 | interval | | 3.72 | | 7.76 | 4.08 | 4.16 | 4.40 | 4.48 | 4.60 | 4.64 | 5.34 | | 11.48 | 12.64 | 13.72 | |
| | | velocity | 7.50 | 9.41 | | 9.02 | 8.58 | 8.41 | 7.95 | 7.81 | 7.61 | 7.54 | 7.49 | 8.13 | 9.15 | 8.31 | 7.65 | |
| H1 lead leg | R | strides | 20 | 13 | | | 13 | 13 | 14 | 14 | 14 | 14 | 17.7 | 132.7 | | | | |

**FINAL** - 2017 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Jun-17 | time | 5.96 | 9.70 | 13.53 | 17.46 | 21.50 | 25.60 | 30.00 | 34.30 | 38.76 | 43.20 | | 48.44 | 4 / 2 | | | |
| reaction time | 0.188 | interval | | 3.74 | 3.83 | 3.93 | 4.04 | 4.10 | 4.40 | 4.30 | 4.46 | 4.44 | 5.24 | | | 11.50 | 12.54 | 13.20 |
| | | velocity | 7.55 | 9.36 | 9.14 | 8.91 | 8.66 | 8.54 | 7.95 | 8.14 | 7.85 | 7.88 | 7.63 | 8.26 | | 9.13 | 8.37 | 7.95 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.5 | 158.5 | | | | |

**FINAL** - 2016 Meeting Paris (Saint-Denis, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Aug-16 | time | 5.88 | 9.52 | | 17.24 | 21.24 | 25.28 | | 33.92 | 38.40 | 43.00 | | 48.24 | 4 / 3 | | | |
| reaction time | 0.186 | interval | | 3.64 | | 7.72 | 4.00 | 4.04 | | 8.64 | 4.48 | 4.60 | 5.24 | | | 11.36 | | |
| | | velocity | 7.65 | 9.62 | | 9.07 | 8.75 | 8.66 | | 8.10 | 7.81 | 7.61 | 7.63 | 8.29 | | 9.24 | | |
| H1 lead leg | R | strides | 20 | 13 | | | 13 | 13 | | | 14 | 14 | 17.5 | 104.5 | | | | |

**FINAL** - 2016 London Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jul-16 | time | 5.84 | 9.56 | 13.40 | 17.28 | 21.28 | 25.48 | 29.80 | 34.24 | 38.80 | 43.36 | | 48.70 | 6 / 3 | | | |
| reaction time | 0.189 | interval | | 3.72 | 3.84 | 3.88 | 4.00 | 4.20 | 4.32 | 4.44 | 4.56 | 4.56 | 5.34 | | | 11.44 | 12.52 | 13.56 |
| | | velocity | 7.71 | 9.41 | 9.11 | 9.02 | 8.75 | 8.33 | 8.10 | 7.88 | 7.68 | 7.68 | 7.49 | 8.21 | | 9.18 | 8.39 | 7.74 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.2 | 158.2 | | | | |

**FINAL** - 2016 European Championships (Amsterdam, NED) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Jul-16 | time | 5.88 | 9.56 | 13.44 | 17.44 | 21.48 | 25.60 | 29.80 | 34.24 | 39.80 | 43.52 | | 48.98 | 6 / 1 | | | |
| reaction time | 0.175 | interval | | 3.68 | 3.88 | 4.00 | 4.04 | 4.12 | 4.20 | 4.44 | 5.56 | 3.72 | 5.46 | | | 11.56 | 12.36 | 13.72 |
| | | velocity | 7.65 | 9.51 | 9.02 | 8.75 | 8.66 | 8.50 | 8.33 | 7.88 | 6.29 | 9.41 | 7.33 | 8.17 | | 9.08 | 8.50 | 7.65 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 18 | 145 | | | | |

**Heat 2** - 2016 European Championships (Amsterdam, NED) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jul-16 | time | 5.84 | 9.48 | 13.28 | 17.28 | 21.20 | 25.08 | 29.28 | 33.64 | 38.16 | 42.80 | | 48.42 | 5 / 1 | | | |
| reaction time | 0.173 | interval | | 3.64 | 3.80 | 4.00 | 3.92 | 3.88 | 4.20 | 4.36 | 4.52 | 4.64 | 5.62 | **NR PB** | | 11.44 | 12.00 | 13.52 |
| | | velocity | 7.71 | 9.62 | 9.21 | 8.75 | 8.93 | 9.02 | 8.33 | 8.03 | 7.74 | 7.54 | 7.12 | 8.26 | | 9.18 | 8.75 | 7.77 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 18 | 159 | | | | |

**FINAL** - 2016 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2021) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-16 | time | 5.88 | 9.56 | 13.40 | 17.26 | 21.48 | 25.64 | 30.04 | 34.40 | 38.88 | 43.44 | | 48.79 | 1 / 1 | | | |
| reaction time | 0.164 | interval | | 3.68 | 3.84 | 3.86 | 4.22 | 4.16 | 4.40 | 4.36 | 4.48 | 4.56 | 5.35 | | | 11.38 | 12.78 | 13.40 |
| | | velocity | 7.65 | 9.51 | 9.11 | 9.07 | 8.29 | 8.41 | 7.95 | 8.03 | 7.81 | 7.68 | 7.48 | 8.20 | | 9.23 | 8.22 | 7.84 |
| H1 lead leg | R | strides | 20 | 13 | | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.7 | 145.7 | | | | |

**FINAL** - 2016 Prefontaine Classic (Eugene, OR) (TV Analysis) *(H8 5m short)* *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-16 | time | 6.00 | 9.84 | 13.72 | 17.76 | | 26.16 | 30.40 | 34.32 | 39.52 | 44.20 | | 49.43 | 1 / 5 | | | |
| reaction time | | interval | | 3.84 | 3.88 | 4.04 | | 8.40 | 4.24 | 3.92 | 5.20 | 4.68 | 5.23 | | | 11.76 | 12.64 | 13.80 |
| | | velocity | 7.50 | 9.11 | 9.02 | 8.66 | | 8.33 | 8.25 | 7.65 | 7.69 | 7.48 | 7.65 | 8.09 | | 8.93 | 8.31 | 7.61 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | | | 13 | 12 | 16 | 14 | 17.5 | 131.5 | | | | |

**FINAL** - 2016 Shanghai Golden Grand Prix (Shanghai, CHN) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-May-16 | time | 5.76 | 9.44 | 13.28 | 17.16 | 21.12 | 25.24 | 29.64 | 34.08 | 38.80 | 43.52 | | 49.14 | 2 / 5 | | | |
| reaction time | 0.162 | interval | | 3.68 | 3.84 | 3.88 | 3.96 | 4.12 | 4.40 | 4.44 | 4.72 | 4.72 | 5.62 | | | 11.40 | 12.48 | 13.88 |
| | | velocity | 7.81 | 9.51 | 9.11 | 9.02 | 8.84 | 8.50 | 7.95 | 7.88 | 7.42 | 7.42 | 7.12 | 8.14 | | 9.21 | 8.41 | 7.56 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18 | 161 | | | | |

**FINAL** - 2015 IAAF World Championships (Beijing, CHN) (TV Analysis) *Henson (2021) - Athlete First: major championships report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-15 | time | 6.00 | | 13.52 | 17.40 | 21.40 | | 29.88 | 34.28 | 38.84 | 43.84 | | 48.96 | 2 / 6 | | | |
| reaction time | 0.204 | interval | | | 7.52 | 3.88 | 4.00 | | 8.48 | 4.40 | 4.56 | 5.00 | 5.12 | | | 11.40 | 12.48 | 13.96 |
| | | velocity | 7.50 | | 9.31 | 9.02 | 8.75 | | 8.25 | 7.95 | 7.68 | 7.00 | 7.81 | 8.17 | | 9.21 | 8.41 | 7.52 |
| H1 lead leg | R | strides | | 13 | | 13 | 13 | | | 14 | 14 | 14 | 17.5 | 98.5 | | | | |

**Coroller, Victor (FRA) (1997)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 European Athletics Championships (Munich, GER) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date | 19-Aug-22 | time | 5.93 | 9.79 | | 17.49 | 21.58 | 23.21 | 25.79 | 30.28 | 34.82 | 39.71 | 44.76 | | 50.46 | 8 / 8 | | |
| reaction time | 0.201 | interval | | 3.86 | | 7.70 | 4.09 | | 4.21 | 4.49 | 4.54 | 4.89 | 5.05 | 5.70 | | | 11.56 | 12.79 | 14.48 |
| | | velocity | 7.59 | 9.07 | | 9.09 | 8.56 | 8.62 | 8.31 | 7.80 | 7.71 | 7.16 | 6.93 | 7.02 | 7.93 | | 9.08 | 8.21 | 7.25 |
| H1 lead leg | R | strides | 21 | 14 | | | 14 | | 14 | 15 | 16 | 16 | 16 | 19 | 145 | | | | |
| **FINAL** - 2018 Meeting de Paris (Paris, FRA) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2018 year end hurdle report* | | | |
| date | 05-Jul-18 | time | 5.96 | 9.72 | 13.64 | 17.64 | 21.72 | 23.5 | 25.92 | 30.36 | 35.04 | 39.76 | 44.56 | | 50.03 | 3 / 7 | | |
| reaction time | 0.165 | interval | | 3.76 | 3.92 | 4.00 | 4.08 | | 4.20 | 4.44 | 4.68 | 4.72 | 4.80 | 5.47 | | | 11.68 | 12.72 | 14.20 |
| | | velocity | 7.55 | 9.31 | 8.93 | 8.75 | 8.58 | 8.51 | 8.33 | 7.88 | 7.48 | 7.42 | 7.29 | 7.31 | 8.00 | | 8.99 | 8.25 | 7.39 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 168.5 | | | | |

**Cray, Eric Shauwn (PHI) (1988)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2016 Athletissime (Laussane, SUI) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2016 year end hurdle report* | | | |
| date | 25-Aug-16 | time | 5.60 | 9.36 | 13.33 | 17.46 | 21.76 | | 26.10 | 30.30 | 34.73 | 39.30 | 44.13 | | 49.88 | 7 / 5 | | |
| reaction time | 0.132 | interval | | 3.76 | 3.97 | 4.13 | 4.30 | | 4.34 | 4.20 | 4.43 | 4.57 | 4.83 | 5.75 | | | 11.86 | 12.84 | 13.83 |
| | | velocity | 8.04 | 9.31 | 8.82 | 8.47 | 8.14 | | 8.06 | 8.33 | 7.90 | 7.66 | 7.25 | 6.96 | 8.02 | | 8.85 | 8.18 | 7.59 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 16 | | 154 | | | | |

**Cui Caizhuang (CHN) (1995)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 3** - 2021 Chinese National Championships (Chongqing, CHN) | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 26-Jun-21 | time | 6.38 | 10.49 | 14.65 | 19.00 | 23.39 | | 27.91 | 32.51 | 37.29 | 42.16 | 47.11 | | 52.73 | 5 / 5 | | |
| reaction time | 0.171 | interval | | 4.11 | 4.16 | 4.35 | 4.39 | | 4.52 | 4.60 | 4.78 | 4.87 | 4.95 | 5.62 | | | 12.62 | 13.51 | 14.60 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.05 | 8.52 | 8.41 | 8.05 | 7.97 | 7.74 | 7.61 | 7.32 | 7.19 | 7.07 | 7.12 | 7.59 | | 8.32 | 7.77 | 7.19 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 18 | 170 | | | | |

**FINAL** - 2020 Chinese Olympic Trials (Shaoxing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Jun-21 | time | 6.11 | 10.09 | 14.13 | 18.26 | 22.47 | 26.88 | 31.41 | 36.02 | 40.66 | 45.30 | | 50.59 | 4 / 3 | | | |
| reaction time | 0.167 | interval | | 3.98 | 4.04 | 4.13 | 4.21 | 4.41 | 4.53 | 4.61 | 4.64 | 4.64 | 5.29 | PB | | 12.15 | 13.15 | 13.89 |
| | | velocity | 7.36 | 8.79 | 8.66 | 8.47 | 8.31 | 7.94 | 7.73 | 7.59 | 7.54 | 7.54 | 7.56 | 7.91 | | 8.64 | 7.98 | 7.56 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.2 | 171.2 | | | | |

**FINAL** - 2021 National Grand Prix (Chengdu, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Apr-21 | time | 6.16 | 10.16 | 14.26 | 18.41 | 22.61 | 26.94 | 31.42 | 36.02 | 40.75 | 45.52 | | 50.85 | 3 / 1 | | | |
| reaction time | 0.193 | interval | | 4.00 | 4.10 | 4.15 | 4.20 | 4.33 | 4.48 | 4.60 | 4.73 | 4.77 | 5.33 | PB | | 12.25 | 13.01 | 14.10 |
| | | velocity | 7.31 | 8.75 | 8.54 | 8.43 | 8.33 | 8.08 | 7.81 | 7.61 | 7.40 | 7.34 | 7.50 | 7.87 | | 8.57 | 8.07 | 7.45 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 19 | 172 | | | | |

**Heat 1** - 2021 National Grand Prix (Chengdu, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Apr-21 | time | 6.22 | 10.22 | 14.32 | 18.54 | 22.82 | 27.26 | 31.90 | 36.66 | 41.52 | 46.42 | | 51.93 | 4 / 1 | | | |
| reaction time | 0.194 | interval | | 4.00 | 4.10 | 4.22 | 4.28 | 4.44 | 4.64 | 4.76 | 4.86 | 4.90 | 5.51 | | | 12.32 | 13.36 | 14.52 |
| | | velocity | 7.23 | 8.75 | 8.54 | 8.29 | 8.18 | 7.88 | 7.54 | 7.35 | 7.20 | 7.14 | 7.26 | 7.70 | | 8.52 | 7.86 | 7.23 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.5 | 171.5 | | | | |

**FINAL** - 2019 Chinese National Grand Prix Final (Daqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-19 | time | 6.22 | 10.22 | 14.31 | 18.55 | 22.90 | 27.39 | 32.02 | 36.81 | 41.66 | 46.59 | | 52.25 | 9 / 7 | | | |
| reaction time | 0.216 | interval | | 4.00 | 4.09 | 4.24 | 4.35 | 4.49 | 4.63 | 4.79 | 4.85 | 4.93 | 5.66 | | | 12.33 | 13.47 | 14.57 |
| | | velocity | 7.23 | 8.75 | 8.56 | 8.25 | 8.05 | 7.80 | 7.56 | 7.31 | 7.22 | 7.10 | 7.07 | 7.66 | | 8.52 | 7.80 | 7.21 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.5 | 171.5 | | | | |

**Heat 1** - 2019 Chinese National Grand Prix Final (Daqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Aug-19 | time | 6.38 | 10.48 | 14.64 | 18.93 | 23.25 | 27.82 | 32.47 | 37.24 | 42.08 | 46.91 | | 52.30 | 8 / 2 | | | |
| reaction time | 0.223 | interval | | 4.10 | 4.16 | 4.29 | 4.32 | 4.57 | 4.65 | 4.77 | 4.84 | 4.83 | 5.39 | | | 12.55 | 13.54 | 14.44 |
| | | velocity | 7.05 | 8.54 | 8.41 | 8.16 | 8.10 | 7.66 | 7.53 | 7.34 | 7.23 | 7.25 | 7.42 | 7.65 | | 8.37 | 7.75 | 7.27 |
| H1 lead leg | R | strides | 24 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.3 | 173.3 | | | | |

**FINAL** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.21 | 10.18 | 14.20 | 18.35 | 22.56 | 27.01 | 31.70 | 36.48 | 41.31 | 46.28 | | 51.89 | 1 / ~~6~~ 5 | | | |
| reaction time | 0.194 | interval | | 3.97 | 4.02 | 4.15 | 4.21 | 4.45 | 4.69 | 4.78 | 4.83 | 4.97 | 5.61 | | | 12.14 | 13.35 | 14.58 |
| | | velocity | 7.25 | 8.82 | 8.71 | 8.43 | 8.31 | 7.87 | 7.46 | 7.32 | 7.25 | 7.04 | 7.13 | 7.71 | | 8.65 | 7.87 | 7.20 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.8 | 171.8 | | | | |

**Heat 2** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.52 | 10.78 | 15.12 | 19.56 | 24.08 | 28.84 | 33.68 | 38.55 | 43.46 | 48.46 | | 54.03 | 8 / 5 | | | |
| reaction time | 0.228 | interval | | 4.26 | 4.34 | 4.44 | 4.52 | 4.76 | 4.84 | 4.87 | 4.91 | 5.00 | 5.57 | | | 13.04 | 14.12 | 14.78 |
| | | velocity | 6.90 | 8.22 | 8.06 | 7.88 | 7.74 | 7.35 | 7.23 | 7.19 | 7.13 | 7.00 | 7.18 | 7.40 | | 8.05 | 7.44 | 7.10 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 20 | 177 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 4 (Luoyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-May-19 | time | 6.22 | 10.24 | 14.36 | 18.55 | 22.89 | 27.44 | 32.13 | 36.83 | 41.77 | 46.84 | | 52.55 | 5 / 4 | | | |
| reaction time | 0.195 | interval | | 4.02 | 4.12 | 4.19 | 4.34 | 4.55 | 4.69 | 4.70 | 4.94 | 5.07 | 5.71 | | | 12.33 | 13.58 | 14.71 |
| | | velocity | 7.23 | 8.71 | 8.50 | 8.35 | 8.06 | 7.69 | 7.46 | 7.45 | 7.09 | 6.90 | 7.01 | 7.61 | | 8.52 | 7.73 | 7.14 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.5 | 171.5 | | | | |

**Čukman, Hrvoje (CRO) (1998)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2017 European U20 Championships (Grosseto, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jul-17 | time | 5.88 | 9.72 | 13.60 | 17.60 | 21.72 | 26.08 | 30.72 | 35.52 | 40.32 | 45.16 | | 50.92 | 1 / 5 | | | |
| reaction time | 0.226 | interval | | 3.84 | 3.88 | 4.00 | 4.12 | 4.36 | 4.64 | 4.80 | 4.80 | 4.84 | 5.76 | PB | | 11.72 | 13.12 | 14.44 |
| | | velocity | 7.65 | 9.11 | 9.02 | 8.75 | 8.50 | 8.03 | 7.54 | 7.29 | 7.29 | 7.23 | 6.94 | 7.86 | | 8.96 | 8.00 | 7.27 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 15 | 15 | 18 | 143 | | | | |

**Culson, Javier (PUR) (1984)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2017 Jamaica International Invitational (Kingston, JAM) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-May-17 | time | | 9.61 | 13.28 | 17.08 | 21.05 | 25.19 | 29.46 | 33.86 | 38.47 | 43.27 | | 48.76 | 6 / 4 | | | |
| reaction time | | interval | | | 3.67 | 3.80 | 3.97 | 4.14 | 4.27 | 4.40 | 4.61 | 4.80 | 5.49 | | | | 12.38 | 13.81 |
| | | velocity | | 8.32 | 9.54 | 9.21 | 8.82 | 8.45 | 8.20 | 7.95 | 7.59 | 7.29 | 7.29 | 8.20 | | | 8.48 | 7.60 |
| H1 lead leg | | strides | | | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17.2 | 123.2 | | | | |

**FINAL** - 2017 Shanghai Diamond League (Shanghai, CHN) (TV Analysis) *Henson (2021) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-May-17 | time | 5.84 | 9.48 | 13.24 | 17.12 | 21.16 | 25.40 | 29.76 | 34.36 | 39.08 | 44.08 | | 49.90 | 2 / 5 | | | |
| reaction time | 0.194 | interval | | 3.64 | 3.76 | 3.88 | 4.04 | 4.24 | 4.36 | 4.60 | 4.72 | 5.00 | 5.82 | | | 11.28 | 12.64 | 14.32 |
| | | velocity | 7.71 | 9.62 | 9.31 | 9.02 | 8.66 | 8.25 | 8.03 | 7.61 | 7.42 | 7.00 | 6.87 | 8.02 | | 9.31 | 8.31 | 7.33 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 17.5 | 158.5 | | | | |

**FINAL** - 2016 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-16 | time | 5.72 | 9.44 | 13.16 | 16.96 | 20.88 | 25.00 | 29.24 | 33.80 | 38.52 | 43.32 | | 48.79 | 3 / 2 | | | |
| reaction time | 0.175 | interval | | 3.72 | 3.72 | 3.80 | 3.92 | 4.12 | 4.24 | 4.56 | 4.72 | 4.80 | 5.47 | | | 11.24 | 12.28 | 14.08 |
| | | velocity | 7.87 | 9.41 | 9.41 | 9.21 | 8.93 | 8.50 | 8.25 | 7.68 | 7.42 | 7.29 | 7.31 | 8.20 | | 9.34 | 8.55 | 7.46 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17 | 157 | | | | |

**FINAL** - 2016 Meeting Paris (Saint-Denis, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Aug-16 | time | 5.76 | 9.36 | | 16.92 | 20.84 | | 24.96 | | 33.52 | 38.12 | 42.92 | | 48.55 | 5 / 4 | | |
| reaction time | 0.207 | interval | | 3.60 | | 7.56 | 3.92 | | 4.12 | | 8.56 | 4.60 | 4.80 | 5.63 | | | 11.16 | |
| | | velocity | 7.81 | 9.72 | | 9.26 | 8.93 | | 8.50 | | 8.18 | 7.61 | 7.29 | 7.10 | 8.24 | | 9.41 | |
| H1 lead leg | L | strides | 20 | 13 | | | 13 | | 13 | | | 14 | 14 | 17.2 | 104.2 | | | |

**FINAL** - 2016 London Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jul-16 | time | 5.80 | 9.48 | 13.20 | 17.08 | 21.08 | 25.24 | 29.56 | 33.88 | 38.40 | 43.08 | | 48.63 | 3 / 2 | | | |
| reaction time | 0.173 | interval | | 3.68 | 3.72 | 3.88 | 4.00 | 4.16 | 4.32 | 4.32 | 4.52 | 4.68 | 5.55 | | | 11.28 | 12.48 | 13.52 |
| | | velocity | 7.76 | 9.51 | 9.41 | 9.02 | 8.75 | 8.41 | 8.10 | 8.10 | 7.74 | 7.48 | 7.21 | 8.23 | | 9.31 | 8.41 | 7.77 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17 | 156 | | | | |

**FINAL** - 2016 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jun-16 | time | 5.80 | 9.53 | 13.20 | 17.07 | 21.16 | 25.43 | 29.77 | 34.17 | 38.83 | 43.70 | | 49.43 | 5 / 1 | | | |
| reaction time | 0.184 | interval | | 3.73 | 3.67 | 3.87 | 4.09 | 4.27 | 4.34 | 4.40 | 4.66 | 4.87 | 5.73 | | | 11.27 | 12.70 | 13.93 |
| | | velocity | 7.76 | 9.38 | 9.54 | 9.04 | 8.56 | 8.20 | 8.06 | 7.95 | 7.51 | 7.19 | 6.98 | 8.09 | | 9.32 | 8.27 | 7.54 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17.2 | 156.2 | | | | |

**FINAL** - 2016 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2021) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-16 | time | 5.76 | 9.40 | 13.08 | 17.00 | 21.04 | 25.28 | 29.48 | 33.84 | 38.36 | 43.24 | | 48.99 | 8 / 2 | | | |
| reaction time | 0.175 | interval | | 3.64 | 3.68 | 3.92 | 4.04 | 4.24 | 4.20 | 4.36 | 4.52 | 4.88 | 5.75 | | | 11.24 | 12.48 | 13.76 |
| | | velocity | 7.81 | 9.62 | 9.51 | 8.93 | 8.66 | 8.25 | 8.33 | 8.03 | 7.74 | 7.17 | 6.96 | 8.16 | | 9.34 | 8.41 | 7.63 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17.5 | 156.5 | | | | |

**FINAL** - 2016 Prefontaine Classic (Eugene, OR) (TV Analysis) *(H8 5m short)* *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-16 | time | 5.88 | 9.60 | 13.40 | 17.40 | 21.56 | 25.80 | 30.16 | 33.96 | 39.28 | 44.08 | | 49.51 | 2 / 7 | | | |
| reaction time | | interval | | 3.72 | 3.80 | 4.00 | 4.16 | 4.24 | 4.36 | 3.80 | 5.32 | 4.80 | 5.43 | | | 11.52 | 12.76 | 13.92 |
| | | velocity | 7.65 | 9.41 | 9.21 | 8.75 | 8.41 | 8.25 | 8.03 | 7.89 | 7.52 | 7.29 | 7.37 | 8.08 | | 9.11 | 8.23 | 7.54 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | | 11 | 16 | 14 | 17 | 143 | | | | |

**FINAL** - 2016 Shanghai Golden Grand Prix (Shanghai, CHN) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-May-16 | time | 5.76 | 9.40 | 13.12 | 17.12 | 21.24 | 25.48 | 29.88 | 34.32 | 39.00 | 43.88 | | 49.58 | 7 / 8 | | | |
| reaction time | 0.211 | interval | | 3.64 | 3.72 | 4.00 | 4.12 | 4.24 | 4.40 | 4.44 | 4.68 | 4.88 | 5.70 | | | 11.36 | 12.76 | 14.00 |
| | | velocity | 7.81 | 9.62 | 9.41 | 8.75 | 8.50 | 8.25 | 7.95 | 7.88 | 7.48 | 7.17 | 7.02 | 8.07 | | 9.24 | 8.23 | 7.50 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17.2 | 156.2 | | | | |

**FINAL** - 2013 IAAF World Championships (Moscow, RUS) (TV Analysis) *Henson (2021) - Athlete First: major championships report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-13 | time | 5.70 | 9.33 | 13.00 | 16.70 | 20.60 | 24.63 | 28.87 | 33.27 | 37.87 | 42.60 | | 48.38 | 7 / 6 | | | |
| reaction time | 0.189 | interval | | 3.63 | 3.67 | 3.70 | 3.90 | 4.03 | 4.24 | 4.40 | 4.60 | 4.73 | 5.78 | | | 11.00 | 12.17 | 13.73 |
| | | velocity | 7.89 | 9.64 | 9.54 | 9.46 | 8.97 | 8.68 | 8.25 | 7.95 | 7.61 | 7.40 | 6.92 | 8.27 | | 9.55 | 8.63 | 7.65 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17.2 | 156.2 | | | | |

**FINAL** - 2012 Olympic Games (London, GBR) *Hillier (2012) - uka 2012 olympic games report: 400m hurdles*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-12 | time | 5.68 | 9.19 | 12.84 | 16.56 | 20.47 | 22.27 | 24.46 | 28.72 | 33.20 | 37.69 | 42.40 | | 48.10 | 5 / 3 | | |
| reaction time | 0.196 | interval | | 3.51 | 3.65 | 3.72 | 3.91 | | 3.99 | 4.26 | 4.48 | 4.49 | 4.71 | 5.70 | | | 10.88 | 12.16 | 13.68 |
| | | velocity | 7.92 | 9.97 | 9.59 | 9.41 | 8.95 | 8.98 | 8.77 | 8.22 | 7.81 | 7.80 | 7.43 | 7.02 | 8.32 | | 9.65 | 8.63 | 7.68 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17.5 | 159 | | | |

**FINAL** - 2011 IAAF World Championships (Daegu, KOR) *Behm (2011) - Le quatrache: Démus enfin!*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-11 | time | 5.8 | 9.4 | 13.1 | 16.9 | 20.9 | 24.9 | 29.2 | 33.5 | 38.1 | 42.8 | | 48.44 | 3 / 2 | | | |
| reaction time | 0.190 | interval | | 3.60 | 3.70 | 3.80 | 4.00 | 4.00 | 4.30 | 4.30 | 4.60 | 4.70 | 5.64 | | | 11.10 | 12.30 | 13.60 |
| | | velocity | 7.76 | 9.72 | 9.46 | 9.21 | 8.75 | 8.75 | 8.14 | 8.14 | 7.61 | 7.45 | 7.09 | 8.26 | | 9.46 | 8.54 | 7.72 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 18 | 157 | | | | |

**FINAL** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-09 | time | 5.97 | 9.67 | 13.45 | 17.37 | 21.49 | 25.60 | 29.87 | 34.17 | 38.56 | 43.03 | | 48.09 | 8 / 2 | | | |
| reaction time | 0.187 | interval | | 3.70 | 3.78 | 3.92 | 4.12 | 4.11 | 4.27 | 4.30 | 4.39 | 4.47 | 5.06 | **NR** | | 11.40 | 12.50 | 13.16 |
| | | velocity | 7.54 | 9.46 | 9.26 | 8.93 | 8.50 | 8.52 | 8.20 | 8.14 | 7.97 | 7.83 | 7.91 | 8.32 | | 9.21 | 8.40 | 7.98 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 16.7 | 155.7 | | | | |

**Semi-Final 1** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Aug-09 | time | 5.91 | 9.55 | 13.32 | 17.22 | 21.25 | 25.35 | 29.56 | 33.88 | 38.38 | 43.06 | | 48.43 | 5 / 3 | | | |
| reaction time | 0.176 | interval | | 3.64 | 3.77 | 3.90 | 4.03 | 4.10 | 4.21 | 4.32 | 4.50 | 4.68 | 5.37 | | | 11.31 | 12.34 | 13.50 |
| | | velocity | 7.61 | 9.62 | 9.28 | 8.97 | 8.68 | 8.54 | 8.31 | 8.10 | 7.78 | 7.48 | 7.45 | 8.26 | | 9.28 | 8.51 | 7.78 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17 | 136 | | | | |

**Heat 2** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-09 | time | 6.02 | 9.79 | 13.60 | 17.66 | 21.86 | 26.13 | 30.49 | 34.97 | 39.47 | 44.11 | | 49.27 | 1 / 1 | | | |
| reaction time | 0.212 | interval | | 3.77 | 3.81 | 4.06 | 4.20 | 4.27 | 4.36 | 4.48 | 4.50 | 4.64 | 5.16 | | | 11.64 | 12.83 | 13.62 |
| | | velocity | 7.48 | 9.28 | 9.19 | 8.62 | 8.33 | 8.20 | 8.03 | 7.81 | 7.78 | 7.54 | 7.75 | 8.12 | | 9.02 | 8.18 | 7.71 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

| **Cuypers, Alain (BEL) (1967)** | | | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 2** - 1988 Olympic Games (Seoul, KOR) | | | | | | | | | | *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988* | | | | | | | | |
| date | 24-Sep-88 | time | 6.20 | 10.13 | 14.07 | 18.06 | 22.14 | | 26.45 | 30.79 | 35.22 | 39.76 | 44.40 | | 49.75 | 7 / 7 | | | |
| reaction time | | interval | | 3.93 | 3.94 | 3.99 | 4.08 | | 4.31 | 4.34 | 4.43 | 4.54 | 4.64 | 5.35 | **PB** | | 11.86 | 12.73 | 13.61 |
| | | velocity | 7.26 | 8.91 | 8.88 | 8.77 | 8.58 | | 8.12 | 8.06 | 7.90 | 7.71 | 7.54 | 7.48 | 8.04 | | 8.85 | 8.25 | 7.71 |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 168.5 | | | | |

**Davis, Calvin (USA) (1972)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1996 Olympic Games (Atlanta, GA) | | | | | | | | | | | | | | | | *McFarlane (2000) - the science of hurdling and speed* | | | |
| date | 01-Aug-96 | time | 6.02 | 9.85 | 13.62 | 17.38 | 21.34 | | 25.48 | 29.70 | 33.90 | 38.35 | 42.82 | | 47.96 | 5 / 3 | | | |
| reaction time | 0.267 | interval | | 3.83 | 3.77 | 3.76 | 3.96 | | 4.14 | 4.22 | 4.20 | 4.45 | 4.47 | 5.14 | | | 11.36 | 12.32 | 13.12 |
| | | velocity | 7.48 | 9.14 | 9.28 | 9.31 | 8.84 | | 8.45 | 8.29 | 8.33 | 7.87 | 7.83 | 7.78 | 8.34 | | 9.24 | 8.52 | 8.00 |
| H1 lead leg | | strides | 23 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 158 | | | | |
| **FINAL** - 1996 USA Olympic Trials (Atlanta, GA) | | | | | | | | | | | | | | | | *McNichols - Hurdle technique study through video analysis* | | | |
| date | 16-Jun-96 | time | 6.03 | 9.88 | 13.71 | 17.65 | 21.60 | 22.28 | 25.67 | 29.98 | 34.23 | 38.68 | 43.21 | | 48.32 | 3 / 3 | | | |
| reaction time | | interval | | 3.85 | 3.83 | 3.94 | 3.95 | | 4.07 | 4.31 | 4.25 | 4.45 | 4.53 | 5.11 | **PB** | | 11.62 | 12.33 | 13.23 |
| | | velocity | 7.46 | 9.09 | 9.14 | 8.88 | 8.86 | 8.98 | 8.60 | 8.12 | 8.24 | 7.87 | 7.73 | 7.83 | 8.28 | | 9.04 | 8.52 | 7.94 |
| H1 lead leg | R | strides | 23 | 13 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | | 151 | | | | |

**Davis, Glenn (USA) (1934)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1960 Olympic Games (Rome, ITA) | | | | | | | | | | | | | | | | *Nett (1964) - Training des leichtathleten: Hürdenlauf, sprung, wurf, mehrkampf* | | | |
| date | 02-Sep-60 | time | 5.9 | 9.9 | 14.0 | 18.2 | 22.4 | 24.0 | 26.7 | 31.1 | 35.6 | 40.0 | 44.5 | | 49.3 | 6 / 1 | | | |
| reaction time | | interval | | 4.0 | 4.1 | 4.2 | 4.2 | | 4.3 | 4.4 | 4.5 | 4.4 | 4.5 | 4.8 | **OR** | | 12.30 | 12.90 | 13.40 |
| | | velocity | 7.63 | 8.75 | 8.54 | 8.33 | 8.33 | 8.33 | 8.14 | 7.95 | 7.78 | 7.95 | 7.78 | 8.33 | 8.11 | *(49.51)* | 8.54 | 8.14 | 7.84 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **FINAL** - 1956 Olympic Games (Melbourne, AUS) | | | | | | | | | | | | | | | | *Quercentani (2000). Athletics: A history of modern track and field athletics (1860-2000)* | | | |
| date | 24-Nov-56 | time | | | | | 22.7 | | | | | | | | 50.1 | 4 / 1 | | | |
| reaction time | | interval | | | | | | | | | | | | | **=OR** | | | | |
| | | velocity | | | | | 8.15 | | | | | | | | 7.98 | *(50.29)* | | | |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 19 | 176 | | | | |

**de Araújo, Eronilde (BRA) (1970)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 27-Sep-00 | time | 5.98 | 9.66 | 13.38 | 17.14 | 21.06 | 22.62 | 25.10 | 29.38 | 33.78 | 38.26 | 43.94 | | 48.34 | 8 / 5 | | | |
| reaction time | 0.190 | interval | | 3.68 | 3.72 | 3.76 | 3.92 | | 4.04 | 4.28 | 4.40 | 4.48 | 5.68 | 4.40 | | | 11.16 | 12.24 | 14.56 |
| | | velocity | 7.53 | 9.51 | 9.41 | 9.31 | 8.93 | 8.84 | 8.66 | 8.18 | 7.95 | 7.81 | 6.16 | 9.09 | 8.27 | | 9.41 | 8.58 | 7.21 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.3 | 159.3 | | | | |
| **Semi-Final 3** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 25-Sep-00 | time | 5.94 | 9.62 | 13.34 | 17.18 | 21.18 | 22.70 | 25.26 | 29.46 | 33.98 | 38.58 | 43.34 | | 48.76 | 4 / 2 | | | |
| reaction time | 0.181 | interval | | 3.68 | 3.72 | 3.84 | 4.00 | | 4.08 | 4.20 | 4.52 | 4.60 | 4.76 | 5.42 | | | 11.24 | 12.28 | 13.88 |
| | | velocity | 7.58 | 9.51 | 9.41 | 9.11 | 8.75 | 8.81 | 8.58 | 8.33 | 7.74 | 7.61 | 7.35 | 7.38 | 8.20 | | 9.34 | 8.55 | 7.56 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.8 | 159.8 | | | | |
| **Heat 8** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 24-Sep-00 | time | 6.06 | 9.86 | 13.62 | 17.58 | 21.62 | | 25.86 | 30.18 | 34.82 | 39.62 | 44.42 | | 50.06 | 8 / 1 | | | |
| reaction time | 0.179 | interval | | 3.80 | 3.76 | 3.96 | 4.04 | | 4.24 | 4.32 | 4.64 | 4.80 | 4.80 | 5.64 | | | 11.52 | 12.60 | 14.24 |
| | | velocity | 7.43 | 9.21 | 9.31 | 8.84 | 8.66 | | 8.25 | 8.10 | 7.54 | 7.29 | 7.29 | 7.09 | 7.99 | | 9.11 | 8.33 | 7.37 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 17.9 | 163.9 | | | | |
| **FINAL** - 1999 IAAF World Championships (Sevilla, ESP) | | | | | | | | | | | | | | | | *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas* | | | |
| date | 27-Aug-99 | time | 5.72 | 9.39 | 13.13 | 16.93 | 20.85 | | 24.84 | 29.06 | 33.37 | 37.85 | 42.46 | | 48.13 | 8 / 4 | | | |
| reaction time | 0.205 | interval | | 3.67 | 3.74 | 3.80 | 3.92 | | 3.99 | 4.22 | 4.31 | 4.48 | 4.61 | 5.67 | | | 11.21 | 12.13 | 13.40 |
| | | velocity | 7.87 | 9.54 | 9.36 | 9.21 | 8.93 | | 8.77 | 8.29 | 8.12 | 7.81 | 7.59 | 7.05 | 8.31 | | 9.37 | 8.66 | 7.84 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 17.5 | 161 | | | | |
| **Semi-Final 2** - 1999 IAAF World Championships (Sevilla, ESP) | | | | | | | | | | | | | | | | *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas* | | | |
| date | 25-Aug-99 | time | 5.70 | 9.47 | 13.28 | 17.09 | 21.07 | | 25.09 | 29.28 | 33.57 | 38.04 | 42.68 | | 48.41 | 6 / 3 | | | |
| reaction time | 0.174 | interval | | 3.77 | 3.81 | 3.81 | 3.98 | | 4.02 | 4.19 | 4.29 | 4.47 | 4.64 | 5.73 | | | 11.39 | 12.19 | 13.40 |
| | | velocity | 7.89 | 9.28 | 9.19 | 9.19 | 8.79 | | 8.71 | 8.35 | 8.16 | 7.83 | 7.54 | 6.98 | 8.26 | | 9.22 | 8.61 | 7.84 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.5 | 159.5 | | | | |
| **FINAL** - 1996 Olympic Games (Atlanta, GA) | | | | | | | | | | | | | | | | *Behm (1996) - 400m haies* | | | |
| date | 01-Aug-96 | time | 6.0 | 9.9 | 13.7 | 17.5 | 21.4 | | 25.5 | 29.7 | 34.0 | 38.4 | 43.0 | | 48.78 | 2 / 8 | | | |
| reaction time | 0.199 | interval | | 3.90 | 3.80 | 3.80 | 3.90 | | 4.10 | 4.20 | 4.30 | 4.40 | 4.60 | 5.78 | | | 11.50 | 12.20 | 13.30 |
| | | velocity | 7.50 | 8.97 | 9.21 | 9.21 | 8.97 | | 8.54 | 8.33 | 8.14 | 7.95 | 7.61 | 6.92 | 8.20 | | 9.13 | 8.61 | 7.89 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | | 142 | | | | |

**Dean, Caleb (USA) (2001)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2023 NCAA Championships (Austin, TX) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | |
| date | 09-Jun-23 | time | 5.76 | 9.47 | 13.28 | 17.17 | 21.17 | | 25.39 | 29.80 | 34.30 | 38.80 | 43.26 | | 48.56 | 7 / 4 | | | |
| reaction time | | interval | | 3.71 | 3.81 | 3.89 | 4.00 | | 4.22 | 4.41 | 4.50 | 4.50 | 4.46 | 5.30 | | | 11.41 | 12.63 | 13.46 |
| | | velocity | 7.81 | 9.43 | 9.19 | 9.00 | 8.75 | | 8.29 | 7.94 | 7.78 | 7.78 | 7.85 | 7.55 | 8.24 | | 9.20 | 8.31 | 7.80 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 14 | 18.2 | 161.2 | | | | |
| **Semi-Final 1** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 25-Jun-21 | time | 5.93 | 9.77 | 13.67 | 17.60 | 21.77 | | 26.07 | 30.53 | 35.03 | 39.77 | 44.53 | | 49.78 | 7 / 5 | | | |
| reaction time | 0.178 | interval | | 3.84 | 3.90 | 3.93 | 4.17 | | 4.30 | 4.46 | 4.50 | 4.74 | 4.76 | 5.25 | | | 11.67 | 12.93 | 14.00 |
| | | velocity | 7.59 | 9.11 | 8.97 | 8.91 | 8.39 | | 8.14 | 7.85 | 7.78 | 7.38 | 7.35 | 7.62 | 8.04 | | 9.00 | 8.12 | 7.50 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | 15 | 15 | 15 | 15 | 15 | 18 | 145 | | | | |

**Deguchi, Haruto (JPN) (2001)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2020 Japanese U20 National Championships (Hiroshima, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Oct-20 | time | 6.41 | 10.49 | 14.70 | 19.00 | 23.51 | 28.06 | 32.60 | 37.22 | 41.89 | 46.68 | | 52.17 | 4 / 1 | | | |
| reaction time | 0.195 | interval | | 4.08 | 4.21 | 4.30 | 4.51 | 4.55 | 4.54 | 4.62 | 4.67 | 4.79 | 5.49 | | | 12.59 | 13.60 | 14.08 |
| | | velocity | 7.02 | 8.58 | 8.31 | 8.14 | 7.76 | 7.69 | 7.71 | 7.58 | 7.49 | 7.31 | 7.29 | 7.67 | | 8.34 | 7.72 | 7.46 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | 17.7 | 165.7 | | | | |

**FINAL** - 2019 Japanese National High School Championships (Okinawa, JPN) *Kota (2019) - 72nd high school championships: JAF scientific committee - biomechanics data collection*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-19 | time | 6.25 | 10.21 | 14.25 | 18.39 | 22.76 | 27.24 | 31.65 | 36.05 | 40.62 | 45.28 | | 50.57 | 4 / 1 | | | |
| reaction time | | interval | | 3.96 | 4.04 | 4.14 | 4.37 | 4.48 | 4.41 | 4.40 | 4.57 | 4.66 | 5.29 | PB | | 12.14 | 13.26 | 13.63 |
| | | velocity | 7.20 | 8.84 | 8.66 | 8.45 | 8.01 | 7.81 | 7.94 | 7.95 | 7.66 | 7.51 | 7.56 | 7.91 | | 8.65 | 7.92 | 7.70 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | | 127 | | | | |

**FINAL** - 2018 Japanese National High School Championships (Nagoya, JPN) *Kota (2018) - 71st high school championships: JAF scientific committee - biomechanics data collection*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Aug-18 | time | 6.26 | 10.36 | 14.66 | 19.04 | 23.52 | 27.98 | 32.47 | 36.95 | 41.45 | 46.01 | | 51.17 | 4 / 1 | | | |
| reaction time | | interval | | 4.10 | 4.30 | 4.38 | 4.48 | 4.46 | 4.49 | 4.48 | 4.50 | 4.56 | 5.16 | PB | | 12.78 | 13.43 | 13.54 |
| | | velocity | 7.19 | 8.54 | 8.14 | 7.99 | 7.81 | 7.85 | 7.80 | 7.81 | 7.78 | 7.68 | 7.75 | 7.82 | | 8.22 | 7.82 | 7.75 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**Derby, Brian (USA) (1981)**

**Heat 1** - 2007 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2007)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-07 | time | 6.09 | 10.03 | 13.98 | 18.03 | 22.17 | | 26.61 | 31.09 | 35.67 | 40.27 | 44.91 | | 50.26 | 5 / 3 | | | |
| reaction time | | interval | | 3.94 | 3.95 | 4.05 | 4.14 | | 4.44 | 4.48 | 4.58 | 4.60 | 4.64 | 5.35 | | | 11.94 | 13.06 | 13.82 |
| | | velocity | 7.39 | 8.88 | 8.86 | 8.64 | 8.45 | | 7.88 | 7.81 | 7.64 | 7.61 | 7.54 | 7.48 | 7.96 | | 8.79 | 8.04 | 7.60 |
| H1 lead leg | L | strides | 21 | 14 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 14 | | 144 | | | | |

**Derevyagin, Aleksandr (RUS) (1979)**

**FINAL** - 2011 IAAF World Championships (Daegu, KOR) *Behm (2011) - Le quatrache: Démus enfin!*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-11 | time | 6.0 | 9.7 | 13.7 | 17.6 | 21.6 | | 25.8 | 30.2 | 34.6 | 39.0 | 43.7 | | 49.32 | 2 / 8 | | | |
| reaction time | 0.187 | interval | | 3.70 | 4.00 | 3.90 | 4.00 | | 4.20 | 4.40 | 4.40 | 4.40 | 4.70 | 5.62 | | | 11.60 | 12.60 | 13.50 |
| | | velocity | 7.50 | 9.46 | 8.75 | 8.97 | 8.75 | | 8.33 | 7.95 | 7.95 | 7.95 | 7.45 | 7.12 | 8.11 | | 9.05 | 8.33 | 7.78 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 16 | 15 | | 15 | 15 | 15 | 15 | 15 | 18 | 176 | | | | |

**FINAL** - 2007 European Cup (Munich, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jun-07 | time | 6.17 | 10.12 | 14.14 | 18.12 | 22.21 | 26.30 | 30.52 | 34.80 | 39.20 | 43.74 | | 49.12 | / 4 | | | |
| reaction time | 0.162 | interval | | 3.95 | 4.02 | 3.98 | 4.09 | 4.09 | 4.22 | 4.28 | 4.40 | 4.54 | 5.38 | PB | | 11.95 | 12.40 | 13.22 |
| | | velocity | 7.29 | 8.86 | 8.71 | 8.79 | 8.56 | 8.56 | 8.29 | 8.18 | 7.95 | 7.71 | 7.43 | 8.14 | | 8.79 | 8.47 | 7.94 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 2006 European Championships (Göteborg, SWE) *Behm (2006) - Göteborg 2006: Le quatrache*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-06 | time | 5.9 | 9.7 | 13.6 | 17.6 | 21.7 | 26.0 | 30.4 | 34.7 | 39.4 | 44.2 | | 50.31 | / 8 | | | |
| reaction time | | interval | | 3.80 | 3.90 | 4.00 | 4.10 | 4.30 | 4.40 | 4.30 | 4.70 | 4.80 | 6.11 | | | 11.70 | 12.80 | 13.80 |
| | | velocity | 7.63 | 9.21 | 8.97 | 8.75 | 8.54 | 8.14 | 7.95 | 8.14 | 7.45 | 7.29 | 6.55 | 7.95 | | 8.97 | 8.20 | 7.61 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.5 | 170.5 | | | | |

**Dia Bâ, Amadou (SEN) (1958)**

**FINAL** - 1988 Olympic Games (Seoul, KOR) *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-88 | time | 5.96 | 9.60 | 13.33 | 17.13 | 21.01 | | 25.06 | 29.26 | 33.44 | 37.83 | 42.27 | | 47.23 | 5 / 2 | | | |
| reaction time | 0.220 | interval | | 3.64 | 3.73 | 3.80 | 3.88 | | 4.05 | 4.20 | 4.18 | 4.39 | 4.44 | 4.96 | NR | | 11.17 | 12.13 | 13.01 |
| | | velocity | 7.55 | 9.62 | 9.38 | 9.21 | 9.02 | | 8.64 | 8.33 | 8.37 | 7.97 | 7.88 | 8.06 | 8.47 | | 9.40 | 8.66 | 8.07 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 18 | 159 | | | | |

**Semi-Final 2** - 1988 Olympic Games (Seoul, KOR) *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-88 | time | 6.16 | 10.00 | 13.91 | 17.73 | 21.78 | 25.89 | 30.18 | 34.49 | 38.99 | 43.48 | | 48.48 | 4 / 3 | | | |
| reaction time | | interval | | 3.84 | 3.91 | 3.82 | 4.05 | 4.11 | 4.29 | 4.31 | 4.50 | 4.49 | 5.00 | | | 11.57 | 12.45 | 13.30 |
| | | velocity | 7.31 | 9.11 | 8.95 | 9.16 | 8.64 | 8.52 | 8.16 | 8.12 | 7.78 | 7.80 | 8.00 | 8.25 | | 9.08 | 8.43 | 7.89 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17 | 158 | | | | |

**FINAL** - 1987 Meeting BNP D'Athletisme (Paris, FRA) *Behm (1988) - 45-39*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-87 | time | 5.7 | 9.5 | 13.3 | 17.2 | 21.2 | 25.3 | 29.5 | 34.1 | | 43.3 | | 48.89 | / 1 | | | |
| reaction time | | interval | | 3.84 | 3.78 | 3.83 | 4.08 | 4.02 | 4.26 | 4.59 | | 9.20 | 5.59 | | | 11.45 | 12.36 | 13.79 |
| | | velocity | 7.89 | 9.11 | 9.26 | 9.14 | 8.58 | 8.71 | 8.22 | 7.63 | | 7.61 | 7.16 | 8.18 | | 9.17 | 8.50 | 7.61 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Diagana, Stéphane (FRA) (1969)**

**Semi-Final 1** - 2003 IAAF World Championships (Paris, FRA) *Behm (2003) - Paris 2003:Le quatrache masculn - féminin*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Aug-03 | time | 5.8 | 9.5 | 13.3 | 17.2 | 21.2 | | 25.3 | 29.5 | 33.9 | 38.5 | 43.1 | | 48.64 | 2 / 5 | | | |
| reaction time | 0.163 | interval | | 3.70 | 3.80 | 3.90 | 4.00 | | 4.10 | 4.20 | 4.40 | 4.60 | 4.60 | 5.54 | | | 11.40 | 12.30 | 13.60 |
| | | velocity | 7.76 | 9.46 | 9.21 | 8.97 | 8.75 | | 8.54 | 8.33 | 7.95 | 7.61 | 7.61 | 7.22 | 8.22 | | 9.21 | 8.54 | 7.72 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |

**Heat 1** - 2003 IAAF World Championships (Paris, FRA) *Behm (2003) - Paris 2003:Le quatrache masculn - féminin*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Aug-03 | time | 5.8 | 9.5 | 13.3 | 17.1 | 20.9 | | 25.1 | 29.4 | 34.1 | 38.7 | 43.5 | | 49.00 | 7 / 3 | | | |
| reaction time | 0.186 | interval | | 3.70 | 3.80 | 3.80 | 3.80 | | 4.20 | 4.30 | 4.70 | 4.60 | 4.80 | 5.50 | | | 11.30 | 12.30 | 14.10 |
| | | velocity | 7.76 | 9.46 | 9.21 | 9.21 | 9.21 | | 8.33 | 8.14 | 7.45 | 7.61 | 7.29 | 7.27 | 8.16 | | 9.29 | 8.54 | 7.45 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |

**FINAL** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-02 | time | 5.95 | 9.65 | 13.35 | 17.13 | 21.03 | | 25.11 | 29.41 | 33.62 | 38.01 | 42.50 | | 47.58 | / 1 | | | |
| reaction time | 0.141 | interval | | 3.70 | 3.70 | 3.78 | 3.90 | | 4.08 | 4.30 | 4.21 | 4.39 | 4.49 | 5.08 | | | 11.18 | 12.28 | 13.09 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.56 | 9.46 | 9.46 | 9.26 | 8.97 | 8.58 | 8.14 | 8.31 | 7.97 | 7.80 | 7.87 | 8.41 | | 9.39 | 8.55 | 8.02 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**Semi-Final 2** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Aug-02 | time | 5.97 | 9.66 | 13.44 | 17.26 | 21.20 | 25.32 | 29.69 | 34.14 | 38.82 | 43.53 | | 49.01 | / 1 | | | |
| reaction time | | interval | | 3.69 | 3.78 | 3.82 | 3.94 | 4.12 | 4.37 | 4.45 | 4.68 | 4.71 | 5.48 | | | 11.29 | 12.43 | 13.84 |
| | | velocity | 7.54 | 9.49 | 9.26 | 9.16 | 8.88 | 8.50 | 8.01 | 7.87 | 7.48 | 7.43 | 7.30 | 8.16 | | 9.30 | 8.45 | 7.59 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Heat 3** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Aug-02 | time | 6.06 | 9.86 | 13.71 | 17.60 | 21.50 | 25.75 | 30.24 | 34.88 | 39.15 | 44.35 | | 49.52 | / 1 | | | |
| reaction time | | interval | | 3.80 | 3.85 | 3.89 | 3.90 | 4.25 | 4.49 | 4.64 | 4.27 | 5.20 | 5.17 | | | 11.54 | 12.64 | 14.11 |
| | | velocity | 7.43 | 9.21 | 9.09 | 9.00 | 8.97 | 8.24 | 7.80 | 7.54 | 8.20 | 6.73 | 7.74 | 8.08 | | 9.10 | 8.31 | 7.44 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 2001 European Cup (Bremen, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jun-01 | time | 6.03 | 9.78 | 13.62 | 17.52 | 21.41 | 25.46 | 29.60 | 34.16 | 38.90 | 43.73 | | 49.07 | / 3 | | | |
| reaction time | | interval | | 3.75 | 3.84 | 3.90 | 3.89 | 4.05 | 4.14 | 4.56 | 4.74 | 4.83 | 5.34 | | | 11.49 | 12.08 | 14.13 |
| | | velocity | 7.46 | 9.33 | 9.11 | 8.97 | 9.00 | 8.64 | 8.45 | 7.68 | 7.38 | 7.25 | 7.49 | 8.15 | | 9.14 | 8.69 | 7.43 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Aug-99 | time | 5.44 | 9.09 | 12.77 | 16.54 | 20.39 | 24.41 | 28.77 | 33.08 | 37.59 | 42.19 | | 48.12 | 5 / 2 | | | |
| reaction time | 0.139 | interval | | 3.65 | 3.68 | 3.77 | 3.85 | 4.02 | 4.36 | 4.31 | 4.51 | 4.60 | 5.93 | | | 11.10 | 12.23 | 13.42 |
| | | velocity | 8.27 | 9.59 | 9.51 | 9.28 | 9.09 | 8.71 | 8.03 | 8.12 | 7.76 | 7.61 | 6.75 | 8.31 | | 9.46 | 8.59 | 7.82 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 19 | 163 | | | | |

**Semi-Final 2** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-99 | time | 5.57 | 9.24 | 13.03 | 16.81 | 20.72 | 24.73 | 28.98 | 33.39 | 37.91 | 42.46 | | 48.18 | 4 / 1 | | | |
| reaction time | 0.161 | interval | | 3.67 | 3.79 | 3.78 | 3.91 | 4.01 | 4.25 | 4.41 | 4.52 | 4.55 | 5.72 | | | 11.24 | 12.17 | 13.48 |
| | | velocity | 8.08 | 9.54 | 9.23 | 9.26 | 8.95 | 8.73 | 8.24 | 7.94 | 7.74 | 7.69 | 6.99 | 8.30 | | 9.34 | 8.63 | 7.79 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |

**Heat 5** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-99 | time | 5.59 | 9.30 | 13.12 | 16.99 | 20.93 | 24.99 | 29.38 | 33.82 | 38.45 | 43.02 | | 48.55 | 5 / 1 | | | |
| reaction time | 0.155 | interval | | 3.71 | 3.82 | 3.87 | 3.94 | 4.06 | 4.39 | 4.44 | 4.63 | 4.57 | 5.53 | | | 11.40 | 12.39 | 13.64 |
| | | velocity | 8.05 | 9.43 | 9.16 | 9.04 | 8.88 | 8.62 | 7.97 | 7.88 | 7.56 | 7.66 | 7.23 | 8.24 | | 9.21 | 8.47 | 7.70 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |

**FINAL** - 1997 IAAF World Championships (Athens, GRE) *Hommel (1999) - biomechanical research project, athens 1997: final report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Aug-97 | time | 5.87 | 9.50 | 13.14 | 16.85 | 20.60 | 24.68 | 28.68 | 32.98 | 37.56 | 42.27 | | 47.70 | 6 / 1 | | | |
| reaction time | 0.157 | interval | | 3.63 | 3.64 | 3.71 | 3.75 | 4.08 | 4.00 | 4.30 | 4.58 | 4.71 | 5.43 | | | 10.98 | 11.83 | 13.59 |
| | | velocity | 7.67 | 9.64 | 9.62 | 9.43 | 9.33 | 8.58 | 8.75 | 8.14 | 7.64 | 7.43 | 7.37 | 8.39 | | 9.56 | 8.88 | 7.73 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 19 | 163 | | | | |

**FINAL** - 1997 European Cup (Munich, GER) *Jung (2003) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-97 | time | 6.0 | 9.8 | 13.7 | 17.6 | 21.6 | 25.7 | 30.2 | 34.7 | 39.3 | 43.9 | | 49.19 | / 2 | | | |
| reaction time | | interval | | 3.77 | 3.92 | 3.88 | 4.00 | 4.10 | 4.49 | 4.55 | 4.54 | 4.64 | 5.27 | | | 11.57 | 12.59 | 13.73 |
| | | velocity | 7.46 | 9.28 | 8.93 | 9.02 | 8.75 | 8.54 | 7.80 | 7.69 | 7.71 | 7.54 | 7.59 | 8.13 | | 9.08 | 8.34 | 7.65 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 1995 IAAF World Championships (Göteborg, SWE) *Behm (1999) - Les chiffres: Les podiums de tous le championnats*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-95 | time | | | | | 21.1 | | | | | | | 48.14 | 6 / 3 | | | |
| reaction time | | interval | | | | | | | | | | | | | | | | |
| | | velocity | | | | | 8.77 | | | | | | | 8.31 | | | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 19.2 | 162 | | | | |

**FINAL** - 1995 Athletissima (Luasanne, SUI) *Behm (1999) - Les deux recordmen de France: Stéphane Diagana (Vazel)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jul-95 | time | 5.86 | 9.54 | 13.30 | 17.10 | 20.97 | 24.94 | 29.09 | 33.25 | 37.67 | 42.16 | | 47.37 | / 1 | | | |
| reaction time | | interval | | 3.68 | 3.76 | 3.80 | 3.87 | 3.97 | 4.15 | 4.16 | 4.42 | 4.49 | 5.21 | **AR** | | 11.24 | 11.99 | 13.07 |
| | | velocity | 7.68 | 9.51 | 9.31 | 9.21 | 9.04 | 8.82 | 8.43 | 8.41 | 7.92 | 7.80 | 7.68 | 8.44 | | 9.34 | 8.76 | 8.03 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**FINAL** - 1994 European Championships (Helsinki, FIN) *Behm (1995) - la tactique du 400 haies*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-94 | time | 5.9 | 9.5 | 13.2 | 16.9 | 20.8 | 24.7 | 29.0 | 33.3 | 37.9 | 42.6 | | 48.23 | / 3 | | | |
| reaction time | | interval | | 3.60 | 3.70 | 3.70 | 3.90 | 3.90 | 4.30 | 4.30 | 4.60 | 4.70 | 5.63 | | | 11.00 | 12.10 | 13.60 |
| | | velocity | 7.63 | 9.72 | 9.46 | 9.46 | 8.97 | 8.97 | 8.14 | 8.14 | 7.61 | 7.45 | 7.10 | 8.29 | | 9.55 | 8.68 | 7.72 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | | 143 | | | | |

**FINAL** - 1993 IAAF World Championships (Stuttgart, GER) *Graubner (2008) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Aug-93 | time | 5.87 | 9.42 | 13.10 | 16.89 | 20.74 | 24.74 | 28.91 | 33.18 | 37.66 | 42.26 | | 47.64 | 7 / 4 | | | |
| reaction time | 0.206 | interval | | 3.55 | 3.68 | 3.79 | 3.85 | 4.00 | 4.17 | 4.27 | 4.48 | 4.60 | 5.38 | **PB** | | 11.02 | 12.02 | 13.35 |
| | | velocity | 7.67 | 9.86 | 9.51 | 9.23 | 9.09 | 8.75 | 8.39 | 8.20 | 7.81 | 7.61 | 7.43 | 8.40 | | 9.53 | 8.74 | 7.87 |
| H1 lead leg | L | strides | 20 | 13 | 13 | | 13 | 13 | 14 | 14 | 15 | 15 | 19 | 149 | | | | |

**FINAL** - 1992 Olympic Games (Barcelona, ESP) *Belloc (1992) - Diagana: 45.18 / 48.13 : 3" d'ecart; incompressibles?*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-92 | time | 5.90 | 9.60 | 13.35 | 17.15 | 21.00 | 25.20 | 29.40 | 33.65 | 38.05 | 42.70 | | 48.13 | 6 / 4 | | | |
| reaction time | | interval | | 3.70 | 3.75 | 3.80 | 3.85 | 4.20 | 4.20 | 4.25 | 4.40 | 4.65 | 5.43 | **PB** | | 11.25 | 12.25 | 13.30 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.63 | 9.46 | 9.33 | 9.21 | 9.09 | | 8.33 | 8.33 | 8.24 | 7.95 | 7.53 | 7.37 | 8.31 | | 9.33 | 8.57 | 7.89 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.3 | 164.3 | | | | |

**Dlouhy, Manfred (FRG) (1952)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1975 West German National Championships (Gelsenkirchen, FRG) | | | | | | | | | | | | | | | | *Helbig (1975) - 400-m-hürdenlauf* | | | |
| date | 28-Jun-75 | time | 6.3 | 10.3 | 14.4 | 18.7 | 23.0 | 25.0 | 27.1 | 31.6 | 36.7 | 41.4 | 46.4 | | 52.14 | 2 / 6 | | | |
| reaction time | | interval | | 4.04 | 4.09 | 4.25 | 4.33 | | 4.07 | 4.57 | 5.07 | 4.69 | 5.00 | 5.75 | | | 12.38 | 12.97 | 14.76 |
| | | velocity | 7.17 | 8.66 | 8.56 | 8.24 | 8.08 | 8.00 | 8.60 | 7.66 | 6.90 | 7.46 | 7.00 | 6.96 | 7.67 | | 8.48 | 8.10 | 7.11 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Dobek, Patryk (POL) (1994)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 2** - 2019 IAAF World Championships (Doha, QAT) | | | | | | | | | | | | | | | | *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships* | | | |
| date | 28-Sep-19 | time | 6.08 | 9.84 | 13.67 | 17.59 | 21.74 | | 26.00 | 30.33 | 34.81 | 39.44 | 44.39 | | 50.18 | 8 / 7 | | | |
| reaction time | 0.174 | interval | | 3.76 | 3.83 | 3.92 | 4.15 | | 4.26 | 4.33 | 4.48 | 4.63 | 4.95 | 5.79 | | | 11.51 | 12.74 | 14.06 |
| | | velocity | 7.40 | 9.31 | 9.14 | 8.93 | 8.43 | | 8.22 | 8.08 | 7.81 | 7.56 | 7.07 | 6.91 | 7.97 | | 9.12 | 8.24 | 7.47 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 17 | 17.7 | 160.7 | | | | |
| **FINAL** - 2019 Bislett Games (Oslo, NOR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2019 year end hurdle report* | | | |
| date | 13-Jun-19 | time | 5.92 | 9.62 | 13.45 | | 21.42 | 23.1 | 25.55 | 29.99 | 34.46 | 39.30 | 44.21 | | 49.80 | 2 / 6 | | | |
| reaction time | 0.155 | interval | | 3.70 | 3.83 | | 7.97 | | 4.13 | 4.44 | 4.47 | 4.84 | 4.91 | 5.59 | | | | | 14.22 |
| | | velocity | 7.60 | 9.46 | 9.14 | | 8.78 | 8.66 | 8.47 | 7.88 | 7.83 | 7.23 | 7.13 | 7.16 | 8.03 | | | | 7.38 |
| H1 lead leg | L | strides | 20 | 13 | 13 | | | | 13 | 14 | 14 | 15 | 15 | 18 | 135 | | | | |
| **FINAL** - 2019 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2019 year end hurdle report* | | | |
| date | 06-Jun-19 | time | 5.90 | 9.66 | 13.50 | 17.46 | 21.56 | | 25.76 | 30.23 | 34.88 | 39.73 | 44.71 | | 50.38 | 3 / 8 | | | |
| reaction time | 0.153 | interval | | 3.76 | 3.84 | 3.96 | 4.10 | | 4.20 | 4.47 | 4.65 | 4.85 | 4.98 | 5.67 | | | 11.56 | 12.77 | 14.48 |
| | | velocity | 7.63 | 9.31 | 9.11 | 8.84 | 8.54 | | 8.33 | 7.83 | 7.53 | 7.22 | 7.03 | 7.05 | 7.94 | | 9.08 | 8.22 | 7.25 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 17.7 | 162.7 | | | | |
| **FINAL** - 2016 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2016 year end hurdle report* | | | |
| date | 16-Jun-16 | time | 5.97 | 9.73 | 13.53 | 17.37 | 21.37 | | 25.63 | 30.03 | 34.60 | 39.30 | 44.23 | | 49.89 | 7 / 3 | | | |
| reaction time | 0.163 | interval | | 3.76 | 3.80 | 3.84 | 4.00 | | 4.26 | 4.40 | 4.57 | 4.70 | 4.93 | 5.66 | | | 11.40 | 12.66 | 14.20 |
| | | velocity | 7.54 | 9.31 | 9.21 | 9.11 | 8.75 | | 8.22 | 7.95 | 7.66 | 7.45 | 7.10 | 7.07 | 8.02 | | 9.21 | 8.29 | 7.39 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 18 | 160 | | | | |
| **FINAL** - 2016 Bislett Games (Oslo, NOR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2016 year end hurdle report* | | | |
| date | 09-Jun-16 | time | 6.00 | 9.80 | 13.64 | 17.56 | 21.76 | | 26.00 | 30.48 | 35.00 | 39.68 | 44.52 | | 50.27 | 3 / 7 | | | |
| reaction time | 0.174 | interval | | 3.80 | 3.84 | 3.92 | 4.20 | | 4.24 | 4.48 | 4.52 | 4.68 | 4.84 | 5.75 | | | 11.56 | 12.92 | 14.04 |
| | | velocity | 7.50 | 9.21 | 9.11 | 8.93 | 8.33 | | 8.25 | 7.81 | 7.74 | 7.48 | 7.23 | 6.96 | 7.96 | | 9.08 | 8.13 | 7.48 |
| H1 lead leg | L | strides | 20 | 13 | | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.2 | 145.2 | | | | |
| **FINAL** - 2016 Shanghai Golden Grand Prix (Shanghai, CHN) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2016 year end hurdle report* | | | |
| date | 14-May-16 | time | 5.92 | 9.68 | 13.52 | 17.52 | 21.56 | | 25.72 | 30.08 | 34.48 | 39.08 | 43.68 | | 49.01 | 1 / 2 | | | |
| reaction time | 0.178 | interval | | 3.76 | 3.84 | 4.00 | 4.04 | | 4.16 | 4.36 | 4.40 | 4.60 | 4.60 | 5.33 | | | 11.60 | 12.56 | 13.60 |
| | | velocity | 7.60 | 9.31 | 9.11 | 8.75 | 8.66 | | 8.41 | 8.03 | 7.95 | 7.61 | 7.61 | 7.50 | 8.16 | | 9.05 | 8.36 | 7.72 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.5 | 159.5 | | | | |
| **FINAL** - 2015 IAAF World Championships (Beijing, CHN) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: major championships report* | | | |
| date | 25-Aug-15 | time | 6.00 | | 13.64 | 17.48 | 21.52 | | 25.68 | 30.04 | 34.52 | 39.16 | 43.84 | | 49.14 | 3 / 7 | | | |
| reaction time | 0.176 | interval | | | 7.64 | 3.84 | 4.04 | | 4.16 | 4.36 | 4.48 | 4.64 | 4.68 | 5.30 | | | 11.48 | 12.56 | 13.80 |
| | | velocity | 7.50 | | 9.16 | 9.11 | 8.66 | | 8.41 | 8.03 | 7.81 | 7.54 | 7.48 | 7.55 | 8.14 | | 9.15 | 8.36 | 7.61 |
| H1 lead leg | L | strides | | 13 | | 13 | 13 | | | 14 | 14 | 14 | 14 | | 95 | | | | |

**Dobrovolskiy, Sergey (URS) (1966)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1985 European Junior Championships (Cottbus, GDR) | | | | | | | | | | | | | | | | *Warburton (1985) - 1985 european junior championships - hurdles* | | | |
| date | 25-Aug-85 | time | | 9.90 | 13.82 | 18.20 | 22.39 | | 26.83 | 31.28 | 35.94 | 40.57 | 45.20 | | 51.31 | / 4 | | | |
| reaction time | | interval | | | 3.92 | 4.38 | 4.19 | | 4.44 | 4.45 | 4.66 | 4.63 | 4.63 | 6.11 | | | | 13.08 | 13.92 |
| | | velocity | | 8.08 | 8.93 | 7.99 | 8.35 | | 7.88 | 7.87 | 7.51 | 7.56 | 7.56 | 6.55 | 7.80 | | | 8.03 | 7.54 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**dos Santos, Alison Brendon (BRA) (**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2023 Prefontaine Classic (Eugene, OR) | | | | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | |
| date | 16-Sep-23 | time | 5.79 | 9.49 | 13.20 | 16.94 | 20.84 | | 24.85 | 28.98 | 33.26 | 37.65 | 42.12 | | 47.44 | 4 / 4 | | | |
| reaction time | 0.172 | interval | | 3.70 | 3.71 | 3.74 | 3.90 | | 4.01 | 4.13 | 4.28 | 4.39 | 4.47 | 5.32 | | | 11.15 | 12.04 | 13.14 |
| | | velocity | 7.77 | 9.46 | 9.43 | 9.36 | 8.97 | | 8.73 | 8.47 | 8.18 | 7.97 | 7.83 | 7.52 | 8.43 | | 9.42 | 8.72 | 7.99 |
| H1 lead leg | L | strides | 20 | | | 12 | 12 | | 12 | 13 | 13 | 13 | 13 | 16 | 124 | | | | |
| **FINAL** - 2023 Weltklasse (Zürich, SUI) | | | | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | |
| date | 31-Aug-23 | time | 5.80 | 9.39 | 13.04 | 16.77 | 20.66 | | 24.66 | 28.84 | 33.18 | 37.66 | 42.22 | | 47.62 | 5 / 3 | | | |
| reaction time | 0.162 | interval | | 3.59 | 3.65 | 3.73 | 3.89 | | 4.00 | 4.18 | 4.34 | 4.48 | 4.56 | 5.40 | | | 10.97 | 12.07 | 13.38 |
| | | velocity | 7.76 | 9.75 | 9.59 | 9.38 | 9.00 | | 8.75 | 8.37 | 8.06 | 7.81 | 7.68 | 7.41 | 8.40 | | 9.57 | 8.70 | 7.85 |
| H1 lead leg | L | strides | 20 | 13 | | | 12 | | 12 | 13 | | | 13 | 16.2 | 99.2 | | | | |
| **FINAL** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | |
| date | 23-Aug-23 | time | 5.81 | 9.56 | 12.96 | 16.62 | 20.49 | | 24.48 | 28.60 | 32.90 | 37.55 | 42.21 | | 48.10 | 9 / 5 | | | |
| reaction time | 0.164 | interval | | 3.75 | 3.40 | 3.66 | 3.87 | | 3.99 | 4.12 | 4.30 | 4.65 | 4.66 | 5.89 | | | 10.81 | 11.98 | 13.61 |
| | | velocity | 7.75 | 9.33 | 10.29 | 9.56 | 9.04 | | 8.77 | 8.50 | 8.14 | 7.53 | 7.51 | 6.79 | 8.32 | | 9.71 | 8.76 | 7.71 |
| H1 lead leg | L | strides | 20 | 13 | 12 | 12 | 12 | | 12 | 13 | 13 | 14 | 14 | 17.2 | 152.2 | | | | |

**Semi-Final 2** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-23 | time | 5.87 | 9.61 | 13.24 | 16.78 | 20.65 | 24.76 | 29.00 | 33.28 | 37.65 | 42.17 | 47.38 | 8 / 2 | | | | |
| reaction time | 0.182 | interval | | 3.74 | 3.63 | 3.54 | 3.87 | 4.11 | 4.24 | 4.28 | 4.37 | 4.52 | 5.21 | | 10.91 | 12.22 | 13.17 | |
| | | velocity | 7.67 | 9.36 | 9.64 | 9.89 | 9.04 | 8.52 | 8.25 | 8.18 | 8.01 | 7.74 | 7.68 | 8.44 | 9.62 | 8.59 | 7.97 | |
| H1 lead leg | L | strides | 20 | 13 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 13 | 16.2 | 150.2 | | | | |

**Heat 1** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 5.93 | 9.77 | 13.47 | | 20.93 | 24.93 | 29.16 | 33.53 | 38.03 | 42.86 | 48.12 | 2 / 1 | | | | |
| reaction time | 0.167 | interval | | 3.84 | 3.70 | | 7.46 | 4.00 | 4.23 | 4.37 | 4.50 | 4.83 | 5.26 | | | | 13.70 | |
| | | velocity | 7.59 | 9.11 | 9.46 | | 9.38 | 8.75 | 8.27 | 8.01 | 7.78 | 7.25 | 7.60 | 8.31 | | | 7.66 | |
| H1 lead leg | L | strides | 20 | 13 | 12 | | | 12 | | 13 | 13 | 14 | 16.2 | 113.2 | | | | |

**FINAL** - 2023 Herculis Meeting International d'Athlétisme (Monaco, MON) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jul-23 | time | 5.71 | 9.26 | 12.88 | 16.52 | 20.34 | 24.30 | 28.43 | 32.71 | 37.15 | 41.99 | 47.66 | 6 / 2 | | | | |
| reaction time | 0.169 | interval | | 3.55 | 3.62 | 3.64 | 3.82 | 3.96 | 4.13 | 4.28 | 4.44 | 4.84 | 5.67 | | 10.81 | 11.91 | 13.56 | |
| | | velocity | 7.88 | 9.86 | 9.67 | 9.62 | 9.16 | 8.84 | 8.47 | 8.18 | 7.88 | 7.23 | 7.05 | 8.39 | 9.71 | 8.82 | 7.74 | |
| H1 lead leg | L | strides | 20 | 13 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 14 | 17 | 151 | | | | |

**FINAL** - 2022 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-22 | time | 5.70 | 9.27 | 12.91 | 16.58 | 20.45 | 21.96 | 24.36 | 28.50 | 32.70 | 37.10 | 41.67 | 46.98 | 6 / 1 | | | |
| reaction time | 0.155 | interval | | 3.57 | 3.64 | 3.67 | 3.87 | | 3.91 | 4.14 | 4.20 | 4.40 | 4.57 | 5.31 | | 10.88 | 11.92 | 13.17 |
| | | velocity | 7.89 | 9.80 | 9.62 | 9.54 | 9.04 | 9.11 | 8.95 | 8.45 | 8.33 | 7.95 | 7.66 | 7.53 | 8.51 | 9.65 | 8.81 | 7.97 |
| H1 lead leg | L | strides | 20 | 13 | 12 | 12 | 12 | | 12 | 13 | 13 | 13 | 13 | 16 | 149 | | | |

**FINAL** - 2022 Memorial van Damme (Brussels, BEL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Sep-22 | time | 5.80 | 9.41 | 13.11 | 16.88 | 20.79 | 22.45 | 24.79 | 29.03 | 33.40 | 37.87 | 42.34 | 47.54 | 6 / 1 | | | |
| reaction time | 0.210 | interval | | 3.61 | 3.70 | 3.77 | 3.91 | | 2.34 | 4.24 | 4.37 | 4.47 | 4.47 | 5.20 | | 11.08 | 12.15 | 13.31 |
| | | velocity | 7.76 | 9.70 | 9.46 | 9.28 | 8.95 | 8.91 | 14.96 | 8.25 | 8.01 | 7.83 | 7.83 | 7.69 | 8.41 | 9.48 | 8.64 | 7.89 |
| H1 lead leg | L | strides | 20 | 13 | 12 | 12 | 12 | | 12 | 13 | 13 | 13 | 13 | 16 | 149 | | | |

**FINAL** - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-22 | time | 5.83 | 9.50 | 13.26 | 17.10 | 21.03 | 22.69 | 25.17 | 29.50 | 33.90 | 38.23 | 42.63 | 47.80 | 6 / 1 | | | |
| reaction time | 0.179 | interval | | 3.67 | 3.76 | 3.84 | 3.93 | | 4.14 | 4.33 | 4.40 | 4.33 | 4.40 | 5.17 | | 11.27 | 12.40 | 13.13 |
| | | velocity | 7.72 | 9.54 | 9.31 | 9.11 | 8.91 | 8.81 | 8.45 | 8.08 | 7.95 | 8.08 | 7.95 | 7.74 | 8.37 | 9.32 | 8.47 | 8.00 |
| H1 lead leg | L | strides | 20 | 13 | 12 | 12 | 12 | | 12 | 13 | 13 | 13 | 13 | 16 | 149 | | | |

**FINAL** - 2022 World Athletics Championships (Eugene, OR) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Jul-22 | time | 5.71 | 9.26 | 12.81 | 16.38 | 20.12 | 21.67 | 24.01 | 28.11 | 32.33 | 36.69 | 41.07 | 46.29 | 6 / 1 | | | |
| reaction time | 0.141 | interval | | 3.55 | 3.55 | 3.57 | 3.74 | | 3.89 | 4.10 | 4.22 | 4.36 | 4.38 | 5.22 | **CR NR** | 10.67 | 11.73 | 12.96 |
| | | velocity | 7.88 | 9.86 | 9.86 | 9.80 | 9.36 | 9.23 | 9.00 | 8.54 | 8.29 | 8.03 | 7.99 | 7.66 | 8.64 | 9.84 | 8.95 | 8.10 |
| H1 lead leg | L | strides | 20 | 13 | 12 | 12 | 12 | | 12 | 13 | 13 | 13 | 13 | 16.2 | 149.2 | | | |

**Semi-Final 2** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.73 | 9.43 | 13.14 | 16.86 | 20.76 | 22.49 | 24.86 | 29.16 | 33.53 | 38.03 | 42.56 | 47.85 | 5 / 1 | | | |
| reaction time | 0.166 | interval | | 3.70 | 3.71 | 3.72 | 3.90 | | 4.10 | 4.30 | 4.37 | 4.50 | 4.53 | 5.29 | | 11.13 | 12.30 | 13.40 |
| | | velocity | 7.85 | 9.46 | 9.43 | 9.41 | 8.97 | 8.89 | 8.54 | 8.14 | 8.01 | 7.78 | 7.73 | 7.56 | 8.36 | 9.43 | 8.54 | 7.84 |
| H1 lead leg | L | strides | 20 | 13 | 12 | 12 | 12 | | 12 | 13 | 13 | 13 | 13 | 16 | 149 | | | |

**Heat 2** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 5.70 | 9.37 | 13.13 | 16.93 | 20.96 | 22.65 | 25.07 | 29.50 | 34.10 | 38.93 | 43.90 | 49.41 | 5 / 1 | | | |
| reaction time | 0.157 | interval | | 3.67 | 3.76 | 3.80 | 4.03 | | 4.11 | 4.43 | 4.60 | 4.83 | 4.97 | 5.51 | | 11.23 | 12.57 | 14.40 |
| | | velocity | 7.89 | 9.54 | 9.31 | 9.21 | 8.68 | 8.83 | 8.52 | 7.90 | 7.61 | 7.25 | 7.04 | 7.26 | 8.10 | 9.35 | 8.35 | 7.29 |
| H1 lead leg | L | strides | 20 | 13 | 12 | 12 | 12 | | 12 | 13 | 13 | 14 | 14 | 16 | 151 | | | |

**FINAL** - 2022 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-22 | time | 5.66 | 9.24 | 12.80 | 16.42 | 20.18 | 21.78 | 24.08 | 28.22 | 32.48 | 36.84 | 41.40 | 46.80 | 6 / 1 | | | |
| reaction time | 0.147 | interval | | 3.58 | 3.56 | 3.62 | 3.76 | | 3.90 | 4.14 | 4.26 | 4.36 | 4.56 | 5.40 | | 10.76 | 11.80 | 13.18 |
| | | velocity | 7.95 | 9.78 | 9.83 | 9.67 | 9.31 | 9.18 | 8.97 | 8.45 | 8.22 | 8.03 | 7.68 | 7.41 | 8.55 | 9.76 | 8.90 | 7.97 |
| H1 lead leg | L | strides | 20 | 13 | 12 | 12 | 12 | | 12 | 13 | 13 | 13 | 13 | 16.7 | 149.7 | | | |

**FINAL** - 2022 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jun-22 | time | 5.74 | 9.42 | 13.16 | 16.92 | 20.82 | 22.56 | 24.96 | 29.20 | 33.42 | 37.76 | 42.16 | 47.26 | 7 / 1 | | | |
| reaction time | 0.184 | interval | | 3.68 | 3.74 | 3.76 | 3.90 | | 4.14 | 4.24 | 4.22 | 4.34 | 4.40 | 5.10 | | 11.18 | 12.28 | 12.96 |
| | | velocity | 7.84 | 9.51 | 9.36 | 9.31 | 8.97 | 8.87 | 8.45 | 8.25 | 8.29 | 8.06 | 7.95 | 7.84 | 8.46 | 9.39 | 8.55 | 8.10 |
| H1 lead leg | L | strides | 20 | 13 | 12 | 12 | 12 | | 12 | 13 | 13 | 13 | 13 | 16 | 149 | | | |

**FINAL** - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-22 | time | 5.75 | 9.36 | 13.00 | 16.73 | 20.56 | 22.33 | 24.54 | 28.70 | 32.93 | 37.53 | 42.00 | 47.23 | 7 / 1 | | | |
| reaction time | 0.194 | interval | | 3.61 | 3.64 | 3.73 | 3.83 | | 3.98 | 4.16 | 4.23 | 4.60 | 4.47 | 5.23 | | 10.98 | 11.97 | 13.30 |
| | | velocity | 7.83 | 9.70 | 9.62 | 9.38 | 9.14 | 8.96 | 8.79 | 8.41 | 8.27 | 7.61 | 7.83 | 7.65 | 8.47 | 9.56 | 8.77 | 7.89 |
| H1 lead leg | L | strides | 20 | 13 | 12 | 12 | 12 | | 12 | 13 | 13 | 14 | 13 | 16 | 150 | | | |

**FINAL** - 2022 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-May-22 | time | 5.70 | 9.37 | 13.11 | 17.12 | 21.20 | 22.9 | 25.36 | 29.44 | 33.63 | 37.83 | 42.14 | 47.24 | 7 / 1 | | | |
| reaction time | 0.172 | interval | | 3.67 | 3.74 | 4.01 | 4.08 | | 4.16 | 4.08 | 4.19 | 4.20 | 4.31 | 5.10 | | 11.42 | 12.32 | 12.70 |
| | | velocity | 7.89 | 9.54 | 9.36 | 8.73 | 8.58 | 8.73 | 8.41 | 8.58 | 8.35 | 8.33 | 8.12 | 7.84 | 8.47 | 9.19 | 8.52 | 8.27 |
| H1 lead leg | L | strides | 20 | 13 | 12 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | | 136 | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

**FINAL** - 2021 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Sep-21 | time | 5.80 | | 13.24 | 17.04 | 20.92 | 22.6 | 25.00 | 29.12 | 33.36 | 37.80 | 42.44 | | 47.81 | 6 / 2 | | | |
| reaction time | 0.181 | interval | | | 7.44 | 3.80 | 3.88 | | 4.08 | 4.12 | 4.24 | 4.44 | 4.64 | 5.37 | | | 11.24 | 12.08 | 13.32 |
| | | velocity | 7.76 | | 9.41 | 9.21 | 9.02 | 8.85 | 8.58 | 8.50 | 8.25 | 7.88 | 7.54 | 7.45 | 8.37 | | 9.34 | 8.69 | 7.88 |
| H1 lead leg | L | strides | 20 | | | 12 | 12 | | 13 | 13 | 13 | 13 | 14 | 16.5 | 126.5 | | | | |

**FINAL** - 2021 Memorial van Damme (Brussels, BEL) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Sep-21 | time | 5.84 | 9.52 | 13.32 | 17.16 | 21.24 | 23.0 | 25.44 | 29.60 | 33.80 | 38.28 | 42.92 | | 48.23 | 6 / 1 | | | |
| reaction time | 0.181 | interval | | 3.68 | 3.80 | 3.84 | 4.08 | | 4.20 | 4.16 | 4.20 | 4.48 | 4.64 | 5.31 | | | 11.32 | 12.44 | 13.32 |
| | | velocity | 7.71 | 9.51 | 9.21 | 9.11 | 8.58 | 8.70 | 8.33 | 8.41 | 8.33 | 7.81 | 7.54 | 7.53 | 8.29 | | 9.28 | 8.44 | 7.88 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 12 | 12 | | 13 | 13 | 13 | 13 | 13 | 16.5 | 151.5 | | | | |

**FINAL** - 2020 Olympic Games (Tokyo, JPN) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-21 | time | 5.76 | 9.36 | 13.08 | 16.76 | 20.60 | | 24.64 | 28.80 | 33.00 | 37.26 | 41.58 | | 46.72 | 7 / 3 | | | |
| reaction time | 0.156 | interval | | 3.60 | 3.72 | 3.68 | 3.84 | | 4.04 | 4.16 | 4.20 | 4.26 | 4.32 | 5.14 | **AR** | | 11.00 | 12.04 | 12.78 |
| | | velocity | 7.81 | 9.72 | 9.41 | 9.51 | 9.11 | | 8.66 | 8.41 | 8.33 | 8.22 | 8.10 | 7.78 | 8.56 | | 9.55 | 8.72 | 8.22 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 12 | 12 | | 13 | 13 | 13 | 14 | 13 | 16.2 | 152.2 | | | | |

**FINAL** - 2021 Herculis Meeting International d'Athletisme (Monaco, MON) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-21 | time | 5.70 | 9.31 | | 16.76 | 20.64 | 22.4 | 24.74 | 28.93 | 33.16 | 37.60 | 42.31 | | 47.51 | 6 / 2 | | | |
| reaction time | 0.177 | interval | | 3.61 | | 7.45 | 3.88 | | 4.10 | 4.19 | 4.23 | 4.44 | 4.71 | 5.20 | | | 11.06 | 12.17 | 13.38 |
| | | velocity | 7.89 | 9.70 | | 9.40 | 9.02 | 8.93 | 8.54 | 8.35 | 8.27 | 7.88 | 7.43 | 7.69 | 8.42 | | 9.49 | 8.63 | 7.85 |
| H1 lead leg | L | strides | 20 | 13 | 13 | | 12 | | 13 | 14 | | 15 | 15 | 16.5 | 131.5 | | | | |

**FINAL** - 2021 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jul-21 | time | 5.74 | 9.40 | 13.16 | 16.86 | 20.70 | 22.5 | 24.76 | 28.80 | 32.94 | 37.30 | 41.92 | | 47.34 | 7 / 1 | | | |
| reaction time | 0.160 | interval | | 3.66 | 3.76 | 3.70 | 3.84 | | 4.06 | 4.04 | 4.14 | 4.36 | 4.62 | 5.42 | **AR PB** | | 11.12 | 11.94 | 13.12 |
| | | velocity | 7.84 | 9.56 | 9.31 | 9.46 | 9.11 | 8.89 | 8.62 | 8.66 | 8.45 | 8.03 | 7.58 | 7.38 | 8.45 | | 9.44 | 8.79 | 8.00 |
| H1 lead leg | L | strides | | 13 | 13 | 12 | 12 | | 13 | 13 | 13 | 13 | 13 | 17 | 132 | | | | |

**FINAL** - 2021 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jul-21 | time | 5.74 | 9.36 | 13.12 | 16.92 | 20.78 | | 24.86 | 28.98 | 33.20 | 37.56 | 42.06 | | 47.38 | 6 / 2 | | | |
| reaction time | 0.179 | interval | | 3.62 | 3.76 | 3.80 | 3.86 | | 4.08 | 4.12 | 4.22 | 4.36 | 4.50 | 5.32 | **AR PB** | | 11.18 | 12.06 | 13.08 |
| | | velocity | 7.84 | 9.67 | 9.31 | 9.21 | 9.07 | | 8.58 | 8.50 | 8.29 | 8.03 | 7.78 | 7.52 | 8.44 | | 9.39 | 8.71 | 8.03 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 12 | 12 | | 13 | 13 | | 13 | 13 | 16.5 | 138.5 | | | | |

**FINAL** - 2021 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-21 | time | 5.70 | 9.37 | 13.18 | 17.05 | 20.95 | 22.7 | 25.12 | 29.33 | 33.60 | 37.94 | 42.34 | | 47.57 | 6 / 2 | | | |
| reaction time | 0.187 | interval | | 3.67 | 3.81 | 3.87 | 3.90 | | 4.17 | 4.21 | 4.27 | 4.34 | 4.40 | 5.23 | **AR PB** | | 11.35 | 12.28 | 13.01 |
| | | velocity | 7.89 | 9.54 | 9.19 | 9.04 | 8.97 | 8.81 | 8.39 | 8.31 | 8.20 | 8.06 | 7.95 | 7.65 | 8.41 | | 9.25 | 8.55 | 8.07 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 12 | 12 | | 13 | 13 | 13 | 13 | 13 | 16.2 | 151.2 | | | | |

**FINAL** - 2021 USATF Golden Games (Walnut, CA) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-May-21 | time | 6.04 | 9.71 | 13.51 | 17.45 | 21.42 | | 25.56 | 29.73 | 34.03 | 38.40 | 42.77 | | 47.68 | 4 / 3 | | | |
| reaction time | | interval | | 3.67 | 3.80 | 3.94 | 3.97 | | 4.14 | 4.17 | 4.30 | 4.37 | 4.37 | 4.91 | **AR PB** | | 11.41 | 12.28 | 13.04 |
| | | velocity | 7.45 | 9.54 | 9.21 | 8.88 | 8.82 | | 8.45 | 8.39 | 8.14 | 8.01 | 8.01 | 8.15 | 8.39 | | 9.20 | 8.55 | 8.05 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 12 | 12 | | 13 | 13 | 13 | 13 | 13 | 16.2 | 151.2 | | | | |

**FINAL** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Sep-19 | time | 6.07 | 9.89 | 13.77 | 17.60 | 21.54 | | 25.55 | 29.73 | 33.96 | 38.39 | 42.99 | | 48.28 | 5 / 7 | | | |
| reaction time | 0.208 | interval | | 3.82 | 3.88 | 3.83 | 3.94 | | 4.01 | 4.18 | 4.23 | 4.43 | 4.60 | 5.29 | **AJR PB** | | 11.53 | 12.13 | 13.26 |
| | | velocity | 7.41 | 9.16 | 9.02 | 9.14 | 8.88 | | 8.73 | 8.37 | 8.27 | 7.90 | 7.61 | 7.56 | 8.29 | | 9.11 | 8.66 | 7.92 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 12 | 12 | | 13 | 13 | 13 | 14 | 14 | 16 | 153 | | | | |

**Semi-Final 1** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 6.12 | 9.84 | 13.68 | 17.51 | 21.49 | | 25.56 | 29.76 | 34.13 | 38.65 | 43.25 | | 48.35 | 6 / 1 | | | |
| reaction time | 0.211 | interval | | 3.72 | 3.84 | 3.83 | 3.98 | | 4.07 | 4.20 | 4.37 | 4.52 | 4.60 | 5.10 | **AJR PB** | | 11.39 | 12.25 | 13.49 |
| | | velocity | 7.35 | 9.41 | 9.11 | 9.14 | 8.79 | | 8.60 | 8.33 | 8.01 | 7.74 | 7.61 | 7.84 | 8.27 | | 9.22 | 8.57 | 7.78 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 12 | | 12 | 13 | 13 | 14 | 14 | 16.5 | 153.5 | | | | |

**FINAL** - 2019 Müller Grand Prix (Birmingham, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-19 | time | 5.96 | 9.92 | 13.80 | 17.80 | 21.80 | 23.6 | 25.92 | 30.24 | 34.72 | 39.36 | 43.88 | | 49.20 | 4 / 2 | | | |
| reaction time | 0.152 | interval | | 3.96 | 3.88 | 4.00 | 4.00 | | 4.12 | 4.32 | 4.48 | 4.64 | 4.52 | 5.32 | | | 11.84 | 12.44 | 13.64 |
| | | velocity | 7.55 | 8.84 | 9.02 | 8.75 | 8.75 | 8.47 | 8.50 | 8.10 | 7.81 | 7.54 | 7.74 | 7.52 | 8.13 | | 8.87 | 8.44 | 7.70 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17 | 157 | | | | |

**FINAL** - 2019 Pan American Games (Lima, PER) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Aug-19 | time | 5.90 | 9.67 | 13.51 | 17.45 | | | 25.36 | 29.52 | 33.82 | 38.23 | 42.97 | | 48.45 | 5 / 1 | | | |
| reaction time | 0.160 | interval | | 3.77 | 3.84 | 3.94 | | | 7.91 | 4.16 | 4.30 | 4.41 | 4.74 | 5.48 | **AJR PB** | | 11.55 | 12.07 | 13.45 |
| | | velocity | 7.63 | 9.28 | 9.11 | 8.88 | | | 8.85 | 8.41 | 8.14 | 7.94 | 7.38 | 7.30 | 8.26 | | 9.09 | 8.70 | 7.81 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | | | | 13 | 13 | 13 | 14 | 17 | 129 | | | | |

| **Douglas, Matthew (GBR) (1976)** | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Semi-Final 3** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Sep-00 | time | 5.86 | 9.50 | 13.22 | 16.98 | 20.90 | 22.50 | 24.98 | 29.34 | 33.86 | 38.62 | 43.20 | | 49.53 | 8 / 6 | | | |
| reaction time | 0.177 | interval | | 3.64 | 3.72 | 3.76 | 3.92 | | 4.08 | 4.36 | 4.52 | 4.76 | 4.58 | 6.33 | | | 11.12 | 12.36 | 13.86 |
| | | velocity | 7.68 | 9.62 | 9.41 | 9.31 | 8.93 | 8.89 | 8.58 | 8.03 | 7.74 | 7.35 | 7.64 | 6.32 | 8.08 | | 9.44 | 8.50 | 7.58 |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 19.5 | 165.5 | | | | |

**Heat 7** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.96 | 9.64 | 13.56 | 17.48 | 21.52 | | 25.80 | 30.20 | 34.60 | 39.28 | 44.04 | | 49.62 | 8 / 3 | | | |
| reaction time | 0.163 | interval | | 3.68 | 3.92 | 3.92 | 4.04 | | 4.28 | 4.40 | 4.40 | 4.68 | 4.76 | 5.58 | | | 11.52 | 12.72 | 13.84 |
| | | velocity | 7.55 | 9.51 | 8.93 | 8.93 | 8.66 | | 8.18 | 7.95 | 7.95 | 7.48 | 7.35 | 7.17 | 8.06 | | 9.11 | 8.25 | 7.59 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.8 | 164.8 | | | | |

**Downing, Quincy (USA) (1993)**

**FINAL** - 2022 USATF National Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
| date | 26-Jun-22 | time | 5.97 | 9.61 | 13.25 | 17.05 | 20.95 | 22.61 | 25.05 | 29.53 | 34.13 | 39.04 | 44.04 | | 50.09 | 3 / 8 | | | |
| reaction time | | interval | | 3.64 | 3.64 | 3.80 | 3.90 | | 4.10 | 4.48 | 4.60 | 4.91 | 5.00 | 6.05 | | | 11.08 | 12.48 | 14.51 |
| | | velocity | 7.54 | 9.62 | 9.62 | 9.21 | 8.97 | 8.85 | 8.54 | 7.81 | 7.61 | 7.13 | 7.00 | 6.61 | 7.99 | | 9.48 | 8.41 | 7.24 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 144 | | | | |

**FINAL** - 2017 Müller's Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-17 | time | 5.96 | 9.76 | 13.48 | 17.28 | 21.16 | | 25.16 | 29.52 | 34.04 | 38.64 | 43.40 | | 48.81 | 2 / 7 | | | |
| reaction time | 0.144 | interval | | 3.80 | 3.72 | 3.80 | 3.88 | | 4.00 | 4.36 | 4.52 | 4.60 | 4.76 | 5.41 | | | 11.32 | 12.24 | 13.88 |
| | | velocity | 7.55 | 9.21 | 9.41 | 9.21 | 9.02 | | 8.75 | 8.03 | 7.74 | 7.61 | 7.35 | 7.39 | 8.20 | | 9.28 | 8.58 | 7.56 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 17.5 | 160.5 | | | | |

**FINAL** - 2017 USATF Championships (Sacramento, CA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jun-17 | time | 5.89 | 9.55 | 13.20 | 16.93 | 20.82 | | | 29.17 | 33.62 | 38.24 | 43.07 | | 48.70 | 7 / 6 | | | |
| reaction time | | interval | | 3.66 | 3.65 | 3.73 | 3.89 | | | 8.35 | 4.45 | 4.62 | 4.83 | 5.63 | | | 11.04 | 12.24 | 13.90 |
| | | velocity | 7.64 | 9.56 | 9.59 | 9.38 | 9.00 | | | 8.38 | 7.87 | 7.58 | 7.25 | 7.10 | 8.21 | | 9.51 | 8.58 | 7.55 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | | | 14 | 14 | 15 | 17.7 | 133.7 | | | | |

**FINAL** - 2016 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-16 | time | 5.97 | 9.74 | 13.61 | 17.42 | 21.39 | | 25.49 | 29.86 | 34.33 | 39.10 | 43.91 | | 49.60 | 3 / ~~7~~ 6 | | | |
| reaction time | 0.196 | interval | | 3.77 | 3.87 | 3.81 | 3.97 | | 4.10 | 4.37 | 4.47 | 4.77 | 4.81 | 5.69 | | | 11.45 | 12.44 | 14.05 |
| | | velocity | 7.54 | 9.28 | 9.04 | 9.19 | 8.82 | | 8.54 | 8.01 | 7.83 | 7.34 | 7.28 | 7.03 | 8.06 | | 9.17 | 8.44 | 7.47 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |

**Drummond, Gerald (CRC) (1994)**

**Semi-Final 3** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
| date | 21-Aug-23 | time | 5.93 | 9.81 | | 17.48 | 21.59 | | | 30.39 | 34.86 | | 44.24 | | 49.31 | 4 / 8 | | | |
| reaction time | 0.169 | interval | | 3.88 | | 7.67 | 4.11 | | | 8.80 | 4.47 | | 9.38 | 5.07 | | | 11.55 | 12.91 | 13.85 |
| | | velocity | 7.59 | 9.02 | | 9.13 | 8.52 | | | 7.95 | 7.83 | | 7.46 | 7.89 | 8.11 | | 9.09 | 8.13 | 7.58 |
| H1 lead leg | L | strides | 21 | 14 | | | 14 | | | | 16 | | | 18 | 83 | | | | |

**Heat 5** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 5.86 | 9.76 | 13.63 | 17.60 | 21.58 | | 25.74 | 30.03 | 34.46 | | 43.60 | | 48.73 | 8 / 4 | | | |
| reaction time | 0.220 | interval | | 3.90 | 3.87 | 3.97 | 3.98 | | 4.16 | 4.29 | 4.43 | | 9.14 | 5.13 | | | 11.74 | 12.43 | 13.57 |
| | | velocity | 7.68 | 8.97 | 9.04 | 8.82 | 8.79 | | 8.41 | 8.16 | 7.90 | | 7.66 | 7.80 | 8.21 | | 8.94 | 8.45 | 7.74 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | | | 18 | 138 | | | | |

**Semi-Final 2** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.90 | 9.70 | 13.66 | 17.63 | 21.83 | 23.64 | 26.23 | 30.67 | 35.10 | 39.67 | 44.30 | | 49.37 | 6 / 7 | | | |
| reaction time | 0.188 | interval | | 3.80 | 3.96 | 3.97 | 4.20 | | 4.40 | 4.44 | 4.43 | 4.57 | 4.63 | 5.07 | | | 11.73 | 13.04 | 13.63 |
| | | velocity | 7.63 | 9.21 | 8.84 | 8.82 | 8.33 | 8.46 | 7.95 | 7.88 | 7.90 | 7.66 | 7.56 | 7.89 | 8.10 | | 8.95 | 8.05 | 7.70 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18 | 171 | | | | |

**Heat 4** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 6.07 | 9.95 | 13.90 | 17.90 | 22.13 | 23.84 | | 30.77 | | 39.70 | 44.27 | | 49.16 | 2 / 3 | | | |
| reaction time | 0.195 | interval | | 3.88 | 3.95 | 4.00 | 4.23 | | | 8.64 | | 8.93 | 4.57 | 4.89 | NR | | 11.83 | 12.87 | 13.50 |
| | | velocity | 7.41 | 9.02 | 8.86 | 8.75 | 8.27 | 8.39 | | 8.10 | | 7.84 | 7.66 | 8.18 | 8.14 | | 8.88 | 8.16 | 7.78 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | | | | 15 | 15 | 17.5 | 125.5 | | | | |

**Du Yuanpeng (CHN) (2000)**

**Heat 3** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
| date | 25-Apr-21 | time | 6.61 | 10.76 | 15.03 | 19.42 | 24.02 | | 28.74 | 33.72 | 38.75 | 44.08 | 49.72 | | 55.53 | 4 / 4 | | | |
| reaction time | 0.225 | interval | | 4.15 | 4.27 | 4.39 | 4.60 | | 4.72 | 4.98 | 5.03 | 5.33 | 5.64 | 5.81 | | | 12.81 | 14.30 | 16.00 |
| | | velocity | 6.81 | 8.43 | 8.20 | 7.97 | 7.61 | | 7.42 | 7.03 | 6.96 | 6.57 | 6.21 | 6.88 | 7.20 | | 8.20 | 7.34 | 6.56 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 16 | 17 | 18.5 | 174.5 | | | | |

**Dudley, Eric (USA) (1980)**

**Heat 2** - 2007 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2007)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
| date | 21-Jun-07 | time | 6.11 | 9.91 | 13.89 | 17.92 | 22.05 | | 26.36 | 30.74 | 35.22 | 39.91 | 44.43 | | 49.58 | 7 / 4 | | | |
| reaction time | | interval | | 3.80 | 3.98 | 4.03 | 4.13 | | 4.31 | 4.38 | 4.48 | 4.69 | 4.52 | 5.15 | PB | | 11.81 | 12.82 | 13.69 |
| | | velocity | 7.36 | 9.21 | 8.79 | 8.68 | 8.47 | | 8.12 | 7.99 | 7.81 | 7.46 | 7.74 | 7.77 | 8.07 | | 8.89 | 8.19 | 7.67 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | | 142 | | | | |

**Duma, Christian (GER) (1982)**

**FINAL** - 2002 IAAF World Cup (Madrid, ESP) *Sanchez (2002) - copa del mundo de Madrid '02: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
| date | 20-Sep-02 | time | 5.91 | 9.73 | 13.65 | 17.65 | 21.83 | | 26.18 | 30.69 | 35.33 | 40.06 | 44.99 | | 50.57 | 5 / 8 | | | |
| reaction time | 0.148 | interval | | 3.82 | 3.92 | 4.00 | 4.18 | | 4.35 | 4.51 | 4.64 | 4.73 | 4.93 | 5.58 | | | 11.74 | 13.04 | 14.30 |
| | | velocity | 7.61 | 9.16 | 8.93 | 8.75 | 8.37 | | 8.05 | 7.76 | 7.54 | 7.40 | 7.10 | 7.17 | 7.91 | | 8.94 | 8.05 | 7.34 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 16 | 19.5 | 172.5 | | | | |

**Heat 3** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Aug-02 | time | 6.03 | 9.97 | 13.90 | 17.86 | 21.98 | | 26.21 | 30.64 | 36.34 | 40.16 | 45.02 | | 50.50 | / 6 | | | |
| reaction time | | interval | | 3.94 | 3.93 | 3.96 | 4.12 | | 4.23 | 4.43 | 5.70 | 3.82 | 4.86 | 5.48 | | | 11.83 | 12.78 | 14.38 |
| | | velocity | 7.46 | 8.88 | 8.91 | 8.84 | 8.50 | | 8.27 | 7.90 | 6.14 | 9.16 | 7.20 | 7.30 | 7.92 | | 8.88 | 8.22 | 7.30 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Dutch, Johnny (USA) (1989)**

**FINAL** - 2017 USATF Championships (Sacramento, CA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jun-17 | time | 5.96 | 9.62 | 13.41 | 17.20 | 21.20 | | 25.31 | 29.51 | 33.79 | 38.27 | 43.00 | | 48.60 | 3 / 5 | | | |
| reaction time | | interval | | 3.66 | 3.79 | 3.79 | 4.00 | | 4.11 | 4.20 | 4.28 | 4.48 | 4.73 | 5.60 | | | 11.24 | 12.31 | 13.49 |
| | | velocity | 7.55 | 9.56 | 9.23 | 9.23 | 8.75 | | 8.52 | 8.33 | 8.18 | 7.81 | 7.40 | 7.14 | 8.23 | | 9.34 | 8.53 | 7.78 |
| H1 lead leg | R | strides | 22 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 19 | 166 | | | | |

**FINAL** - 2016 London Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jul-16 | time | 5.84 | 9.60 | 13.56 | 17.60 | 21.80 | | 26.08 | 30.40 | 34.80 | 39.24 | 43.92 | | 49.60 | 5 / 7 | | | |
| reaction time | 0.193 | interval | | 3.76 | 3.96 | 4.04 | 4.20 | | 4.28 | 4.32 | 4.40 | 4.44 | 4.68 | 5.68 | | | 11.76 | 12.80 | 13.52 |
| | | velocity | 7.71 | 9.31 | 8.84 | 8.66 | 8.33 | | 8.18 | 8.10 | 7.95 | 7.88 | 7.48 | 7.04 | 8.06 | | 8.93 | 8.20 | 7.77 |
| H1 lead leg | R | strides | 22 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 165.5 | | | | |

**FINAL** - 2016 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-16 | time | 5.90 | 9.51 | 13.24 | 17.08 | 20.99 | | 24.99 | 29.13 | 33.47 | 38.04 | 42.87 | | 48.92 | 5 / 5 | | | |
| reaction time | 0.227 | interval | | 3.61 | 3.73 | 3.84 | 3.91 | | 4.00 | 4.14 | 4.34 | 4.57 | 4.83 | 6.05 | | | 11.18 | 12.05 | 13.74 |
| | | velocity | 7.63 | 9.70 | 9.38 | 9.11 | 8.95 | | 8.75 | 8.45 | 8.06 | 7.66 | 7.25 | 6.61 | 8.18 | | 9.39 | 8.71 | 7.64 |
| H1 lead leg | R | strides | 22 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 19.7 | 166.7 | | | | |

**FINAL** - 2016 Racers Grand Prix (Kingston, JAM) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-16 | time | 5.67 | 9.33 | 13.13 | 17.03 | 21.10 | | 25.27 | 29.43 | 33.77 | 38.17 | 42.70 | | 48.10 | 5 / 1 | | | |
| reaction time | | interval | | 3.66 | 3.80 | 3.90 | 4.07 | | 4.17 | 4.16 | 4.34 | 4.40 | 4.53 | 5.40 | | | 11.36 | 12.40 | 13.27 |
| | | velocity | 7.94 | 9.56 | 9.21 | 8.97 | 8.60 | | 8.39 | 8.41 | 8.06 | 7.95 | 7.73 | 7.41 | 8.32 | | 9.24 | 8.47 | 7.91 |
| H1 lead leg | R | strides | 22 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.2 | 165.2 | | | | |

**Heat 1** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-09 | time | 5.95 | 9.65 | 13.50 | 17.39 | 21.43 | | 25.66 | 29.93 | 34.35 | 38.91 | 43.67 | | 49.38 | 6 / 3 | | | |
| reaction time | 0.165 | interval | | 3.70 | 3.85 | 3.89 | 4.04 | | 4.23 | 4.27 | 4.42 | 4.56 | 4.76 | 5.71 | | | 11.44 | 12.54 | 13.74 |
| | | velocity | 7.56 | 9.46 | 9.09 | 9.00 | 8.66 | | 8.27 | 8.20 | 7.92 | 7.68 | 7.35 | 7.01 | 8.10 | | 9.18 | 8.37 | 7.64 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2008 USA Olympic Trials (Eugene, OR) *USATF Hurdle Development (2008)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jun-08 | time | 6.03 | 9.82 | 13.66 | 17.71 | 21.85 | | 26.10 | 30.34 | 34.66 | 38.97 | 43.37 | | 48.52 | 7 / 5 | | | |
| reaction time | | interval | | 3.79 | 3.84 | 4.05 | 4.14 | | 4.25 | 4.24 | 4.32 | 4.31 | 4.40 | 5.15 | PB | | 11.68 | 12.63 | 13.03 |
| | | velocity | 7.46 | 9.23 | 9.11 | 8.64 | 8.45 | | 8.24 | 8.25 | 8.10 | 8.12 | 7.95 | 7.77 | 8.24 | | 8.99 | 8.31 | 8.06 |
| H1 lead leg | R | strides | 22 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 147 | | | | |

**Duvigneau, Dominique (FRA) (1960)**

**FINAL** - 1987 French National Championships (Annecy, FRA) *Veney - split times from PJ*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-87 | time | 6.09 | 10.11 | 14.19 | 18.38 | 22.55 | | 26.92 | 31.37 | 36.03 | 40.70 | 45.42 | | 50.92 | / 3 | | | |
| reaction time | | interval | | 4.02 | 4.08 | 4.19 | 4.17 | | 4.37 | 4.45 | 4.66 | 4.67 | 4.72 | 5.50 | | | 12.29 | 12.99 | 14.05 |
| | | velocity | 7.39 | 8.71 | 8.58 | 8.35 | 8.39 | | 8.01 | 7.87 | 7.51 | 7.49 | 7.42 | 7.27 | 7.86 | | 8.54 | 8.08 | 7.47 |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | | 151 | | | | |

**Dyrzka, Juan Carlos (ARG) (1941)**

**Heat 2** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) *Jonath (1969) - wie gerhard hennige trainiert*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Oct-68 | time | 6.1 | 10.0 | 14.0 | 17.9 | 21.9 | 23.6 | 26.1 | 30.5 | 35.0 | 39.5 | 44.2 | | 49.8 | / 1 | | | |
| reaction time | | interval | | 3.90 | 4.00 | 3.90 | 4.00 | | 4.20 | 4.40 | 4.50 | 4.50 | 4.70 | 5.60 | NR | | 11.80 | 12.60 | 13.70 |
| | | velocity | 7.38 | 8.97 | 8.75 | 8.97 | 8.75 | 8.47 | 8.33 | 7.95 | 7.78 | 7.78 | 7.45 | 7.14 | 8.03 | *(49.82)* | 8.90 | 8.33 | 7.66 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Dzhivondov, Ilya (BUL) (1978)**

**Heat 5** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.08 | 9.88 | 13.80 | 17.80 | 22.00 | | 26.36 | 30.92 | 35.88 | | | | 54.36 | 8 / 8 | | | |
| reaction time | 0.279 | interval | | 3.80 | 3.92 | 4.00 | 4.20 | | 4.36 | 4.56 | 4.96 | | | | | | 11.72 | 13.12 | |
| | | velocity | 7.40 | 9.21 | 8.93 | 8.75 | 8.33 | | 8.03 | 7.68 | 7.06 | | | | 7.36 | | 8.96 | 8.00 | |
| H1 lead leg | | strides | 22 | 13 | 13 | 13 | 14 | | 14 | 15 | 15 | | | | 119 | | | | |

**Edlund, Oskar (SWE) (2002)**

**FINAL** - 2023 Bauhaus Galan (Stockholm, SWE) *Omega Timing (2023) - diamond league race analysis*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Jul-23 | time | 5.97 | 9.80 | 13.73 | 17.69 | 21.72 | | 25.95 | 30.42 | 35.04 | 39.80 | 44.57 | | 50.35 | 1 / 7 | | | |
| reaction time | 0.177 | interval | | 3.83 | 3.93 | 3.96 | 4.03 | | 4.23 | 4.47 | 4.62 | 4.76 | 4.77 | 5.78 | | | 11.72 | 12.73 | 14.15 |
| | | velocity | 7.54 | 9.14 | 8.91 | 8.84 | 8.68 | | 8.27 | 7.83 | 7.58 | 7.35 | 7.34 | 6.92 | 7.94 | | 8.96 | 8.25 | 7.42 |
| H1 lead leg | L | strides | 21 | 13 | | 13 | 13 | | 13 | | | 15 | 15 | | 103 | | | | |

**Ehrle, Klaus (AUT) (1966)**

**Semi-Final 1** - 1988 Olympic Games (Seoul, KOR) *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-88 | time | 6.16 | 10.00 | 13.92 | 17.93 | 22.01 | | 26.25 | 30.74 | 35.46 | 40.44 | 45.52 | | 51.04 | 2 / 7 | | | |
| reaction time | | interval | | 3.84 | 3.92 | 4.01 | 4.08 | | 4.24 | 4.49 | 4.72 | 4.98 | 5.08 | 5.52 | | | 11.77 | 12.81 | 14.78 |
| | | velocity | 7.31 | 9.11 | 8.93 | 8.73 | 8.58 | | 8.25 | 7.80 | 7.42 | 7.03 | 6.89 | 7.25 | 7.84 | | 8.92 | 8.20 | 7.10 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18 | 164 | | | | |

**Ehrnsprenger, Klaus (GER) (1973)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1997 European Cup (Munich, GER) | | | | | | | | | | | | | | | | *Jung (2003) - http://www.fgs.uni-halle.de* | | | |
| date | 21-Jun-97 | time | 6.56 | 10.77 | 15.15 | 19.62 | 24.23 | | 28.92 | 33.77 | 38.71 | 43.99 | 49.46 | | 55.13 | / 8 | | | |
| reaction time | | interval | | 4.21 | 4.38 | 4.47 | 4.61 | | 4.69 | 4.85 | 4.94 | 5.28 | 5.47 | 5.67 | | | 13.06 | 14.15 | 15.69 |
| | | velocity | 6.86 | 8.31 | 7.99 | 7.83 | 7.59 | | 7.46 | 7.22 | 7.09 | 6.63 | 6.40 | 7.05 | 7.26 | | 8.04 | 7.42 | 6.69 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Elliott, Cass (USA) (2000)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2023 NCAA Championships (Austin, TX) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | |
| date | 09-Jun-23 | time | 6.14 | 9.89 | 13.80 | 17.76 | 21.89 | | | 30.43 | 34.88 | 39.39 | 44.01 | | 49.21 | 2 / 7 | | | |
| reaction time | | interval | | 3.75 | 3.91 | 3.96 | 4.13 | | | 8.54 | 4.45 | 4.51 | 4.62 | 5.20 | | | 11.62 | 12.67 | 13.58 |
| | | velocity | 7.33 | 9.33 | 8.95 | 8.84 | 8.47 | | | 8.20 | 7.87 | 7.76 | 7.58 | 7.69 | 8.13 | | 9.04 | 8.29 | 7.73 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | | | 15 | 15 | 16 | 18.5 | 141.5 | | | | |

**Faye, Ibou (SEN) (1969)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 3** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 24-Sep-00 | time | 6.02 | 9.74 | 13.62 | 17.58 | 21.66 | | 25.90 | 30.38 | 34.90 | 39.62 | 44.46 | | 50.09 | 4 / 3 | | | |
| reaction time | 0.188 | interval | | 3.72 | 3.88 | 3.96 | 4.08 | | 4.24 | 4.48 | 4.52 | 4.72 | 4.84 | 5.63 | | | 11.56 | 12.80 | 14.08 |
| | | velocity | 7.48 | 9.41 | 9.02 | 8.84 | 8.58 | | 8.25 | 7.81 | 7.74 | 7.42 | 7.23 | 7.10 | 7.99 | | 9.08 | 8.20 | 7.46 |
| H1 lead leg | | strides | 22 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 163 | | | | |

**Feng Zhiqiang (CHN) (1998)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 2** - 2021 Chinese National Championships (Chongqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 26-Jun-21 | time | 6.29 | 10.22 | 14.23 | 18.38 | 22.72 | | 27.21 | 32.05 | 36.80 | 41.62 | 46.48 | | 52.24 | 3 / 3 | | | |
| reaction time | 0.268 | interval | | 3.93 | 4.01 | 4.15 | 4.34 | | 4.49 | 4.84 | 4.75 | 4.82 | 4.86 | 5.76 | | | 12.09 | 13.67 | 14.43 |
| | | velocity | 7.15 | 8.91 | 8.73 | 8.43 | 8.06 | | 7.80 | 7.23 | 7.37 | 7.26 | 7.20 | 6.94 | 7.66 | | 8.68 | 7.68 | 7.28 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |
| **FINAL** - 2020 Chinese National Championships (Shaoxing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2020)* | | | |
| date | 17-Sep-20 | time | 5.92 | 9.64 | 13.58 | 17.62 | 21.79 | | 26.16 | 30.50 | 35.17 | 39.96 | 44.87 | | 50.43 | 6 / 1 | | | |
| reaction time | | interval | | 3.72 | 3.94 | 4.04 | 4.17 | | 4.37 | 4.34 | 4.67 | 4.79 | 4.91 | 5.56 | | | 11.70 | 12.88 | 14.37 |
| | | velocity | 7.60 | 9.41 | 8.88 | 8.66 | 8.39 | | 8.01 | 8.06 | 7.49 | 7.31 | 7.13 | 7.19 | 7.93 | | 8.97 | 8.15 | 7.31 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 15 | 17 | 158 | | | | |
| **FINAL** - 2019 Nanjing World Challenge (Nanjing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 21-May-19 | time | 6.20 | 10.06 | 13.96 | 17.93 | 22.10 | | 26.46 | 31.10 | | 40.56 | 45.40 | | 50.72 | 2 / 7 | | | |
| reaction time | | interval | | 3.86 | 3.90 | 3.97 | 4.17 | | 4.36 | 4.64 | | 9.46 | 4.84 | 5.32 | | | 11.73 | 13.17 | 14.30 |
| | | velocity | 7.26 | 9.07 | 8.97 | 8.82 | 8.39 | | 8.03 | 7.54 | | 7.40 | 7.23 | 7.52 | 7.89 | | 8.95 | 7.97 | 7.34 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | | | | 17.2 | 96.2 | | | | |
| **FINAL** - 2019 Shanghai Diamond League (Shanghai, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 18-May-19 | time | 6.20 | 10.12 | 14.19 | 18.29 | 22.63 | 24.4 | 27.19 | 31.93 | 36.70 | 41.70 | 46.63 | | 52.11 | 2 / 8 | | | |
| reaction time | 0.195 | interval | | 3.92 | 4.07 | 4.10 | 4.34 | | 4.56 | 4.74 | 4.77 | 5.00 | 4.93 | 5.48 | | | 12.09 | 13.64 | 14.70 |
| | | velocity | 7.26 | 8.93 | 8.60 | 8.54 | 8.06 | 8.20 | 7.68 | 7.38 | 7.34 | 7.00 | 7.10 | 7.30 | 7.68 | | 8.68 | 7.70 | 7.14 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 17 | 161 | | | | |
| **Heat 2** - 2019 Asian Athletics Championships (Doha, QAT) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 21-Apr-19 | time | 5.99 | 9.91 | 13.83 | 17.88 | 22.10 | | 26.51 | 31.09 | 35.68 | 40.36 | 45.15 | | 50.71 | 7 / 6 | | | |
| reaction time | 0.199 | interval | | 3.92 | 3.92 | 4.05 | 4.22 | | 4.41 | 4.58 | 4.59 | 4.68 | 4.79 | 5.56 | | | 11.89 | 13.21 | 14.06 |
| | | velocity | 7.51 | 8.93 | 8.93 | 8.64 | 8.29 | | 7.94 | 7.64 | 7.63 | 7.48 | 7.31 | 7.19 | 7.89 | | 8.83 | 7.95 | 7.47 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 17.5 | 160.5 | | | | |
| **FINAL** - 2017 Chinese National Games (Tianjin, CHN) | | | | | | | | | | | | | | | | *Zhou (2020) - analysis of competetive performance charactersitics of outstanding men's 400m hurdlers* | | | |
| date | 04-Sep-17 | time | 5.7 | 9.6 | 13.5 | 17.3 | 21.6 | | 26.0 | 30.3 | 34.8 | 39.5 | 44.1 | | 49.66 | / 1 | | | |
| reaction time | | interval | | 3.90 | 3.90 | 3.80 | 4.30 | | 4.40 | 4.30 | 4.50 | 4.70 | 4.60 | 5.56 | **PB** | | 11.60 | 13.00 | 13.80 |
| | | velocity | 7.89 | 8.97 | 8.97 | 9.21 | 8.14 | | 7.95 | 8.14 | 7.78 | 7.45 | 7.61 | 7.19 | 8.05 | | 9.05 | 8.08 | 7.61 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 15 | 15 | 15 | 15 | 18 | 165 | | | | |

**Ferguson, Kenneth (USA) (1984)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2007 IAAF World Athletics Final (Stuttgart, GER) | | | | | | | | | | | | | | | | *Graubner (2007) - http://www.fgs.uni-halle.de* | | | |
| date | 22-Sep-07 | time | 6.14 | 9.62 | 13.42 | 17.39 | 21.58 | | 25.93 | 30.36 | 34.86 | 39.39 | 44.04 | | 49.45 | 7 / 6 | | | |
| reaction time | 0.153 | interval | | 3.48 | 3.80 | 3.97 | 4.19 | | 4.35 | 4.43 | 4.50 | 4.53 | 4.65 | 5.41 | | | 11.25 | 12.97 | 13.68 |
| | | velocity | 7.33 | 10.06 | 9.21 | 8.82 | 8.35 | | 8.05 | 7.90 | 7.78 | 7.73 | 7.53 | 7.39 | 8.09 | | 9.33 | 8.10 | 7.68 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **Heat 4** - 2007 USATF National Championships (Indianapolis, IN) | | | | | | | | | | | | | | | | *USATF Men's Hurdle Development (2007)* | | | |
| date | 21-Jun-07 | time | 6.11 | 9.79 | 13.60 | 17.57 | 21.72 | | 26.21 | 30.85 | 35.45 | 39.84 | 44.29 | | 49.31 | 5 / 1 | | | |
| reaction time | | interval | | 3.68 | 3.81 | 3.97 | 4.15 | | 4.49 | 4.64 | 4.60 | 4.39 | 4.45 | 5.02 | | | 11.46 | 13.28 | 13.44 |
| | | velocity | 7.36 | 9.51 | 9.19 | 8.82 | 8.43 | | 7.80 | 7.54 | 7.61 | 7.97 | 7.87 | 7.97 | 8.11 | | 9.16 | 7.91 | 7.81 |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | | 15 | 15 | 15 | 15 | 15 | | 149 | | | | |
| **FINAL** - 2006 USATF National Championships (Indianapolis, IN) | | | | | | | | | | | | | | | | *USATF Men's Hurdle Development (2006)* | | | |
| date | 24-Jun-06 | time | 5.86 | 9.61 | 13.46 | 17.35 | 21.41 | | 25.66 | 30.03 | 34.60 | 39.34 | 44.56 | | 50.76 | 1 / 7 | | | |
| reaction time | | interval | | 3.75 | 3.85 | 3.89 | 4.06 | | 4.25 | 4.37 | 4.57 | 4.74 | 5.22 | 6.20 | | | 11.49 | 12.68 | 14.53 |
| | | velocity | 7.68 | 9.33 | 9.09 | 9.00 | 8.62 | | 8.24 | 8.01 | 7.66 | 7.38 | 6.70 | 6.45 | 7.88 | | 9.14 | 8.28 | 7.23 |
| H1 lead leg | L | strides | 22 | 13 | 15 | 13 | 13 | | 15 | 15 | 15 | 15 | 15 | | 151 | | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

**FINAL** - 2003 USATF National Junior Championships (Palo Alto, CA) *USATF Women's Sprint Development (2003)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Jun-03 | time | 6.34 | 10.39 | 14.51 | 18.73 | 23.14 | 27.36 | 31.39 | 35.60 | 39.96 | 44.68 | 50.70 | 7 / 1 | | | | | |
| reaction time | | interval | | 4.05 | 4.12 | 4.22 | 4.41 | 4.22 | 4.03 | 4.21 | 4.36 | 4.72 | 6.02 | | 12.39 | 12.66 | 13.29 | | |
| | | velocity | 7.10 | 8.64 | 8.50 | 8.29 | 7.94 | 8.29 | 8.68 | 8.31 | 8.03 | 7.42 | 6.64 | 7.89 | 8.47 | 8.29 | 7.90 | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Fernández, Sérgio (ESP) (1993)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2016 Athletissime (Laussane, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-16 | time | 5.96 | 9.80 | 13.73 | 17.70 | 21.76 | 25.93 | 30.26 | 34.73 | 39.26 | 43.80 | 49.22 | 3 / 3 | | | | | |
| reaction time | 0.146 | interval | | 3.84 | 3.93 | 3.97 | 4.06 | 4.17 | 4.33 | 4.47 | 4.53 | 4.54 | 5.42 | | 11.74 | 12.56 | 13.54 | | |
| | | velocity | 7.55 | 9.11 | 8.91 | 8.82 | 8.62 | 8.39 | 8.08 | 7.83 | 7.73 | 7.71 | 7.38 | 8.13 | 8.94 | 8.36 | 7.75 | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17 | 158 | | | | | |

**FINAL** - 2016 European Championships (Amsterdam, NED) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Jul-16 | time | 6.04 | 9.88 | 13.84 | 17.96 | 22.04 | 26.16 | 30.28 | 34.68 | 39.20 | 43.84 | 49.06 | 5 / 2 | | | | | |
| reaction time | 0.138 | interval | | 3.84 | 3.96 | 4.12 | 4.08 | 4.12 | 4.12 | 4.40 | 4.52 | 4.64 | 5.22 | | 11.92 | 12.32 | 13.56 | | |
| | | velocity | 7.45 | 9.11 | 8.84 | 8.50 | 8.58 | 8.50 | 8.50 | 7.95 | 7.74 | 7.54 | 7.66 | 8.15 | 8.81 | 8.52 | 7.74 | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 17.5 | 144.5 | | | | | |

**Fleischhauer, Georg (GER) (1988)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 1** - 2011 IAAF World Championships (Daegu, KOR) *Beck (2011) - 400-meter-hürdensprinter im aufschwung*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Aug-11 | time | 6.16 | 9.96 | 13.84 | 17.78 | 21.77 | 25.85 | 30.08 | 34.48 | 38.96 | 43.52 | 48.72 | 4 / 3 | | | | | |
| reaction time | 0.176 | interval | | 3.80 | 3.88 | 3.94 | 3.99 | 4.08 | 4.23 | 4.40 | 4.48 | 4.56 | 5.20 | PB | 11.62 | 12.30 | 13.44 | | |
| | | velocity | 7.31 | 9.21 | 9.02 | 8.88 | 8.77 | 8.58 | 8.27 | 7.95 | 7.81 | 7.68 | 7.69 | 8.21 | 9.04 | 8.54 | 7.81 | | |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | | 141 | | | | | |

**FINAL** - 2011 Weltklasse in Biberach (Biberach, GER) *Beck (2011) - 400-meter-hürdensprinter im aufschwung*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Jun-11 | time | 6.30 | 10.16 | 14.06 | 18.02 | 22.04 | 26.26 | 30.58 | 35.00 | 39.64 | 44.26 | 49.50 | / 2 | | | | | |
| reaction time | | interval | | 3.86 | 3.90 | 3.96 | 4.02 | 4.22 | 4.32 | 4.42 | 4.64 | 4.62 | 5.24 | | 11.72 | 12.56 | 13.68 | | |
| | | velocity | 7.14 | 9.07 | 8.97 | 8.84 | 8.71 | 8.29 | 8.10 | 7.92 | 7.54 | 7.58 | 7.63 | 8.08 | 8.96 | 8.36 | 7.68 | | |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | | 139 | | | | | |

**Flenoy, Stefan (USA) (1968)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1996 USA Olympic Trials (Atlanta, GA) *McNichols - Hurdle technique study through video analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jun-96 | time | 5.86 | 9.61 | 13.38 | 17.21 | 21.08 | 21.75 | 25.17 | 29.43 | 33.96 | 38.51 | 43.18 | 48.74 | 6 / 6 | | | | |
| reaction time | | interval | | 3.75 | 3.77 | 3.83 | 3.87 | | 4.09 | 4.26 | 4.53 | 4.55 | 4.67 | 5.56 | | 11.35 | 12.22 | 13.75 | |
| | | velocity | 7.68 | 9.33 | 9.28 | 9.14 | 9.04 | 9.20 | 8.56 | 8.22 | 7.73 | 7.69 | 7.49 | 7.19 | 8.21 | 9.25 | 8.59 | 7.64 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | | 141 | | | | |

**Forsberg, Anton (SWE) (1991)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2011 Poks Memorial (Hässleholm, SWE) *Blomkvist (2011) - www.elitlandslag.se/SprintHäck/LängSprintHäck.aspx*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Jun-11 | time | | 10.76 | 15.06 | 19.36 | 23.78 | | 33.10 | 37.88 | 42.84 | 48.08 | 54.40 | / 4 | | | | | |
| reaction time | | interval | | | 4.30 | 4.30 | 4.42 | | 9.32 | 4.78 | 4.96 | 5.24 | 6.32 | PB | | 13.74 | 14.98 | | |
| | | velocity | | 7.43 | 8.14 | 8.14 | 7.92 | | 7.51 | 7.32 | 7.06 | 6.68 | 6.33 | 7.35 | | 7.64 | 7.01 | | |
| H1 lead leg | R | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 19 | 150 | | | | | |

**Franca, Matteo (ITA)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1993 Pesaro, ITA *Partipilo (1994) - la distribuzione dello sforzo nei 400m ad ostacoli*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Oct-93 | time | 6.80 | 11.19 | 15.49 | 20.08 | 24.85 | 26.90 | 29.77 | 34.58 | 39.63 | 44.83 | 50.17 | 56.10 | ??? | | | | |
| reaction time | | interval | | 4.39 | 4.30 | 4.59 | 4.77 | | 4.92 | 4.81 | 5.05 | 5.20 | 5.34 | 5.93 | PB | 13.28 | 14.50 | 15.59 | |
| | | velocity | 6.62 | 7.97 | 8.14 | 7.63 | 7.34 | 7.43 | 7.11 | 7.28 | 6.93 | 6.73 | 6.55 | 6.75 | 7.13 | 7.91 | 7.24 | 6.74 | |
| H1 lead leg | | strides | 23 | 15 | 15 | 15 | 17 | | 17 | 17 | 17 | 17 | 17 | | 170 | | | | |

**FINAL** - 1993 Bologna, ITA *Partipilo (1994) - la distribuzione dello sforzo nei 400m ad ostacoli*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Sep-93 | time | 6.87 | 11.55 | 16.16 | 20.91 | 25.96 | 28.10 | 31.07 | 36.30 | 41.43 | 46.53 | 51.83 | 57.40 | ??? | | | | |
| reaction time | | interval | | 4.68 | 4.61 | 4.75 | 5.05 | | 5.11 | 5.23 | 5.13 | 5.10 | 5.30 | 5.57 | | 14.04 | 15.39 | 15.53 | |
| | | velocity | 6.55 | 7.48 | 7.59 | 7.37 | 6.93 | 7.12 | 6.85 | 6.69 | 6.82 | 6.86 | 6.60 | 7.18 | 6.97 | 7.48 | 6.82 | 6.76 | |
| H1 lead leg | | strides | 23 | 15 | 15 | 15 | 15 | | 16 | 16 | 17 | 17 | 17 | | 166 | | | | |

**FINAL** - 1993 Bologna, ITA *Partipilo (1994) - la distribuzione dello sforzo nei 400m ad ostacoli*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jul-93 | time | 6.79 | 11.17 | 15.71 | 20.31 | 25.36 | 27.50 | 30.34 | 35.41 | 40.57 | 46.09 | 51.40 | 57.40 | ??? | | | | |
| reaction time | | interval | | 4.38 | 4.54 | 4.60 | 5.05 | | 4.98 | 5.07 | 5.16 | 5.52 | 5.31 | 6.00 | | 13.52 | 15.10 | 15.99 | |
| | | velocity | 6.63 | 7.99 | 7.71 | 7.61 | 6.93 | 7.27 | 7.03 | 6.90 | 6.78 | 6.34 | 6.59 | 6.67 | 6.97 | 7.77 | 6.95 | 6.57 | |
| H1 lead leg | | strides | 23 | 15 | 15 | 15 | 15 | | 17 | 17 | 17 | 17 | 17 | | 168 | | | | |

**Franz, Felix (GER) (1993)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2014 European Championships (Zurich, SUI) *Green (2015) - twitter.com/jackpgreen (from Behm?)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-14 | time | 6.03 | 9.91 | 13.75 | 17.83 | 21.91 | 26.11 | 30.55 | 35.07 | 39.79 | 44.51 | 49.83 | / 5 | | | | | |
| reaction time | 0.174 | interval | | 3.88 | 3.84 | 4.08 | 4.08 | 4.20 | 4.44 | 4.52 | 4.72 | 4.72 | 5.32 | | 11.80 | 12.72 | 13.96 | | |
| | | velocity | 7.46 | 9.02 | 9.11 | 8.58 | 8.58 | 8.33 | 7.88 | 7.74 | 7.42 | 7.42 | 7.52 | 8.03 | 8.90 | 8.25 | 7.52 | | |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | | 121 | | | | | |

**Fredericks, Cornel (RSA) (1990)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2018 IAAF Continental Cup (Ostrava, CZE) (TV Analysis) *Henson (2021) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-18 | time | 5.96 | 9.84 | 13.64 | 17.52 | 21.60 | 25.80 | 30.24 | 34.84 | 39.64 | 44.60 | 50.54 | 2 / 7 | | | | | |
| reaction time | 0.139 | interval | | 3.88 | 3.80 | 3.88 | 4.08 | 4.20 | 4.44 | 4.60 | 4.80 | 4.96 | 5.94 | | 11.56 | 12.72 | 14.36 | | |
| | | velocity | 7.55 | 9.02 | 9.21 | 9.02 | 8.58 | 8.33 | 7.88 | 7.61 | 7.29 | 7.06 | 6.73 | 7.91 | 9.08 | 8.25 | 7.31 | | |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 19.2 | 157.2 | | | | | |

**FINAL** - 2018 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Aug-18 | time | 5.92 | 9.68 | 13.48 | 17.44 | 21.52 | 23.4 | 25.76 | 30.24 | | 39.44 | | 49.96 | 8 / 5 | | | |
| reaction time | 0.144 | interval | | 3.76 | 3.80 | 3.96 | 4.08 | | 4.24 | 4.48 | | 9.20 | | | | 11.52 | 12.80 | |
| | | velocity | 7.60 | 9.31 | 9.21 | 8.84 | 8.58 | 8.55 | 8.25 | 7.81 | | 7.61 | | 8.01 | | 9.11 | 8.20 | |
| H1 lead leg | R | strides | 21 | 14 | 14 | | 14 | | 14 | 15 | 15 | | | 107 | | | | |

**FINAL** - 2018 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-May-18 | time | 5.96 | 9.72 | 13.60 | 17.52 | 21.64 | | 25.88 | 30.32 | 34.88 | 39.64 | 44.40 | | 50.03 | 1 / 5 | | | |
| reaction time | 0.164 | interval | | 3.76 | 3.88 | 3.92 | 4.12 | | 4.24 | 4.44 | 4.56 | 4.76 | 4.76 | 5.63 | | | 11.56 | 12.80 | 14.08 |
| | | velocity | 7.55 | 9.31 | 9.02 | 8.93 | 8.50 | | 8.25 | 7.88 | 7.68 | 7.35 | 7.35 | 7.10 | 8.00 | | 9.08 | 8.20 | 7.46 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | | 15 | 19 | 156 | | | | |

**FINAL** - 2017 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jul-17 | time | 6.00 | 9.76 | 13.60 | 17.48 | 21.48 | | 25.56 | 29.80 | 34.20 | 38.80 | 43.52 | | 49.32 | 8 / 5 | | | |
| reaction time | 0.137 | interval | | 3.76 | 3.84 | 3.88 | 4.00 | | 4.08 | 4.24 | 4.40 | 4.60 | 4.72 | 5.80 | | | 11.48 | 12.32 | 13.72 |
| | | velocity | 7.50 | 9.31 | 9.11 | 9.02 | 8.75 | | 8.58 | 8.25 | 7.95 | 7.61 | 7.42 | 6.90 | 8.11 | | 9.15 | 8.52 | 7.65 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 20 | 172 | | | | |

**FINAL** - 2017 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-17 | time | 6.00 | 9.76 | 13.63 | 17.53 | 21.56 | | 25.70 | 30.06 | 34.53 | 39.26 | 44.20 | | 49.96 | 1 / 5 | | | |
| reaction time | 0.147 | interval | | 3.76 | 3.87 | 3.90 | 4.03 | | 4.14 | 4.36 | 4.47 | 4.73 | 4.94 | 5.76 | | | 11.53 | 12.53 | 14.14 |
| | | velocity | 7.50 | 9.31 | 9.04 | 8.97 | 8.68 | | 8.45 | 8.03 | 7.83 | 7.40 | 7.09 | 6.94 | 8.01 | | 9.11 | 8.38 | 7.43 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 16 | 19.5 | 172.5 | | | | |

**FINAL** - 2011 IAAF World Championships (Daegu, KOR) *Behm (2011) - Le quatrache: Démus enfin!*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-11 | time | 5.8 | 9.5 | 13.3 | 17.2 | 21.3 | | 25.3 | 29.5 | 34.0 | 38.6 | 43.4 | | 49.12 | 4 / 5 | | | |
| reaction time | 0.170 | interval | | 3.70 | 3.80 | 3.90 | 4.10 | | 4.00 | 4.20 | 4.50 | 4.60 | 4.80 | 5.72 | | | 11.40 | 12.30 | 13.90 |
| | | velocity | 7.76 | 9.46 | 9.21 | 8.97 | 8.54 | | 8.75 | 8.33 | 7.78 | 7.61 | 7.29 | 6.99 | 8.14 | | 9.21 | 8.54 | 7.55 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 16 | 16 | 20 | 174 | | | | |

**Friedrich, Dieter (FRG) (1947)**

**FINAL** - 1975 West German National Championships (Gelsenkirchen, FRG) *Helbig (1975) - 400-m-hürdenlauf*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 28-Jun-75 | time | 6.0 | 10.0 | 14.1 | 18.3 | 22.6 | 24.6 | 27.0 | 31.4 | 36.2 | 40.6 | 45.3 | | 51.29 | 5 / 2 | | | |
| reaction time | interval | | 4.00 | 4.04 | 4.20 | 4.32 | | 4.39 | 4.42 | 4.77 | 4.45 | 4.71 | 5.96 | | | 12.24 | 13.13 | 13.93 |
| | velocity | 7.46 | 8.75 | 8.66 | 8.33 | 8.10 | 8.13 | 7.97 | 7.92 | 7.34 | 7.87 | 7.43 | 6.71 | 7.80 | | 8.58 | 8.00 | 7.54 |
| H1 lead leg | strides | | | | | | | | | | | | | | | | | |

**Frinolli, Giorgio (ITA) (1970)**

**Semi-Final 2** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 25-Sep-00 | time | 6.08 | 9.88 | 13.84 | 17.84 | 21.92 | | 26.08 | 30.52 | 35.04 | 39.72 | 44.48 | | 50.10 | 2 / 8 | | | |
| reaction time | interval | | 3.80 | 3.96 | 4.00 | 4.08 | | 4.16 | 4.44 | 4.52 | 4.68 | 4.76 | 5.62 | | | 11.76 | 12.68 | 13.96 |
| | velocity | 7.40 | 9.21 | 8.84 | 8.75 | 8.58 | | 8.41 | 7.88 | 7.74 | 7.48 | 7.35 | 7.12 | 7.98 | | 8.93 | 8.28 | 7.52 |
| H1 lead leg | strides | | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 16 | 15 | | 131 | | | | |

**Heat 8** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.06 | 9.82 | 13.78 | 17.70 | 21.78 | | 25.94 | 30.26 | 34.86 | 39.78 | 44.66 | | 50.27 | 6 / 2 | | | |
| reaction time | 0.179 | interval | | 3.76 | 3.96 | 3.92 | 4.08 | | 4.16 | 4.32 | 4.60 | 4.92 | 4.88 | 5.61 | | | 11.64 | 12.56 | 14.40 |
| | | velocity | 7.43 | 9.31 | 8.84 | 8.93 | 8.58 | | 8.41 | 8.10 | 7.61 | 7.11 | 7.17 | 7.13 | 7.96 | | 9.02 | 8.36 | 7.29 |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 16 | 16 | 19.2 | 171.2 | | | | |

**Frinolli, Roberto (ITA) (1940)**

**FINAL** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) *Dessons (1982) - traite d'athletisme - volume 1: les courses*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 15-Oct-68 | time | 5.8 | 9.7 | 13.6 | 17.5 | 21.5 | 23.4 | 25.6 | 29.9 | 34.3 | 38.9 | 43.9 | | 50.1 | 4 / 8 | | | |
| reaction time | interval | | 3.90 | 3.90 | 3.90 | 4.00 | | 4.10 | 4.30 | 4.40 | 4.60 | 5.00 | 6.20 | *(50.13)* | | 11.70 | 12.40 | 14.00 |
| | velocity | 7.76 | 8.97 | 8.97 | 8.97 | 8.75 | 8.55 | 8.54 | 8.14 | 7.95 | 7.61 | 7.00 | 6.45 | 7.98 | | 8.97 | 8.47 | 7.50 |
| H1 lead leg L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 157 | | | | |

**Heat 4** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) *Jonath (1969) - wie gerhard hennige trainiert*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Oct-68 | time | 6.0 | 10.0 | 14.2 | 18.2 | 22.2 | 23.8 | 26.6 | 30.7 | 35.1 | 39.4 | 44.0 | | 49.9 | / 1 | | | |
| reaction time | | interval | | 4.00 | 4.20 | 4.00 | 4.00 | | 4.40 | 4.10 | 4.40 | 4.30 | 4.60 | 5.90 | *(49.95)* | | 12.20 | 12.50 | 13.30 |
| | | velocity | 7.50 | 8.75 | 8.33 | 8.75 | 8.75 | 8.40 | 7.95 | 8.54 | 7.95 | 8.14 | 7.61 | 6.78 | 8.02 | | 8.61 | 8.40 | 7.89 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 1964 Olympic Games (Tokyo, JPN) *Breitschaft (1965) - die leichtathletik wettkampfe der 1964 olympischen sommerspielen - 400m hürdenlauf*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Oct-64 | time | 5.8 | | 13.4 | | 21.0 | | | 29.8 | | 39.0 | | | 50.7 | 7 / 6 | | | |
| reaction time | | interval | | | 7.60 | | 7.60 | | | 8.80 | | 9.20 | | 11.70 | | | | | |
| | | velocity | 7.76 | | 9.21 | | 9.21 | | | 7.95 | | 7.61 | | 6.41 | 7.89 | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Fu Jiaho (CHN) (1999)**

**FINAL** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 03-Aug-19 | time | 6.30 | 10.36 | 14.56 | 18.79 | 23.16 | | 27.70 | 32.38 | 37.10 | 41.90 | 46.91 | | 52.81 | 5 / ~~7~~ 6 | | | |
| reaction time | interval | | 4.06 | 4.20 | 4.23 | 4.37 | | 4.54 | 4.68 | 4.72 | 4.80 | 5.01 | 5.90 | | | 12.49 | 13.59 | 14.53 |
| | velocity | 7.14 | 8.62 | 8.33 | 8.27 | 8.01 | | 7.71 | 7.48 | 7.42 | 7.29 | 6.99 | 6.78 | 7.57 | | 8.41 | 7.73 | 7.23 |
| H1 lead leg L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 16 | 20 | 174 | | | | |

**Heat 1** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.35 | 10.54 | 14.85 | 19.14 | 23.46 | 28.09 | 32.82 | 37.52 | 42.32 | 47.33 | | 52.83 | 3 / 2 | | | |
| reaction time | 0.183 | interval | | 4.19 | 4.31 | 4.29 | 4.32 | 4.63 | 4.73 | 4.70 | 4.80 | 5.01 | 5.50 | | | 12.79 | 13.68 | 14.51 |
| | | velocity | 7.09 | 8.35 | 8.12 | 8.16 | 8.10 | 7.56 | 7.40 | 7.45 | 7.29 | 6.99 | 7.27 | 7.57 | | 8.21 | 7.68 | 7.24 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 15 | 15 | 16 | 15 | 16 | 16 | 18.5 | 175.5 | | | | |

**Heat 2** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-19 | time | 6.37 | 10.43 | 14.64 | 18.88 | 23.22 | 27.69 | 32.32 | 37.05 | 41.79 | 46.65 | | 52.29 | 5 / ~~7~~ 6 | | | |
| reaction time | 0.232 | interval | | 4.06 | 4.21 | 4.24 | 4.34 | 4.47 | 4.63 | 4.73 | 4.74 | 4.86 | 5.64 | | | 12.51 | 13.44 | 14.33 |
| | | velocity | 7.06 | 8.62 | 8.31 | 8.25 | 8.06 | 7.83 | 7.56 | 7.40 | 7.38 | 7.20 | 7.09 | 7.65 | | 8.39 | 7.81 | 7.33 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | 20 | 174 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 4 (Luoyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-May-19 | time | 6.67 | 11.05 | 15.45 | 19.80 | 24.34 | 29.01 | 33.76 | 38.52 | 43.47 | 48.88 | | 54.71 | 1 / 6 | | | |
| reaction time | 0.208 | interval | | 4.38 | 4.40 | 4.35 | 4.54 | 4.67 | 4.75 | 4.76 | 4.95 | 5.41 | 5.83 | | | 13.13 | 13.96 | 15.12 |
| | | velocity | 6.75 | 7.99 | 7.95 | 8.05 | 7.71 | 7.49 | 7.37 | 7.35 | 7.07 | 6.47 | 6.86 | 7.31 | | 8.00 | 7.52 | 6.94 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 17 | 19.5 | 174.5 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 2 (Huangshi, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Apr-19 | time | 6.60 | 10.84 | 15.16 | 19.62 | 24.20 | 28.90 | 33.78 | 38.58 | 43.36 | 48.62 | | 54.39 | 3 / 7 | | | |
| reaction time | 0.200 | interval | | 4.24 | 4.32 | 4.46 | 4.58 | 4.70 | 4.88 | 4.80 | 4.78 | 5.26 | 5.77 | | | 13.02 | 14.16 | 14.84 |
| | | velocity | 6.82 | 8.25 | 8.10 | 7.85 | 7.64 | 7.45 | 7.17 | 7.29 | 7.32 | 6.65 | 6.93 | 7.35 | | 8.06 | 7.42 | 7.08 |
| H1 lead leg | L | strides | 21 | 16 | 16 | 16 | 16 | 15 | 15 | 15 | 15 | 15 | 19.2 | 179.2 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 1 (Zhaoqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Apr-19 | time | 6.44 | 10.51 | 14.73 | 18.88 | 23.19 | 27.64 | 32.26 | 36.93 | 41.79 | 46.86 | | 52.33 | 6 / 6 | | | |
| reaction time | 0.218 | interval | | 4.07 | 4.22 | 4.15 | 4.31 | 4.45 | 4.62 | 4.67 | 4.86 | 5.07 | 5.47 | | | 12.44 | 13.38 | 14.6 |
| | | velocity | 6.99 | 8.60 | 8.29 | 8.43 | 8.12 | 7.87 | 7.58 | 7.49 | 7.20 | 6.90 | 7.31 | 7.64 | | 8.44 | 7.85 | 7.19 |
| H1 lead leg | L | strides | 22 | 16 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 17 | 19.5 | 189.5 | | | | |

**Fuchiqami, Syota (JPN) (2005)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Japanese National High School Championships (Naruto, JPN) | | | | | | | | | | | | | | | *Kishima (2022) - national high school championships biomechanics data collection* | | | |
| date | 05-Aug-22 | time | 6.08 | 9.98 | 13.93 | 18.10 | 22.42 | 26.88 | 31.38 | 36.02 | 40.73 | 45.53 | | 51.03 | 6 / 3 | | | |
| reaction time | 0.186 | interval | | 3.90 | 3.95 | 4.17 | 4.32 | 4.46 | 4.50 | 4.64 | 4.71 | 4.80 | 5.50 | | | 12.02 | 13.28 | 14.15 |
| | | velocity | 7.40 | 8.97 | 8.86 | 8.39 | 8.10 | 7.85 | 7.78 | 7.54 | 7.43 | 7.29 | 7.27 | 7.84 | | 8.74 | 7.91 | 7.42 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 19.5 | 172.5 | | | | |

**FINAL** - 2022 Japanese National High School Championships (Naruto, JPN) *Kishima (2022) - national high school championships biomechanics data collection*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Aug-22 | time | 6.16 | 10.09 | 14.11 | 18.31 | 22.69 | 27.16 | 31.70 | 36.49 | 41.36 | 46.25 | | 51.86 | 2 / 7 | | | |
| reaction time | 0.187 | interval | | 3.93 | 4.02 | 4.20 | 4.38 | 4.47 | 4.54 | 4.79 | 4.87 | 4.89 | 5.61 | | | 12.15 | 13.39 | 14.55 |
| | | velocity | 7.31 | 8.91 | 8.71 | 8.33 | 7.99 | 7.83 | 7.71 | 7.31 | 7.19 | 7.16 | 7.13 | 7.71 | | 8.64 | 7.84 | 7.22 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 19.2 | 172.2 | | | | |

**Fueki, Yasuhiro (JPN) (1985)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2014 Seiko Golden Grand Prix (Tokyo, JPN) | | | | | | | | | | | | | | | *Yasunori (2014) - race pattern analysis of Japanese top 400m hurdlers for major domestic competitions* | | | |
| date | 11-May-14 | time | 6.01 | 9.90 | 13.80 | 17.72 | 21.77 | 25.92 | 30.39 | 35.04 | 39.98 | 45.25 | | 51.68 | / 8 | | | |
| reaction time | | interval | | 3.89 | 3.90 | 3.92 | 4.05 | 4.15 | 4.47 | 4.65 | 4.94 | 5.27 | 6.43 | | | 11.71 | 12.67 | 14.86 |
| | | velocity | 7.49 | 9.00 | 8.97 | 8.93 | 8.64 | 8.43 | 7.83 | 7.53 | 7.09 | 6.64 | 6.22 | 7.74 | | 8.97 | 8.29 | 7.07 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 16 | | 130 | | | | |

**Fujii, Ryusei (JPN) (1998)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2015 Japanese National High School Championships (Wakayama, JPN) | | | | | | | | | | | | | | | *Enomoto (2015) - 68th high school championships: JAF scientific committee- biomechanics data* | | | |
| date | 31-Jul-15 | time | 6.19 | 10.24 | 14.55 | 18.97 | 23.37 | 27.78 | 32.23 | 36.69 | 41.27 | 45.96 | | 51.34 | 4 / 4 | | | |
| reaction time | | interval | | 4.05 | 4.31 | 4.42 | 4.40 | 4.41 | 4.45 | 4.46 | 4.58 | 4.69 | 5.38 | PB | | 12.78 | 13.26 | 13.73 |
| | | velocity | 7.27 | 8.64 | 8.12 | 7.92 | 7.95 | 7.94 | 7.87 | 7.85 | 7.64 | 7.46 | 7.43 | 7.79 | | 8.22 | 7.92 | 7.65 |
| H1 lead leg | | strides | | 14 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | | 134 | | | | |

**Fukamachi, Hidai (JPN) (2001)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Japanese U20 National Championships (Osaka, JPN) | | | | | | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | |
| date | 26-Jun-21 | time | 6.22 | 10.19 | 14.10 | 18.10 | 22.19 | 26.43 | 30.81 | 35.39 | 40.14 | 45.03 | | 50.73 | 4 / 3 | | | |
| reaction time | 0.220 | interval | | 3.97 | 3.91 | 4.00 | 4.09 | 4.24 | 4.38 | 4.58 | 4.75 | 4.89 | 5.70 | PB | | 11.88 | 12.71 | 14.22 |
| | | velocity | 7.23 | 8.82 | 8.95 | 8.75 | 8.56 | 8.25 | 7.99 | 7.64 | 7.37 | 7.16 | 7.02 | 7.88 | | 8.84 | 8.26 | 7.38 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 19.5 | 173.5 | | | | |

**FINAL** - 2019 Japanese National High School Championships (Okinawa, JPN) *Kota (2019) - 72nd high school championships: JAF scientific committee - biomechanics data*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-19 | time | 6.31 | 10.39 | 14.51 | 18.74 | 23.13 | 27.79 | 32.52 | 37.37 | 42.60 | 47.96 | | 54.32 | 8 / 6 | | | |
| reaction time | | interval | | 4.08 | 4.12 | 4.23 | 4.39 | 4.66 | 4.73 | 4.85 | 5.23 | 5.36 | 6.36 | | | 12.43 | 13.78 | 15.44 |
| | | velocity | 7.13 | 8.58 | 8.50 | 8.27 | 7.97 | 7.51 | 7.40 | 7.22 | 6.69 | 6.53 | 6.29 | 7.36 | | 8.45 | 7.62 | 6.80 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | | 142 | | | | |

**Futch, Eric (USA) (1993)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2017 Müller's Anniversary Games (London, GBR) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2017 year end hurdle report* | | | |
| date | 09-Jul-17 | time | 5.96 | 9.72 | 13.56 | 17.48 | 21.60 | 25.80 | 30.04 | 34.40 | 38.84 | 43.40 | | 48.68 | 5 / 5 | | | |
| reaction time | 0.189 | interval | | 3.76 | 3.84 | 3.92 | 4.12 | 4.20 | 4.24 | 4.36 | 4.44 | 4.56 | 5.28 | | | 11.52 | 12.56 | 13.36 |
| | | velocity | 7.55 | 9.31 | 9.11 | 8.93 | 8.50 | 8.33 | 8.25 | 8.03 | 7.88 | 7.68 | 7.58 | 8.22 | | 9.11 | 8.36 | 7.86 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 13 | 14 | 15 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |

**FINAL** - 2017 USATF Championships (Sacramento, CA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jun-17 | time | 5.96 | 9.79 | 13.65 | 17.58 | 21.65 | 25.65 | 29.82 | 34.03 | 38.34 | 42.79 | | 48.18 | 4 / 1 | | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | | interval | | 3.83 | 3.86 | 3.93 | 4.07 | | 4.00 | 4.17 | 4.21 | 4.31 | 4.45 | 5.39 | PB | | 11.62 | 12.24 | 12.97 |
| | | velocity | 7.55 | 9.14 | 9.07 | 8.91 | 8.60 | | 8.75 | 8.39 | 8.31 | 8.12 | 7.87 | 7.42 | 8.30 | | 9.04 | 8.58 | 8.10 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 13 | 13 | | | 14 | 15 | 15 | 15 | 18 | 153 | | | | |

**Garnier, Philippe (FRA) (1963)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1987 French National Championships (Annecy, FRA) *Veney - split times from PJ*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-87 | time | 6.07 | 10.18 | 14.43 | 18.59 | 22.64 | | 26.96 | 31.33 | 35.85 | 40.59 | 45.67 | | 51.80 | / 6 | | | |
| reaction time | | interval | | 4.11 | 4.25 | 4.16 | 4.05 | | 4.32 | 4.37 | 4.52 | 4.74 | 5.08 | 6.13 | | | 12.52 | 12.74 | 14.34 |
| | | velocity | 7.41 | 8.52 | 8.24 | 8.41 | 8.64 | | 8.10 | 8.01 | 7.74 | 7.38 | 6.89 | 6.53 | 7.72 | | 8.39 | 8.24 | 7.32 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Garrett, LaBronze (USA) (1976)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2006 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2006)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jun-06 | time | 5.94 | 9.83 | 13.73 | 17.67 | 21.67 | | 25.87 | 30.10 | 34.54 | 39.14 | 43.74 | | 49.47 | 2 / 5 | | | |
| reaction time | | interval | | 3.89 | 3.90 | 3.94 | 4.00 | | 4.20 | 4.23 | 4.44 | 4.60 | 4.60 | 5.73 | | | 11.73 | 12.43 | 13.64 |
| | | velocity | 7.58 | 9.00 | 8.97 | 8.88 | 8.75 | | 8.33 | 8.27 | 7.88 | 7.61 | 7.61 | 6.98 | 8.09 | | 8.95 | 8.45 | 7.70 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 146 | | | | |

**FINAL** - 2003 USATF National Championships (Palo Alto, CA) *USATF Women's Sprint Development (2003)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Jun-03 | time | 6.04 | 9.89 | 13.90 | 18.07 | 22.36 | | 26.69 | 31.20 | 35.79 | 40.41 | 45.08 | | 50.45 | 1 / ~~8~~ 7 | | | |
| reaction time | | interval | | 3.85 | 4.01 | 4.17 | 4.29 | | 4.33 | 4.51 | 4.59 | 4.62 | 4.67 | 5.37 | | | 12.03 | 13.13 | 13.88 |
| | | velocity | 7.45 | 9.09 | 8.73 | 8.39 | 8.16 | | 8.08 | 7.76 | 7.63 | 7.58 | 7.49 | 7.45 | 7.93 | | 8.73 | 8.00 | 7.56 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Gavrilenko, Yevgeniy (URS) (1951)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** -1976 Olympic Games (Montreal, CAN) *Behm (1995) - la tactique du 400 haies*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jul-76 | time | 6.0 | 9.7 | 13.4 | 17.4 | 21.5 | | 25.7 | 29.9 | 34.5 | 39.0 | 43.8 | | 49.45 | 8 / 3 | | | |
| reaction time | | interval | | 3.70 | 3.70 | 4.00 | 4.10 | | 4.20 | 4.20 | 4.60 | 4.50 | 4.80 | 5.65 | | | 11.40 | 12.50 | 13.90 |
| | | velocity | 7.50 | 9.46 | 9.46 | 8.75 | 8.54 | | 8.33 | 8.33 | 7.61 | 7.78 | 7.29 | 7.08 | 8.09 | | 9.21 | 8.40 | 7.55 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 1972 Olympic Games (Munich, FRG) *Letzelter (1973) - schrittgestaltung und geschwindigkeitsverlauf beim 400-m-hürdenlauf der olympischen spiele 1972*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Sep-72 | time | 6.0 | 9.8 | 13.7 | 17.6 | 21.6 | 23.3 | 25.9 | 30.3 | 34.8 | 39.3 | 44.1 | | 49.66 | 2 / =6 | | | |
| reaction time | | interval | | 3.80 | 3.85 | 3.95 | 4.00 | | 4.25 | 4.40 | 4.50 | 4.55 | 4.75 | 5.61 | | | 11.60 | 12.65 | 13.80 |
| | | velocity | 7.50 | 9.21 | 9.09 | 8.86 | 8.75 | 8.58 | 8.24 | 7.95 | 7.78 | 7.69 | 7.37 | 7.13 | 8.05 | | 9.05 | 8.30 | 7.61 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | | 15 | 15 | 15 | | 131 | | | | |

**Gaymon, Justin (USA) (1986)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2008 USA Olympic Trials (Eugene, OR) *USATF Hurdle Development (2008)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jun-08 | time | 6.07 | 9.97 | 13.73 | 17.73 | 21.70 | | 25.82 | 30.09 | 34.50 | 38.87 | 43.32 | | 48.46 | 8 / 4 | | | |
| reaction time | | interval | | 3.90 | 3.76 | 4.00 | 3.97 | | 4.12 | 4.27 | 4.41 | 4.37 | 4.45 | 5.14 | PB | | 11.66 | 12.36 | 13.23 |
| | | velocity | 7.41 | 8.97 | 9.31 | 8.75 | 8.82 | | 8.50 | 8.20 | 7.94 | 8.01 | 7.87 | 7.78 | 8.25 | | 9.01 | 8.50 | 7.94 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 153 | | | | |

**Heat 3** - 2007 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2007)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-07 | time | 6.02 | 10.01 | 14.06 | 18.27 | 22.41 | | 26.75 | 31.18 | 35.70 | 40.27 | 44.93 | | 50.16 | 6 / 2 | | | |
| reaction time | | interval | | 3.99 | 4.05 | 4.21 | 4.14 | | 4.34 | 4.43 | 4.52 | 4.57 | 4.66 | 5.23 | | | 12.25 | 12.91 | 13.75 |
| | | velocity | 7.48 | 8.77 | 8.64 | 8.31 | 8.45 | | 8.06 | 7.90 | 7.74 | 7.66 | 7.51 | 7.65 | 7.97 | | 8.57 | 8.13 | 7.64 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 155 | | | | |

**Geiger, Karl (FRG) (1953)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1975 West German National Championships (Gelsenkirchen, FRG) *Helbig (1975) - 400-m-hürdenlauf*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Jun-75 | time | 6.3 | 10.3 | 14.4 | 18.6 | 23.4 | 25.4 | 27.8 | 32.4 | 37.1 | 41.8 | 46.7 | | 52.42 | 4 / 7 | | | |
| reaction time | | interval | | 4.02 | 4.11 | 4.18 | 4.86 | | 4.40 | 4.60 | 4.63 | 4.68 | 4.97 | 5.70 | | | 12.31 | 13.86 | 14.28 |
| | | velocity | 7.18 | 8.71 | 8.52 | 8.37 | 7.20 | 7.86 | 7.95 | 7.61 | 7.56 | 7.48 | 7.04 | 7.02 | 7.63 | | 8.53 | 7.58 | 7.35 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Gianessi, Paolo (ITA)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1993 Bergamo, ITA *Partipilo (1994) - la distribuzione dello sforzo nei 400m ad ostacoli*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Oct-93 | time | 6.49 | 10.73 | 14.96 | 19.38 | 23.81 | 25.80 | 28.51 | 33.37 | 38.35 | 43.81 | 49.17 | | 55.47 | ??? | | | |
| reaction time | | interval | | 4.24 | 4.23 | 4.42 | 4.43 | | 4.70 | 4.86 | 4.98 | 5.46 | 5.36 | 6.30 | | | 12.89 | 13.99 | 15.80 |
| | | velocity | 6.93 | 8.25 | 8.27 | 7.92 | 7.90 | 7.75 | 7.45 | 7.20 | 7.03 | 6.41 | 6.53 | 6.35 | 7.21 | | 8.15 | 7.51 | 6.65 |
| H1 lead leg | | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 16 | | 159 | | | | |

**FINAL** - 1993 Urbino, ITA *Partipilo (1994) - la distribuzione dello sforzo nei 400m ad ostacoli*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-93 | time | 6.7 | 11.1 | 15.6 | 21.2 | 24.8 | 26.9 | 29.4 | 34.3 | 39.2 | 44.2 | 49.4 | | 55.20 | ??? | | | |
| reaction time | | interval | | 4.40 | 4.50 | 5.60 | 3.60 | | 4.60 | 4.90 | 4.90 | 5.00 | 5.20 | 5.80 | | | 14.50 | 13.10 | 15.10 |
| | | velocity | 6.72 | 7.95 | 7.78 | 6.25 | 9.72 | 7.43 | 7.61 | 7.14 | 7.14 | 7.00 | 6.73 | 6.90 | 7.25 | | 7.24 | 8.02 | 6.95 |
| H1 lead leg | | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 157 | | | | |

**FINAL** - 1992 Corridonia, ITA *Partipilo (1994) - la distribuzione dello sforzo nei 400m ad ostacoli*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-May-92 | time | 6.84 | 11.47 | 16.18 | 20.93 | 25.67 | 27.70 | 30.50 | 35.51 | 40.51 | 45.63 | 50.80 | | 56.70 | ??? | | | |
| reaction time | | interval | | 4.63 | 4.71 | 4.75 | 4.74 | | 4.83 | 5.01 | 5.00 | 5.12 | 5.17 | 5.90 | | | 14.09 | 14.58 | 15.29 |
| | | velocity | 6.58 | 7.56 | 7.43 | 7.37 | 7.38 | 7.22 | 7.25 | 6.99 | 7.00 | 6.84 | 6.77 | 6.78 | 7.05 | | 7.45 | 7.20 | 6.87 |
| H1 lead leg | | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 157 | | | | |

**Gibson, Jeffery (BAH) (1990)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2019 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Jul-19 | time | 6.04 | 9.88 | 13.84 | 17.84 | 22.00 | 23.8 | 26.24 | | 35.12 | 39.76 | 44.44 | | 49.88 | 1 / 7 | | | |
| reaction time | 0.153 | interval | | 3.84 | 3.96 | 4.00 | 4.16 | | 4.24 | | 8.88 | 4.64 | 4.68 | 5.44 | | | 11.80 | | |
| | | velocity | 7.45 | 9.11 | 8.84 | 8.75 | 8.41 | 8.40 | 8.25 | | 7.88 | 7.54 | 7.48 | 7.35 | 8.02 | | 8.90 | | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | | | | 14 | 14 | 17.7 | 117.7 | | | | |

**FINAL** - 2018 Commonwealth Games (Gold Coast, AUS) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Apr-18 | time | 6.00 | 9.84 | 13.68 | 17.58 | 21.55 | | 25.69 | 30.06 | 34.53 | 39.17 | 43.77 | | 49.10 | 8 / 2 | | | |
| reaction time | 0.146 | interval | | 3.84 | 3.84 | 3.90 | 3.97 | | 4.14 | 4.37 | 4.47 | 4.64 | 4.60 | 5.33 | | | 11.58 | 12.48 | 13.71 |
| | | velocity | 7.50 | 9.11 | 9.11 | 8.97 | 8.82 | | 8.45 | 8.01 | 7.83 | 7.54 | 7.61 | 7.50 | 8.15 | | 9.07 | 8.41 | 7.66 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.7 | 138.7 | | | | |

**FINAL** - 2016 Prefontaine Classic (Eugene, OR) (TV Analysis) *(H8 5m short)* *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-16 | time | 6.04 | 9.88 | 13.80 | 17.76 | | | 26.16 | 30.44 | 34.32 | 39.48 | 44.00 | | 49.16 | 6 / 4 | | | |
| reaction time | | interval | | 3.84 | 3.92 | 3.96 | | | 8.40 | 4.28 | 3.88 | 5.16 | 4.52 | 5.16 | | | 11.72 | 12.68 | 13.56 |
| | | velocity | 7.45 | 9.11 | 8.93 | 8.84 | | | 8.33 | 8.18 | 7.73 | 7.75 | 7.74 | 7.75 | 8.14 | | 8.96 | 8.28 | 7.74 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | | | | 13 | 11 | 16 | 14 | 17 | 130 | | | | |

**FINAL** - 2016 Shanghai Golden Grand Prix (Shanghai, CHN) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-May-16 | time | 5.92 | 9.68 | 13.56 | 17.52 | 21.56 | | 25.72 | 30.08 | 34.60 | 39.16 | 43.76 | | 49.11 | 4 / 3 | | | |
| reaction time | 0.213 | interval | | 3.76 | 3.88 | 3.96 | 4.04 | | 4.16 | 4.36 | 4.52 | 4.56 | 4.60 | 5.35 | | | 11.60 | 12.56 | 13.68 |
| | | velocity | 7.60 | 9.31 | 9.02 | 8.84 | 8.66 | | 8.41 | 8.03 | 7.74 | 7.68 | 7.61 | 7.48 | 8.14 | | 9.05 | 8.36 | 7.68 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17.5 | 157.5 | | | | |

**FINAL** - 2015 IAAF World Championships (Beijing, CHN) (TV Analysis) *Henson (2021) - Athlete First: major championships report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-15 | time | 5.88 | 9.64 | 13.36 | 17.16 | 21.12 | | 25.08 | 29.28 | 33.60 | 38.08 | 42.72 | | 48.17 | 7 / 3 | | | |
| reaction time | 0.184 | interval | | 3.76 | 3.72 | 3.80 | 3.96 | | 3.96 | 4.20 | 4.32 | 4.48 | 4.64 | 5.45 | **NR PB** | | 11.28 | 12.12 | 13.44 |
| | | velocity | 7.65 | 9.31 | 9.41 | 9.21 | 8.84 | | 8.84 | 8.33 | 8.10 | 7.81 | 7.54 | 7.34 | 8.30 | | 9.31 | 8.66 | 7.81 |
| H1 lead leg | R | strides | | 13 | 13 | 12 | 13 | | 13 | 13 | 14 | 14 | 14 | 17.5 | 136.5 | | | | |

**Goller, Thomas (GER) (1977)**

**FINAL** - 2007 European Cup (Munich, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jun-07 | time | 6.00 | 9.77 | 13.68 | 17.64 | 21.70 | | 25.97 | 30.46 | 35.10 | 39.94 | 44.80 | | 50.48 | / 5 | | | |
| reaction time | 0.143 | interval | | 3.77 | 3.91 | 3.96 | 4.06 | | 4.27 | 4.49 | 4.64 | 4.84 | 4.86 | 5.68 | | | 11.64 | 12.82 | 14.34 |
| | | velocity | 7.50 | 9.28 | 8.95 | 8.84 | 8.62 | | 8.20 | 7.80 | 7.54 | 7.23 | 7.20 | 7.04 | 7.92 | | 9.02 | 8.19 | 7.32 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Semi-Final 1** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 5.90 | 9.58 | 13.50 | 17.42 | 21.38 | 22.90 | 25.50 | 29.82 | 34.30 | 38.94 | 43.66 | | 49.28 | 3 / 6 | | | |
| reaction time | 0.152 | interval | | 3.68 | 3.92 | 3.92 | 3.96 | | 4.12 | 4.32 | 4.48 | 4.64 | 4.72 | 5.62 | | | 11.52 | 12.40 | 13.84 |
| | | velocity | 7.63 | 9.51 | 8.93 | 8.93 | 8.84 | 8.73 | 8.50 | 8.10 | 7.81 | 7.54 | 7.42 | 7.12 | 8.12 | | 9.11 | 8.47 | 7.59 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |

**Heat 1** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.94 | 9.58 | 13.30 | 17.10 | 21.02 | | 25.10 | 29.50 | 33.94 | 38.74 | 43.62 | | 49.32 | 7 / 2 | | | |
| reaction time | 0.154 | interval | | 3.64 | 3.72 | 3.80 | 3.92 | | 4.08 | 4.40 | 4.44 | 4.80 | 4.88 | 5.70 | | | 11.16 | 12.40 | 14.12 |
| | | velocity | 7.58 | 9.62 | 9.41 | 9.21 | 8.93 | | 8.58 | 7.95 | 7.88 | 7.29 | 7.17 | 7.02 | 8.11 | | 9.41 | 8.47 | 7.44 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 19.2 | 163.2 | | | | |

**FINAL** - 2000 ISTAF (Berlin, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-00 | time | 5.98 | 9.68 | 13.46 | 17.35 | 21.40 | | 25.52 | 29.83 | 34.16 | 38.74 | 43.44 | | 48.82 | / 5 | | | |
| reaction time | | interval | | 3.70 | 3.78 | 3.89 | 4.05 | | 4.12 | 4.31 | 4.33 | 4.58 | 4.70 | 5.38 | | | 11.37 | 12.48 | 13.61 |
| | | velocity | 7.53 | 9.46 | 9.26 | 9.00 | 8.64 | | 8.50 | 8.12 | 8.08 | 7.64 | 7.45 | 7.43 | 8.19 | | 9.23 | 8.41 | 7.71 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Semi-Final 2** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-99 | time | 5.58 | 9.26 | 13.02 | 16.87 | 20.78 | | 24.94 | 29.50 | 34.12 | 38.82 | 43.74 | | 49.89 | 1 / 8 | | | |
| reaction time | 0.178 | interval | | 3.68 | 3.76 | 3.85 | 3.91 | | 4.16 | 4.56 | 4.62 | 4.70 | 4.92 | 6.15 | | | 11.29 | 12.63 | 14.24 |
| | | velocity | 8.06 | 9.51 | 9.31 | 9.09 | 8.95 | | 8.41 | 7.68 | 7.58 | 7.45 | 7.11 | 6.50 | 8.02 | | 9.30 | 8.31 | 7.37 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 15 | 19 | 164 | | | | |

**Gollnow, David (GER) (1989)**

**FINAL** - 2011 German National Championships (Kassel, GER) *Beck (2011) - 400-meter-hürdensprinter im aufschwung*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jul-11 | time | 6.26 | 10.12 | 13.94 | 17.80 | 21.81 | | 25.96 | 30.34 | 34.93 | 39.62 | 44.35 | | 49.56 | 6 / 1 | | | |
| reaction time | 0.175 | interval | | 3.86 | 3.82 | 3.86 | 4.01 | | 4.15 | 4.38 | 4.59 | 4.69 | 4.73 | 5.21 | | | 11.54 | 12.54 | 14.01 |
| | | velocity | 7.19 | 9.07 | 9.16 | 9.07 | 8.73 | | 8.43 | 7.99 | 7.63 | 7.46 | 7.40 | 7.68 | 8.07 | | 9.10 | 8.37 | 7.49 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 144 | | | | |

**FINAL** - 2011 European U23 Championships (Ostrava, CZE) *Beck (2011) - 400-meter-hürdensprinter im aufschwung*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-11 | time | 6.22 | 10.16 | 14.19 | 18.16 | 22.30 | | 26.62 | 31.02 | 35.54 | 40.20 | 44.84 | | 49.97 | 2 / 6 | | | |
| reaction time | 0.201 | interval | | 3.94 | 4.03 | 3.97 | 4.14 | | 4.32 | 4.40 | 4.52 | 4.66 | 4.64 | 5.13 | | | 11.94 | 12.86 | 13.82 |
| | | velocity | 7.23 | 8.88 | 8.68 | 8.82 | 8.45 | | 8.10 | 7.95 | 7.74 | 7.51 | 7.54 | 7.80 | 8.00 | | 8.79 | 8.16 | 7.60 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 15 | | 145 | | | | |

**Gonigam, Philippe (FRA) (1963)**

**FINAL** - 1987 French National Championships (Annecy, FRA) *Veney - split times from PJ*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-87 | time | 6.15 | 10.12 | 14.23 | 18.46 | 22.68 | | 26.94 | 31.30 | 35.69 | 40.33 | 45.01 | | 50.60 | / 2 | | | |
| reaction time | | interval | | 3.97 | 4.11 | 4.23 | 4.22 | | 4.26 | 4.36 | 4.39 | 4.64 | 4.68 | 5.59 | | | 12.31 | 12.84 | 13.71 |
| | | velocity | 7.32 | 8.82 | 8.52 | 8.27 | 8.29 | | 8.22 | 8.03 | 7.97 | 7.54 | 7.48 | 7.16 | 7.91 | | 8.53 | 8.18 | 7.66 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 16 | | 158 | | | | |

**FINAL** - 1986 French National Championships (Aix les Bains, FRA) *Veney - split times from PJ*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-86 | time | 6.11 | 10.03 | 14.09 | 18.17 | 22.36 | | 26.58 | 30.81 | 35.16 | 39.62 | 44.16 | | 49.82 | / 1 | | | |
| reaction time | | interval | | 3.92 | 4.06 | 4.08 | 4.19 | | 4.22 | 4.23 | 4.35 | 4.46 | 4.54 | 5.66 | | | 12.06 | 12.64 | 13.35 |
| | | velocity | 7.36 | 8.93 | 8.62 | 8.58 | 8.35 | | 8.29 | 8.27 | 8.05 | 7.85 | 7.71 | 7.07 | 8.03 | | 8.71 | 8.31 | 7.87 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Gong Debin (CHN) (1997)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 3** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.11 | 10.08 | 14.10 | 18.42 | 22.79 | | 27.33 | 32.02 | 36.84 | 41.74 | 46.58 | | 52.00 | 4 / 4 | | | |
| reaction time | 0.271 | interval | | 3.97 | 4.02 | 4.32 | 4.37 | | 4.54 | 4.69 | 4.82 | 4.90 | 4.84 | 5.42 | | | 12.31 | 13.60 | 14.56 |
| | | velocity | 7.36 | 8.82 | 8.71 | 8.10 | 8.01 | | 7.71 | 7.46 | 7.26 | 7.14 | 7.23 | 7.38 | 7.69 | | 8.53 | 7.72 | 7.21 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.5 | 170.5 | | | | |

**FINAL** - 2020 Chinese Olympic Trials (Shaoxing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Jun-21 | time | 5.95 | 9.96 | 13.95 | 18.28 | 22.65 | | 27.41 | 32.23 | 37.09 | 41.98 | 47.01 | | 53.07 | 1 / 8 | | | |
| reaction time | 0.257 | interval | | 4.01 | 3.99 | 4.33 | 4.37 | | 4.76 | 4.82 | 4.86 | 4.89 | 5.03 | 6.06 | | | 12.33 | 13.95 | 14.78 |
| | | velocity | 7.56 | 8.73 | 8.77 | 8.08 | 8.01 | | 7.35 | 7.26 | 7.20 | 7.16 | 6.96 | 6.60 | 7.54 | | 8.52 | 7.53 | 7.10 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 19 | 171 | | | | |

**Heat 3** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.24 | 10.29 | 14.64 | 18.94 | 23.54 | | 28.14 | 32.85 | 37.67 | 42.54 | 47.36 | | 52.97 | 5 / 3 | | | |
| reaction time | 0.300 | interval | | 4.05 | 4.35 | 4.30 | 4.60 | | 4.60 | 4.71 | 4.82 | 4.87 | 4.82 | 5.61 | | | 12.70 | 13.91 | 14.51 |
| | | velocity | 7.21 | 8.64 | 8.05 | 8.14 | 7.61 | | 7.61 | 7.43 | 7.26 | 7.19 | 7.26 | 7.13 | 7.55 | | 8.27 | 7.55 | 7.24 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18 | 170 | | | | |

**Heat 2** - 2019 Chinese National Grand Prix Final (Daqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Aug-19 | time | 6.36 | 10.53 | 14.71 | 19.07 | 23.62 | | 28.24 | 33.12 | 38.15 | 43.18 | 48.20 | | 54.11 | 7 / 6 | | | |
| reaction time | 0.325 | interval | | 4.17 | 4.18 | 4.36 | 4.55 | | 4.62 | 4.88 | 5.03 | 5.03 | 5.02 | 5.91 | | | 12.71 | 14.05 | 15.08 |
| | | velocity | 7.08 | 8.39 | 8.37 | 8.03 | 7.69 | | 7.58 | 7.17 | 6.96 | 6.96 | 6.97 | 6.77 | 7.39 | | 8.26 | 7.47 | 6.96 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 16 | 19 | 172 | | | | |

**Heat 1** - 2019 Asian Athletics Championships (Doha, QAT) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Apr-19 | time | 5.96 | 9.81 | 13.63 | 17.68 | 21.81 | | 26.19 | 30.81 | 35.55 | 40.27 | 45.12 | | 50.96 | 1 / 4 | | | |
| reaction time | 0.182 | interval | | 3.85 | 3.82 | 4.05 | 4.13 | | 4.38 | 4.62 | 4.74 | 4.72 | 4.85 | 5.84 | | | 11.72 | 13.13 | 14.31 |
| | | velocity | 7.55 | 9.09 | 9.16 | 8.64 | 8.47 | | 7.99 | 7.58 | 7.38 | 7.42 | 7.22 | 6.85 | 7.85 | | 8.96 | 8.00 | 7.34 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.7 | 170.7 | | | | |

**Gorban, Boris (RUS) (1978)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2001 IAAF World Championships (Edmonton, CAN) *Behm (2001) - Edmonton: Le quatrache: les finales*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-01 | time | 5.9 | 9.8 | 13.7 | 17.7 | 21.6 | | 25.5 | 29.5 | 33.8 | 38.3 | 42.9 | | 48.40 | 2 / ~~5~~ | | | |
| reaction time | 0.176 | interval | | 3.90 | 3.90 | 4.00 | 3.90 | | 3.90 | 4.00 | 4.30 | 4.50 | 4.60 | 5.50 | DQ | | 11.80 | 11.80 | 13.40 |
| | | velocity | 7.63 | 8.97 | 8.97 | 8.75 | 8.97 | | 8.97 | 8.75 | 8.14 | 7.78 | 7.61 | 7.27 | 8.26 | | 8.90 | 8.90 | 7.84 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17.5 | 156.5 | | | | |

**Semi-Final 3** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 5.94 | 9.74 | 13.66 | 17.62 | 21.66 | 23.18 | 25.74 | 30.02 | 34.54 | 39.14 | 43.86 | | 49.29 | 5 / 5 | | | |
| reaction time | 0.454 | interval | | 3.80 | 3.92 | 3.96 | 4.04 | | 4.08 | 4.28 | 4.52 | 4.60 | 4.72 | 5.43 | | | 11.68 | 12.40 | 13.84 |
| | | velocity | 7.58 | 9.21 | 8.93 | 8.84 | 8.66 | 8.63 | 8.58 | 8.18 | 7.74 | 7.61 | 7.42 | 7.37 | 8.12 | | 8.99 | 8.47 | 7.59 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.5 | 158.5 | | | | |

**Heat 2** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.98 | 9.82 | 13.62 | 17.54 | 21.54 | | 25.70 | | 34.66 | 39.30 | 43.98 | | 49.44 | 8 / 2 | | | |
| reaction time | 0.195 | interval | | 3.84 | 3.80 | 3.92 | 4.00 | | 4.16 | | 8.96 | 4.64 | 4.68 | 5.46 | | | 11.56 | | |
| | | velocity | 7.53 | 9.11 | 9.21 | 8.93 | 8.75 | | 8.41 | | 7.81 | 7.54 | 7.48 | 7.33 | 8.09 | | 9.08 | | |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | | 13 | | | 14 | 14 | 17.8 | 130.8 | | | | |

**Gordon, Jehue (TTO) (1991)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2013 IAAF World Championships (Moscow, RUS) (TV Analysis) *Henson (2021) - Athlete First: major championships report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-13 | time | 5.73 | 9.40 | 13.20 | 17.07 | 20.97 | | 24.97 | 29.07 | 33.27 | 37.63 | 42.17 | | 47.69 | 6 / 1 | | | |
| reaction time | 0.174 | interval | | 3.67 | 3.80 | 3.87 | 3.90 | | 4.00 | 4.10 | 4.20 | 4.36 | 4.54 | 5.52 | | | 11.34 | 12.00 | 13.10 |
| | | velocity | 7.85 | 9.54 | 9.21 | 9.04 | 8.97 | | 8.75 | 8.54 | 8.33 | 8.03 | 7.71 | 7.25 | 8.39 | | 9.26 | 8.75 | 8.02 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17.7 | 156.7 | | | | |

**FINAL** - 2012 Olympic Games (London, GBR) *Hillier (2012) - uka 2012 olympic games report: 400m hurdles*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-12 | time | 5.72 | 9.28 | 13.07 | 16.92 | 20.93 | 22.73 | 25.02 | 29.14 | 33.40 | 38.05 | 43.07 | | 48.86 | 8 / 6 | | | |
| reaction time | 0.165 | interval | | 3.56 | 3.79 | 3.85 | 4.01 | | 4.09 | 4.12 | 4.26 | 4.65 | 5.02 | 5.79 | | | 11.20 | 12.22 | 13.93 |
| | | velocity | 7.87 | 9.83 | 9.23 | 9.09 | 8.73 | 8.80 | 8.56 | 8.50 | 8.22 | 7.53 | 6.97 | 6.91 | 8.19 | | 9.38 | 8.59 | 7.54 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 15 | 15 | 15 | | 145 | | | | |

**FINAL** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-09 | time | 6.04 | 9.76 | 13.60 | 17.40 | 21.32 | | 25.36 | 29.59 | 33.96 | 38.44 | 43.00 | | 48.26 | 2 / 4 | | | |
| reaction time | 0.172 | interval | | 3.72 | 3.84 | 3.80 | 3.92 | | 4.04 | 4.23 | 4.37 | 4.48 | 4.56 | 5.26 | NR | | 11.36 | 12.19 | 13.41 |
| | | velocity | 7.45 | 9.41 | 9.11 | 9.21 | 8.93 | | 8.66 | 8.27 | 8.01 | 7.81 | 7.68 | 7.60 | 8.29 | | 9.24 | 8.61 | 7.83 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17 | 157 | | | | |

**Semi-Final 1** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Aug-09 | time | 6.00 | 9.68 | 13.50 | 17.36 | 21.39 | 25.60 | 29.84 | 34.22 | 38.80 | 43.44 | | 48.77 | 7 / 5 | | | | |
| reaction time | 0.162 | interval | | 3.68 | 3.82 | 3.86 | 4.03 | 4.21 | 4.24 | 4.38 | 4.58 | 4.64 | 5.33 | | | 11.36 | 12.48 | 13.60 | |
| | | velocity | 7.50 | 9.51 | 9.16 | 9.07 | 8.68 | 8.31 | 8.25 | 7.99 | 7.64 | 7.54 | 7.50 | 8.20 | | 9.24 | 8.41 | 7.72 | |
| H1 lead leg | | strides | | | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17 | 123 | | | | | |

**Heat 3** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-09 | time | 6.05 | 9.78 | 13.53 | 17.36 | 21.33 | 25.55 | 29.77 | 34.17 | 38.91 | 43.45 | | 48.66 | 8 / 3 | | | | |
| reaction time | 0.173 | interval | | 3.73 | 3.75 | 3.83 | 3.97 | 4.22 | 4.22 | 4.40 | 4.74 | 4.54 | 5.21 | NR | | 11.31 | 12.41 | 13.68 | |
| | | velocity | 7.44 | 9.38 | 9.33 | 9.14 | 8.82 | 8.29 | 8.29 | 7.95 | 7.38 | 7.71 | 7.68 | 8.22 | | 9.28 | 8.46 | 7.68 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Gotoh, Keita (JPN) (1999)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 2** - 2016 Japanese National Youth Championships (Mizuho, JPN) *(2016.11.17) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Oct-16 | time | | | | | 24.01 | | | 39.19 | | | | 56.49 | 4 / 5 | | | | |
| reaction time | | interval | | | | | | | | 15.18 | | | | | | | | | |
| | | velocity | | | | | 7.71 | | | 6.92 | | | | 7.08 | | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Goto, Sota (JPN)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2018 Japanese National High School Championships (Nagoya, JPN) *Kota (2018) - 71st high school championships: JAF scientific committee - biomechanics data collection*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Aug-18 | time | 6.22 | 10.24 | 14.46 | 18.77 | 23.21 | 27.71 | 32.30 | 36.94 | 41.89 | 46.88 | | 52.56 | 6 / 6 | | | | |
| reaction time | | interval | | 4.02 | 4.22 | 4.31 | 4.44 | 4.50 | 4.59 | 4.64 | 4.95 | 4.99 | 5.68 | | | 12.55 | 13.53 | 14.58 | |
| | | velocity | 7.23 | 8.71 | 8.29 | 8.12 | 7.88 | 7.78 | 7.63 | 7.54 | 7.07 | 7.01 | 7.04 | 7.61 | | 8.37 | 7.76 | 7.20 | |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 16 | 16 | | 137 | | | | | |

**Graham, John (CAN) (1965)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Semi-Final 1** - 1988 Olympic Games (Seoul, KOR) *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-88 | time | 6.05 | 10.05 | 14.09 | 18.14 | 22.38 | 26.75 | 31.16 | 35.79 | 40.68 | 45.68 | | 51.33 | 7 / 8 | | | | |
| reaction time | | interval | | 4.00 | 4.04 | 4.05 | 4.24 | 4.37 | 4.41 | 4.63 | 4.89 | 5.00 | 5.65 | | | 12.09 | 13.02 | 14.52 | |
| | | velocity | 7.44 | 8.75 | 8.66 | 8.64 | 8.25 | 8.01 | 7.94 | 7.56 | 7.16 | 7.00 | 7.08 | 7.79 | | 8.68 | 8.06 | 7.23 | |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 18.5 | 170.5 | | | | | |

**Graham, Winthrop (JAM) (1965)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1993 IAAF World Championships (Stuttgart, GER) *Graubner (2008) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Aug-93 | time | 5.92 | 9.63 | 13.43 | 17.26 | 21.18 | 25.07 | 29.10 | 33.44 | 37.77 | 42.33 | | 47.62 | 5 / 3 | | | | |
| reaction time | 0.213 | interval | | 3.71 | 3.80 | 3.83 | 3.92 | 3.89 | 4.03 | 4.34 | 4.33 | 4.56 | 5.29 | | | 11.34 | 11.84 | 13.23 | |
| | | velocity | 7.60 | 9.43 | 9.21 | 9.14 | 8.93 | 9.00 | 8.68 | 8.06 | 8.08 | 7.68 | 7.56 | 8.40 | | 9.26 | 8.87 | 7.94 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 15 | 18 | 146 | | | | | |

**FINAL** - 1992 Olympic Games (Barcelona, ESP) *Knight (1992) - 1992 Olympic report: the hurdling events*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-92 | time | 5.9 | 9.5 | 13.3 | 17.1 | 20.9 | 24.9 | 29.1 | 33.3 | 37.8 | 42.4 | | 47.66 | 3 / 2 | | | | |
| reaction time | | interval | | 3.60 | 3.80 | 3.80 | 3.80 | 4.00 | 4.20 | 4.20 | 4.50 | 4.60 | 5.26 | | | 11.20 | 12.00 | 13.30 | |
| | | velocity | 7.63 | 9.72 | 9.21 | 9.21 | 9.21 | 8.75 | 8.33 | 8.33 | 7.78 | 7.61 | 7.60 | 8.39 | | 9.38 | 8.75 | 7.89 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 17.7 | 159 | | | | | |

**FINAL** - 1991 IAAF World Championships (Tokyo, JPN) *Behm (1995) - la tactique du 400 haies*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Aug-91 | time | 5.9 | 9.5 | 13.2 | 16.8 | 20.4 | 24.3 | 28.6 | 33.0 | 37.5 | 42.1 | | 47.74 | 5 / 2 | | | | |
| reaction time | | interval | | 3.60 | 3.70 | 3.60 | 3.60 | 3.90 | 4.30 | 4.40 | 4.50 | 4.60 | 5.64 | NR | | 10.90 | 11.80 | 13.50 | |
| | | velocity | 7.63 | 9.72 | 9.46 | 9.72 | 9.72 | 8.97 | 8.14 | 7.95 | 7.78 | 7.61 | 7.09 | 8.38 | | 9.63 | 8.90 | 7.78 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 18.5 | 159.5 | | | | | |

**FINAL** - 1988 Olympic Games (Seoul, KOR) *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-88 | time | 6.15 | 9.96 | 13.79 | 17.68 | 21.57 | 25.61 | 29.69 | 34.02 | 38.40 | 42.95 | | 48.04 | 4 / 5 | | | | |
| reaction time | 0.191 | interval | | 3.81 | 3.83 | 3.89 | 3.89 | 4.04 | 4.08 | 4.33 | 4.38 | 4.55 | 5.09 | PB | | 11.53 | 12.01 | 13.26 | |
| | | velocity | 7.32 | 9.19 | 9.14 | 9.00 | 9.00 | 8.66 | 8.58 | 8.08 | 7.99 | 7.69 | 7.86 | 8.33 | | 9.11 | 8.74 | 7.92 | |
| H1 lead leg | L | strides | 21 | 14 | 13 | 14 | 13 | 14 | 14 | 14 | 14 | 14 | 17.3 | 162.3 | | | | | |

**Semi-Final 2** - 1988 Olympic Games (Seoul, KOR) *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-88 | time | 6.00 | 9.85 | 13.77 | 17.72 | 21.70 | 25.78 | 29.95 | 34.27 | 38.74 | 43.32 | | 48.37 | 6 / 2 | | | | |
| reaction time | | interval | | 3.85 | 3.92 | 3.95 | 3.98 | 4.08 | 4.17 | 4.32 | 4.47 | 4.58 | 5.05 | | | 11.72 | 12.23 | 13.37 | |
| | | velocity | 7.50 | 9.09 | 8.93 | 8.86 | 8.79 | 8.58 | 8.39 | 8.10 | 7.83 | 7.64 | 7.92 | 8.27 | | 8.96 | 8.59 | 7.85 | |
| H1 lead leg | | strides | 21 | 14 | 14 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 17.5 | 163.5 | | | | | |

**Grant, Robert (USA) (1996)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2019 NCAA Championships (Austin, TX) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-19 | time | 6.00 | 9.80 | 13.80 | 17.83 | 21.96 | 26.13 | 30.36 | 34.73 | | 43.63 | | 48.83 | 7 / ~~4~~ | | | | |
| reaction time | 0.186 | interval | | 3.80 | 4.00 | 4.03 | 4.13 | 4.17 | 4.23 | 4.37 | | 8.90 | 5.20 | DQ | | 11.83 | 12.53 | 13.27 | |
| | | velocity | 7.50 | 9.21 | 8.75 | 8.68 | 8.47 | 8.39 | 8.27 | 8.01 | | 7.87 | 7.69 | 8.19 | | 8.88 | 8.38 | 7.91 | |
| H1 lead leg | R | strides | | 14 | 14 | 14 | 14 | 14 | 16 | 15 | | | | 101 | | | | | |

**Green, Jack (GBR) (1991)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2018 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jul-18 | time | 6.08 | 9.96 | | | | | | | | | | dnf | 2 / -- | | | | |
| reaction time | 0.180 | interval | | 3.88 | | | | | | | | | | | | | | | |
| | | velocity | 7.40 | 9.02 | | | | | | | | | | | | | | | |
| H1 lead leg | R | strides | 22 | 14 | | | | | | | | | | 36 | | | | | |

**FINAL** - 2018 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jul-18 | time | 6.00 | 9.80 | 13.76 | | 21.80 | 25.96 | 30.32 | | 39.44 | 44.12 | | 49.52 | 1 / 7 | | | |
| reaction time | 0.172 | interval | | 3.80 | 3.96 | | 8.04 | 4.16 | 4.36 | | 9.12 | 4.68 | 5.40 | | | | | 13.80 |
| | | velocity | 7.50 | 9.21 | 8.84 | | 8.71 | 8.41 | 8.03 | | 7.68 | 7.48 | 7.41 | 8.08 | | | | 7.61 |
| H1 lead leg | R | strides | 22 | 14 | 14 | | 14 | 14 | 14 | | 15 | 15 | 18.2 | 140.2 | | | | |

**FINAL** - 2018 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jun-18 | time | 6.04 | 9.84 | 13.72 | 17.68 | 21.80 | 26.12 | 30.56 | 35.04 | 39.60 | 44.40 | | 49.73 | 8 / 5 | | | |
| reaction time | 0.176 | interval | | 3.80 | 3.88 | 3.96 | 4.12 | 4.32 | 4.44 | 4.48 | 4.56 | 4.80 | 5.33 | | | 11.64 | 12.88 | 13.84 |
| | | velocity | 7.45 | 9.21 | 9.02 | 8.84 | 8.50 | 8.10 | 7.88 | 7.81 | 7.68 | 7.29 | 7.50 | 8.04 | | 9.02 | 8.15 | 7.59 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 13 | 14 | 15 | 15 | 15 | 15 | 16 | | 153 | | | | |

**FINAL** - 2018 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-May-18 | time | 6.12 | 10.00 | 13.92 | 18.04 | 22.32 | 26.64 | 31.12 | 35.56 | 40.20 | 44.96 | | 50.22 | 8 / 7 | | | |
| reaction time | 0.230 | interval | | 3.88 | 3.92 | 4.12 | 4.28 | 4.32 | 4.48 | 4.44 | 4.64 | 4.76 | 5.26 | | | 11.92 | 13.08 | 13.84 |
| | | velocity | 7.35 | 9.02 | 8.93 | 8.50 | 8.18 | 8.10 | 7.81 | 7.88 | 7.54 | 7.35 | 7.60 | 7.96 | | 8.81 | 8.03 | 7.59 |
| H1 lead leg | R | strides | 22 | 14 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | | 150 | | | | |

**FINAL** - 2018 Commonwealth Games (Gold Coast, AUS) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Apr-18 | time | 6.17 | 9.97 | 13.74 | 17.65 | 21.75 | 25.99 | 30.30 | 34.70 | 39.24 | 43.77 | | 49.18 | 7 / 4 | | | |
| reaction time | 0.185 | interval | | 3.80 | 3.77 | 3.91 | 4.10 | 4.24 | 4.31 | 4.40 | 4.54 | 4.53 | 5.41 | | | 11.48 | 12.65 | 13.47 |
| | | velocity | 7.29 | 9.21 | 9.28 | 8.95 | 8.54 | 8.25 | 8.12 | 7.95 | 7.71 | 7.73 | 7.39 | 8.13 | | 9.15 | 8.30 | 7.80 |
| H1 lead leg | R | strides | 22 | 14 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 19.2 | 167.2 | | | | |

**FINAL** - 2017 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-17 | time | 6.00 | 9.72 | 13.48 | 17.40 | 21.52 | 25.84 | 30.24 | 34.76 | 39.44 | 44.12 | | 49.41 | 8 / 6 | | | |
| reaction time | 0.218 | interval | | 3.72 | 3.76 | 3.92 | 4.12 | 4.32 | 4.40 | 4.52 | 4.68 | 4.68 | 5.29 | | | 11.40 | 12.84 | 13.88 |
| | | velocity | 7.50 | 9.41 | 9.31 | 8.93 | 8.50 | 8.10 | 7.95 | 7.74 | 7.48 | 7.48 | 7.56 | 8.10 | | 9.21 | 8.18 | 7.56 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | | 15 | 18.5 | 151.5 | | | | |

**FINAL** - 2017 Müller's Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-17 | time | 6.16 | 9.92 | 13.68 | 17.48 | 21.44 | 25.72 | 30.00 | 34.40 | 38.92 | 43.52 | | 48.77 | 9 / 6 | | | |
| reaction time | 0.213 | interval | | 3.76 | 3.76 | 3.80 | 3.96 | 4.28 | 4.28 | 4.40 | 4.52 | 4.60 | 5.25 | | | 11.32 | 12.52 | 13.52 |
| | | velocity | 7.31 | 9.31 | 9.31 | 9.21 | 8.84 | 8.18 | 8.18 | 7.95 | 7.74 | 7.61 | 7.62 | 8.20 | | 9.28 | 8.39 | 7.77 |
| H1 lead leg | R | strides | 22 | 14 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18.7 | 166.7 | | | | |

**FINAL** - 2017 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Jun-17 | time | 6.08 | 9.88 | 13.60 | 17.44 | 21.48 | 25.76 | 30.12 | 34.60 | 39.16 | 43.80 | | 49.29 | 8 / 4 | | | |
| reaction time | 0.203 | interval | | 3.80 | 3.72 | 3.84 | 4.04 | 4.28 | 4.36 | 4.48 | 4.56 | 4.64 | 5.49 | | | 11.36 | 12.68 | 13.68 |
| | | velocity | 7.40 | 9.21 | 9.41 | 9.11 | 8.66 | 8.18 | 8.03 | 7.81 | 7.68 | 7.54 | 7.29 | 8.12 | | 9.24 | 8.28 | 7.68 |
| H1 lead leg | R | strides | 22 | 14 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | 19.2 | 169.2 | | | | |

**FINAL** - 2016 London Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jul-16 | time | 6.12 | 10.00 | 13.84 | 17.80 | 21.92 | 26.12 | 30.40 | 34.72 | 39.20 | 43.76 | | 48.99 | 9 / 5 | | | |
| reaction time | 0.187 | interval | | 3.88 | 3.84 | 3.96 | 4.12 | 4.20 | 4.28 | 4.32 | 4.48 | 4.56 | 5.23 | | | 11.68 | 12.60 | 13.36 |
| | | velocity | 7.35 | 9.02 | 9.11 | 8.84 | 8.50 | 8.33 | 8.18 | 8.10 | 7.81 | 7.68 | 7.65 | 8.16 | | 8.99 | 8.33 | 7.86 |
| H1 lead leg | R | strides | 22 | 14 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | 18.7 | 168.7 | | | | |

**FINAL** - 2016 European Championships (Amsterdam, NED) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Jul-16 | time | 6.08 | 10.00 | 13.96 | 18.12 | 22.24 | | | | | | | dnf | 2 / -- | | | |
| reaction time | 0.187 | interval | | 3.92 | 3.96 | 4.16 | 4.12 | | | | | | | | | 12.04 | | |
| | | velocity | 7.40 | 8.93 | 8.84 | 8.41 | 8.50 | | | | | | | | | 8.72 | | |
| H1 lead leg | L | strides | 22 | 14 | | 14 | 14 | | | | | | | 64 | | | | |

| **Green, Leford (JAM) (1986)** | | | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2012 Olympic Games (London, GBR) *Hillier (2012) - uka 2012 olympic games report: 400m hurdles*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-12 | time | 5.98 | 9.75 | 13.31 | 17.20 | 21.32 | 23.12 | 25.69 | 30.12 | 34.71 | 39.27 | 42.88 | | 49.12 | 9 / 7 | | |
| reaction time | 0.194 | interval | | 3.77 | 3.56 | 3.89 | 4.12 | | 4.37 | 4.43 | 4.59 | 4.56 | 3.61 | 6.24 | | | 11.22 | 12.92 | 12.76 |
| | | velocity | 7.53 | 9.28 | 9.83 | 9.00 | 8.50 | 8.65 | 8.01 | 7.90 | 7.63 | 7.68 | 9.70 | 6.41 | 8.14 | | 9.36 | 8.13 | 8.23 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 15 | 15 | 15 | | 145 | | | | |

| **Greene, David (Dai) (GBR) (1986)** | | | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2012 Olympic Games (London, GBR) *Hillier (2012) - uka 2012 olympic games report: 400m hurdles*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-12 | time | 5.82 | 9.44 | 13.18 | 16.98 | 20.96 | 22.76 | 25.12 | 29.32 | 33.64 | 38.10 | 42.84 | | 48.24 | 3 / 4 | | |
| reaction time | 0.150 | interval | | 3.62 | 3.74 | 3.80 | 3.98 | | 4.16 | 4.20 | 4.32 | 4.46 | 4.74 | 5.40 | | | 11.16 | 12.34 | 13.52 |
| | | velocity | 7.73 | 9.67 | 9.36 | 9.21 | 8.79 | 8.79 | 8.41 | 8.33 | 8.10 | 7.85 | 7.38 | 7.41 | 8.29 | | 9.41 | 8.51 | 7.77 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 16 | 19.2 | 172 | | | | |

**Semi-Final 1** - 2012 Olympic Games (London, GBR) *Hillier (2012) - uka 2012 olympic games report: 400m hurdles*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Aug-12 | time | 5.91 | 9.54 | 13.28 | 17.13 | 21.07 | 22.67 | 25.17 | 29.38 | 33.67 | 38.17 | 42.79 | | 48.19 | 7 / 4 | | |
| reaction time | 0.181 | interval | | 3.63 | 3.74 | 3.85 | 3.94 | | 4.10 | 4.21 | 4.29 | 4.50 | 4.62 | 5.40 | | | 11.22 | 12.25 | 13.41 |
| | | velocity | 7.61 | 9.64 | 9.36 | 9.09 | 8.88 | 8.82 | 8.54 | 8.31 | 8.16 | 7.78 | 7.58 | 7.41 | 8.30 | | 9.36 | 8.57 | 7.83 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | | 152 | | | | |

**Heat 3** - 2012 Olympic Games (London, GBR) *Hillier (2012) - uka 2012 olympic games report: 400m hurdles*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-12 | time | 6.02 | 9.76 | 13.59 | 17.48 | 21.52 | 23.12 | 25.75 | 30.04 | 34.44 | 39.01 | 43.64 | | 48.98 | 1 / 1 | | |
| reaction time | 0.167 | interval | | 3.74 | 3.83 | 3.89 | 4.04 | | 4.23 | 4.29 | 4.40 | 4.57 | 4.63 | 5.34 | | | 11.46 | 12.56 | 13.60 |
| | | velocity | 7.48 | 9.36 | 9.14 | 9.00 | 8.66 | 8.65 | 8.27 | 8.16 | 7.95 | 7.66 | 7.56 | 7.49 | 8.17 | | 9.16 | 8.36 | 7.72 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | | 152 | | | | |

**FINAL** - 2011 IAAF World Championships (Daegu, KOR) *Behm (2011) - Le quatrache: Démus enfin!*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-11 | time | 5.9 | 9.6 | 13.3 | 17.2 | 21.1 | | 25.2 | 29.4 | 33.8 | 38.3 | 42.9 | | 48.26 | 6 / 1 | | | |
| reaction time | 0.153 | interval | | 3.70 | 3.70 | 3.90 | 3.90 | | 4.10 | 4.20 | 4.40 | 4.50 | 4.60 | 5.36 | | | 11.30 | 12.20 | 13.50 |
| | | velocity | 7.63 | 9.46 | 9.46 | 8.97 | 8.97 | | 8.54 | 8.33 | 7.95 | 7.78 | 7.61 | 7.46 | 8.29 | | 9.29 | 8.61 | 7.78 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 18.5 | 169.5 | | | | |

**FINAL** - 2010 Commonwealth Games (Dehli, IND) *Arnold (2010) - 400mH planning and peaking*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Oct-10 | time | 6.1 | 9.9 | 13.7 | 17.7 | 21.7 | 23.5 | 25.9 | 30.1 | 34.4 | 38.9 | 43.5 | | 48.52 | 6 / 1 | | | |
| reaction time | 0.163 | interval | | 3.80 | 3.80 | 4.00 | 4.00 | | 4.20 | 4.20 | 4.30 | 4.50 | 4.60 | 5.02 | | | 11.60 | 12.40 | 13.40 |
| | | velocity | 7.38 | 9.21 | 9.21 | 8.75 | 8.75 | 8.51 | 8.33 | 8.33 | 8.14 | 7.78 | 7.61 | 7.97 | 8.24 | | 9.05 | 8.47 | 7.84 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 19 | 170 | | | | |

**Heat 2** - 2010 Commonwealth Games (Dehli, IND) *Arnold (2010) - 400mH planning and peaking*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Oct-10 | time | 6.1 | 10.0 | 14.0 | 18.0 | 22.3 | 24.1 | 26.6 | 30.9 | 35.4 | 40.0 | 44.6 | | 49.98 | 4 / 1 | | | |
| reaction time | 0.177 | interval | | 3.90 | 4.00 | 4.00 | 4.30 | | 4.30 | 4.30 | 4.50 | 4.60 | 4.60 | 5.38 | | | 11.90 | 12.90 | 13.70 |
| | | velocity | 7.38 | 8.97 | 8.75 | 8.75 | 8.14 | 8.30 | 8.14 | 8.14 | 7.78 | 7.61 | 7.61 | 7.43 | 8.00 | | 8.82 | 8.14 | 7.66 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2010 European Championships (Barcelona, ESP) *Arnold (2010) - 400mH planning and peaking*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-10 | time | 6.08 | 9.86 | 13.70 | 17.56 | 21.52 | | 25.54 | 29.70 | 33.96 | 38.38 | 42.96 | | 48.12 | 3 / 1 | | | |
| reaction time | 0.175 | interval | | 3.78 | 3.84 | 3.86 | 3.96 | | 4.02 | 4.16 | 4.26 | 4.42 | 4.58 | 5.16 | | | 11.48 | 12.14 | 13.26 |
| | | velocity | 7.40 | 9.26 | 9.11 | 9.07 | 8.84 | | 8.71 | 8.41 | 8.22 | 7.92 | 7.64 | 7.75 | 8.31 | | 9.15 | 8.65 | 7.92 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 19 | 170 | | | | |

**Semi-Final 1** - 2010 European Championships (Barcelona, ESP) *Arnold (2010) - 400mH planning and peaking*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jul-10 | time | 6.10 | 9.84 | 13.72 | 17.62 | 21.68 | | 25.86 | 30.18 | 34.70 | 39.32 | 44.02 | | 49.48 | 3 / 1 | | | |
| reaction time | 0.225 | interval | | 3.74 | 3.88 | 3.90 | 4.06 | | 4.18 | 4.32 | 4.52 | 4.62 | 4.70 | 5.46 | | | 11.52 | 12.56 | 13.84 |
| | | velocity | 7.38 | 9.36 | 9.02 | 8.97 | 8.62 | | 8.37 | 8.10 | 7.74 | 7.58 | 7.45 | 7.33 | 8.08 | | 9.11 | 8.36 | 7.59 |
| H1 lead leg | R | strides | | | | | | | | | | | | | | | | | |

**Heat 4** - 2010 European Championships (Barcelona, ESP) *Arnold (2010) - 400mH planning and peaking*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Jul-10 | time | 6.22 | 10.04 | 13.94 | 17.84 | 21.88 | | 26.08 | 30.46 | 34.90 | 39.56 | 44.40 | | 50.11 | 4 / 1 | | | |
| reaction time | 0.189 | interval | | 3.82 | 3.90 | 3.90 | 4.04 | | 4.20 | 4.38 | 4.44 | 4.66 | 4.84 | 5.71 | | | 11.62 | 12.62 | 13.94 |
| | | velocity | 7.23 | 9.16 | 8.97 | 8.97 | 8.66 | | 8.33 | 7.99 | 7.88 | 7.51 | 7.23 | 7.01 | 7.98 | | 9.04 | 8.32 | 7.53 |
| H1 lead leg | R | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-09 | time | 6.07 | 9.86 | 13.71 | 17.65 | 21.76 | | 25.93 | 30.19 | 34.52 | 38.92 | 43.46 | | 48.68 | 6 / 7 | | | |
| reaction time | 0.148 | interval | | 3.79 | 3.85 | 3.94 | 4.11 | | 4.17 | 4.26 | 4.33 | 4.40 | 4.54 | 5.22 | | | 11.58 | 12.54 | 13.27 |
| | | velocity | 7.41 | 9.23 | 9.09 | 8.88 | 8.52 | | 8.39 | 8.22 | 8.08 | 7.95 | 7.71 | 7.66 | 8.22 | | 9.07 | 8.37 | 7.91 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 19 | 171 | | | | |

**Semi-Final 2** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Aug-09 | time | 6.05 | 9.79 | 13.65 | 17.51 | 21.54 | | 25.66 | 29.94 | 34.24 | 38.62 | 43.10 | | 48.27 | 4 / 2 | | | |
| reaction time | 0.156 | interval | | 3.74 | 3.86 | 3.86 | 4.03 | | 4.12 | 4.28 | 4.30 | 4.38 | 4.48 | 5.17 | PB | | 11.46 | 12.43 | 13.16 |
| | | velocity | 7.44 | 9.36 | 9.07 | 9.07 | 8.68 | | 8.50 | 8.18 | 8.14 | 7.99 | 7.81 | 7.74 | 8.29 | | 9.16 | 8.45 | 7.98 |
| H1 lead leg | | strides | | | | | | | 14 | 14 | 15 | 15 | 15 | 18.7 | 91.7 | | | | |

**Heat 4** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-09 | time | 6.16 | 9.98 | 13.88 | 17.93 | 22.03 | | 26.20 | 30.44 | 34.76 | 39.22 | 43.64 | | 48.76 | 7 / 1 | | | |
| reaction time | 0.165 | interval | | 3.82 | 3.90 | 4.05 | 4.10 | | 4.17 | 4.24 | 4.32 | 4.46 | 4.42 | 5.12 | | | 11.77 | 12.51 | 13.20 |
| | | velocity | 7.31 | 9.16 | 8.97 | 8.64 | 8.54 | | 8.39 | 8.25 | 8.10 | 7.85 | 7.92 | 7.81 | 8.20 | | 8.92 | 8.39 | 7.95 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Greene, Joe (USA) (1987)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 2** - 2007 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2007)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-07 | time | 6.17 | 9.88 | 13.70 | 17.60 | 21.71 | | 26.08 | 30.61 | 35.25 | 39.94 | 44.72 | | 50.44 | 5 / 6 | | | |
| reaction time | | interval | | 3.71 | 3.82 | 3.90 | 4.11 | | 4.37 | 4.53 | 4.64 | 4.69 | 4.78 | 5.72 | | | 11.43 | 13.01 | 14.11 |
| | | velocity | 7.29 | 9.43 | 9.16 | 8.97 | 8.52 | | 8.01 | 7.73 | 7.54 | 7.46 | 7.32 | 6.99 | 7.93 | | 9.19 | 8.07 | 7.44 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 146 | | | | |

**Griffith, Rasheeme (BAR) (2000)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2023 NCAA Championships (Austin, TX) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-23 | time | 6.05 | 9.74 | 13.60 | 17.52 | 21.54 | | | 30.06 | 34.48 | 39.09 | 43.91 | | 49.17 | 3 / 5 | | | |
| reaction time | | interval | | 3.69 | 3.86 | 3.92 | 4.02 | | | 8.52 | 4.42 | 4.61 | 4.82 | 5.26 | | | 11.47 | 12.54 | 13.85 |
| | | velocity | 7.44 | 9.49 | 9.07 | 8.93 | 8.71 | | | 8.22 | 7.92 | 7.59 | 7.26 | 7.60 | 8.14 | | 9.15 | 8.37 | 7.58 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | | 14 | 14 | 15 | 18 | 147 | | | | |

**Grimes, Norman (USA) (1998)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2019 NCAA Championships (Austin, TX) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-19 | time | 5.93 | 9.60 | 13.30 | 17.06 | 20.86 | | 24.80 | 29.06 | 33.46 | 38.16 | 42.93 | | 48.71 | 3 / 2 | | | |
| reaction time | 0.231 | interval | | 3.67 | 3.70 | 3.76 | 3.80 | | 3.94 | 4.26 | 4.40 | 4.70 | 4.77 | 5.78 | PB | | 11.13 | 12.00 | 13.87 |
| | | velocity | 7.59 | 9.54 | 9.46 | 9.31 | 9.21 | | 8.88 | 8.22 | 7.95 | 7.45 | 7.34 | 6.92 | 8.21 | | 9.43 | 8.75 | 7.57 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.5 | 138.5 | | | | |

**Guillen, Serge (FRA) (1960)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 1** - 1982 European Championships (Athens, GRE) *(1982) - XIII championnats d'Europe d'Atletisma, Athens 1982*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-82 | time | 5.9 | | 13.9 | | 22.0 | | | 30.6 | | 39.6 | | | 50.07 | / 2 | | | |
| reaction time | | interval | | | 8.00 | | 8.10 | | | 8.60 | | 9.00 | | | | | | | |
| | | velocity | 7.63 | | 8.75 | | 8.64 | | | 8.14 | | 7.78 | | | 7.99 | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Hackelbusch, Henning (GER) (1982)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 2** - 2002 European Championships (Munich, GER) | | | | | | | | | | | | | | | | *Graubner (2009) - http://www.fgs.uni-halle.de* | | | |
| date | 07-Aug-02 | time | 6.21 | 10.13 | 14.09 | 18.10 | 22.23 | | 26.67 | 31.23 | 35.97 | 40.80 | 45.71 | | 51.37 | / 7 | | | |
| reaction time | | interval | | 3.92 | 3.96 | 4.01 | 4.13 | | 4.44 | 4.56 | 4.74 | 4.83 | 4.91 | 5.66 | | | 11.89 | 13.13 | 14.48 |
| | | velocity | 7.25 | 8.93 | 8.84 | 8.73 | 8.47 | | 7.88 | 7.68 | 7.38 | 7.25 | 7.13 | 7.07 | 7.79 | | 8.83 | 8.00 | 7.25 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Hall, Quincy (USA) (1998)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 USATF National Championships (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date | 26-Jun-22 | time | 6.10 | 9.81 | 13.61 | 17.55 | 21.62 | 23.22 | 25.76 | 29.96 | 34.26 | 38.77 | 43.34 | | 48.33 | 6 / 5 | | | |
| reaction time | | interval | | 3.71 | 3.80 | 3.94 | 4.07 | | 4.14 | 4.20 | 4.30 | 4.51 | 4.57 | 4.99 | | | 11.45 | 12.41 | 13.38 |
| | | velocity | 7.38 | 9.43 | 9.21 | 8.88 | 8.60 | 8.61 | 8.45 | 8.33 | 8.14 | 7.76 | 7.66 | 8.02 | 8.28 | | 9.17 | 8.46 | 7.85 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 16 | 156 | | | | |
| **FINAL** - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date | 28-May-22 | time | 5.80 | 9.53 | 13.30 | 17.16 | 21.10 | 23.83 | 25.20 | 29.46 | 33.73 | 38.37 | 43.00 | | 48.10 | 6 / 3 | | | |
| reaction time | 0.213 | interval | | 3.73 | 3.77 | 3.86 | 3.94 | | 4.10 | 4.26 | 4.27 | 4.64 | 4.63 | 5.10 | PB | | 11.36 | 12.30 | 13.54 |
| | | velocity | 7.76 | 9.38 | 9.28 | 9.07 | 8.88 | 8.39 | 8.54 | 8.22 | 8.20 | 7.54 | 7.56 | 7.84 | 8.32 | | 9.24 | 8.54 | 7.75 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 16 | 156 | | | | |
| **FINAL** - 2019 NCAA Championships (Austin, TX) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2019 year end hurdle report* | | | |
| date | 07-Jun-19 | time | 6.06 | 9.83 | 13.70 | 17.56 | 21.53 | | 25.53 | 29.70 | 34.03 | 38.60 | 43.40 | | 48.48 | 5 / 1 | | | |
| reaction time | 0.269 | interval | | 3.77 | 3.87 | 3.86 | 3.97 | | 4.00 | 4.17 | 4.33 | 4.57 | 4.80 | 5.08 | PB | | 11.50 | 12.14 | 13.70 |
| | | velocity | 7.43 | 9.28 | 9.04 | 9.07 | 8.82 | | 8.75 | 8.39 | 8.08 | 7.66 | 7.29 | 7.87 | 8.25 | | 9.13 | 8.65 | 7.66 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 16.7 | 156.7 | | | | |

**Hamada, Hiroshi (JPN) (2001)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2019 Japanese National High School Championships (Okinawa, JPN) | | | | | | | | | | | | | | | | *Kota (2019) - 72nd high school championships: JAF scientific committee - biomechanics data collection* | | | |
| date | 06-Aug-19 | time | 6.26 | 10.28 | 14.41 | 18.69 | 23.02 | | 27.46 | 31.92 | 36.53 | 41.54 | 46.85 | | 52.71 | 3 / 4 | | | |
| reaction time | | interval | | 4.02 | 4.13 | 4.28 | 4.33 | | 4.44 | 4.46 | 4.61 | 5.01 | 5.31 | 5.86 | | | 12.43 | 13.23 | 14.93 |
| | | velocity | 7.19 | 8.71 | 8.47 | 8.18 | 8.08 | | 7.88 | 7.85 | 7.59 | 6.99 | 6.59 | 6.83 | 7.59 | | 8.45 | 7.94 | 7.03 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 17 | | 138 | | | | |
| **FINAL** - 2018 Japanese National High School Championships (Nagoya, JPN) | | | | | | | | | | | | | | | | *Kota (2018) - 71st high school championships: JAF scientific committee - biomechanics data collection* | | | |
| date | 04-Aug-18 | time | 6.41 | 10.56 | 14.81 | 19.10 | 23.46 | | 27.79 | 32.25 | 36.82 | 41.61 | 46.50 | | 51.98 | 9 / 4 | | | |
| reaction time | | interval | | 4.15 | 4.25 | 4.29 | 4.36 | | 4.33 | 4.46 | 4.57 | 4.79 | 4.89 | 5.48 | PB | | 12.69 | 13.15 | 14.25 |
| | | velocity | 7.02 | 8.43 | 8.24 | 8.16 | 8.03 | | 8.08 | 7.85 | 7.66 | 7.31 | 7.16 | 7.30 | 7.70 | | 8.27 | 7.98 | 7.37 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**Hamamura, Kazuki (JPN) (1997)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2015 Japanese National High School Championships (Wakayama, JPN) | | | | | | | | | | | | | | | | *Enomoto (2015) - 68th high school championships: JAF scientific committee- biomechanics data* | | | |
| date | 31-Jul-15 | time | 6.16 | 10.33 | 14.43 | 18.64 | 22.96 | | 27.38 | 31.97 | 36.75 | 41.86 | 47.31 | | 53.19 | 3 / 6 | | | |
| reaction time | | interval | | 4.17 | 4.10 | 4.21 | 4.32 | | 4.42 | 4.59 | 4.78 | 5.11 | 5.45 | 5.88 | | | 12.48 | 13.33 | 15.34 |
| | | velocity | 7.31 | 8.39 | 8.54 | 8.31 | 8.10 | | 7.92 | 7.63 | 7.32 | 6.85 | 6.42 | 6.80 | 7.52 | | 8.41 | 7.88 | 6.84 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 16 | 15 | 17 | 17 | | 140 | | | | |

**Hamed, Zaid Abou (SYR) (1970)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 7** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 24-Sep-00 | time | 6.08 | 10.08 | 14.20 | 18.36 | 22.76 | | 27.04 | 31.60 | 36.04 | 40.68 | | | 50.74 | 3 / 5 | | | |
| reaction time | 0.117 | interval | | 4.00 | 4.12 | 4.16 | 4.40 | | 4.28 | 4.56 | 4.44 | 4.64 | | | | | 12.28 | 13.24 | |
| | | velocity | 7.40 | 8.75 | 8.50 | 8.41 | 7.95 | | 8.18 | 7.68 | 7.88 | 7.54 | | | 7.88 | | 8.55 | 7.93 | |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | | | 136 | | | | |

**Han Mingkun (CHN) (1995)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 1** - 2021 East China District Meeting (Zhaoqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 25-Apr-21 | time | 6.46 | 10.54 | 14.78 | 19.26 | 23.91 | | 28.66 | 33.42 | 38.19 | 43.04 | 48.16 | | 54.11 | 7 / 6 | | | |
| reaction time | 0.205 | interval | | 4.08 | 4.24 | 4.48 | 4.65 | | 4.75 | 4.76 | 4.77 | 4.85 | 5.12 | 5.95 | | | 12.80 | 14.16 | 14.74 |
| | | velocity | 6.97 | 8.58 | 8.25 | 7.81 | 7.53 | | 7.37 | 7.35 | 7.34 | 7.22 | 6.84 | 6.72 | 7.39 | | 8.20 | 7.42 | 7.12 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 15 | 15 | | 15 | 15 | 15 | 15 | 16 | 19 | 174 | | | | |

**Hanaoka, Kazuma (JPN) (2000)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2017 Japanese National High School Chamionships (Yamagata, JPN) | | | | | | | | | | | | | | | | *Kota (2017) - 70th high school championships: JAF scientific committee- biomechanics data* | | | |
| date | 31-Jul-17 | time | 6.31 | 10.39 | 14.53 | 18.74 | 23.09 | | 27.59 | 32.20 | 36.97 | 41.99 | 47.18 | | 52.88 | 5 / 6 | | | |
| reaction time | 0.192 | interval | | 4.08 | 4.14 | 4.21 | 4.35 | | 4.50 | 4.61 | 4.77 | 5.02 | 5.19 | 5.70 | | | 12.43 | 13.46 | 14.98 |
| | | velocity | 7.13 | 8.58 | 8.45 | 8.31 | 8.05 | | 7.78 | 7.59 | 7.34 | 6.97 | 6.74 | 7.02 | 7.56 | | 8.45 | 7.80 | 7.01 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 17 | 17 | | 139 | | | | |

**Hann, Mamadou Kasse (FRA) (1986)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2019 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2019 year end hurdle report* | | | |
| date | 06-Jun-19 | time | 5.97 | 9.87 | 13.77 | 17.70 | 21.77 | | 25.97 | 30.32 | 34.85 | 39.48 | 44.45 | | 50.00 | 1 / 6 | | | |
| reaction time | 0.157 | interval | | 3.90 | 3.90 | 3.93 | 4.07 | | 4.20 | 4.35 | 4.53 | 4.63 | 4.97 | 5.55 | | | 11.73 | 12.62 | 14.13 |
| | | velocity | 7.54 | 8.97 | 8.97 | 8.91 | 8.60 | | 8.33 | 8.05 | 7.73 | 7.56 | 7.04 | 7.21 | 8.00 | | 8.95 | 8.32 | 7.43 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 13 | 13 | | 14 | 14 | 14 | 14 | 15 | 17.7 | 163.7 | | | | |

**FINAL** - 2018 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jun-18 | time | 6.00 | 9.80 | 13.68 | 17.52 | 21.48 | 25.68 | 30.04 | 34.56 | 39.24 | 44.04 | 49.58 | 3 / 4 | | | | |
| reaction time | 0.140 | interval | | 3.80 | 3.88 | 3.84 | 3.96 | 4.20 | 4.36 | 4.52 | 4.68 | 4.80 | 5.54 | | 11.52 | 12.52 | 14.00 | |
| | | velocity | 7.50 | 9.21 | 9.02 | 9.11 | 8.84 | 8.33 | 8.03 | 7.74 | 7.48 | 7.29 | 7.22 | 8.07 | 9.11 | 8.39 | 7.50 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 17.7 | 163.7 | | | | |

**FINAL** - 2018 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-18 | time | 5.92 | 9.72 | | | 21.48 | 23.3 | 25.68 | 30.08 | 34.48 | 39.16 | 43.96 | 49.50 | 2 / 7 | | | |
| reaction time | 0.159 | interval | | 3.80 | | | 11.76 | | 4.20 | 4.40 | 4.40 | 4.68 | 4.80 | 5.54 | | | | 13.88 |
| | | velocity | 7.60 | 9.21 | | | 8.93 | 8.58 | 8.33 | 7.95 | 7.95 | 7.48 | 7.29 | 7.22 | 8.08 | | | 7.56 |
| H1 lead leg | L | strides | 21 | 13 | | | | | 14 | 14 | 14 | 14 | 15 | 17 | 122 | | | |

**FINAL** - 2017 Müller's Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-17 | time | 6.08 | 9.96 | 13.84 | 17.64 | 21.60 | 25.72 | 30.16 | 34.64 | 39.36 | 44.16 | 49.50 | 3 / 9 | | | | |
| reaction time | 0.151 | interval | | 3.88 | 3.88 | 3.80 | 3.96 | 4.12 | 4.44 | 4.48 | 4.72 | 4.80 | 5.34 | | 11.56 | 12.52 | 14.00 | |
| | | velocity | 7.40 | 9.02 | 9.02 | 9.21 | 8.84 | 8.50 | 7.88 | 7.81 | 7.42 | 7.29 | 7.49 | 8.08 | 9.08 | 8.39 | 7.50 | |
| H1 lead leg | L | strides | 21 | 14 | 14 | 13 | 13 | 13 | 14 | 14 | 15 | 14 | | 145 | | | | |

**FINAL** - 2017 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Jun-17 | time | 6.04 | 9.92 | | 17.76 | 21.88 | 26.08 | 30.60 | 35.16 | 39.80 | 44.44 | 49.72 | 5 / 5 | | | | |
| reaction time | 0.158 | interval | | 3.88 | | 7.84 | 4.12 | 4.20 | 4.52 | 4.56 | 4.64 | 4.64 | 5.28 | | 11.72 | 12.84 | 13.84 | |
| | | velocity | 7.45 | 9.02 | | 8.93 | 8.50 | 8.33 | 7.74 | 7.68 | 7.54 | 7.54 | 7.58 | 8.05 | 8.96 | 8.18 | 7.59 | |
| H1 lead leg | L | strides | 21 | 13 | | | 13 | 14 | 14 | 14 | 14 | 14 | | 117 | | | | |

**FINAL** - 2017 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Jun-17 | time | 6.03 | 9.80 | 13.53 | 17.36 | 21.26 | 25.46 | 29.76 | 34.26 | 39.00 | 43.73 | 48.97 | 5 / 4 | | | | |
| reaction time | 0.176 | interval | | 3.77 | 3.73 | 3.83 | 3.90 | 4.20 | 4.30 | 4.50 | 4.74 | 4.73 | 5.24 | | 11.33 | 12.40 | 13.97 | |
| | | velocity | 7.46 | 9.28 | 9.38 | 9.14 | 8.97 | 8.33 | 8.14 | 7.78 | 7.38 | 7.40 | 7.63 | 8.17 | 9.27 | 8.47 | 7.52 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 17.2 | 163.2 | | | | |

**FINAL** - 2016 Meeting Paris (Saint-Denis, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Aug-16 | time | 6.08 | 9.92 | | 17.76 | 21.76 | 25.88 | | 34.60 | 39.28 | 44.08 | 49.46 | 1 / 7 | | | | |
| reaction time | 0.115 | interval | | 3.84 | | 7.84 | 4.00 | 4.12 | | 8.72 | 4.68 | 4.80 | 5.38 | | 11.68 | | | |
| | | velocity | 7.40 | 9.11 | | 8.93 | 8.75 | 8.50 | | 8.03 | 7.48 | 7.29 | 7.43 | 8.09 | 8.99 | | | |
| H1 lead leg | R | strides | 20 | 13 | | | 13 | 13 | | | 14 | 14 | | 87 | | | | |

*Hann, Mamadou Kasse (SEN) (1986)*

**FINAL** - 2013 IAAF World Championships (Moscow, RUS) (TV Analysis) *Henson (2021) - Athlete First: major championships report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-13 | time | 6.00 | 9.77 | 13.60 | 17.37 | 21.33 | 25.33 | 29.60 | 34.17 | 38.70 | 43.37 | 48.68 | 2 / 7 | | | | |
| reaction time | 0.195 | interval | | 3.77 | 3.83 | 3.77 | 3.96 | 4.00 | 4.27 | 4.57 | 4.53 | 4.67 | 5.31 | | 11.37 | 12.23 | 13.77 | |
| | | velocity | 7.50 | 9.28 | 9.14 | 9.28 | 8.84 | 8.75 | 8.20 | 7.66 | 7.73 | 7.49 | 7.53 | 8.22 | 9.23 | 8.59 | 7.63 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | | 14 | 14 | 16.7 | 143.7 | | | | |

**Happio, Wilfried (FRA) (1998)**

**FINAL** - 2023 Prefontaine Classic (Eugene, OR) *Omega Timing (2023) - diamond league race analysis*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Sep-23 | time | 5.88 | 9.56 | 13.26 | 17.03 | 20.93 | | 24.96 | 29.07 | 33.36 | 37.91 | 42.52 | | 47.83 | 3 / 5 | | | |
| reaction time | 0.173 | interval | | 3.68 | 3.70 | 3.77 | 3.90 | | 4.03 | 4.11 | 4.29 | 4.55 | 4.61 | 5.31 | | | 11.15 | 12.04 | 13.45 |
| | | velocity | 7.65 | 9.51 | 9.46 | 9.28 | 8.97 | | 8.68 | 8.52 | 8.16 | 7.69 | 7.59 | 7.53 | 8.36 | | 9.42 | 8.72 | 7.81 |
| H1 lead leg | L | strides | 20 | | | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 18 | 133 | | | | |

**FINAL** - 2023 Weltklasse (Zürich, SUI) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Aug-23 | time | 6.09 | 9.69 | 13.37 | 17.16 | 21.08 | 25.15 | 29.33 | 33.73 | 38.35 | 43.05 | 48.42 | 2 / 5 | | | | |
| reaction time | 0.469 | interval | | 3.60 | 3.68 | 3.79 | 3.92 | 4.07 | 4.18 | 4.40 | 4.62 | 4.70 | 5.37 | | 11.07 | 12.17 | 13.72 | |
| | | velocity | 7.39 | 9.72 | 9.51 | 9.23 | 8.93 | 8.60 | 8.37 | 7.95 | 7.58 | 7.45 | 7.45 | 8.26 | 9.49 | 8.63 | 7.65 | |
| H1 lead leg | L | strides | 20 | 13 | | | 13 | 13 | 13 | | | 15 | 17.2 | 104.2 | | | | |

**Semi-Final 3** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-23 | time | 5.94 | 9.67 | 13.31 | 16.91 | 20.72 | 24.66 | 28.76 | 33.40 | | 43.31 | 48.83 | 6 / 7 | | | | |
| reaction time | 0.176 | interval | | 3.73 | 3.64 | 3.60 | 3.81 | 3.94 | 4.10 | 4.64 | | 9.91 | 5.52 | | 10.97 | 11.85 | 14.55 | |
| | | velocity | 7.58 | 9.38 | 9.62 | 9.72 | 9.19 | 8.88 | 8.54 | 7.54 | | 7.06 | 7.25 | 8.19 | 9.57 | 8.86 | 7.22 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | | | 17.7 | 129.7 | | | | |

**Heat 3** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 5.93 | 9.80 | 13.60 | 17.43 | 21.23 | 25.26 | 29.46 | 33.80 | 38.53 | 43.36 | 48.63 | 4 / 1 | | | | |
| reaction time | 0.172 | interval | | 3.87 | 3.80 | 3.83 | 3.80 | 4.03 | 4.20 | 4.34 | 4.73 | 4.83 | 5.27 | | 11.50 | 12.03 | 13.90 | |
| | | velocity | 7.59 | 9.04 | 9.21 | 9.14 | 9.21 | 8.68 | 8.33 | 8.06 | 7.40 | 7.25 | 7.59 | 8.23 | 9.13 | 8.73 | 7.55 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 17 | 158 | | | | |

**FINAL** - 2023 Herculis Meeting International d'Athlétisme (Monaco, MON) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jul-23 | time | 5.80 | 9.44 | 13.14 | 16.91 | 20.82 | 24.89 | 29.09 | 33.44 | 38.09 | 42.79 | 48.25 | 4 / 5 | | | | |
| reaction time | 0.149 | interval | | 3.64 | 3.70 | 3.77 | 3.91 | 4.07 | 4.20 | 4.35 | 4.65 | 4.70 | 5.46 | | 11.11 | 12.18 | 13.70 | |
| | | velocity | 7.76 | 9.62 | 9.46 | 9.28 | 8.95 | 8.60 | 8.33 | 8.05 | 7.53 | 7.45 | 7.33 | 8.29 | 9.45 | 8.62 | 7.66 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | | | 13 | 13 | 15 | 15 | | 115 | | | | |

**FINAL** - 2023 Bauhaus Galan (Stockholm, SWE) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Jul-23 | time | 5.79 | 9.44 | 13.12 | 16.88 | 20.80 | 24.86 | 29.12 | 33.68 | 38.71 | 43.77 | 49.67 | 6 / 5 | | | | |
| reaction time | 0.151 | interval | | 3.65 | 3.68 | 3.76 | 3.92 | 4.06 | 4.26 | 4.56 | 5.03 | 5.06 | 5.90 | | 11.09 | 12.24 | 14.65 | |
| | | velocity | 7.77 | 9.59 | 9.51 | 9.31 | 8.93 | 8.62 | 8.22 | 7.68 | 6.96 | 6.92 | 6.78 | 8.05 | 9.47 | 8.58 | 7.17 | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | L | strides | 20 | 13 | | 13 | 13 | | 13 | 13 | 14 | 15 | 15 | | 129 | | | | |

**FINAL** - 2023 Bislett Games (Oslo, NOR) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Jun-23 | time | 5.82 | 9.47 | 13.16 | 16.95 | 20.88 | | 24.93 | 29.11 | 33.48 | 38.00 | 42.70 | | 48.13 | 5 / 3 | | | |
| reaction time | 0.159 | interval | | 3.65 | 3.69 | 3.79 | 3.93 | | 4.05 | 4.18 | 4.37 | 4.52 | 4.70 | 5.43 | | | 11.13 | 12.16 | 13.59 |
| | | velocity | 7.73 | 9.59 | 9.49 | 9.23 | 8.91 | | 8.64 | 8.37 | 8.01 | 7.74 | 7.45 | 7.37 | 8.31 | | 9.43 | 8.63 | 7.73 |
| H1 lead leg | L | strides | 20 | | | 13 | 13 | | 13 | | | 13 | 15 | 17 | 104 | | | | |

**FINAL** - 2023 Meeting de Paris (Paris, FRA) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-23 | time | 5.76 | 9.37 | 13.06 | 16.85 | 20.77 | | 24.79 | 28.96 | 33.32 | 38.00 | 42.81 | | 48.26 | 6 / 2 | | | |
| reaction time | 0.156 | interval | | 3.61 | 3.69 | 3.79 | 3.92 | | 4.02 | 4.17 | 4.36 | 4.68 | 4.81 | 5.45 | | | 11.09 | 12.11 | 13.85 |
| | | velocity | 7.81 | 9.70 | 9.49 | 9.23 | 8.93 | | 8.71 | 8.39 | 8.03 | 7.48 | 7.28 | 7.34 | 8.29 | | 9.47 | 8.67 | 7.58 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 18 | 159 | | | | |

**FINAL** - 2023 FBK Games (Hengelo, NED) *Omega Timing (2023) - continental tour race analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jun-23 | time | 5.85 | 9.55 | 13.34 | 17.23 | 21.27 | | 25.40 | 29.68 | 34.18 | 38.98 | 43.79 | | 49.40 | 7 / 4 | | | |
| reaction time | 0.158 | interval | | 3.70 | 3.79 | 3.89 | 4.04 | | 4.13 | 4.28 | 4.50 | 4.80 | 4.81 | 5.61 | | | 11.38 | 12.45 | 14.11 |
| | | velocity | 7.69 | 9.46 | 9.23 | 9.00 | 8.66 | | 8.47 | 8.18 | 7.78 | 7.29 | 7.28 | 7.13 | 8.10 | | 9.23 | 8.43 | 7.44 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 17.5 | 158.5 | | | | |

**FINAL** - 2023 Doha Diamond League (Doha, QAT) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-23 | time | 5.85 | 9.55 | 13.30 | 17.17 | 21.14 | | 25.24 | 29.53 | 33.96 | 38.65 | 43.56 | | 49.12 | 5 / 3 | | | |
| reaction time | 0.156 | interval | | 3.70 | 3.75 | 3.87 | 3.97 | | 4.10 | 4.29 | 4.43 | 4.69 | 4.91 | 5.56 | | | 11.32 | 12.36 | 14.03 |
| | | velocity | 7.69 | 9.46 | 9.33 | 9.04 | 8.82 | | 8.54 | 8.16 | 7.90 | 7.46 | 7.13 | 7.19 | 8.14 | | 9.28 | 8.50 | 7.48 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 18 | 159 | | | | |

**FINAL** - 2022 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-22 | time | 5.87 | 9.54 | 13.38 | 17.32 | 21.32 | 22.89 | 25.46 | 29.69 | 34.00 | 38.71 | 43.48 | | 48.72 | 7 / 4 | | | |
| reaction time | 0.130 | interval | | 3.67 | 3.84 | 3.94 | 4.00 | | 4.14 | 4.23 | 4.31 | 4.71 | 4.77 | 5.24 | | | 11.45 | 12.37 | 13.79 |
| | | velocity | 7.67 | 9.54 | 9.11 | 8.88 | 8.75 | 8.74 | 8.45 | 8.27 | 8.12 | 7.43 | 7.34 | 7.63 | 8.21 | | 9.17 | 8.49 | 7.61 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 17.5 | 158.5 | | | | |

**FINAL** - 2022 Memorial van Damme (Brussels, BEL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Sep-22 | time | 5.87 | 9.51 | 13.24 | | 21.08 | 22.72 | 25.16 | 29.46 | 33.97 | 38.67 | 43.44 | | 48.61 | 5 / ~~4~~ 3 | | | |
| reaction time | 0.170 | interval | | 3.64 | 3.73 | | 7.84 | | 2.44 | 4.30 | 4.51 | 4.70 | 4.77 | 5.17 | | | | | 13.98 |
| | | velocity | 7.67 | 9.62 | 9.38 | | 8.93 | 8.80 | 14.34 | 8.14 | 7.76 | 7.45 | 7.34 | 7.74 | 8.23 | | | | 7.51 |
| H1 lead leg | L | strides | 20 | 13 | 13 | | | | 13 | 13 | 13 | 15 | 15 | 17.2 | 132.2 | | | | |

**FINAL** - 2022 European Athletics Championships (Munich, GER) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Aug-22 | time | 5.85 | 9.43 | | 17.09 | 21.06 | 22.67 | 25.19 | 29.44 | 33.85 | 38.50 | 43.27 | | 48.56 | 3 / 2 | | | |
| reaction time | 0.185 | interval | | 3.58 | | 7.66 | 3.97 | | 4.13 | 4.25 | 4.41 | 4.65 | 4.77 | 5.29 | | | 11.24 | 12.35 | 13.83 |
| | | velocity | 7.69 | 9.78 | | 9.14 | 8.82 | 8.82 | 8.47 | 8.24 | 7.94 | 7.53 | 7.34 | 7.56 | 8.24 | | 9.34 | 8.50 | 7.59 |
| H1 lead leg | L | strides | 20 | 13 | | | 13 | | 13 | 13 | 13 | 15 | 15 | 18 | 133 | | | | |

**FINAL** - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-22 | time | 5.83 | 9.50 | 13.26 | 17.10 | 21.10 | 22.80 | 25.23 | 29.50 | 33.93 | 38.70 | 43.50 | | 48.74 | 5 / 3 | | | |
| reaction time | 0.154 | interval | | 3.67 | 3.76 | 3.84 | 4.00 | | 4.13 | 4.27 | 4.43 | 4.77 | 4.80 | 5.24 | | | 11.27 | 12.40 | 14.00 |
| | | velocity | 7.72 | 9.54 | 9.31 | 9.11 | 8.75 | 8.77 | 8.47 | 8.20 | 7.90 | 7.34 | 7.29 | 7.63 | 8.21 | | 9.32 | 8.47 | 7.50 |
| H1 lead leg | L | strides | 20 | 13 | 13 | | 13 | | 13 | 13 | 13 | 15 | 15 | 17.7 | 145.7 | | | | |

**FINAL** - 2022 World Athletics Championships (Eugene, OR) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Jul-22 | time | 5.79 | 9.33 | 12.95 | 16.58 | 20.34 | 21.86 | 24.26 | 28.50 | 32.83 | 37.49 | 42.18 | | 47.41 | 5 / 4 | | | |
| reaction time | 0.134 | interval | | 3.54 | 3.62 | 3.63 | 3.76 | | 3.92 | 4.24 | 4.33 | 4.66 | 4.69 | 5.23 | **PB** | | 10.79 | 11.92 | 13.68 |
| | | velocity | 7.77 | 9.89 | 9.67 | 9.64 | 9.31 | 9.15 | 8.93 | 8.25 | 8.08 | 7.51 | 7.46 | 7.65 | 8.44 | | 9.73 | 8.81 | 7.68 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 18 | 159 | | | | |

**Semi-Final 3** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.76 | 9.40 | 13.20 | 16.90 | 20.76 | 22.44 | 24.80 | 29.06 | 33.46 | 38.07 | 42.73 | | 48.14 | 6 / 2 | | | |
| reaction time | 0.136 | interval | | 3.64 | 3.80 | 3.70 | 3.86 | | 4.04 | 4.26 | 4.40 | 4.61 | 4.66 | 5.41 | **PB** | | 11.14 | 12.16 | 13.67 |
| | | velocity | 7.81 | 9.62 | 9.21 | 9.46 | 9.07 | 8.91 | 8.66 | 8.22 | 7.95 | 7.59 | 7.51 | 7.39 | 8.31 | | 9.43 | 8.63 | 7.68 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 18 | 159 | | | | |

**Heat 2** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 5.96 | 9.60 | 13.40 | 17.27 | 21.30 | 23.05 | 25.40 | 29.73 | 34.20 | 39.07 | 44.07 | | 49.60 | 6 / 3 | | | |
| reaction time | 0.308 | interval | | 3.64 | 3.80 | 3.87 | 4.03 | | 4.10 | 4.33 | 4.47 | 4.87 | 5.00 | 5.53 | | | 11.31 | 12.46 | 14.34 |
| | | velocity | 7.55 | 9.62 | 9.21 | 9.04 | 8.68 | 8.68 | 8.54 | 8.08 | 7.83 | 7.19 | 7.00 | 7.23 | 8.06 | | 9.28 | 8.43 | 7.32 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 17.2 | 158.2 | | | | |

**FINAL** - 2022 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jun-22 | time | 5.76 | 9.40 | 13.22 | 17.12 | 21.10 | 22.81 | 25.28 | 29.72 | 34.12 | 38.80 | 43.48 | | 49.01 | 3 / 3 | | | |
| reaction time | 0.150 | interval | | 3.64 | 3.82 | 3.90 | 3.98 | | 4.18 | 4.44 | 4.40 | 4.68 | 4.68 | 5.53 | **PB** | | 11.36 | 12.60 | 13.76 |
| | | velocity | 7.81 | 9.62 | 9.16 | 8.97 | 8.79 | 8.77 | 8.37 | 7.88 | 7.95 | 7.48 | 7.48 | 7.23 | 8.16 | | 9.24 | 8.33 | 7.63 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 161 | | | | |

**FINAL** - FINAL - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jun-22 | time | 5.87 | 9.50 | 13.27 | 17.17 | 21.20 | 22.90 | 25.30 | 29.80 | 34.30 | 39.07 | 43.83 | | 49.27 | 2 / 3 | | | |
| reaction time | 0.143 | interval | | 3.63 | 3.77 | 3.90 | 4.03 | | 4.10 | 4.50 | 4.50 | 4.77 | 4.76 | 5.44 | | | 11.30 | 12.63 | 14.03 |
| | | velocity | 7.67 | 9.64 | 9.28 | 8.97 | 8.68 | 8.73 | 8.54 | 7.78 | 7.78 | 7.34 | 7.35 | 7.35 | 8.12 | | 9.29 | 8.31 | 7.48 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 143 | | | | |

**FINAL** - 2021 Herculis Meeting International d'Athletisme (Monaco, MON) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-21 | time | 5.84 | 9.54 | | 17.32 | 21.37 | 23.1 | 25.52 | 30.05 | 34.60 | 39.34 | 44.17 | | 49.66 | 3 / 5 | | | |
| reaction time | 0.123 | interval | | 3.70 | | 7.78 | 4.05 | | 4.15 | 4.53 | 4.55 | 4.74 | 4.83 | 5.49 | | | 11.48 | 12.73 | 14.12 |
| | | velocity | 7.71 | 9.46 | | 9.00 | 8.64 | 8.66 | 8.43 | 7.73 | 7.69 | 7.38 | 7.25 | 7.29 | 8.05 | | 9.15 | 8.25 | 7.44 |
| H1 lead leg | L | strides | 20 | 13 | | | 13 | | 13 | 14 | | 15 | 15 | | 103 | | | | |

**FINAL** - 2021 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jul-21 | time | 5.80 | 9.56 | 13.40 | 17.24 | 21.20 | 23.0 | 25.28 | | 34.04 | 38.88 | 43.64 | | 49.28 | 2 / 6 | | | |
| reaction time | 0.136 | interval | | 3.76 | 3.84 | 3.84 | 3.96 | | 4.08 | | 8.76 | 4.84 | 4.76 | 5.64 | | | 11.44 | | |
| | | velocity | 7.76 | 9.31 | 9.11 | 9.11 | 8.84 | 8.70 | 8.58 | | 7.99 | 7.23 | 7.35 | 7.09 | 8.12 | | 9.18 | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | | 15 | 15 | 18 | 146 | | | | |

**FINAL** - 2020 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Sep-20 | time | 5.91 | 9.71 | | | 21.59 | 23.4 | | 30.10 | 34.53 | 39.21 | 44.01 | | 49.65 | 5 / 5 | | | |
| reaction time | 0.166 | interval | | 3.80 | | | 11.88 | | | 8.51 | 4.43 | 4.68 | 4.80 | 5.64 | | | | | 13.91 |
| | | velocity | 7.61 | 9.21 | | | 8.84 | 8.55 | | 8.23 | 7.90 | 7.48 | 7.29 | 7.09 | 8.06 | | | | 7.55 |
| H1 lead leg | L | strides | 20 | 13 | | | | | | | 14 | 15 | 15 | 17.5 | 94.5 | | | | |

**FINAL** - 2020 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-20 | time | 5.86 | | 13.48 | 17.44 | 21.40 | 23.2 | 25.54 | | 34.36 | 38.94 | 43.64 | | 49.14 | 5 / 2 | | | |
| reaction time | 0.141 | interval | | | 7.62 | 3.96 | 3.96 | | 4.14 | | 8.82 | 4.58 | 4.70 | 5.50 | | | 11.58 | | |
| | | velocity | 7.68 | | 9.19 | 8.84 | 8.84 | 8.62 | 8.45 | | 7.94 | 7.64 | 7.45 | 7.27 | 8.14 | | 9.07 | | |
| H1 lead leg | L | strides | 20 | 13 | | 13 | 13 | | 13 | | | 15 | 15 | 18.5 | 120.5 | | | | |

**FINAL** - 2017 European U20 Championships (Grosseto, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jul-17 | time | 5.88 | 9.64 | 13.56 | 17.60 | 21.84 | | 26.04 | 30.56 | 34.92 | 39.48 | 44.24 | | 49.93 | 6 / 1 | | | |
| reaction time | 0.234 | interval | | 3.76 | 3.92 | 4.04 | 4.24 | | 4.20 | 4.52 | 4.36 | 4.56 | 4.76 | 5.69 | NJR PB | | 11.72 | 12.96 | 13.68 |
| | | velocity | 7.65 | 9.31 | 8.93 | 8.66 | 8.25 | | 8.33 | 7.74 | 8.03 | 7.68 | 7.35 | 7.03 | 8.01 | | 8.96 | 8.10 | 7.68 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 141 | | | | |

**Harada, Hibiki (JPN) (2003)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2021 Japanese High School National Championships (Fukui, JPN) *Shibayama (2021) - national high school and U20 national championhsips*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jul-21 | time | 6.19 | 10.08 | 14.32 | 18.84 | 23.36 | | 28.01 | 32.83 | 37.74 | 42.91 | 48.06 | | 53.82 | 1 / 8 | | | |
| reaction time | 0.162 | interval | | 3.89 | 4.24 | 4.52 | 4.52 | | 4.65 | 4.82 | 4.91 | 5.17 | 5.15 | 5.76 | | | 12.65 | 13.99 | 15.23 |
| | | velocity | 7.27 | 9.00 | 8.25 | 7.74 | 7.74 | | 7.53 | 7.26 | 7.13 | 6.77 | 6.80 | 6.94 | 7.43 | | 8.30 | 7.51 | 6.89 |
| H1 lead leg | | strides | | 14 | 14 | 15 | 15 | | 15 | 15 | 15 | 16 | 16 | | 135 | | | | |

**Harnden, Iain (ZIM) (1976)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 8** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.26 | 10.10 | 13.98 | 17.98 | 22.18 | | 26.62 | 31.22 | 36.26 | 41.74 | | | 54.01 | 3 / 7 | | | |
| reaction time | 0.287 | interval | | 3.84 | 3.88 | 4.00 | 4.20 | | 4.44 | 4.60 | 5.04 | 5.48 | | | | | 11.72 | 13.24 | |
| | | velocity | 7.19 | 9.11 | 9.02 | 8.75 | 8.33 | | 7.88 | 7.61 | 6.94 | 6.39 | | | 7.41 | | 8.96 | 7.93 | |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 16 | | | 132 | | | | |

**Harnden, Ken (ZIM) (1973)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 5** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.28 | 10.00 | 13.92 | 17.84 | 21.88 | | 26.00 | 30.40 | 35.24 | 40.48 | 45.72 | | 51.83 | 5 / 4 | | | |
| reaction time | 0.435 | interval | | 3.72 | 3.92 | 3.92 | 4.04 | | 4.12 | 4.40 | 4.84 | 5.24 | 5.24 | 6.11 | | | 11.56 | 12.56 | 15.32 |
| | | velocity | 7.17 | 9.41 | 8.93 | 8.93 | 8.66 | | 8.50 | 7.95 | 7.23 | 6.68 | 6.68 | 6.55 | 7.72 | | 9.08 | 8.36 | 6.85 |
| H1 lead leg | | strides | 22 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 17 | 17 | 19.7 | 168.7 | | | | |

**Harris, Danny (USA) (1965)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1987 IAAF World Championships (Rome, ITA) *Sušanka (1990) - time analyis of the 400m hurdles - Rome 1987 Scientific Report (2nd ed)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-87 | time | 6.07 | 9.20 | 13.44 | 17.22 | 21.09 | | 24.98 | 29.17 | 33.35 | 37.76 | 42.42 | | 47.48 | 4 / 2 | | | |
| reaction time | | interval | | 3.13 | 4.24 | 3.78 | 3.87 | | 3.89 | 4.19 | 4.18 | 4.41 | 4.66 | 5.06 | PB | | 11.15 | 11.95 | 13.25 |
| | | velocity | 7.41 | 11.18 | 8.25 | 9.26 | 9.04 | | 9.00 | 8.35 | 8.37 | 7.94 | 7.51 | 7.91 | 8.42 | | 9.42 | 8.79 | 7.92 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 17.8 | 161 | | | | |

**Semi-Final 1** - 1987 IAAF World Championships (Rome, ITA) *Sušanka (1990) - time analyis of the 400m hurdles - Rome 1987 Scientific Report (2nd ed)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Aug-87 | time | 6.01 | 9.69 | 13.41 | 17.17 | 21.02 | | 24.96 | 29.21 | 33.58 | 38.15 | 43.01 | | 48.24 | 3 / 2 | | | |
| reaction time | | interval | | 3.68 | 3.72 | 3.76 | 3.85 | | 3.94 | 4.25 | 4.37 | 4.57 | 4.86 | 5.23 | | | 11.16 | 12.04 | 13.80 |
| | | velocity | 7.49 | 9.51 | 9.41 | 9.31 | 9.09 | | 8.88 | 8.24 | 8.01 | 7.66 | 7.20 | 7.65 | 8.29 | | 9.41 | 8.72 | 7.61 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 18.1 | 161.1 | | | | |

**Heat 2** - 1987 IAAF World Championships (Rome, ITA) *Sušanka (1990) - time analyis of the 400m hurdles - Rome 1987 Scientific Report (2nd ed)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Aug-87 | time | 6.11 | 9.80 | 13.59 | 17.45 | 21.42 | | 25.62 | 30.04 | 34.48 | 38.98 | 43.54 | | 48.74 | 8 / 1 | | | |
| reaction time | | interval | | 3.69 | 3.79 | 3.86 | 3.97 | | 4.20 | 4.42 | 4.44 | 4.50 | 4.56 | 5.20 | | | 11.34 | 12.59 | 13.50 |
| | | velocity | 7.36 | 9.49 | 9.23 | 9.07 | 8.82 | | 8.33 | 7.92 | 7.88 | 7.78 | 7.68 | 7.69 | 8.21 | | 9.26 | 8.34 | 7.78 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 14 | 17 | 160 | | | | |

**FINAL** - 1984 Olympic Games (Los Angeles, CA) *Behm (1995) - la tactique du 400 haies*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Aug-84 | time | 6.0 | 9.8 | 13.7 | 17.6 | 21.6 | | 25.7 | 29.9 | 34.1 | 38.5 | 43.0 | | 48.13 | 4 / 2 | | | |
| reaction time | 0.210 | interval | | 3.80 | 3.90 | 3.90 | 4.00 | | 4.10 | 4.20 | 4.20 | 4.40 | 4.50 | 5.13 | | | 11.60 | 12.30 | 13.10 |
| | | velocity | 7.50 | 9.21 | 8.97 | 8.97 | 8.75 | | 8.54 | 8.33 | 8.33 | 7.95 | 7.78 | 7.80 | 8.31 | | 9.05 | 8.54 | 8.02 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 15 | 17 | 158 | | | | |

**Harris, Rickey (USA) (1981)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 2** - 2007 USATF National Championships (Indianapolis, IN) | | | | | | | | | | | | | | | | *USATF Men's Hurdle Development (2007)* | | | |
| date | 21-Jun-07 | time | 6.02 | 9.93 | 13.85 | 17.85 | 21.97 | | 26.28 | 30.63 | 35.11 | 39.71 | 44.41 | | 49.46 | 6 / 3 | | | |
| reaction time | | interval | | 3.91 | 3.92 | 4.00 | 4.12 | | 4.31 | 4.35 | 4.48 | 4.60 | 4.70 | 5.05 | | | 11.83 | 12.78 | 13.78 |
| | | velocity | 7.48 | 8.95 | 8.93 | 8.75 | 8.50 | | 8.12 | 8.05 | 7.81 | 7.61 | 7.45 | 7.92 | 8.09 | | 8.88 | 8.22 | 7.62 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 157 | | | | |

**Harvey, Jonathan (USA) (1997)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 2** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 25-Jun-21 | time | 5.93 | 9.67 | 13.54 | 17.55 | 21.69 | | 26.16 | 30.63 | 35.23 | 39.77 | 44.34 | | 49.53 | 7 / 6 | | | |
| reaction time | 0.140 | interval | | 3.74 | 3.87 | 4.01 | 4.14 | | 4.47 | 4.47 | 4.60 | 4.54 | 4.57 | 5.19 | **PB** | | 11.62 | 13.08 | 13.71 |
| | | velocity | 7.59 | 9.36 | 9.04 | 8.73 | 8.45 | | 7.83 | 7.83 | 7.61 | 7.71 | 7.66 | 7.71 | 8.08 | | 9.04 | 8.03 | 7.66 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 17.2 | 163.2 | | | | |
| **FINAL** - 2021 NCAA Championships (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 11-Jun-21 | time | 5.87 | 9.57 | | 17.20 | 21.27 | | | 30.07 | 34.70 | 39.33 | 44.03 | | 49.64 | 2 / 7 | | | |
| reaction time | 0.149 | interval | | 3.70 | | 7.63 | 4.07 | | | 8.80 | 4.63 | 4.63 | 4.70 | 5.61 | **PB** | | 11.33 | 12.87 | 13.96 |
| | | velocity | 7.67 | 9.46 | | 9.17 | 8.60 | | | 7.95 | 7.56 | 7.56 | 7.45 | 7.13 | 8.06 | | 9.27 | 8.16 | 7.52 |
| H1 lead leg | R | strides | 21 | 13 | | | 13 | | | | 15 | 15 | 15 | 18.5 | 110.5 | | | | |

**Hataura, Yusuke (JPN) (1998)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2020 Japanese National Championships (Niigata, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |
| date | 02-Oct-20 | time | 6.16 | 9.99 | 13.93 | 17.95 | 22.14 | | 26.48 | 30.85 | 35.34 | 39.99 | 44.91 | | 50.80 | 8 / 7 | | | |
| reaction time | 0.131 | interval | | 3.83 | 3.94 | 4.02 | 4.19 | | 4.34 | 4.37 | 4.49 | 4.65 | 4.92 | 5.89 | | | 11.79 | 12.90 | 14.06 |
| | | velocity | 7.31 | 9.14 | 8.88 | 8.71 | 8.35 | | 8.06 | 8.01 | 7.80 | 7.53 | 7.11 | 6.79 | 7.87 | | 8.91 | 8.14 | 7.47 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 153 | | | | |

**Hemeida, Bassem (QAT) (2000)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 1** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | |
| date | 21-Aug-23 | time | 5.96 | 9.80 | 13.63 | 17.36 | 21.26 | | 25.50 | 29.83 | 34.40 | 39.06 | 43.97 | | 49.50 | 4 / 7 | | | |
| reaction time | 0.172 | interval | | 3.84 | 3.83 | 3.73 | 3.90 | | 4.24 | 4.33 | 4.57 | 4.66 | 4.91 | 5.53 | | | 11.40 | 12.47 | 14.14 |
| | | velocity | 7.55 | 9.11 | 9.14 | 9.38 | 8.97 | | 8.25 | 8.08 | 7.66 | 7.51 | 7.13 | 7.23 | 8.08 | | 9.21 | 8.42 | 7.43 |
| H1 lead leg | R | strides | 21 | 13 | 14 | 13 | 13 | | 14 | | 14 | 14 | 15 | 17.7 | 148.7 | | | | |
| **Heat 3** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | |
| date | 20-Aug-23 | time | 6.03 | 9.93 | 13.90 | 17.73 | 21.66 | | 25.83 | 30.23 | 34.72 | 39.47 | 44.20 | | 49.50 | 2 / 3 | | | |
| reaction time | 0.156 | interval | | 3.90 | 3.97 | 3.83 | 3.93 | | 4.17 | 4.40 | 4.49 | 4.75 | 4.73 | 5.30 | | | 11.70 | 12.50 | 13.97 |
| | | velocity | 7.46 | 8.97 | 8.82 | 9.14 | 8.91 | | 8.39 | 7.95 | 7.80 | 7.37 | 7.40 | 7.55 | 8.08 | | 8.97 | 8.40 | 7.52 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 14 | 14 | 14 | 14 | 17 | 161 | | | | |

**Hemery, David (GBR) (1944)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1972 Olympic Games (Munich, FRG) | | | | | | | | | | | | | | | | *Le Masurier (1977) - die olympischen 400-m-hürdenlauf vom Mexico City, München und Montreal* | | | |
| date | 03-Sep-72 | time | 6.1 | 9.8 | 13.4 | 17.2 | 21.1 | 22.8 | 25.1 | 29.3 | 33.6 | 38.2 | 43.0 | | 48.52 | 5 / 3 | | | |
| reaction time | | interval | | 3.70 | 3.60 | 3.80 | 3.90 | | 4.00 | 4.20 | 4.30 | 4.60 | 4.80 | 5.52 | | | 11.10 | 12.10 | 13.70 |
| | | velocity | 7.38 | 9.46 | 9.72 | 9.21 | 8.97 | 8.77 | 8.75 | 8.33 | 8.14 | 7.61 | 7.29 | 7.25 | 8.24 | | 9.46 | 8.68 | 7.66 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 15 | 18.2 | 164.2 | | | | |
| **Heat 2** - 1972 Olympic Games (Munich, FRG) | | | | | | | | | | | | | | | | *Schmidt (1973) - vorolympishces training von john akii-bua über 400 hürden* | | | |
| date | 01-Sep-72 | time | | | | | 21.8 | | | 30.3 | | | 44.3 | | 49.72 | 5 / 1 | | | |
| reaction time | | interval | | | | | | | | 8.50 | | | 14.00 | 5.42 | | | | | 14.00 |
| | | velocity | | | | | 8.49 | | | 8.24 | | | 7.50 | 7.38 | 8.05 | | | | 7.50 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **FINAL** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) | | | | | | | | | | | | | | | | *McFarlane (1981) - understanding the 400m hurdles (in Jarver (ed) - the hurdles, 1981)* | | | |
| date | 15-Oct-68 | time | 6.0 | 9.8 | 13.6 | 17.5 | 21.5 | 23.3 | 25.4 | 29.6 | 33.9 | 38.3 | 42.8 | | 48.1 | 6 / 1 | | | |
| reaction time | | interval | | 3.80 | 3.80 | 3.90 | 4.00 | | 3.90 | 4.20 | 4.30 | 4.40 | 4.50 | 5.30 | **WR** | | 11.50 | 12.10 | 13.20 |
| | | velocity | 7.50 | 9.21 | 9.21 | 8.97 | 8.75 | 8.58 | 8.97 | 8.33 | 8.14 | 7.95 | 7.78 | 7.55 | 8.32 | *(48.12)* | 9.13 | 8.68 | 7.95 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 15 | 18 | 164 | | | | |
| **Heat 4** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) | | | | | | | | | | | | | | | | *Jonath (1969) - wie gerhard hennige trainiert* | | | |
| date | 13-Oct-68 | time | 6.0 | 10.0 | 14.0 | 18.1 | 22.2 | 23.7 | 26.7 | 30.8 | 35.0 | 39.5 | 44.1 | | 50.3 | / 2 | | | |
| reaction time | | interval | | 4.00 | 4.00 | 4.10 | 4.10 | | 4.50 | 4.10 | 4.20 | 4.50 | 4.60 | 6.20 | *(50.33)* | | 12.10 | 12.70 | 13.30 |
| | | velocity | 7.50 | 8.75 | 8.75 | 8.54 | 8.54 | 8.44 | 7.78 | 8.54 | 8.33 | 7.78 | 7.61 | 6.45 | 7.95 | | 8.68 | 8.27 | 7.89 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Hennige, Gerhard (FRG) (1940)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) | | | | | | | | | | | | | | | | *Dessons (1982) - traite d'athletisme - volume 1: les courses* | | | |
| date | 15-Oct-68 | time | 6.0 | 9.9 | 13.8 | 17.8 | 21.9 | 23.8 | 26.1 | 30.5 | 34.9 | 39.4 | 44.0 | | 49.0 | 2 / 2 | | | |
| reaction time | | interval | | 3.90 | 3.90 | 4.00 | 4.10 | | 4.20 | 4.40 | 4.40 | 4.50 | 4.60 | 5.00 | *(49.02)* | | 11.80 | 12.70 | 13.50 |
| | | velocity | 7.50 | 8.97 | 8.97 | 8.75 | 8.54 | 8.40 | 8.33 | 7.95 | 7.95 | 7.78 | 7.61 | 8.00 | 8.16 | | 8.90 | 8.27 | 7.78 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 15 | 18.2 | 164 | | | | |
| **Semi-Final 2** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) | | | | | | | | | | | | | | | | *Jonath (1969) - wie gerhard hennige trainiert* | | | |
| date | 14-Oct-68 | time | 6.1 | 9.9 | 13.7 | 17.7 | 21.9 | 23.6 | 26.0 | 30.3 | 34.6 | 39.0 | 43.6 | | 49.1 | / 1 | | | |
| reaction time | | interval | | 3.80 | 3.80 | 4.00 | 4.20 | | 4.10 | 4.30 | 4.30 | 4.40 | 4.60 | 5.50 | *(49.16)* | | 11.60 | 12.60 | 13.30 |
| | | velocity | 7.38 | 9.21 | 9.21 | 8.75 | 8.33 | 8.47 | 8.54 | 8.14 | 8.14 | 7.95 | 7.61 | 7.27 | 8.15 | | 9.05 | 8.33 | 7.89 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Heat 1** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) *Jonath (1969) - wie gerhard hennige trainiert*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Oct-68 | time | 5.9 | 9.8 | 13.6 | 17.6 | 21.8 | 23.5 | 25.8 | 30.0 | 34.5 | 39.1 | 43.5 | | 49.5 | / 1 | | | |
| reaction time | | interval | | 3.90 | 3.80 | 4.00 | 4.20 | | 4.00 | 4.20 | 4.50 | 4.60 | 4.40 | 6.00 | *(49.57)* | | 11.70 | 12.40 | 13.50 |
| | | velocity | 7.63 | 8.97 | 9.21 | 8.75 | 8.33 | 8.51 | 8.75 | 8.33 | 7.78 | 7.61 | 7.95 | 6.67 | 8.08 | | 8.97 | 8.47 | 7.78 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Herbert, Llewellyn (RSA) (1977)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2003 IAAF World Championships (Paris, FRA) | | | | | | | | | | | | | | | | *Behm (2003) - Paris 2003:Le quatrache masculn - féminin* | | | |
| date | 29-Aug-03 | time | 6.1 | 9.8 | 13.7 | 17.6 | 21.6 | | 25.5 | 29.6 | 33.7 | 38.0 | 42.8 | | 72.10 | 8 / 8 | | | |
| reaction time | 0.149 | interval | | 3.70 | 3.90 | 3.90 | 4.00 | | 3.90 | 4.10 | 4.10 | 4.30 | 4.80 | 29.30 | | | 11.50 | 12.00 | 13.20 |
| | | velocity | 7.38 | 9.46 | 8.97 | 8.97 | 8.75 | | 8.97 | 8.54 | 8.54 | 8.14 | 7.29 | 1.37 | 5.55 | | 9.13 | 8.75 | 7.95 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 16 | | 152 | | | | |
| **FINAL** - 2002 IAAF World Cup (Madrid, ESP) | | | | | | | | | | | | | | | | *Sanchez (2002) - copa del mundo de Madrid '02: análisis de la carreras con villas* | | | |
| date | 20-Sep-02 | time | 6.06 | 9.90 | 13.94 | 17.93 | 21.98 | | 26.20 | 30.53 | 35.03 | 39.76 | 44.75 | | 50.52 | 2 / 7 | | | |
| reaction time | 0.136 | interval | | 3.84 | 4.04 | 3.99 | 4.05 | | 4.22 | 4.33 | 4.50 | 4.73 | 4.99 | 5.77 | | | 11.87 | 12.60 | 14.22 |
| | | velocity | 7.43 | 9.11 | 8.66 | 8.77 | 8.64 | | 8.29 | 8.08 | 7.78 | 7.40 | 7.01 | 6.93 | 7.92 | | 8.85 | 8.33 | 7.38 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 16 | 16 | 16 | 18.5 | 173.5 | | | | |
| **FINAL** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 27-Sep-00 | time | 5.98 | 9.78 | 13.62 | 17.50 | 21.46 | 22.98 | 25.50 | 29.54 | 33.70 | 38.06 | 42.54 | | 47.81 | 6 / 3 | | | |
| reaction time | 0.169 | interval | | 3.80 | 3.84 | 3.88 | 3.96 | | 4.04 | 4.04 | 4.16 | 4.36 | 4.48 | 5.27 | NR | | 11.52 | 12.04 | 13.00 |
| | | velocity | 7.53 | 9.21 | 9.11 | 9.02 | 8.84 | 8.70 | 8.66 | 8.66 | 8.41 | 8.03 | 7.81 | 7.59 | 8.37 | | 9.11 | 8.72 | 8.08 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.2 | 169.2 | | | | |
| **Semi-Final 2** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 25-Sep-00 | time | 5.96 | 9.80 | 13.80 | 17.72 | 21.72 | 23.38 | 25.80 | 29.96 | 34.16 | 38.56 | 43.12 | | 48.38 | 4 / 1 | | | |
| reaction time | 0.153 | interval | | 3.84 | 4.00 | 3.92 | 4.00 | | 4.08 | 4.16 | 4.20 | 4.40 | 4.56 | 5.26 | | | 11.76 | 12.24 | 13.16 |
| | | velocity | 7.55 | 9.11 | 8.75 | 8.93 | 8.75 | 8.55 | 8.58 | 8.41 | 8.33 | 7.95 | 7.68 | 7.60 | 8.27 | | 8.93 | 8.58 | 7.98 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.2 | 144.2 | | | | |
| **Heat 1** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 24-Sep-00 | time | 5.98 | 9.82 | 13.62 | 17.50 | 21.42 | | 25.58 | 29.82 | 34.18 | 38.74 | 43.62 | | 49.25 | 8 / 1 | | | |
| reaction time | 0.171 | interval | | 3.84 | 3.80 | 3.88 | 3.92 | | 4.16 | 4.24 | 4.36 | 4.56 | 4.88 | 5.63 | | | 11.52 | 12.32 | 13.80 |
| | | velocity | 7.53 | 9.11 | 9.21 | 9.02 | 8.93 | | 8.41 | 8.25 | 8.03 | 7.68 | 7.17 | 7.10 | 8.12 | | 9.11 | 8.52 | 7.61 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 16 | 19.2 | 173.2 | | | | |
| **FINAL** - 1997 IAAF World Championships (Athens, GRE) | | | | | | | | | | | | | | | | *Hommel (1999) - biomechanical research project, athens 1997: final report* | | | |
| date | 04-Aug-97 | time | 5.96 | 9.62 | 13.46 | 17.32 | 21.48 | | 25.64 | 29.86 | 34.14 | 38.48 | 42.87 | | 47.86 | 1 / 2 | | | |
| reaction time | 0.147 | interval | | 3.66 | 3.84 | 3.86 | 4.16 | | 4.16 | 4.22 | 4.28 | 4.34 | 4.39 | 4.99 | NR | | 11.36 | 12.54 | 13.01 |
| | | velocity | 7.55 | 9.56 | 9.11 | 9.07 | 8.41 | | 8.41 | 8.29 | 8.18 | 8.06 | 7.97 | 8.02 | 8.36 | | 9.24 | 8.37 | 8.07 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Herrero, Juan (ESP) (1976)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1998 Spanish National Championships (San Sebastián, ESP) | | | | | | | | | | | | | | | | *Ruiz (1998) - campeonato des españa absoluto: análisis de la carreras con villas* | | | |
| date | 02-Aug-98 | time | 6.03 | 10.02 | 14.18 | 18.37 | 22.62 | | 26.87 | 31.25 | 35.77 | 40.38 | 45.15 | | 50.96 | 3 / 2 | | | |
| reaction time | | interval | | 3.99 | 4.16 | 4.19 | 4.25 | | 4.25 | 4.38 | 4.52 | 4.61 | 4.77 | 5.81 | | | 12.34 | 12.88 | 13.90 |
| | | velocity | 7.46 | 8.77 | 8.41 | 8.35 | 8.24 | | 8.24 | 7.99 | 7.74 | 7.59 | 7.34 | 6.88 | 7.85 | | 8.51 | 8.15 | 7.55 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 19 | 171 | | | | |

**Heusse, Jean-Laurent (FRA) (1974)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 1** - 1999 IAAF World Championships (Sevilla, ESP) | | | | | | | | | | | | | | | | *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas* | | | |
| date | 25-Aug-99 | time | 5.75 | 9.54 | 13.44 | 17.45 | 21.57 | | 25.82 | 30.25 | 34.73 | 39.34 | 44.21 | | 50.47 | 1 / 8 | | | |
| reaction time | 0.141 | interval | | 3.79 | 3.90 | 4.01 | 4.12 | | 4.25 | 4.43 | 4.48 | 4.61 | 4.87 | 6.26 | | | 11.70 | 12.80 | 13.96 |
| | | velocity | 7.83 | 9.23 | 8.97 | 8.73 | 8.50 | | 8.24 | 7.90 | 7.81 | 7.59 | 7.19 | 6.39 | 7.93 | | 8.97 | 8.20 | 7.52 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 15 | 15 | 15 | 15 | 19 | 167 | | | | |

**Hinti, Saad (MAR) (2002)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - FINAL - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date | 05-Jun-22 | time | 5.83 | 9.63 | 13.57 | 17.67 | 22.00 | 23.85 | 26.43 | 31.00 | 35.63 | | | | 52.98 | 3 / 6 | | | |
| reaction time | 0.191 | interval | | 3.80 | 3.94 | 4.10 | 4.33 | | 4.43 | 4.57 | 4.63 | | | | | | 11.84 | 13.33 | |
| | | velocity | 7.72 | 9.21 | 8.88 | 8.54 | 8.08 | 8.39 | 7.90 | 7.66 | 7.56 | | | | 7.55 | | 8.87 | 7.88 | |
| H1 lead leg | R | strides | 21 | 14 | 14 | 15 | 15 | | 15 | 15 | 15 | | | | 124 | | | | |

**Hirata, Ai (JPN) (2004)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Japanese National High School Championships (Naruto, JPN) | | | | | | | | | | | | | | | | *Kishima (2022) - national high school championships biomechanics data collection* | | | |
| date | 05-Aug-22 | time | 6.15 | 10.03 | 14.05 | 18.08 | 22.27 | | 26.57 | 30.98 | 35.53 | 40.25 | 45.20 | | 51.01 | 5 / 2 | | | |
| reaction time | 0.185 | interval | | 3.88 | 4.02 | 4.03 | 4.19 | | 4.30 | 4.41 | 4.55 | 4.72 | 4.95 | 5.81 | PB | | 11.93 | 12.90 | 14.22 |
| | | velocity | 7.32 | 9.02 | 8.71 | 8.68 | 8.35 | | 8.14 | 7.94 | 7.69 | 7.42 | 7.07 | 6.88 | 7.84 | | 8.80 | 8.14 | 7.38 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 20 | 177 | | | | |

**Holmes, TJ (USA) (1995)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 1** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 25-Jun-21 | time | 6.07 | 9.93 | 13.73 | 17.53 | 21.53 | | 25.83 | 30.57 | 35.33 | 40.43 | 45.93 | | 53.98 | 5 / 8 | | | |
| reaction time | 0.189 | interval | | 3.86 | 3.80 | 3.80 | 4.00 | | 4.30 | 4.74 | 4.76 | 5.10 | 5.50 | 8.05 | | | 11.46 | 13.04 | 15.36 |
| | | velocity | 7.41 | 9.07 | 9.21 | 9.21 | 8.75 | | 8.14 | 7.38 | 7.35 | 6.86 | 6.36 | 4.97 | 7.41 | | 9.16 | 8.05 | 6.84 |
| H1 lead leg | L | strides | 19 | 12 | 12 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | | 139 | | | | |

**FINAL** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Sep-19 | time | 6.00 | 9.63 | 13.36 | 17.08 | 20.96 | 25.06 | 29.34 | 33.76 | 38.48 | 43.10 | 48.20 | 3 / 5 | | | | | |
| reaction time | 0.193 | interval | | 3.63 | 3.73 | 3.72 | 3.88 | 4.10 | 4.28 | 4.42 | 4.72 | 4.62 | 5.10 | PB | 11.08 | 12.26 | 13.76 | | |
| | | velocity | 7.50 | 9.64 | 9.38 | 9.41 | 9.02 | 8.54 | 8.18 | 7.92 | 7.42 | 7.58 | 7.84 | 8.30 | 9.48 | 8.56 | 7.63 | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17 | 157 | | | | | |

**Semi-Final 2** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 5.90 | 9.49 | 13.18 | 16.95 | 20.97 | 25.16 | 29.45 | 34.05 | 38.59 | 43.38 | 48.67 | 7 / 3 | | | | | |
| reaction time | 0.258 | interval | | 3.59 | 3.69 | 3.77 | 4.02 | 4.19 | 4.29 | 4.60 | 4.54 | 4.79 | 5.29 | | 11.05 | 12.50 | 13.93 | | |
| | | velocity | 7.63 | 9.75 | 9.49 | 9.28 | 8.71 | 8.35 | 8.16 | 7.61 | 7.71 | 7.31 | 7.56 | 8.22 | 9.50 | 8.40 | 7.54 | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17 | 157 | | | | | |

**FINAL** - 2019 Meeting de Paris (Paris, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-19 | time | 5.86 | 9.56 | 13.30 | 17.32 | 21.46 | 23.2 | 25.62 | 29.94 | 34.40 | 39.12 | 43.80 | 49.04 | 6 / 5 | | | | |
| reaction time | 0.197 | interval | | 3.70 | 3.74 | 4.02 | 4.14 | | 4.16 | 4.32 | 4.46 | 4.72 | 4.68 | 5.24 | | 11.46 | 12.62 | 13.86 | |
| | | velocity | 7.68 | 9.46 | 9.36 | 8.71 | 8.45 | 8.62 | 8.41 | 8.10 | 7.85 | 7.42 | 7.48 | 7.63 | 8.16 | 9.16 | 8.32 | 7.58 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17 | 156 | | | | |

**FINAL** - 2019 Prefontaine Classic (Stanford, CA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-19 | time | 5.90 | 9.46 | 13.30 | 17.13 | 21.10 | 25.46 | 29.86 | 34.56 | 39.16 | 44.03 | 49.79 | 8 / 5 | | | | | |
| reaction time | 0.282 | interval | | 3.56 | 3.84 | 3.83 | 3.97 | 4.36 | 4.40 | 4.70 | 4.60 | 4.87 | 5.76 | | 11.23 | 12.73 | 14.17 | | |
| | | velocity | 7.63 | 9.83 | 9.11 | 9.14 | 8.82 | 8.03 | 7.95 | 7.45 | 7.61 | 7.19 | 6.94 | 8.03 | 9.35 | 8.25 | 7.41 | | |
| H1 lead leg | L | strides | 20 | 13 | | 13 | 13 | 14 | 14 | 14 | | 15 | | 116 | | | | | |

**FINAL** - 2019 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Jun-19 | time | 6.05 | 9.71 | 13.48 | | 21.35 | 23.0 | 25.48 | 29.86 | 34.26 | 39.44 | 44.48 | 50.60 | 5 / 7 | | | | |
| reaction time | 0.292 | interval | | 3.66 | 3.77 | | 7.87 | | 4.13 | 4.38 | 4.40 | 5.18 | 5.04 | 6.12 | | | | 14.62 | |
| | | velocity | 7.44 | 9.56 | 9.28 | | 8.89 | 8.70 | 8.47 | 7.99 | 7.95 | 6.76 | 6.94 | 6.54 | 7.91 | | | 7.18 | |
| H1 lead leg | L | strides | 19 | 13 | 13 | | | | 13 | 13 | 13 | 15 | 15 | 18 | 132 | | | | |

**FINAL** - 2019 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-May-19 | time | 5.86 | 9.52 | 13.32 | 17.15 | 21.11 | 22.7 | 25.26 | 29.62 | 34.06 | 38.90 | 43.62 | 49.25 | 6 / 2 | | | | |
| reaction time | 0.156 | interval | | 3.66 | 3.80 | 3.83 | 3.96 | | 4.15 | 4.36 | 4.44 | 4.84 | 4.72 | 5.63 | | 11.29 | 12.47 | 14.00 | |
| | | velocity | 7.68 | 9.56 | 9.21 | 9.14 | 8.84 | 8.81 | 8.43 | 8.03 | 7.88 | 7.23 | 7.42 | 7.10 | 8.12 | 9.30 | 8.42 | 7.50 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17.2 | 156.2 | | | | |

**FINAL** - 2018 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Aug-18 | time | 5.76 | 9.32 | 13.08 | 16.96 | 21.00 | 22.8 | 25.16 | 29.44 | 34.00 | 39.04 | 44.48 | 51.39 | 6 / 8 | | | | |
| reaction time | 0.186 | interval | | 3.56 | 3.76 | 3.88 | 4.04 | | 4.16 | 4.28 | 4.56 | 5.04 | 5.44 | 6.91 | | 11.20 | 12.48 | 15.04 | |
| | | velocity | 7.81 | 9.83 | 9.31 | 9.02 | 8.66 | 8.77 | 8.41 | 8.18 | 7.68 | 6.94 | 6.43 | 5.79 | 7.78 | 9.38 | 8.41 | 6.98 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | | 16 | | 128 | | | | |

**FINAL** - 2018 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jul-18 | time | 5.92 | 9.64 | | | 21.24 | | 25.40 | 29.76 | 34.40 | 39.12 | 44.00 | 49.66 | 4 / 7 | | | | |
| reaction time | 0.211 | interval | | 3.72 | | | 11.60 | | 4.16 | 4.36 | 4.64 | 4.72 | 4.88 | 5.66 | | | | 14.24 | |
| | | velocity | 7.60 | 9.41 | | | 9.05 | | 8.41 | 8.03 | 7.54 | 7.42 | 7.17 | 7.07 | 8.05 | | | 7.37 | |
| H1 lead leg | L | strides | 20 | 13 | | | | | 13 | 13 | 14 | 14 | 15 | | 102 | | | | |

**FINAL** - 2018 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jul-18 | time | 5.84 | 9.56 | 13.28 | 17.12 | 21.16 | | 25.40 | 29.76 | 34.20 | 38.92 | 43.64 | 48.94 | 7 / 4 | | | | |
| reaction time | 0.188 | interval | | 3.72 | 3.72 | 3.84 | 4.04 | | 4.24 | 4.36 | 4.44 | 4.72 | 4.72 | 5.30 | | 11.28 | 12.64 | 13.88 | |
| | | velocity | 7.71 | 9.41 | 9.41 | 9.11 | 8.66 | | 8.25 | 8.03 | 7.88 | 7.42 | 7.42 | 7.55 | 8.17 | 9.31 | 8.31 | 7.56 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17 | 156 | | | | |

**FINAL** - 2018 Meeting de Paris (Paris, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-18 | time | 5.96 | 9.60 | 13.32 | 17.12 | 21.04 | 22.8 | 25.16 | 29.48 | 33.92 | 38.56 | 43.12 | 48.30 | 4 / 4 | | | | |
| reaction time | 0.230 | interval | | 3.64 | 3.72 | 3.80 | 3.92 | | 4.12 | 4.32 | 4.44 | 4.64 | 4.56 | 5.18 | PB | 11.16 | 12.36 | 13.64 | |
| | | velocity | 7.55 | 9.62 | 9.41 | 9.21 | 8.93 | 8.77 | 8.50 | 8.10 | 7.88 | 7.54 | 7.68 | 7.72 | 8.28 | 9.41 | 8.50 | 7.70 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17 | 158 | | | | |

**FINAL** - 2018 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-18 | time | 5.76 | 9.36 | | | 20.84 | 22.6 | 24.96 | 29.36 | 33.84 | 38.56 | 43.24 | 48.64 | 3 / 4 | | | | |
| reaction time | 0.210 | interval | | 3.60 | | | 11.48 | | 4.12 | 4.40 | 4.48 | 4.72 | 4.68 | 5.40 | | | | 13.88 | |
| | | velocity | 7.81 | 9.72 | | | 9.15 | 8.85 | 8.50 | 7.95 | 7.81 | 7.42 | 7.48 | 7.41 | 8.22 | | | 7.56 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | | | | 13 | 14 | 14 | 14 | 14 | 17 | 132 | | | | |

**FINAL** - 2018 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-May-18 | time | 5.96 | 9.72 | 13.60 | 17.56 | 21.60 | | 25.88 | 30.20 | 34.68 | 39.40 | 43.92 | 49.00 | 3 / 4 | | | | |
| reaction time | 0.194 | interval | | 3.76 | 3.88 | 3.96 | 4.04 | | 4.28 | 4.32 | 4.48 | 4.72 | 4.52 | 5.08 | | 11.60 | 12.64 | 13.72 | |
| | | velocity | 7.55 | 9.31 | 9.02 | 8.84 | 8.66 | | 8.18 | 8.10 | 7.81 | 7.42 | 7.74 | 7.87 | 8.16 | 9.05 | 8.31 | 7.65 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17 | 156 | | | | |

**FINAL** - 2017 IAAF World Championships (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-17 | time | 6.04 | 9.88 | 13.84 | 17.80 | 21.84 | | 25.92 | 30.24 | 34.64 | 39.20 | 43.72 | 49.00 | 7 / 5 | | | | |
| reaction time | 0.210 | interval | | 3.84 | 3.96 | 3.96 | 4.04 | | 4.08 | 4.32 | 4.40 | 4.56 | 4.52 | 5.28 | | 11.76 | 12.44 | 13.48 | |
| | | velocity | 7.45 | 9.11 | 8.84 | 8.84 | 8.66 | | 8.58 | 8.10 | 7.95 | 7.68 | 7.74 | 7.58 | 8.16 | 8.93 | 8.44 | 7.79 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.2 | 158.2 | | | | |

**FINAL** - 2017 USATF Championships (Sacramento, CA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jun-17 | time | 5.93 | 9.65 | 13.41 | 17.07 | 20.93 | 24.86 | 29.31 | 33.65 | 38.34 | 43.14 | 48.44 | 2 / 3 | | | | | |
| reaction time | | interval | | 3.72 | 3.76 | 3.66 | 3.86 | 3.93 | 4.45 | 4.34 | 4.69 | 4.80 | 5.30 | PB | | 11.14 | 12.24 | 13.83 | |
| | | velocity | 7.59 | 9.41 | 9.31 | 9.56 | 9.07 | 8.91 | 7.87 | 8.06 | 7.46 | 7.29 | 7.55 | 8.26 | | 9.43 | 8.58 | 7.59 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18 | 161 | | | | | |

**Holúbek, Radoslav (SVK) (1975)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 7** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.04 | 10.08 | 14.16 | 18.36 | 22.56 | 26.88 | 31.36 | 35.92 | 40.68 | | 51.18 | 2 / 7 | | | | | |
| reaction time | 0.127 | interval | | 4.04 | 4.08 | 4.20 | 4.20 | 4.32 | 4.48 | 4.56 | 4.76 | | | | | 12.32 | 13.00 | | |
| | | velocity | 7.45 | 8.66 | 8.58 | 8.33 | 8.33 | 8.10 | 7.81 | 7.68 | 7.35 | | 7.82 | | | 8.52 | 8.08 | | |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | | 136 | | | | | | |

**Honma, Ryota (JPN)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2016 Japanese National High School Championships (Okayama, JPN) *Kota (2016) - 69th high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-16 | time | 6.47 | 10.63 | 14.90 | 19.24 | 23.62 | 28.23 | 32.86 | 37.89 | 42.98 | 47.98 | | 53.23 | 3 / 7 | | | | |
| reaction time | 0.167 | interval | | 4.16 | 4.27 | 4.34 | 4.38 | 4.61 | 4.63 | 5.03 | 5.09 | 5.00 | 5.25 | | | 12.77 | 13.62 | 15.12 | |
| | | velocity | 6.96 | 8.41 | 8.20 | 8.06 | 7.99 | 7.59 | 7.56 | 6.96 | 6.88 | 7.00 | 7.62 | 7.51 | | 8.22 | 7.71 | 6.94 | |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | 15 | 15 | 17 | 17 | 17 | | 141 | | | | | |

**Horbenko, Hennadiy (UKR) (1975)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2004) - analysis of the race distribution for male 400m hurdles at the sydney olympics (in Jarver (ed) - the hurdles, 2004)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Sep-00 | time | 6.26 | 10.02 | 13.90 | 17.70 | 21.70 | 23.18 | 25.70 | 29.90 | 34.34 | 38.90 | 43.58 | 49.01 | 7 / 8 | | | | |
| reaction time | 0.395 | interval | | 3.76 | 3.88 | 3.80 | 4.00 | | 4.00 | 4.20 | 4.44 | 4.56 | 4.68 | 5.43 | | 11.44 | 12.20 | 13.68 | |
| | | velocity | 7.19 | 9.31 | 9.02 | 9.21 | 8.75 | 8.63 | 8.75 | 8.33 | 7.88 | 7.68 | 7.48 | 7.37 | 8.16 | 9.18 | 8.61 | 7.68 | |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | | 140 | | | | |

**Semi-Final 1** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 5.94 | 9.86 | 13.70 | 17.62 | 21.82 | 23.10 | 25.62 | 29.66 | 34.10 | 38.50 | 43.18 | 48.40 | 5 / 3 | | | | |
| reaction time | 0.478 | interval | | 3.92 | 3.84 | 3.92 | 4.20 | | 3.80 | 4.04 | 4.44 | 4.40 | 4.68 | 5.22 | PB | 11.68 | 12.04 | 13.52 | |
| | | velocity | 7.58 | 8.93 | 9.11 | 8.93 | 8.33 | 8.66 | 9.21 | 8.66 | 7.88 | 7.95 | 7.48 | 7.66 | 8.26 | 8.99 | 8.72 | 7.77 | |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17.4 | 158.4 | | | | |

**Heat 7** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.08 | 9.88 | 13.80 | 17.76 | 21.76 | 25.84 | 30.12 | 34.48 | 39.00 | 43.72 | | 49.12 | 5 / 2 | | | | |
| reaction time | 0.406 | interval | | 3.80 | 3.92 | 3.96 | 4.00 | 4.08 | 4.28 | 4.36 | 4.52 | 4.72 | 5.40 | PB | | 11.68 | 12.36 | 13.60 | |
| | | velocity | 7.40 | 9.21 | 8.93 | 8.84 | 8.75 | 8.58 | 8.18 | 8.03 | 7.74 | 7.42 | 7.41 | 8.14 | | 8.99 | 8.50 | 7.72 | |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17.4 | 157.4 | | | | | |

**Houston, Victor (BAR) (1974)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 1** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.90 | 9.58 | 13.34 | 17.22 | 21.22 | 25.54 | 30.10 | 34.86 | 39.98 | 45.34 | | 51.51 | 2 / 7 | | | | |
| reaction time | 0.179 | interval | | 3.68 | 3.76 | 3.88 | 4.00 | 4.32 | 4.56 | 4.76 | 5.12 | 5.36 | 6.17 | | | 11.32 | 12.88 | 15.24 | |
| | | velocity | 7.63 | 9.51 | 9.31 | 9.02 | 8.75 | 8.10 | 7.68 | 7.35 | 6.84 | 6.53 | 6.48 | 7.77 | | 9.28 | 8.15 | 6.89 | |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 16 | | 126 | | | | | |

**Hughes, David (GBR) (1984)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2010 Commonwealth Games (Dehli, IND) *Arnold (2010) - 400mH planning and peaking*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Oct-10 | time | 6.0 | 9.9 | 13.7 | 17.8 | 21.9 | 23.7 | 26.1 | 30.6 | 35.3 | 40.1 | 44.9 | 50.48 | 2 / 8 | | | | |
| reaction time | 0.170 | interval | | 3.90 | 3.80 | 4.08 | 4.12 | | 4.20 | 4.50 | 4.70 | 4.80 | 4.80 | 5.58 | | 11.78 | 12.82 | 14.30 | |
| | | velocity | 7.50 | 8.97 | 9.21 | 8.58 | 8.50 | 8.44 | 8.33 | 7.78 | 7.45 | 7.29 | 7.29 | 7.17 | 7.92 | 8.91 | 8.19 | 7.34 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | 17.7 | 160.7 | | | | |

**Heat 3** - 2010 Commonwealth Games (Dehli, IND) *Arnold (2010) - 400mH planning and peaking*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Oct-10 | time | 5.9 | 9.8 | 13.8 | 17.8 | 21.9 | 23.7 | 26.2 | 30.6 | 35.2 | 40.0 | 44.8 | 50.55 | 6 / 3 | | | | |
| reaction time | 0.180 | interval | | 3.90 | 4.00 | 4.00 | 4.10 | | 4.30 | 4.40 | 4.60 | 4.80 | 4.80 | 5.75 | | 11.90 | 12.80 | 14.20 | |
| | | velocity | 7.63 | 8.97 | 8.75 | 8.75 | 8.54 | 8.44 | 8.14 | 7.95 | 7.61 | 7.29 | 7.29 | 6.96 | 7.91 | 8.82 | 8.20 | 7.39 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Hussein, Kariem (SUI) (1989)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2018 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-May-18 | time | 6.04 | 9.88 | 13.84 | 17.88 | 22.00 | 26.28 | 30.72 | 35.36 | 40.32 | | 51.40 | 7 / 8 | | | | | |
| reaction time | 0.230 | interval | | 3.84 | 3.96 | 4.04 | 4.12 | 4.28 | 4.44 | 4.64 | 4.96 | | | | | 11.84 | 12.84 | | |
| | | velocity | 7.45 | 9.11 | 8.84 | 8.66 | 8.50 | 8.18 | 7.88 | 7.54 | 7.06 | | 7.78 | | | 8.87 | 8.18 | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 141 | | | | | | |

**FINAL** - 2017 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-17 | time | 6.00 | 9.72 | 13.56 | | 21.56 | 25.68 | 29.84 | 34.20 | 38.60 | 43.12 | | 48.45 | 3 / 3 | | | | |
| reaction time | 0.148 | interval | | 3.72 | 3.84 | | 8.00 | 4.12 | 4.16 | 4.36 | 4.40 | 4.52 | 5.33 | =PB | | | | 13.28 | |
| | | velocity | 7.50 | 9.41 | 9.11 | | 8.75 | 8.50 | 8.41 | 8.03 | 7.95 | 7.74 | 7.50 | 8.26 | | | | 7.91 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | | | 14 | 14 | 14 | 14 | 14 | 17.2 | 133.2 | | | | | |

**FINAL** - 2017 IAAF World Championships (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-17 | time | 6.00 | 9.84 | 13.72 | 17.72 | 21.80 | 26.00 | 30.40 | 34.92 | 39.52 | 44.28 | | 50.07 | 9 / 8 | | | | |
| reaction time | 0.163 | interval | | 3.84 | 3.88 | 4.00 | 4.08 | 4.20 | 4.40 | 4.52 | 4.60 | 4.76 | 5.79 | | | 11.72 | 12.68 | 13.88 | |
| | | velocity | 7.50 | 9.11 | 9.02 | 8.75 | 8.58 | 8.33 | 7.95 | 7.74 | 7.61 | 7.35 | 6.91 | 7.99 | | 8.96 | 8.28 | 7.56 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 14 | 17.2 | 159.2 | | | | | |

**FINAL** - 2017 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jul-17 | time | 5.96 | 9.76 | 13.68 | 17.68 | 21.72 | 25.88 | 30.16 | 34.48 | 39.00 | 43.56 | | 48.79 | 5 / 1 | | | | |
| reaction time | 0.170 | interval | | 3.80 | 3.92 | 4.00 | 4.04 | 4.16 | 4.28 | 4.32 | 4.52 | 4.56 | 5.23 | | | 11.72 | 12.48 | 13.40 | |
| | | velocity | 7.55 | 9.21 | 8.93 | 8.75 | 8.66 | 8.41 | 8.18 | 8.10 | 7.74 | 7.68 | 7.65 | 8.20 | | 8.96 | 8.41 | 7.84 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17 | 158 | | | | | |

**FINAL** - 2017 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Jun-17 | time | 6.03 | 9.70 | 13.53 | 17.56 | 25.86 | 30.20 | 34.53 | 39.03 | 43.73 | | 49.37 | 2 / 6 | | | | | |
| reaction time | 0.162 | interval | | 3.67 | 3.83 | 4.03 | 8.30 | 4.34 | 4.33 | 4.50 | 4.70 | 5.64 | | | 11.53 | 12.64 | 13.53 | | |
| | | velocity | 7.46 | 9.54 | 9.14 | 8.68 | 8.43 | 8.06 | 8.08 | 7.78 | 7.45 | 7.09 | 8.10 | | 9.11 | 8.31 | 7.76 | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 17.2 | 133.2 | | | | | | |

**FINAL** - 2017 Shanghai Diamond League (Shanghai, CHN) (TV Analysis) *Henson (2021) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-May-17 | time | 6.04 | 9.92 | 13.92 | 18.08 | 22.24 | 26.40 | 30.72 | 35.12 | | | | 50.02 | 9 / 6 | | | | |
| reaction time | 0.177 | interval | | 3.88 | 4.00 | 4.16 | 4.16 | 4.16 | 4.32 | 4.40 | | | | | | 12.04 | 12.64 | | |
| | | velocity | 7.45 | 9.02 | 8.75 | 8.41 | 8.41 | 8.41 | 8.10 | 7.95 | | | | 8.00 | | 8.72 | 8.31 | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | | | | 113 | | | | | |

**FINAL** - 2016 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-16 | time | 5.76 | 9.40 | 13.12 | 16.96 | 20.92 | 25.00 | 29.32 | 33.72 | 38.40 | 43.32 | | 49.21 | 7 / 5 | | | | |
| reaction time | 0.147 | interval | | 3.64 | 3.72 | 3.84 | 3.96 | 4.08 | 4.32 | 4.40 | 4.68 | 4.92 | 5.89 | | | 11.20 | 12.36 | 14.00 | |
| | | velocity | 7.81 | 9.62 | 9.41 | 9.11 | 8.84 | 8.58 | 8.10 | 7.95 | 7.48 | 7.11 | 6.79 | 8.13 | | 9.38 | 8.50 | 7.50 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18 | 161 | | | | | |

**FINAL** - 2016 European Championships (Amsterdam, NED) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Jul-16 | time | 5.88 | 9.64 | 13.52 | 17.60 | 21.72 | 25.88 | 29.92 | 34.36 | 38.92 | 43.68 | | 49.10 | 3 / 3 | | | | |
| reaction time | 0.134 | interval | | 3.76 | 3.88 | 4.08 | 4.12 | 4.16 | 4.04 | 4.44 | 4.56 | 4.76 | 5.42 | | | 11.72 | 12.32 | 13.76 | |
| | | velocity | 7.65 | 9.31 | 9.02 | 8.58 | 8.50 | 8.41 | 8.66 | 7.88 | 7.68 | 7.35 | 7.38 | 8.15 | | 8.96 | 8.52 | 7.63 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | 18 | 162 | | | | | |

**FINAL** - 2016 Prefontaine Classic (Eugene, OR) (TV Analysis) *(H8 5m short)* *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-16 | time | 6.00 | 9.80 | 13.72 | 17.72 | 26.04 | 30.20 | 34.08 | 39.32 | 44.08 | | 49.47 | 8 / 6 | | | | | |
| reaction time | | interval | | 3.80 | 3.92 | 4.00 | 8.32 | 4.16 | 3.88 | 5.24 | 4.76 | 5.39 | | | 11.72 | 12.48 | 13.88 | | |
| | | velocity | 7.50 | 9.21 | 8.93 | 8.75 | 8.41 | 8.41 | 7.73 | 7.63 | 7.35 | 7.42 | 8.09 | | 8.96 | 8.41 | 7.56 | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | | 13 | 13 | | 15 | 17.7 | 117.7 | | | | | | |

**FINAL** - 2014 European Championships (Zurich, SUI) *Green (2015) - twitter.com/jackpgreen (from Behm?)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-14 | time | 6.04 | 9.80 | 13.72 | 17.72 | 21.76 | 25.88 | 30.08 | 34.40 | 38.80 | 43.44 | | 48.96 | / 1 | | | | |
| reaction time | 0.169 | interval | | 3.76 | 3.92 | 4.00 | 4.04 | 4.12 | 4.20 | 4.32 | 4.40 | 4.64 | 5.52 | **PB** | | 11.68 | 12.36 | 13.36 | |
| | | velocity | 7.45 | 9.31 | 8.93 | 8.75 | 8.66 | 8.50 | 8.33 | 8.10 | 7.95 | 7.54 | 7.25 | 8.17 | | 8.99 | 8.50 | 7.86 | |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | | 123 | | | | | |

**Hutcherson, Orentheus (USA) (1976)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 4** - 2007 USATF National Championships (Indianapolis, IN) | | | | | | | | | | | | | | | *USATF Men's Hurdle Development (2007)* | | | |
| date | 21-Jun-07 | time | 5.91 | 9.74 | 13.69 | 17.76 | 21.97 | 26.35 | 30.81 | 35.24 | 39.82 | 44.50 | | 49.93 | 8 / 4 | | | |
| reaction time | | interval | | 3.83 | 3.95 | 4.07 | 4.21 | 4.38 | 4.46 | 4.43 | 4.58 | 4.68 | 5.43 | | | 11.85 | 13.05 | 13.69 |
| | | velocity | 7.61 | 9.14 | 8.86 | 8.60 | 8.31 | 7.99 | 7.85 | 7.90 | 7.64 | 7.48 | 7.37 | 8.01 | | 8.86 | 8.05 | 7.67 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 153 | | | | |

**Hyde, Jaheel (JAM) (1997)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 1** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | |
| date | 21-Aug-23 | time | 5.90 | 9.66 | 13.43 | 17.13 | 21.00 | 25.13 | 29.46 | 34.16 | 38.83 | 43.55 | | 48.94 | 3 / 5 | | | |
| reaction time | 0.205 | interval | | 3.76 | 3.77 | 3.70 | 3.87 | 4.13 | 4.33 | 4.70 | 4.67 | 4.72 | 5.39 | | | 11.23 | 12.33 | 14.09 |
| | | velocity | 7.63 | 9.31 | 9.28 | 9.46 | 9.04 | 8.47 | 8.08 | 7.45 | 7.49 | 7.42 | 7.42 | 8.17 | | 9.35 | 8.52 | 7.45 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | | 14 | 15 | 15 | 18 | 147 | | | | |
| **Heat 5** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | |
| date | 20-Aug-23 | time | 5.80 | 9.46 | 13.23 | 17.00 | 20.83 | 25.03 | 29.26 | 33.80 | 38.40 | 43.20 | | 48.63 | 9 / 2 | | | |
| reaction time | 0.182 | interval | | 3.66 | 3.77 | 3.77 | 3.83 | 4.20 | 4.23 | 4.54 | 4.60 | 4.80 | 5.43 | | | 11.20 | 12.26 | 13.94 |
| | | velocity | 7.76 | 9.56 | 9.28 | 9.28 | 9.14 | 8.33 | 8.27 | 7.71 | 7.61 | 7.29 | 7.37 | 8.23 | | 9.38 | 8.56 | 7.53 |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 18 | 163 | | | | |
| **FINAL** - 2022 World Athletics Championships (Eugene, OR) | | | | | | | | | | | | | | | *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season* | | | |
| date | 19-Jul-22 | time | 5.71 | 9.26 | 12.86 | 16.52 | 20.25 | 21.86 | 24.27 | 28.40 | 32.83 | 37.47 | 42.33 | | 48.03 | 7 / 6 | | |
| reaction time | 0.149 | interval | | 3.55 | 3.60 | 3.66 | 3.73 | | 4.02 | 4.13 | 4.43 | 4.64 | 4.86 | 5.70 | **PB** | | 10.81 | 11.88 | 13.93 |
| | | velocity | 7.88 | 9.86 | 9.72 | 9.56 | 9.38 | 9.15 | 8.71 | 8.47 | 7.90 | 7.54 | 7.20 | 7.02 | 8.33 | | 9.71 | 8.84 | 7.54 |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.2 | 165.2 | | | | |
| **Semi-Final 1** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date | 17-Jul-22 | time | 5.77 | 9.46 | 13.33 | 17.27 | 21.33 | 23.13 | 25.53 | 29.80 | 34.30 | 38.90 | 43.60 | | 49.09 | 8 / 2 | | |
| reaction time | 0.149 | interval | | 3.69 | 3.87 | 3.94 | 4.06 | | 4.20 | 4.27 | 4.50 | 4.60 | 4.70 | 5.49 | | | 11.50 | 12.53 | 13.80 |
| | | velocity | 7.80 | 9.49 | 9.04 | 8.88 | 8.62 | 8.65 | 8.33 | 8.20 | 7.78 | 7.61 | 7.45 | 7.29 | 8.15 | | 9.13 | 8.38 | 7.61 |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 15 | 18 | 163 | | | | |
| **Heat 3** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date | 16-Jul-22 | time | 5.80 | 9.63 | 13.63 | 17.63 | 21.70 | 23.51 | 26.03 | 30.26 | 34.80 | 39.53 | 44.37 | | 50.03 | 6 / 3 | | |
| reaction time | 0.187 | interval | | 3.83 | 4.00 | 4.00 | 4.07 | | 4.33 | 4.23 | 4.54 | 4.73 | 4.84 | 5.66 | | | 11.83 | 12.63 | 14.11 |
| | | velocity | 7.76 | 9.14 | 8.75 | 8.75 | 8.60 | 8.51 | 8.08 | 8.27 | 7.71 | 7.40 | 7.23 | 7.07 | 8.00 | | 8.88 | 8.31 | 7.44 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |

**FINAL** - FINAL - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jun-22 | time | 5.67 | 9.23 | 12.90 | 16.67 | 20.50 | 22.22 | 24.67 | 28.97 | 33.50 | 38.27 | 43.37 | | 49.35 | 8 / 5 | | | |
| reaction time | 0.150 | interval | | 3.56 | 3.67 | 3.77 | 3.83 | | 4.17 | 4.30 | 4.53 | 4.77 | 5.10 | 5.98 | | | 11.00 | 12.30 | 14.40 |
| | | velocity | 7.94 | 9.83 | 9.54 | 9.28 | 9.14 | 9.00 | 8.39 | 8.14 | 7.73 | 7.34 | 6.86 | 6.69 | 8.11 | | 9.55 | 8.54 | 7.29 |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 15 | | 146 | | | | |

**FINAL** - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-22 | time | 5.73 | 9.50 | 13.40 | 17.30 | 21.27 | 23.07 | 25.50 | 29.93 | 34.57 | 39.50 | | | 50.38 | 2 / 7 | | | |
| reaction time | 0.157 | interval | | 3.77 | 3.90 | 3.90 | 3.97 | | 4.23 | 4.43 | 4.64 | 4.93 | | | | | 11.57 | 12.63 | |
| | | velocity | 7.85 | 9.28 | 8.97 | 8.97 | 8.82 | 8.67 | 8.27 | 7.90 | 7.54 | 7.10 | | | 7.94 | | 9.08 | 8.31 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 15 | 15 | 15 | | | 132 | | | | |

**FINAL** - 2022 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-May-22 | time | 5.87 | 9.67 | 13.71 | 17.81 | 22.05 | 24.2 | 26.52 | 30.96 | 35.40 | 39.90 | | | 50.23 | 8 / 5 | | | |
| reaction time | 0.167 | interval | | 3.80 | 4.04 | 4.10 | 4.24 | | 4.47 | 4.44 | 4.44 | 4.50 | | | | | 11.94 | 13.15 | |
| | | velocity | 7.67 | 9.21 | 8.66 | 8.54 | 8.25 | 8.26 | 7.83 | 7.88 | 7.88 | 7.78 | | | 7.96 | | 8.79 | 7.98 | |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 14 | 14 | 14 | | | 135 | | | | |

**FINAL** - 2021 ISTAF (Berlin, GER) (TV Analysis) *Henson (2021) - Athlete First: 2021 Karsten Warholm 400m Hurdles World Record Season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Sep-21 | time | 5.80 | | 13.28 | 17.12 | | | 25.32 | 29.68 | 34.08 | 38.68 | 43.44 | | 48.95 | 4 / 3 | | | |
| reaction time | 0.180 | interval | | | 7.48 | 3.84 | | | 8.20 | 4.36 | 4.40 | 4.60 | 4.76 | 5.51 | | | 11.32 | 12.56 | 13.76 |
| | | velocity | 7.76 | | 9.36 | 9.11 | | | 8.54 | 8.03 | 7.95 | 7.61 | 7.35 | 7.26 | 8.17 | | 9.28 | 8.36 | 7.63 |
| H1 lead leg | L | strides | 21 | | | 13 | | | | 14 | 14 | | 15 | 18 | 95 | | | | |

**FINAL** - 2021 Memorial van Damme (Brussels, BEL) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Sep-21 | time | 5.84 | 9.56 | 13.36 | 17.24 | 21.32 | 23.1 | 25.52 | 29.72 | 34.04 | 38.60 | 43.32 | | 48.91 | 7 / 4 | | | |
| reaction time | 0.166 | interval | | 3.72 | 3.80 | 3.88 | 4.08 | | 4.20 | 4.20 | 4.32 | 4.56 | 4.72 | 5.59 | | | 11.40 | 12.48 | 13.60 |
| | | velocity | 7.71 | 9.41 | 9.21 | 9.02 | 8.58 | 8.66 | 8.33 | 8.33 | 8.10 | 7.68 | 7.42 | 7.16 | 8.18 | | 9.21 | 8.41 | 7.72 |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 15 | 18 | 164 | | | | |

**FINAL** - 2019 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Jul-19 | time | 5.96 | 9.80 | 13.80 | 17.76 | 21.88 | 23.6 | 26.16 | | 34.92 | 39.56 | 44.28 | | 49.79 | 2 / 6 | | | |
| reaction time | 0.159 | interval | | 3.84 | 4.00 | 3.96 | 4.12 | | 4.28 | | 8.76 | 4.64 | 4.72 | 5.51 | | | 11.80 | | |
| | | velocity | 7.55 | 9.11 | 8.75 | 8.84 | 8.50 | 8.47 | 8.18 | | 7.99 | 7.54 | 7.42 | 7.26 | 8.03 | | 8.90 | | |
| H1 lead leg | L | strides | 22 | 14 | 14 | 13 | 13 | | 14 | | | 15 | 15 | 18 | 138 | | | | |

**FINAL** - 2018 Commonwealth Games (Gold Coast, AUS) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Apr-18 | time | 5.80 | 9.54 | 13.24 | 17.08 | 21.15 | | 25.22 | 29.49 | 34.03 | 38.67 | 43.47 | | 49.16 | 3 / 3 | | | |
| reaction time | 0.157 | interval | | 3.74 | 3.70 | 3.84 | 4.07 | | 4.07 | 4.27 | 4.54 | 4.64 | 4.80 | 5.69 | | | 11.28 | 12.41 | 13.98 |
| | | velocity | 7.76 | 9.36 | 9.46 | 9.11 | 8.60 | | 8.60 | 8.20 | 7.71 | 7.54 | 7.29 | 7.03 | 8.14 | | 9.31 | 8.46 | 7.51 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.7 | 169.7 | | | | |

**FINAL** - 2017 Jamaica International Invitational (Kingston, JAM) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-May-17 | time | 5.84 | 9.64 | 13.51 | 17.48 | 21.55 | | 25.62 | 29.86 | 34.16 | 38.57 | 43.21 | | 48.52 | 3 / 2 | | | |
| reaction time | | interval | | 3.80 | 3.87 | 3.97 | 4.07 | | 4.07 | 4.24 | 4.30 | 4.41 | 4.64 | 5.31 | **PB** | | 11.64 | 12.38 | 13.35 |
| | | velocity | 7.71 | 9.21 | 9.04 | 8.82 | 8.60 | | 8.60 | 8.25 | 8.14 | 7.94 | 7.54 | 7.53 | 8.24 | | 9.02 | 8.48 | 7.87 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 13 | 14 | | | 14 | 14 | 15 | 15 | 18.5 | 153.5 | | | | |

| **Iakovákis, Periklís (GRE) (1979)** | | | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-09 | time | 6.17 | 9.87 | 13.67 | 17.55 | 21.57 | | 25.71 | 29.94 | 34.24 | 38.63 | 43.15 | | 48.42 | 7 / 5 | | | |
| reaction time | 0.189 | interval | | 3.70 | 3.80 | 3.88 | 4.02 | | 4.14 | 4.23 | 4.30 | 4.39 | 4.52 | 5.27 | | | 11.38 | 12.39 | 13.21 |
| | | velocity | 7.29 | 9.46 | 9.21 | 9.02 | 8.71 | | 8.45 | 8.27 | 8.14 | 7.97 | 7.74 | 7.59 | 8.26 | | 9.23 | 8.47 | 7.95 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 15 | 18.5 | 162.5 | | | | |

**Semi-Final 2** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Aug-09 | time | 6.09 | 9.74 | 13.49 | 17.35 | 21.39 | | 25.38 | 29.66 | 33.98 | 38.48 | 43.22 | | 48.73 | 3 / 3 | | | |
| reaction time | 0.180 | interval | | 3.65 | 3.75 | 3.86 | 4.04 | | 3.99 | 4.28 | 4.32 | 4.50 | 4.74 | 5.51 | | | 11.26 | 12.31 | 13.56 |
| | | velocity | 7.39 | 9.59 | 9.33 | 9.07 | 8.66 | | 8.77 | 8.18 | 8.10 | 7.78 | 7.38 | 7.26 | 8.21 | | 9.33 | 8.53 | 7.74 |
| H1 lead leg | | strides | | | | | | | 14 | 14 | 14 | 14 | 15 | 19 | 90 | | | | |

**Heat 1** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-09 | time | 6.13 | 10.87 | 13.68 | 17.52 | 21.43 | | 25.53 | 29.80 | 34.14 | 38.74 | 43.53 | | 49.12 | 4 / 2 | | | |
| reaction time | 0.179 | interval | | 4.74 | 2.81 | 3.84 | 3.91 | | 4.10 | 4.27 | 4.34 | 4.60 | 4.79 | 5.59 | | | 11.39 | 12.28 | 13.73 |
| | | velocity | 7.34 | 7.38 | 12.46 | 9.11 | 8.95 | | 8.54 | 8.20 | 8.06 | 7.61 | 7.31 | 7.16 | 8.14 | | 9.22 | 8.55 | 7.65 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2008 Olympic Games (Beijing, CHN) *Behm (2008)- Pekin 2008: Le quatrache masculin - féminin*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-08 | time | 5.9 | 9.7 | 13.3 | 17.1 | 20.9 | | 25.0 | 29.5 | 34.0 | 38.7 | 43.6 | | 49.96 | 2 / 8 | | | |
| reaction time | 0.195 | interval | | 3.80 | 3.60 | 3.80 | 3.80 | | 4.10 | 4.50 | 4.50 | 4.70 | 4.90 | 6.36 | | | 11.20 | 12.40 | 14.10 |
| | | velocity | 7.63 | 9.21 | 9.72 | 9.21 | 9.21 | | 8.54 | 7.78 | 7.78 | 7.45 | 7.14 | 6.29 | 8.01 | | 9.38 | 8.47 | 7.45 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 14 | 15 | 16 | 16 | 18.5 | 168 | | | | |

**FINAL** - 2007 IAAF World Championships (Osaka, JPN) *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Aug-07 | time | 5.98 | 9.67 | 13.42 | 17.27 | 21.26 | | 25.40 | 29.82 | 34.27 | 38.94 | 43.69 | | 49.25 | 2 / 6 | | | |
| reaction time | 0.154 | interval | | 3.69 | 3.75 | 3.85 | 3.99 | | 4.14 | 4.42 | 4.45 | 4.67 | 4.75 | 5.56 | | | 11.29 | 12.55 | 13.87 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.53 | 9.49 | 9.33 | 9.09 | 8.77 | 8.45 | 7.92 | 7.87 | 7.49 | 7.37 | 7.19 | 8.12 | | 9.30 | 8.37 | 7.57 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | | 142 | | | | |

**FINAL** - 2007 European Cup (Munich, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jun-07 | time | 6.13 | 9.95 | 13.73 | 17.54 | 21.42 | 25.48 | 29.70 | 34.02 | 38.44 | 43.03 | | 48.35 | / 1 | | | |
| reaction time | 0.165 | interval | | 3.82 | 3.78 | 3.81 | 3.88 | 4.06 | 4.22 | 4.32 | 4.42 | 4.59 | 5.32 | | | 11.41 | 12.16 | 13.33 |
| | | velocity | 7.34 | 9.16 | 9.26 | 9.19 | 9.02 | 8.62 | 8.29 | 8.10 | 7.92 | 7.63 | 7.52 | 8.27 | | 9.20 | 8.63 | 7.88 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 2006 IAAF World Athletic Final (Stuttgart, GER) *(TV Analysis)* *Graubner (2008) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Sep-06 | time | 5.97 | 9.65 | 13.39 | 17.23 | 21.17 | 25.22 | 29.44 | 33.75 | 38.19 | 42.77 | | 47.92 | 3 / 1 | | | |
| reaction time | 0.158 | interval | | 3.68 | 3.74 | 3.84 | 3.94 | 4.05 | 4.22 | 4.31 | 4.44 | 4.58 | 5.15 | | | 11.26 | 12.21 | 13.33 |
| | | velocity | 7.54 | 9.51 | 9.36 | 9.11 | 8.88 | 8.64 | 8.29 | 8.12 | 7.88 | 7.64 | 7.77 | 8.35 | | 9.33 | 8.60 | 7.88 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 2006 European Championships (Göteborg, SWE) *Behm (2006) - Göteborg 2006: Le quatrache*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-06 | time | 5.8 | 9.4 | 13.0 | 16.8 | 20.7 | 24.7 | 29.0 | 33.4 | 37.8 | 42.8 | | 48.46 | / 1 | | | |
| reaction time | | interval | | 3.60 | 3.60 | 3.80 | 3.90 | 4.00 | 4.30 | 4.40 | 4.40 | 5.00 | 5.66 | | | 11.00 | 12.20 | 13.80 |
| | | velocity | 7.76 | 9.72 | 9.72 | 9.21 | 8.97 | 8.75 | 8.14 | 7.95 | 7.95 | 7.00 | 7.07 | 8.25 | | 9.55 | 8.61 | 7.61 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 19 | 163 | | | | |

**FINAL** - 2006 Osaka Grand Prix (Osaka, JPN) *Yasunori (2007) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-May-06 | time | 6.06 | 9.70 | 13.44 | 17.21 | 21.04 | 25.08 | 29.23 | 33.49 | 37.93 | 42.60 | | 47.82 | / 2 | | | |
| reaction time | | interval | | 3.64 | 3.74 | 3.77 | 3.83 | 4.04 | 4.15 | 4.26 | 4.44 | 4.67 | 5.22 | NR | | 11.15 | 12.02 | 13.37 |
| | | velocity | 7.43 | 9.62 | 9.36 | 9.28 | 9.14 | 8.66 | 8.43 | 8.22 | 7.88 | 7.49 | 7.66 | 8.36 | | 9.42 | 8.74 | 7.85 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | | 123 | | | | |

**FINAL** - 2003 IAAF World Championships (Paris, FRA) *Behm (2003) - Paris 2003:Le quatrache masculn - féminin*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Aug-03 | time | 5.9 | 9.5 | 13.2 | 17.1 | 21.0 | 25.0 | 29.4 | 33.8 | 38.3 | 42.9 | | 48.24 | 4 / 3 | | | |
| reaction time | 0.174 | interval | | 3.60 | 3.70 | 3.90 | 3.90 | 4.00 | 4.40 | 4.40 | 4.50 | 4.60 | 5.34 | | | 11.20 | 12.30 | 13.50 |
| | | velocity | 7.63 | 9.72 | 9.46 | 8.97 | 8.97 | 8.75 | 7.95 | 7.95 | 7.78 | 7.61 | 7.49 | 8.29 | | 9.38 | 8.54 | 7.78 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 18 | 160 | | | | |

**FINAL** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-02 | time | 6.11 | 9.91 | 13.75 | 17.69 | 21.67 | 25.75 | 30.05 | 34.42 | 39.02 | 43.78 | | 49.07 | / 5 | | | |
| reaction time | 0.163 | interval | | 3.80 | 3.84 | 3.94 | 3.98 | 4.08 | 4.30 | 4.37 | 4.60 | 4.76 | 5.29 | | | 11.58 | 12.36 | 13.73 |
| | | velocity | 7.36 | 9.21 | 9.11 | 8.88 | 8.79 | 8.58 | 8.14 | 8.01 | 7.61 | 7.35 | 7.56 | 8.15 | | 9.07 | 8.50 | 7.65 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Semi-Final 1** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Aug-02 | time | 6.15 | 9.99 | 13.87 | 17.82 | 21.83 | 25.95 | 30.15 | 34.53 | 39.05 | 43.71 | | 48.99 | / 4 | | | |
| reaction time | | interval | | 3.84 | 3.88 | 3.95 | 4.01 | 4.12 | 4.20 | 4.38 | 4.52 | 4.66 | 5.28 | | | 11.67 | 12.33 | 13.56 |
| | | velocity | 7.32 | 9.11 | 9.02 | 8.86 | 8.73 | 8.50 | 8.33 | 7.99 | 7.74 | 7.51 | 7.58 | 8.16 | | 9.00 | 8.52 | 7.74 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Heat 1** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Aug-02 | time | | | 13.85 | 17.89 | 21.97 | 26.19 | 30.77 | 34.88 | 39.43 | 44.07 | | 49.24 | / 3 | | | |
| reaction time | | interval | | | | 4.04 | 4.08 | 4.22 | 4.58 | 4.11 | 4.55 | 4.64 | 5.17 | | | | 12.88 | 13.30 |
| | | velocity | | | 8.30 | 8.66 | 8.58 | 8.29 | 7.64 | 8.52 | 7.69 | 7.54 | 7.74 | 8.12 | | | 8.15 | 7.89 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 2001 European Cup (Bremen, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jun-01 | time | 6.30 | 10.18 | 14.02 | 18.02 | 21.96 | 26.08 | 30.56 | 35.26 | 40.08 | 44.86 | | 50.28 | / 6 | | | |
| reaction time | | interval | | 3.88 | 3.84 | 4.00 | 3.94 | 4.12 | 4.48 | 4.70 | 4.82 | 4.78 | 5.42 | | | 11.72 | 12.54 | 14.30 |
| | | velocity | 7.14 | 9.02 | 9.11 | 8.75 | 8.88 | 8.50 | 7.81 | 7.45 | 7.26 | 7.32 | 7.38 | 7.96 | | 8.96 | 8.37 | 7.34 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Heat 4** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.00 | 9.84 | 13.76 | 17.72 | 21.72 | 25.72 | 30.12 | 34.72 | 39.68 | 44.72 | | 50.20 | 1 / 3 | | | |
| reaction time | 0.165 | interval | | 3.84 | 3.92 | 3.96 | 4.00 | 4.00 | 4.40 | 4.60 | 4.96 | 5.04 | 5.48 | | | 11.72 | 12.40 | 14.60 |
| | | velocity | 7.50 | 9.11 | 8.93 | 8.84 | 8.75 | 8.75 | 7.95 | 7.61 | 7.06 | 6.94 | 7.30 | 7.97 | | 8.96 | 8.47 | 7.19 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 16 | 16 | 18.6 | 171.6 | | | | |

| **Ibañez Guevara, Pablo Andres (ESA)** | | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2023 FBK Games (Hengelo, NED) *Omega Timing (2023) - continental tour race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jun-23 | time | 5.99 | 9.94 | 13.93 | 17.94 | 21.97 | 26.21 | 30.61 | 35.05 | 39.63 | 44.22 | | 49.63 | 3 / 6 | | | |
| reaction time | 0.156 | interval | | 3.95 | 3.99 | 4.01 | 4.03 | 4.24 | 4.40 | 4.44 | 4.58 | 4.59 | 5.41 | | | 11.95 | 12.67 | 13.61 |
| | | velocity | 7.51 | 8.86 | 8.77 | 8.73 | 8.68 | 8.25 | 7.95 | 7.88 | 7.64 | 7.63 | 7.39 | 8.06 | | 8.79 | 8.29 | 7.71 |
| H1 lead leg | L | strides | 21 | 14 | | | | | | | 15 | 15 | 18.2 | 83.2 | | | | |

| **Ideura, Noriuki (JPN) (1987)** | | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**C FINAL** - 2014 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Yasunori (2014) - race pattern analysis of Japanese top 400m hurdlers for major domestic competitions*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-14 | time | 6.36 | 10.40 | 14.47 | 18.61 | 22.78 | 26.95 | 31.22 | 35.59 | 40.19 | 45.01 | | 50.59 | / 2 | | | |
| reaction time | | interval | | 4.04 | 4.07 | 4.14 | 4.17 | 4.17 | 4.27 | 4.37 | 4.60 | 4.82 | 5.58 | | | 12.25 | 12.61 | 13.79 |
| | | velocity | 7.08 | 8.66 | 8.60 | 8.45 | 8.39 | 8.39 | 8.20 | 8.01 | 7.61 | 7.26 | 7.17 | 7.91 | | 8.57 | 8.33 | 7.61 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**FINAL** - 2011 Japanese National Championships (Kumagaya, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-11 | time | 6.27 | 10.24 | 14.24 | 18.29 | 22.44 | 26.66 | 30.98 | 35.40 | 39.92 | 44.57 | | 49.87 | / 4 | | | |
| reaction time | | interval | | 3.97 | 4.00 | 4.05 | 4.15 | 4.22 | 4.32 | 4.42 | 4.52 | 4.65 | 5.30 | PB | | 12.02 | 12.69 | 13.59 |
| | | velocity | 7.18 | 8.82 | 8.75 | 8.64 | 8.43 | 8.29 | 8.10 | 7.92 | 7.74 | 7.53 | 7.55 | 8.02 | | 8.74 | 8.27 | 7.73 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | | 130 | | | | |

**Ido, Takahiro (JPN) (1999)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2017 Japanese National High School Championships (Yamagata, JPN) *Kota (2017) - 70th high school championships: JAF scientific committee - biomechanics data collection*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-17 | time | 6.21 | 10.36 | 14.61 | 19.00 | 23.56 | 28.28 | 32.87 | 37.75 | 42.69 | 47.80 | | 53.27 | 2 / 8 | | | |
| reaction time | 0.143 | interval | | 4.15 | 4.25 | 4.39 | 4.56 | 4.72 | 4.59 | 4.88 | 4.94 | 5.11 | 5.47 | | | 12.79 | 13.87 | 14.93 |
| | | velocity | 7.25 | 8.43 | 8.24 | 7.97 | 7.68 | 7.42 | 7.63 | 7.17 | 7.09 | 6.85 | 7.31 | 7.51 | | 8.21 | 7.57 | 7.03 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**Ikwaukor, Akovunndu (USA) (1984)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2003 USATF National Junior Championships (Palo Alto, CA) *USATF Women's Sprint Development (2003)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Jun-03 | time | 6.01 | 9.88 | 13.93 | 18.01 | 22.30 | 27.03 | 31.70 | 36.62 | 41.81 | 47.31 | | 54.25 | 3 / 8 | | | |
| reaction time | | interval | | 3.87 | 4.05 | 4.08 | 4.29 | 4.73 | 4.67 | 4.92 | 5.19 | 5.50 | 6.94 | | | 12.00 | 13.69 | 15.61 |
| | | velocity | 7.49 | 9.04 | 8.64 | 8.58 | 8.16 | 7.40 | 7.49 | 7.11 | 6.74 | 6.36 | 5.76 | 7.37 | | 8.75 | 7.67 | 6.73 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Imaka, Kaito (JPN)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 1** - 2016 Japanese National Youth Championships (Mizuho, JPN) *(2016.11.17) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Oct-16 | time | | | | | 24.08 | | | 38.27 | | | | 55.86 | 6 / 3 | | | |
| reaction time | | interval | | | | | | | | 14.19 | | | | | | | | |
| | | velocity | | | | | 7.68 | | | 7.40 | | | | 7.16 | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Imanishi, Ryota (JPN) (2004)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2022 Japanese National High School Championships (Naruto, JPN) *Kishima (2022) - national high school championships biomechanics data collection*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Aug-22 | time | 6.27 | 10.18 | 14.08 | 18.27 | 22.67 | 27.15 | 31.73 | 36.55 | 41.65 | 47.10 | | 54.00 | 9 / 8 | | | |
| reaction time | 0.181 | interval | | 3.91 | 3.90 | 4.19 | 4.40 | 4.48 | 4.58 | 4.82 | 5.10 | 5.45 | 6.90 | | | 12.00 | 13.46 | 15.37 |
| | | velocity | 7.18 | 8.95 | 8.97 | 8.35 | 7.95 | 7.81 | 7.64 | 7.26 | 6.86 | 6.42 | 5.80 | 7.41 | | 8.75 | 7.80 | 6.83 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 15 | 16 | | 156 | | | | |

**Imazeki, Yuta (JPN) (1987)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2012 Japanese National Championships (Osaka, JPN) *Yasunori (2013) - race pattern analysis for the top Japanese 400m hurdlers in major domestic competitions*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-12 | time | 6.19 | 10.14 | 14.11 | 18.25 | 22.48 | 26.72 | 30.96 | 35.25 | 39.69 | 44.21 | | 49.50 | 8 / 4 | | | |
| reaction time | | interval | | 3.95 | 3.97 | 4.14 | 4.23 | 4.24 | 4.24 | 4.29 | 4.44 | 4.52 | 5.29 | | | 12.06 | 12.71 | 13.25 |
| | | velocity | 7.27 | 8.86 | 8.82 | 8.45 | 8.27 | 8.25 | 8.25 | 8.16 | 7.88 | 7.74 | 7.56 | 8.08 | | 8.71 | 8.26 | 7.92 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.7 | 172 | | | | |

**FINAL** - 2012 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Yasunori (2013) - race pattern analysis for the top Japanese 400m hurdlers in major domestic competitions*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-12 | time | 6.22 | 10.11 | 14.01 | 18.00 | 22.15 | 26.30 | 30.59 | 35.08 | 39.68 | 44.38 | | 49.76 | / 3 | | | |
| reaction time | | interval | | 3.89 | 3.90 | 3.99 | 4.15 | 4.15 | 4.29 | 4.49 | 4.60 | 4.70 | 5.38 | | | 11.78 | 12.59 | 13.79 |
| | | velocity | 7.23 | 9.00 | 8.97 | 8.77 | 8.43 | 8.43 | 8.16 | 7.80 | 7.61 | 7.45 | 7.43 | 8.04 | | 8.91 | 8.34 | 7.61 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**FINAL** - 2011 Japanese National Championships (Kumagaya, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-11 | time | 6.21 | 10.15 | 14.19 | 18.21 | 22.26 | 26.33 | 30.53 | 34.93 | 39.52 | 44.22 | | 49.61 | / 2 | | | |
| reaction time | | interval | | 3.94 | 4.04 | 4.02 | 4.05 | 4.07 | 4.20 | 4.40 | 4.59 | 4.70 | 5.39 | | | 12.00 | 12.32 | 13.69 |
| | | velocity | 7.25 | 8.88 | 8.66 | 8.71 | 8.64 | 8.60 | 8.33 | 7.95 | 7.63 | 7.45 | 7.42 | 8.06 | | 8.75 | 8.52 | 7.67 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Race A** - 2011 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-11 | time | 6.21 | 10.16 | 14.13 | 18.17 | 22.32 | 26.56 | 30.85 | 35.29 | 39.84 | 44.46 | | 49.71 | / 3 | | | |
| reaction time | | interval | | 3.95 | 3.97 | 4.04 | 4.15 | 4.24 | 4.29 | 4.44 | 4.55 | 4.62 | 5.25 | | | 11.96 | 12.68 | 13.61 |
| | | velocity | 7.25 | 8.86 | 8.82 | 8.66 | 8.43 | 8.25 | 8.16 | 7.88 | 7.69 | 7.58 | 7.62 | 8.05 | | 8.78 | 8.28 | 7.71 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**FINAL** - 2010 Japanese National Championships (Marugume, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jun-10 | time | 6.17 | 10.19 | 14.36 | 18.55 | 22.85 | 27.20 | 31.54 | 35.93 | 40.36 | 44.79 | | 49.81 | / 4 | | | |
| reaction time | 0.181 | interval | | 4.02 | 4.17 | 4.19 | 4.30 | 4.35 | 4.34 | 4.39 | 4.43 | 4.43 | 5.02 | | | 12.38 | 12.99 | 13.25 |
| | | velocity | 7.29 | 8.71 | 8.39 | 8.35 | 8.14 | 8.05 | 8.06 | 7.97 | 7.90 | 7.90 | 7.97 | 8.03 | | 8.48 | 8.08 | 7.92 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**FINAL** - 2010 Osaka Grand Prix (Osaka, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-10 | time | 6.29 | 10.26 | 14.21 | 18.28 | 22.42 | 26.69 | 31.06 | 35.60 | 40.10 | 44.64 | | 49.77 | / 4 | | | |
| reaction time | | interval | | 3.97 | 3.95 | 4.07 | 4.14 | 4.27 | 4.37 | 4.54 | 4.50 | 4.54 | 5.13 | | | 11.99 | 12.78 | 13.58 |
| | | velocity | 7.15 | 8.82 | 8.86 | 8.60 | 8.45 | 8.20 | 8.01 | 7.71 | 7.78 | 7.71 | 7.80 | 8.04 | | 8.76 | 8.22 | 7.73 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Race A** - 2010 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-10 | time | 6.42 | 10.37 | 14.41 | 18.51 | 22.71 | 26.96 | 31.25 | 35.69 | 40.21 | 44.81 | | 50.09 | / 1 | | | |
| reaction time | | interval | | 3.95 | 4.04 | 4.10 | 4.20 | 4.25 | 4.29 | 4.44 | 4.52 | 4.60 | 5.28 | | | 12.09 | 12.74 | 13.56 |
| | | velocity | 7.01 | 8.86 | 8.66 | 8.54 | 8.33 | 8.24 | 8.16 | 7.88 | 7.74 | 7.61 | 7.58 | 7.99 | | 8.68 | 8.24 | 7.74 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Ina, Sota (JPN) (2000)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**B FINAL** - 2020 World Athletics Trials (Fuji, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Sep-20 | time | 6.24 | 10.26 | 14.18 | 18.28 | 22.51 | 26.78 | 31.18 | 35.84 | 40.59 | 45.33 | | 50.67 | 7 / 3 | | | | |
| reaction time | | interval | | 4.02 | 3.92 | 4.10 | 4.23 | 4.27 | 4.40 | 4.66 | 4.75 | 4.74 | 5.34 | | | 12.04 | 12.90 | 14.15 | |
| | | velocity | 7.21 | 8.71 | 8.93 | 8.54 | 8.27 | 8.20 | 7.95 | 7.51 | 7.37 | 7.38 | 7.49 | 7.89 | | 8.72 | 8.14 | 7.42 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 18 | 166 | | | | | |

**Inoue, Daichi (JPN) (1999)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2017 Tokyo High School Championships (Tokyo, JPN) *(2017) - tfdata-store.com/2017/05/14/post-470/*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-May-17 | time | 6.25 | 10.05 | 13.95 | 17.90 | 21.88 | 26.05 | 30.69 | 35.34 | 40.18 | 45.08 | | 50.37 | 5 / 1 | | | | |
| reaction time | | interval | | 3.80 | 3.90 | 3.95 | 3.98 | 4.17 | 4.64 | 4.65 | 4.84 | 4.90 | 5.29 | PB | | 11.65 | 12.79 | 14.39 | |
| | | velocity | 7.20 | 9.21 | 8.97 | 8.86 | 8.79 | 8.39 | 7.54 | 7.53 | 7.23 | 7.14 | 7.56 | 7.94 | | 9.01 | 8.21 | 7.30 | |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 15 | 15 | | 125 | | | | | |

**U19 FINAL** - 2016 National Sports Festival (Kitakami, JPN) *(2017) - tfdata-store.com/2017/05/14/post-470/*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Oct-16 | time | 6.26 | 10.01 | 13.94 | 18.09 | 22.44 | 27.02 | 31.70 | 36.47 | 41.21 | 45.98 | | 51.36 | 7 / 1 | | | | |
| reaction time | | interval | | 3.75 | 3.93 | 4.15 | 4.35 | 4.58 | 4.68 | 4.77 | 4.74 | 4.77 | 5.38 | PB | | 11.83 | 13.61 | 14.28 | |
| | | velocity | 7.19 | 9.33 | 8.91 | 8.43 | 8.05 | 7.64 | 7.48 | 7.34 | 7.38 | 7.34 | 7.43 | 7.79 | | 8.88 | 7.71 | 7.35 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 19 | 169 | | | | | |

**Inoue, Kakeru (JPN) (1996)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2021 Michitaka Kinami Memorial (Osaka, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jun-21 | time | 6.04 | 9.76 | 13.61 | 17.52 | 21.55 | 25.73 | 30.08 | 34.58 | 39.27 | 44.18 | | 49.80 | 8 / 1 | | | | |
| reaction time | 0.258 | interval | | 3.72 | 3.85 | 3.91 | 4.03 | 4.18 | 4.35 | 4.50 | 4.69 | 4.91 | 5.62 | | | 11.48 | 12.56 | 14.10 | |
| | | velocity | 7.45 | 9.41 | 9.09 | 8.95 | 8.68 | 8.37 | 8.05 | 7.78 | 7.46 | 7.13 | 7.12 | 8.03 | | 9.15 | 8.36 | 7.45 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 19 | 165 | | | | | |

**B FINAL** - 2020 Michitaka Kinami Memorial (Osaka, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Oct-20 | time | 6.18 | 10.09 | 14.13 | 18.18 | 22.34 | 26.68 | 31.13 | 35.72 | 40.44 | 45.20 | | 50.60 | 1 / 1 | | | | |
| reaction time | | interval | | 3.91 | 4.04 | 4.05 | 4.16 | 4.34 | 4.45 | 4.59 | 4.72 | 4.76 | 5.40 | | | 12.00 | 12.95 | 14.07 | |
| | | velocity | 7.28 | 8.95 | 8.66 | 8.64 | 8.41 | 8.06 | 7.87 | 7.63 | 7.42 | 7.35 | 7.41 | 7.91 | | 8.75 | 8.11 | 7.46 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18.7 | 164.7 | | | | | |

**FINAL** - 2020 All Japan Corporate Championships (Kumagaya, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Sep-20 | time | 6.17 | 10.06 | 14.00 | 18.07 | 22.41 | 26.88 | 31.61 | 36.54 | 41.66 | 46.93 | | 53.05 | 2 / 8 | | | | |
| reaction time | 0.220 | interval | | 3.89 | 3.94 | 4.07 | 4.34 | 4.47 | 4.73 | 4.93 | 5.12 | 5.27 | 6.12 | | | 11.90 | 13.54 | 15.32 | |
| | | velocity | 7.29 | 9.00 | 8.88 | 8.60 | 8.06 | 7.83 | 7.40 | 7.10 | 6.84 | 6.64 | 6.54 | 7.54 | | 8.82 | 7.75 | 6.85 | |
| H1 lead leg | | strides | | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | | 127 | | | | | |

**B FINAL** - 2020 World Athletics Trials (Fuji, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Sep-20 | time | 6.12 | 10.01 | 13.96 | 18.03 | 22.17 | 26.43 | 30.86 | 35.49 | 40.31 | 45.31 | | 51.11 | 6 / 4 | | | | |
| reaction time | | interval | | 3.89 | 3.95 | 4.07 | 4.14 | 4.26 | 4.43 | 4.63 | 4.82 | 5.00 | 5.80 | | | 11.91 | 12.83 | 14.45 | |
| | | velocity | 7.35 | 9.00 | 8.86 | 8.60 | 8.45 | 8.22 | 7.90 | 7.56 | 7.26 | 7.00 | 6.90 | 7.83 | | 8.82 | 8.18 | 7.27 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18.7 | 164.7 | | | | | |

**FINAL** - 2019 Seiko Golden Grand Prix (Osaka, JPN) *Hirokawa (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-May-19 | time | 6.09 | 9.94 | 13.86 | 17.87 | 22.06 | 26.34 | 30.86 | 35.57 | 40.44 | 45.35 | | 50.97 | 9 / 4 | | | | |
| reaction time | 0.175 | interval | | 3.85 | 3.92 | 4.01 | 4.19 | 4.28 | 4.52 | 4.71 | 4.87 | 4.91 | 5.62 | | | 11.78 | 12.99 | 14.49 | |
| | | velocity | 7.39 | 9.09 | 8.93 | 8.73 | 8.35 | 8.18 | 7.74 | 7.43 | 7.19 | 7.13 | 7.12 | 7.85 | | 8.91 | 8.08 | 7.25 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 19 | 165 | | | | | |

**A FINAL** - 2019 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Kobayashi (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-19 | time | 6.14 | 9.94 | 13.88 | 17.90 | 21.99 | 26.26 | 30.68 | 35.22 | 39.97 | 44.84 | | 50.34 | 8 / 3 | | | | |
| reaction time | | interval | | 3.80 | 3.94 | 4.02 | 4.09 | 4.27 | 4.42 | 4.54 | 4.75 | 4.87 | 5.50 | | | 11.76 | 12.78 | 14.16 | |
| | | velocity | 7.33 | 9.21 | 8.88 | 8.71 | 8.56 | 8.20 | 7.92 | 7.71 | 7.37 | 7.19 | 7.27 | 7.95 | | 8.93 | 8.22 | 7.42 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 146 | | | | | |

**C FINAL** - 2018 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Morioka (2018) - race pattern analysis of Japan's top 400m hurdles - main national competitions in 2018*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-18 | time | 6.14 | 9.99 | 13.86 | 17.76 | 21.75 | 25.94 | 30.26 | 34.78 | 39.45 | 44.19 | | 49.54 | 5 / 1 | | | | |
| reaction time | 0.182 | interval | | 3.85 | 3.87 | 3.90 | 3.99 | 4.19 | 4.32 | 4.52 | 4.67 | 4.74 | 5.35 | PB | | 11.62 | 12.50 | 13.93 | |
| | | velocity | 7.33 | 9.09 | 9.04 | 8.97 | 8.77 | 8.35 | 8.10 | 7.74 | 7.49 | 7.38 | 7.48 | 8.07 | | 9.04 | 8.40 | 7.54 | |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 18.5 | 169.5 | | | | | |

**Isakov, Erkinjon (UZB) (1974)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 3** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.10 | 10.14 | 14.14 | 18.30 | 22.62 | 26.70 | 31.18 | 35.74 | 40.34 | 45.02 | | 50.71 | 5 / 5 | | | | |
| reaction time | 0.182 | interval | | 4.04 | 4.00 | 4.16 | 4.32 | 4.08 | 4.48 | 4.56 | 4.60 | 4.68 | 5.69 | | | 12.20 | 12.88 | 13.84 | |
| | | velocity | 7.38 | 8.66 | 8.75 | 8.41 | 8.10 | 8.58 | 7.81 | 7.68 | 7.61 | 7.48 | 7.03 | 7.89 | | 8.61 | 8.15 | 7.59 | |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | | 151 | | | | | |

**Ishida, Yusuke (JPN) (1995)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2017 Japanese National Championships (Osaka, JPN) *Morioka (2018) - Analysis of the race patterns of the top 400m hurdles in Japan*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jun-17 | time | 6.16 | 9.96 | 13.86 | 17.77 | 21.76 | 26.06 | 30.38 | 34.90 | 39.59 | 44.34 | | 49.79 | / 2 | | | | |
| reaction time | 0.185 | interval | | 3.80 | 3.90 | 3.91 | 3.99 | 4.30 | 4.32 | 4.52 | 4.69 | 4.75 | 5.45 | | | 11.61 | 12.61 | 13.96 | |
| | | velocity | 7.31 | 9.21 | 8.97 | 8.95 | 8.77 | 8.14 | 8.10 | 7.74 | 7.46 | 7.37 | 7.34 | 8.03 | | 9.04 | 8.33 | 7.52 | |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | | |

**FINAL** - 2017 Nambu Memorial (Sapporo, JPN) *(2017) - tfdata-store.com/2017/07/11/post-1019/*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-17 | time | 6.14 | 9.93 | 13.82 | 17.77 | 21.79 | 26.06 | 30.35 | 34.87 | 39.53 | 44.20 | | 49.35 | 6 / 1 | | | | |
| reaction time | | interval | | 3.79 | 3.89 | 3.95 | 4.02 | 4.27 | 4.29 | 4.52 | 4.66 | 4.67 | 5.15 | PB | | 11.63 | 12.58 | 13.85 | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.33 | 9.23 | 9.00 | 8.86 | 8.71 | 8.20 | 8.16 | 7.74 | 7.51 | 7.49 | 7.77 | 8.11 | | 9.03 | 8.35 | 7.58 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18 | 164 | | | | |

**Ito, Masahiro (JPN) (1999)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 2** - 2016 Japanese National Youth Championships (Mizuho, JPN) | | | | | | | | | | *(2016.11.17) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en* | | | | | | | | | |
| date | 23-Oct-16 | time | | | | | 23.65 | | | | 38.41 | | | | 55.05 | 7 / 2 | | | |
| reaction time | | interval | | | | | | | | | 14.76 | | | | | | | | |
| | | velocity | | | | | 7.82 | | | | 7.11 | | | | 7.27 | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Itt, Edgar (FRG) (1967)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1988 Olympic Games (Seoul, KOR) | | | | | | | | | | *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988* | | | | | | | | | |
| date | 25-Sep-88 | time | 6.04 | 9.90 | 13.77 | 17.69 | 21.77 | | 25.98 | 30.26 | 34.63 | 39.07 | 43.59 | | 48.78 | 8 / 8 | | | |
| reaction time | 0.187 | interval | | 3.86 | 3.87 | 3.92 | 4.08 | | 4.21 | 4.28 | 4.37 | 4.44 | 4.52 | 5.19 | | | 11.65 | 12.57 | 13.33 |
| | | velocity | 7.45 | 9.07 | 9.04 | 8.93 | 8.58 | | 8.31 | 8.18 | 8.01 | 7.88 | 7.74 | 7.71 | 8.20 | | 9.01 | 8.35 | 7.88 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 14 | 16.8 | 159.8 | | | | |
| **Semi-Final 2** - 1988 Olympic Games (Seoul, KOR) | | | | | | | | | | *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988* | | | | | | | | | |
| date | 24-Sep-88 | time | 6.08 | 9.79 | 13.65 | 17.56 | 21.58 | | 25.78 | 30.14 | 34.60 | 39.15 | 43.69 | | 48.86 | 2 / 4 | | | |
| reaction time | | interval | | 3.71 | 3.86 | 3.91 | 4.02 | | 4.20 | 4.36 | 4.46 | 4.55 | 4.54 | 5.17 | | | 11.48 | 12.58 | 13.55 |
| | | velocity | 7.40 | 9.43 | 9.07 | 8.95 | 8.71 | | 8.33 | 8.03 | 7.85 | 7.69 | 7.71 | 7.74 | 8.19 | | 9.15 | 8.35 | 7.75 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 14 | 17.3 | 160.3 | | | | |

**Iwabuchi, Soya (JPN)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2018 Japanese National High School Championships (Nagoya, JPN) | | | | | | | | | | *Kota (2018) - 71st high school championships: JAF scientific committee - biomechanics data collection* | | | | | | | | | |
| date | 04-Aug-18 | time | 6.34 | 10.51 | 14.86 | 19.18 | 23.53 | | 28.04 | 32.50 | 36.97 | 41.47 | 46.08 | | 51.37 | 5 / 2 | | | |
| reaction time | | interval | | 4.17 | 4.35 | 4.32 | 4.35 | | 4.51 | 4.46 | 4.47 | 4.50 | 4.61 | 5.29 | PB | | 12.84 | 13.32 | 13.58 |
| | | velocity | 7.10 | 8.39 | 8.05 | 8.10 | 8.05 | | 7.76 | 7.85 | 7.83 | 7.78 | 7.59 | 7.56 | 7.79 | | 8.18 | 7.88 | 7.73 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**Iwamoto, Takeshi (JPN) (1996)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B FINAL** - 2020 World Athletics Trials (Fuji, JPN) | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | | | | | | | |
| date | 06-Sep-20 | time | 6.14 | 9.98 | 13.93 | 17.92 | 22.09 | | 26.36 | 30.83 | 35.41 | 40.32 | 45.28 | | 50.56 | 4 / 2 | | | |
| reaction time | | interval | | 3.84 | 3.95 | 3.99 | 4.17 | | 4.27 | 4.47 | 4.58 | 4.91 | 4.96 | 5.28 | | | 11.78 | 12.91 | 14.45 |
| | | velocity | 7.33 | 9.11 | 8.86 | 8.77 | 8.39 | | 8.20 | 7.83 | 7.64 | 7.13 | 7.06 | 7.58 | 7.91 | | 8.91 | 8.13 | 7.27 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 16.2 | 155.2 | | | | |

**Iwasaka, Shuto (JPN) (2001)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2019 Japanese National High School Championships (Okinawa, JPN) | | | | | | | | | | *Kota (2019) - 72nd high school championships: JAF scientific committee - biomechanics data collection* | | | | | | | | | |
| date | 06-Aug-19 | time | 6.26 | 10.46 | 14.73 | 19.13 | 23.52 | | 28.08 | 32.48 | 36.97 | 41.64 | 46.55 | | 51.99 | 6 / 2 | | | |
| reaction time | | interval | | 4.20 | 4.27 | 4.40 | 4.39 | | 4.56 | 4.40 | 4.49 | 4.67 | 4.91 | 5.44 | | | 12.87 | 13.35 | 14.07 |
| | | velocity | 7.19 | 8.33 | 8.20 | 7.95 | 7.97 | | 7.68 | 7.95 | 7.80 | 7.49 | 7.13 | 7.35 | 7.69 | | 8.16 | 7.87 | 7.46 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**Iwasaki, Takafumi (JPN) (1997)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Denka Athletics Challenge Cup (Niigata, JPN) | | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | | | | | | |
| date | 06-Jun-21 | time | 6.06 | 9.91 | 13.91 | 17.97 | 22.15 | | 26.41 | 30.76 | 35.19 | 39.77 | 44.43 | | 49.73 | 7 / 3 | | | |
| reaction time | | interval | | 3.85 | 4.00 | 4.06 | 4.18 | | 4.26 | 4.35 | 4.43 | 4.58 | 4.66 | 5.30 | | | 11.91 | 12.79 | 13.67 |
| | | velocity | 7.43 | 9.09 | 8.75 | 8.62 | 8.37 | | 8.22 | 8.05 | 7.90 | 7.64 | 7.51 | 7.55 | 8.04 | | 8.82 | 8.21 | 7.68 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 18.2 | 169.2 | | | | |
| **FINAL** - 2021 Ready Steady Tokyo (Tokyo, JPN) | | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | | | | | | |
| date | 09-May-21 | time | 5.99 | 9.81 | 13.73 | 17.77 | 21.92 | | 26.26 | 30.68 | 35.14 | 39.72 | 44.34 | | 49.64 | 2 / 5 | | | |
| reaction time | 0.183 | interval | | 3.82 | 3.92 | 4.04 | 4.15 | | 4.34 | 4.42 | 4.46 | 4.58 | 4.62 | 5.30 | PB | | 11.78 | 12.91 | 13.66 |
| | | velocity | 7.51 | 9.16 | 8.93 | 8.66 | 8.43 | | 8.06 | 7.92 | 7.85 | 7.64 | 7.58 | 7.55 | 8.06 | | 8.91 | 8.13 | 7.69 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | | 130 | | | | |
| **C FINAL** - 2021 Shizuoka International Athletics Meeting (Fukuroi, JPN) | | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | | | | | | |
| date | 03-May-21 | time | 6.01 | 9.86 | 13.88 | 17.97 | 22.09 | | 26.41 | 30.85 | 35.42 | 40.11 | 44.84 | | 50.44 | 4 / 1 | | | |
| reaction time | 0.192 | interval | | 3.85 | 4.02 | 4.09 | 4.12 | | 4.32 | 4.44 | 4.57 | 4.69 | 4.73 | 5.60 | | | 11.96 | 12.88 | 13.99 |
| | | velocity | 7.49 | 9.09 | 8.71 | 8.56 | 8.50 | | 8.10 | 7.88 | 7.66 | 7.46 | 7.40 | 7.14 | 7.93 | | 8.78 | 8.15 | 7.51 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 19 | 170 | | | | |

**Jabir, Madari Pillyalil (IND) (1996)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 3** - 2019 IAAF World Championships (Doha, QAT) | | | | | | | | | | | *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships* | | | | | | | | |
| date | 28-Sep-19 | time | 5.95 | 9.82 | 13.69 | 17.64 | 21.74 | | 25.92 | 30.19 | 34.61 | 39.24 | 44.12 | | 49.71 | 9 / 5 | | | |
| reaction time | 0.199 | interval | | 3.87 | 3.87 | 3.95 | 4.10 | | 4.18 | 4.27 | 4.42 | 4.63 | 4.88 | 5.59 | | | 11.69 | 12.55 | 13.93 |
| | | velocity | 7.56 | 9.04 | 9.04 | 8.86 | 8.54 | | 8.37 | 8.20 | 7.92 | 7.56 | 7.17 | 7.16 | 8.05 | | 8.98 | 8.37 | 7.54 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 16 | 19.7 | 178.7 | | | | |

**Jackson, Bershawn (USA) (1983)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2018 Weltklasse (Zürich, SUI) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2018 year end hurdle report* | | | | |
| date | 30-Aug-18 | time | 5.76 | 9.68 | 13.80 | 18.00 | 22.32 | 24.2 | 26.56 | 30.84 | | 39.80 | 44.72 | | 50.63 | 2 / 7 | | | |
| reaction time | 0.140 | interval | | 3.92 | 4.12 | 4.20 | 4.32 | | 4.24 | 4.28 | | 8.96 | 4.92 | 5.91 | | | 12.24 | 12.84 | 13.88 |
| | | velocity | 7.81 | 8.93 | 8.50 | 8.33 | 8.10 | 8.26 | 8.25 | 8.18 | | 7.81 | 7.11 | 6.77 | 7.90 | | 8.58 | 8.18 | 7.56 |
| H1 lead leg | L | strides | 22 | 15 | 15 | | 15 | | 15 | 15 | | | 16 | | 113 | | | | |
| **FINAL** - 2018 Athletissima (Lausanne, SUI) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2018 year end hurdle report* | | | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jul-18 | time | 5.60 | 9.44 | 13.44 | 17.52 | 21.64 | | 25.72 | 29.84 | 34.12 | 38.60 | 43.40 | | 49.31 | 8 / 6 | | | |
| reaction time | 0.129 | interval | | 3.84 | 4.00 | 4.08 | 4.12 | | 4.08 | 4.12 | 4.28 | 4.48 | 4.80 | 5.91 | | | 11.92 | 12.32 | 13.56 |
| | | velocity | 8.04 | 9.11 | 8.75 | 8.58 | 8.50 | | 8.58 | 8.50 | 8.18 | 7.81 | 7.29 | 6.77 | 8.11 | | 8.81 | 8.52 | 7.74 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 157 | | | | |

**FINAL** - 2018 Meeting de Paris (Paris, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jul-18 | time | 5.68 | 9.44 | 13.40 | 17.44 | 21.56 | 23.4 | 25.64 | 29.76 | 34.04 | 38.52 | 43.32 | | 49.16 | 2 / 6 | | | |
| reaction time | 0.140 | interval | | 3.76 | 3.96 | 4.04 | 4.12 | | 4.08 | 4.12 | 4.28 | 4.48 | 4.80 | 5.84 | | | 11.76 | 12.32 | 13.56 |
| | | velocity | 7.92 | 9.31 | 8.84 | 8.66 | 8.50 | 8.55 | 8.58 | 8.50 | 8.18 | 7.81 | 7.29 | 6.85 | 8.14 | | 8.93 | 8.52 | 7.74 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 19 | 176 | | | | |

**FINAL** - 2018 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-May-18 | time | 5.72 | 9.56 | 13.64 | 17.84 | 22.04 | | 26.20 | 30.32 | 34.56 | 39.00 | 43.60 | | 49.08 | 2 / 2 | | | |
| reaction time | 0.176 | interval | | 3.84 | 4.08 | 4.20 | 4.20 | | 4.16 | 4.12 | 4.24 | 4.44 | 4.60 | 5.48 | | | 12.12 | 12.48 | 13.28 |
| | | velocity | 7.87 | 9.11 | 8.58 | 8.33 | 8.33 | | 8.41 | 8.50 | 8.25 | 7.88 | 7.61 | 7.30 | 8.15 | | 8.66 | 8.41 | 7.91 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | | 15 | 19 | 161 | | | | |

**FINAL** - 2017 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-17 | time | 5.60 | 9.36 | 13.32 | | 21.52 | | 25.64 | 29.80 | 34.16 | 38.88 | 43.96 | | 50.02 | 2 / 8 | | | |
| reaction time | 0.127 | interval | | 3.76 | 3.96 | | 8.20 | | 4.12 | 4.16 | 4.36 | 4.72 | 5.08 | 6.06 | | | | | 14.16 |
| | | velocity | 8.04 | 9.31 | 8.84 | | 8.54 | | 8.50 | 8.41 | 8.03 | 7.42 | 6.89 | 6.60 | 8.00 | | | | 7.42 |
| H1 lead leg | L | strides | 22 | 15 | 15 | | | | 15 | 15 | 15 | | 17 | 20 | 134 | | | | |

**FINAL** - 2017 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jul-17 | time | 5.72 | 9.64 | 13.84 | 18.12 | 22.32 | | 26.44 | 30.56 | 34.76 | 39.12 | 43.64 | | 49.04 | 3 / 4 | | | |
| reaction time | 0.140 | interval | | 3.92 | 4.20 | 4.28 | 4.20 | | 4.12 | 4.12 | 4.20 | 4.36 | 4.52 | 5.40 | | | 12.40 | 12.44 | 13.08 |
| | | velocity | 7.87 | 8.93 | 8.33 | 8.18 | 8.33 | | 8.50 | 8.50 | 8.33 | 8.03 | 7.74 | 7.41 | 8.16 | | 8.47 | 8.44 | 8.03 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 19 | 176 | | | | |

**FINAL** - 2017 USATF Championships (Sacramento, CA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jun-17 | time | 5.79 | 9.69 | 13.79 | 17.93 | 22.14 | | | 30.31 | 34.58 | 39.03 | 43.83 | | 49.51 | 1 / 8 | | | |
| reaction time | | interval | | 3.90 | 4.10 | 4.14 | 4.21 | | | 8.17 | 4.27 | 4.45 | 4.80 | 5.68 | | | 12.14 | 12.38 | 13.52 |
| | | velocity | 7.77 | 8.97 | 8.54 | 8.45 | 8.31 | | | 8.57 | 8.20 | 7.87 | 7.29 | 7.04 | 8.08 | | 8.65 | 8.48 | 7.77 |
| H1 lead leg | L | strides | 22 | 15 | | 15 | 15 | | | | 15 | 15 | 17 | 19.2 | 133.2 | | | | |

**FINAL** - 2017 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Jun-17 | time | 5.72 | 9.52 | | 17.68 | 21.80 | | 25.92 | 30.12 | 34.64 | 39.36 | 44.08 | | 50.28 | 4 / 6 | | | |
| reaction time | 0.135 | interval | | 3.80 | | 8.16 | 4.12 | | 4.12 | 4.20 | 4.52 | 4.72 | 4.72 | 6.20 | | | 11.96 | 12.44 | 13.96 |
| | | velocity | 7.87 | 9.21 | | 8.58 | 8.50 | | 8.50 | 8.33 | 7.74 | 7.42 | 7.42 | 6.45 | 7.96 | | 8.78 | 8.44 | 7.52 |
| H1 lead leg | L | strides | 22 | 15 | | | 15 | | 15 | 15 | | 16 | 15 | | 113 | | | | |

**FINAL** - 2017 Jamaica International Invitational (Kingston, JAM) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-May-17 | time | 5.74 | 9.54 | 13.54 | 17.65 | 21.75 | | 25.86 | 29.93 | 34.16 | 38.54 | 43.21 | | 48.63 | 4 / 3 | | | |
| reaction time | | interval | | 3.80 | 4.00 | 4.11 | 4.10 | | 4.11 | 4.07 | 4.23 | 4.38 | 4.67 | 5.42 | | | 11.91 | 12.28 | 13.28 |
| | | velocity | 7.84 | 9.21 | 8.75 | 8.52 | 8.54 | | 8.52 | 8.60 | 8.27 | 7.99 | 7.49 | 7.38 | 8.23 | | 8.82 | 8.55 | 7.91 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | | 15 | 15 | 15 | 15 | 19 | 161 | | | | |

**FINAL** - 2017 Shanghai Diamond League (Shanghai, CHN) (TV Analysis) *Henson (2021) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-May-17 | time | 5.64 | 9.40 | 13.40 | 17.56 | 21.60 | | 25.68 | 29.76 | 33.96 | 38.40 | 43.04 | | 48.63 | 4 / 1 | | | |
| reaction time | 0.127 | interval | | 3.76 | 4.00 | 4.16 | 4.04 | | 4.08 | 4.08 | 4.20 | 4.44 | 4.64 | 5.59 | | | 11.92 | 12.20 | 13.28 |
| | | velocity | 7.98 | 9.31 | 8.75 | 8.41 | 8.66 | | 8.58 | 8.58 | 8.33 | 7.88 | 7.54 | 7.16 | 8.23 | | 8.81 | 8.61 | 7.91 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 19 | 176 | | | | |

**FINAL** - 2016 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-16 | time | 5.90 | 9.68 | 13.61 | 17.68 | 21.82 | | 25.86 | 30.00 | 34.30 | 39.07 | 43.98 | | 49.96 | 1 / ~~8~~ 7 | | | |
| reaction time | 0.233 | interval | | 3.78 | 3.93 | 4.07 | 4.14 | | 4.04 | 4.14 | 4.30 | 4.77 | 4.91 | 5.98 | | | 11.78 | 12.32 | 13.98 |
| | | velocity | 7.63 | 9.26 | 8.91 | 8.60 | 8.45 | | 8.66 | 8.45 | 8.14 | 7.34 | 7.13 | 6.69 | 8.01 | | 8.91 | 8.52 | 7.51 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 16 | 19.5 | 178.5 | | | | |

**FINAL** - 2016 Prefontaine Classic (Eugene, OR) (TV Analysis) *(H8 5m short)* *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-16 | time | 5.76 | 9.60 | 13.72 | 17.96 | 22.24 | | 26.40 | 30.48 | 34.24 | 39.16 | 43.72 | | 49.04 | 4 / 3 | | | |
| reaction time | | interval | | 3.84 | 4.12 | 4.24 | 4.28 | | 4.16 | 4.08 | 3.76 | 4.92 | 4.56 | 5.32 | | | 12.20 | 12.52 | 13.24 |
| | | velocity | 7.81 | 9.11 | 8.50 | 8.25 | 8.18 | | 8.41 | 8.58 | 7.98 | 8.13 | 7.68 | 7.52 | 8.16 | | 8.61 | 8.39 | 7.93 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | | | 17 | 15 | 19 | 148 | | | | |

**FINAL** - 2011 IAAF World Championships (Daegu, KOR) *Behm (2011) - Le quatrache: Démus enfin!*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-11 | time | 5.7 | 9.3 | 13.3 | 17.2 | 21.2 | | 25.4 | 29.6 | 33.8 | 38.4 | 43.3 | | 49.24 | 5 / 6 | | | |
| reaction time | 0.151 | interval | | 3.60 | 4.00 | 3.90 | 4.00 | | 4.20 | 4.20 | 4.20 | 4.60 | 4.90 | 5.94 | | | 11.50 | 12.40 | 13.70 |
| | | velocity | 7.89 | 9.72 | 8.75 | 8.97 | 8.75 | | 8.33 | 8.33 | 8.33 | 7.61 | 7.14 | 6.73 | 8.12 | | 9.13 | 8.47 | 7.66 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 17 | 20 | 179 | | | | |

**FINAL** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-09 | time | 5.76 | 9.63 | 13.59 | 17.71 | 21.87 | | 26.01 | 30.17 | 34.43 | 38.79 | 43.22 | | 48.23 | 5 / 3 | | | |
| reaction time | 0.141 | interval | | 3.87 | 3.96 | 4.12 | 4.16 | | 4.14 | 4.16 | 4.26 | 4.36 | 4.43 | 5.01 | | | 11.95 | 12.46 | 13.05 |
| | | velocity | 7.81 | 9.04 | 8.84 | 8.50 | 8.41 | | 8.45 | 8.41 | 8.22 | 8.03 | 7.90 | 7.98 | 8.29 | | 8.79 | 8.43 | 8.05 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 19 | 172 | | | | |

**Semi-Final 2** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Aug-09 | time | 5.74 | 9.58 | 13.50 | 17.61 | 21.70 | 25.87 | 30.04 | 34.28 | 38.64 | 43.09 | | 48.23 | 5 / 1 | | | |
| reaction time | 0.146 | interval | | 3.84 | 3.92 | 4.11 | 4.09 | 4.17 | 4.17 | 4.24 | 4.36 | 4.45 | 5.14 | | | 11.87 | 12.43 | 13.05 |
| | | velocity | 7.84 | 9.11 | 8.93 | 8.52 | 8.56 | 8.39 | 8.39 | 8.25 | 8.03 | 7.87 | 7.78 | 8.29 | | 8.85 | 8.45 | 8.05 |
| H1 lead leg | L | strides | 22 | 14 | 14 | | | 15 | 15 | 15 | 15 | 15 | 18.7 | 143.7 | | | | |

**Heat 2** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-09 | time | 6.14 | 10.20 | 14.38 | 18.60 | 22.89 | 27.07 | 31.28 | 35.58 | 40.00 | 44.44 | | 49.34 | 2 / 2 | | | |
| reaction time | 0.151 | interval | | 4.06 | 4.18 | 4.22 | 4.29 | 4.18 | 4.21 | 4.30 | 4.42 | 4.44 | 4.90 | | | 12.46 | 12.68 | 13.16 |
| | | velocity | 7.33 | 8.62 | 8.37 | 8.29 | 8.16 | 8.37 | 8.31 | 8.14 | 7.92 | 7.88 | 8.16 | 8.11 | | 8.43 | 8.28 | 7.98 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 2008 Olympic Games (Beijing, CHN) *Behm (2008)- Pekin 2008: Le quatrache masculin - féminin*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-08 | time | 5.6 | 9.2 | 13.2 | 17.3 | 21.5 | 25.5 | 29.5 | 33.7 | 38.0 | 42.6 | | 48.06 | 7 / 3 | | | |
| reaction time | 0.145 | interval | | 3.60 | 4.00 | 4.10 | 4.20 | 4.00 | 4.00 | 4.20 | 4.30 | 4.60 | 5.46 | | | 11.70 | 12.20 | 13.10 |
| | | velocity | 8.04 | 9.72 | 8.75 | 8.54 | 8.33 | 8.75 | 8.75 | 8.33 | 8.14 | 7.61 | 7.33 | 8.32 | | 8.97 | 8.61 | 8.02 |
| H1 lead leg | R | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19.5 | 177.5 | | | | |

**FINAL** - 2008 USA Olympic Trials (Eugene, OR) *USATF Hurdle Development (2008)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jun-08 | time | 5.79 | 9.54 | 13.61 | 17.87 | 22.19 | 26.18 | 30.25 | 34.45 | 38.71 | 43.13 | | 48.17 | 4 / 1 | | | |
| reaction time | | interval | | 3.75 | 4.07 | 4.26 | 4.32 | 3.99 | 4.07 | 4.20 | 4.26 | 4.42 | 5.04 | | | 12.08 | 12.38 | 12.88 |
| | | velocity | 7.77 | 9.33 | 8.60 | 8.22 | 8.10 | 8.77 | 8.60 | 8.33 | 8.22 | 7.92 | 7.94 | 8.30 | | 8.69 | 8.48 | 8.15 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | | 158 | | | | |

**FINAL** - 2007 IAAF World Athletics Final (Stuttgart, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Sep-07 | time | 5.86 | 9.68 | 13.68 | 17.80 | 21.96 | 26.02 | 30.14 | 34.38 | 38.72 | 43.33 | | 48.58 | 2 / 4 | | | |
| reaction time | 0.167 | interval | | 3.82 | 4.00 | 4.12 | 4.16 | 4.06 | 4.12 | 4.24 | 4.34 | 4.61 | 5.25 | | | 11.94 | 12.34 | 13.19 |
| | | velocity | 7.68 | 9.16 | 8.75 | 8.50 | 8.41 | 8.62 | 8.50 | 8.25 | 8.06 | 7.59 | 7.62 | 8.23 | | 8.79 | 8.51 | 7.96 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 2007 Osaka Grand Prix (Osaka, JPN) *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-07 | time | 5.71 | 9.40 | 13.29 | 17.36 | 21.48 | 25.47 | 29.57 | 33.81 | 38.23 | 42.88 | | 48.13 | / 1 | | | |
| reaction time | | interval | | 3.69 | 3.89 | 4.07 | 4.12 | 3.99 | 4.10 | 4.24 | 4.42 | 4.65 | 5.25 | | | 11.65 | 12.21 | 13.31 |
| | | velocity | 7.88 | 9.49 | 9.00 | 8.60 | 8.50 | 8.77 | 8.54 | 8.25 | 7.92 | 7.53 | 7.62 | 8.31 | | 9.01 | 8.60 | 7.89 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**FINAL** - 2006 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2006)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jun-06 | time | 5.72 | 9.49 | 13.31 | 17.25 | 21.29 | 25.16 | 29.23 | 33.32 | 37.64 | 42.16 | | 47.48 | 6 / 2 | | | |
| reaction time | | interval | | 3.77 | 3.82 | 3.94 | 4.04 | 3.87 | 4.07 | 4.09 | 4.32 | 4.52 | 5.32 | | | 11.53 | 11.98 | 12.93 |
| | | velocity | 7.87 | 9.28 | 9.16 | 8.88 | 8.66 | 9.04 | 8.60 | 8.56 | 8.10 | 7.74 | 7.52 | 8.42 | | 9.11 | 8.76 | 8.12 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19.7 | 178 | | | | |

**FINAL** - 2006 Osaka Grand Prix (Osaka, JPN) *Yasunori (2007) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-May-06 | time | 6.04 | 10.06 | 14.15 | 18.29 | 22.36 | 26.28 | 30.22 | 34.22 | 38.43 | 42.73 | | 47.60 | / 1 | | | |
| reaction time | | interval | | 4.02 | 4.09 | 4.14 | 4.07 | 3.92 | 3.94 | 4.00 | 4.21 | 4.30 | 4.87 | | | 12.25 | 11.93 | 12.51 |
| | | velocity | 7.45 | 8.71 | 8.56 | 8.45 | 8.60 | 8.93 | 8.88 | 8.75 | 8.31 | 8.14 | 8.21 | 8.40 | | 8.57 | 8.80 | 8.39 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**FINAL** - 2005 Seiko Super Grand Prix (Yokohama, JPN) *Yasunori (2006) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Sep-05 | time | 5.92 | 9.89 | 14.08 | 18.27 | 22.36 | 26.30 | 30.30 | 34.49 | 38.76 | 43.15 | | 48.24 | / 1 | | | |
| reaction time | | interval | | 3.97 | 4.19 | 4.19 | 4.09 | 3.94 | 4.00 | 4.19 | 4.27 | 4.39 | 5.09 | | | 12.35 | 12.03 | 12.85 |
| | | velocity | 7.60 | 8.82 | 8.35 | 8.35 | 8.56 | 8.88 | 8.75 | 8.35 | 8.20 | 7.97 | 7.86 | 8.29 | | 8.50 | 8.73 | 8.17 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**FINAL** - 2005 IAAF World Championships (Helsinki, FIN) *Yasunori (2006) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-05 | time | 5.73 | 9.50 | 13.30 | 17.34 | 21.41 | 25.38 | 29.42 | 33.59 | 37.86 | 42.25 | | 47.30 | 6 / 1 | | | |
| reaction time | 0.153 | interval | | 3.77 | 3.80 | 4.04 | 4.07 | 3.97 | 4.04 | 4.17 | 4.27 | 4.39 | 5.05 | **PB** | | 11.61 | 12.08 | 12.83 |
| | | velocity | 7.85 | 9.28 | 9.21 | 8.66 | 8.60 | 8.82 | 8.66 | 8.39 | 8.20 | 7.97 | 7.92 | 8.46 | | 9.04 | 8.69 | 8.18 |
| H1 lead leg | | strides | | 13 | 13 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 150 | | | | |

**FINAL** - 2003 USATF National Championships (Palo Alto, CA) *USATF Women's Sprint Development (2003)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Jun-03 | time | 5.97 | 9.84 | 13.85 | 17.92 | 22.04 | 26.18 | 30.30 | 34.47 | 38.91 | 43.56 | | 49.01 | 4 / ~~2~~ 1 | | | |
| reaction time | | interval | | 3.87 | 4.01 | 4.07 | 4.12 | 4.14 | 4.12 | 4.17 | 4.44 | 4.65 | 5.45 | | | 11.95 | 12.38 | 13.26 |
| | | velocity | 7.54 | 9.04 | 8.73 | 8.60 | 8.50 | 8.45 | 8.50 | 8.39 | 7.88 | 7.53 | 7.34 | 8.16 | | 8.79 | 8.48 | 7.92 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

| **Januszewski, Paweł (POL) (1972)** | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-02 | time | 6.10 | 9.93 | 13.69 | 17.49 | 21.37 | 25.45 | 29.61 | 33.98 | 38.46 | 43.12 | | 48.46 | / 3 | | | |
| reaction time | 0.145 | interval | | 3.83 | 3.76 | 3.80 | 3.88 | 4.08 | 4.16 | 4.37 | 4.48 | 4.66 | 5.34 | | | 11.39 | 12.12 | 13.51 |
| | | velocity | 7.38 | 9.14 | 9.31 | 9.21 | 9.02 | 8.58 | 8.41 | 8.01 | 7.81 | 7.51 | 7.49 | 8.25 | | 9.22 | 8.66 | 7.77 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | | 128 | | | | |

**Semi-Final 1** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Aug-02 | time | 6.04 | 9.93 | 13.73 | 17.59 | 21.55 | 25.67 | 29.83 | 34.15 | 38.65 | 43.23 | | 48.60 | / 2 | | | |
| reaction time | | interval | | 3.89 | 3.80 | 3.86 | 3.96 | 4.12 | 4.16 | 4.32 | 4.50 | 4.58 | 5.37 | | | 11.55 | 12.24 | 13.40 |
| | | velocity | 7.45 | 9.00 | 9.21 | 9.07 | 8.84 | 8.50 | 8.41 | 8.10 | 7.78 | 7.64 | 7.45 | 8.23 | | 9.09 | 8.58 | 7.84 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Heat 1** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Aug-02 | time | 6.09 | 10.06 | 13.97 | 17.85 | 21.89 | | 26.03 | 30.31 | 34.71 | 39.32 | 43.87 | | 49.17 | / 1 | | | |
| reaction time | | interval | | 3.97 | 3.91 | 3.88 | 4.04 | | 4.14 | 4.28 | 4.40 | 4.61 | 4.55 | 5.30 | | | 11.76 | 12.46 | 13.56 |
| | | velocity | 7.39 | 8.82 | 8.95 | 9.02 | 8.66 | | 8.45 | 8.18 | 7.95 | 7.59 | 7.69 | 7.55 | 8.14 | | 8.93 | 8.43 | 7.74 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2001 IAAF World Championships (Edmonton, CAN) *Behm (2001) - Edmonton: Le quatrache: les finales*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-01 | time | 5.9 | 9.8 | 13.5 | 17.5 | 21.4 | | 25.5 | 29.8 | 34.1 | 38.7 | 43.3 | | 48.57 | 7 / ~~7~~ 6 | | | |
| reaction time | 0.175 | interval | | 3.90 | 3.70 | 4.00 | 3.90 | | 4.10 | 4.30 | 4.30 | 4.60 | 4.60 | 5.27 | | | 11.60 | 12.30 | 13.50 |
| | | velocity | 7.63 | 8.97 | 9.46 | 8.75 | 8.97 | | 8.54 | 8.14 | 8.14 | 7.61 | 7.61 | 7.59 | 8.24 | | 9.05 | 8.54 | 7.78 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 152 | | | | |

**FINAL** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Sep-00 | time | 5.98 | 9.86 | 13.66 | 17.50 | 21.46 | 22.94 | 25.62 | 29.82 | 34.10 | 38.66 | 43.18 | | 48.44 | 2 / 6 | | | |
| reaction time | 0.149 | interval | | 3.88 | 3.80 | 3.84 | 3.96 | | 4.16 | 4.20 | 4.28 | 4.56 | 4.52 | 5.26 | | | 11.52 | 12.32 | 13.36 |
| | | velocity | 7.53 | 9.02 | 9.21 | 9.11 | 8.84 | 8.72 | 8.41 | 8.33 | 8.18 | 7.68 | 7.74 | 7.60 | 8.26 | | 9.11 | 8.52 | 7.86 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.1 | 169.1 | | | | |

**Semi-Final 1** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 6.02 | 9.86 | 13.70 | 17.62 | 21.58 | 23.14 | 25.70 | 29.94 | 34.26 | 38.66 | 43.22 | | 48.42 | 7 / 4 | | | |
| reaction time | 0.244 | interval | | 3.84 | 3.84 | 3.92 | 3.96 | | 4.12 | 4.24 | 4.32 | 4.40 | 4.56 | 5.20 | | | 11.60 | 12.32 | 13.28 |
| | | velocity | 7.48 | 9.11 | 9.11 | 8.93 | 8.84 | 8.64 | 8.50 | 8.25 | 8.10 | 7.95 | 7.68 | 7.69 | 8.26 | | 9.05 | 8.52 | 7.91 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.2 | 169.2 | | | | |

**Heat 5** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.08 | 9.88 | 13.64 | 17.48 | 21.44 | | 25.60 | 30.08 | 34.80 | 40.04 | 45.28 | | 51.40 | 2 / 2 | | | |
| reaction time | 0.163 | interval | | 3.80 | 3.76 | 3.84 | 3.96 | | 4.16 | 4.48 | 4.72 | 5.24 | 5.24 | 6.12 | | | 11.40 | 12.60 | 15.20 |
| | | velocity | 7.40 | 9.21 | 9.31 | 9.11 | 8.84 | | 8.41 | 7.81 | 7.42 | 6.68 | 6.68 | 6.54 | 7.78 | | 9.21 | 8.33 | 6.91 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 19.7 | 170.7 | | | | |

**FINAL** - 2000 ISTAF (Berlin, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-00 | time | 6.07 | 9.93 | 13.76 | 17.69 | 21.67 | | 25.81 | 29.98 | 34.28 | 38.76 | 43.34 | | 48.49 | / 3 | | | |
| reaction time | | interval | | 3.86 | 3.83 | 3.93 | 3.98 | | 4.14 | 4.17 | 4.30 | 4.48 | 4.58 | 5.15 | | | 11.62 | 12.29 | 13.36 |
| | | velocity | 7.41 | 9.07 | 9.14 | 8.91 | 8.79 | | 8.45 | 8.39 | 8.14 | 7.81 | 7.64 | 7.77 | 8.25 | | 9.04 | 8.54 | 7.86 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Aug-99 | time | 5.54 | 9.24 | 13.00 | 16.77 | 20.74 | | 24.77 | 29.00 | 33.21 | 37.64 | 42.27 | | 48.19 | 4 / 5 | | | |
| reaction time | 0.138 | interval | | 3.70 | 3.76 | 3.77 | 3.97 | | 4.03 | 4.23 | 4.21 | 4.43 | 4.63 | 5.92 | | | 11.23 | 12.23 | 13.27 |
| | | velocity | 8.12 | 9.46 | 9.31 | 9.28 | 8.82 | | 8.68 | 8.27 | 8.31 | 7.90 | 7.56 | 6.76 | 8.30 | | 9.35 | 8.59 | 7.91 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 168.5 | | | | |

**Semi-Final 1** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-99 | time | 5.81 | 9.59 | 13.39 | 17.21 | 21.25 | | 25.30 | 29.51 | 33.85 | 38.20 | 42.79 | | 48.63 | 7 / 2 | | | |
| reaction time | 0.255 | interval | | 3.78 | 3.80 | 3.82 | 4.04 | | 4.05 | 4.21 | 4.34 | 4.35 | 4.59 | 5.84 | | | 11.40 | 12.30 | 13.28 |
| | | velocity | 7.75 | 9.26 | 9.21 | 9.16 | 8.66 | | 8.64 | 8.31 | 8.06 | 8.05 | 7.63 | 6.85 | 8.23 | | 9.21 | 8.54 | 7.91 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 168 | | | | |

**FINAL** - 1998 European Championships (Budapest, HUN) *Behm (1998) - analyse et commentaries: le 400m haies: Pavel la surprise!*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-98 | time | 5.9 | 9.8 | 13.6 | 17.4 | 21.2 | | 25.2 | 29.3 | 33.6 | 38.1 | 42.7 | | 48.17 | 3 / 1 | | | |
| reaction time | | interval | | 3.9 | 3.8 | 3.8 | 3.8 | | 4.0 | 4.1 | 4.3 | 4.5 | 4.6 | 5.47 | **NR / PB** | | 11.50 | 11.90 | 13.40 |
| | | velocity | 7.63 | 8.97 | 9.21 | 9.21 | 9.21 | | 8.75 | 8.54 | 8.14 | 7.78 | 7.61 | 7.31 | 8.30 | | 9.13 | 8.82 | 7.84 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 13 | 14 | 14 | 15 | 15 | 18.5 | 166.5 | | | | |

**Johnson, Brandon (USA) (1985)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2008 USA Olympic Trials (Eugene, OR) *USATF Hurdle Development (2008)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jun-08 | time | 5.84 | 9.59 | 13.41 | 17.37 | 21.54 | | 25.64 | 29.96 | 34.38 | 38.89 | 43.38 | | 48.72 | 2 / 6 | | | |
| reaction time | | interval | | 3.75 | 3.82 | 3.96 | 4.17 | | 4.10 | 4.32 | 4.42 | 4.51 | 4.49 | 5.34 | | | 11.53 | 12.59 | 13.42 |
| | | velocity | 7.71 | 9.33 | 9.16 | 8.84 | 8.39 | | 8.54 | 8.10 | 7.92 | 7.76 | 7.80 | 7.49 | 8.21 | | 9.11 | 8.34 | 7.82 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | | 142 | | | | |

**Heat 3** - 2007 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2007)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-07 | time | 5.87 | 9.58 | 13.51 | 17.48 | 21.60 | | 25.86 | 30.46 | 35.07 | 39.01 | 44.69 | | 50.04 | 5 / 1 | | | |
| reaction time | | interval | | 3.71 | 3.93 | 3.97 | 4.12 | | 4.26 | 4.60 | 4.61 | 3.94 | 5.68 | 5.35 | | | 11.61 | 12.98 | 14.23 |
| | | velocity | 7.67 | 9.43 | 8.91 | 8.82 | 8.50 | | 8.22 | 7.61 | 7.59 | 8.88 | 6.16 | 7.48 | 7.99 | | 9.04 | 8.09 | 7.38 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 144 | | | | |

**Jonot, Franck (FRA) (1961)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1986 French National Championships (Aix les Bains, FRA) *Veney - split times from PJ*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-86 | time | 6.05 | 10.02 | 13.86 | 17.80 | 21.94 | | 26.03 | 30.53 | 34.95 | 39.57 | 44.39 | | 50.21 | / 2 | | | |
| reaction time | | interval | | 3.97 | 3.84 | 3.94 | 4.14 | | 4.09 | 4.50 | 4.42 | 4.62 | 4.82 | 5.82 | | | 11.75 | 12.73 | 13.86 |
| | | velocity | 7.44 | 8.82 | 9.11 | 8.88 | 8.45 | | 8.56 | 7.78 | 7.92 | 7.58 | 7.26 | 6.87 | 7.97 | | 8.94 | 8.25 | 7.58 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Jordan-Bacot, Quivell (USA) (1999)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2023 USATF National Championships (Eugene, OR) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-23 | time | 5.94 | 9.67 | 13.61 | 17.58 | 21.65 | | 26.06 | | 35.16 | 39.97 | 44.84 | | 50.73 | 2 / 8 | | | |
| reaction time | | interval | | 3.73 | 3.94 | 3.97 | 4.07 | | 4.41 | | 9.10 | 4.81 | 4.87 | 5.89 | | | 11.64 | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.58 | 9.38 | 8.88 | 8.82 | 8.60 | 7.94 | 7.69 | 7.28 | 7.19 | 6.79 | 7.88 | 9.02 | | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | | 15 | 15 | | 103 | | | |

*Jordan, Quivell (USA) (1999)*

**Semi-Final 1** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jun-21 | time | 5.93 | 9.77 | 13.87 | 18.03 | 22.27 | 26.57 | 31.07 | 35.63 | 40.37 | 45.17 | 50.94 | 2 / 7 | | | |
| reaction time | 0.178 | interval | | 3.84 | 4.10 | 4.16 | 4.24 | 4.30 | 4.50 | 4.56 | 4.74 | 4.80 | 5.77 | 12.10 | 13.04 | 14.10 | |
| | | velocity | 7.59 | 9.11 | 8.54 | 8.41 | 8.25 | 8.14 | 7.78 | 7.68 | 7.38 | 7.29 | 6.93 | 7.85 | 8.68 | 8.05 | 7.45 |
| H1 lead leg | L | strides | 21 | 13 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | | 136 | | | |

**FINAL** - 2021 NCAA Championships (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-21 | time | 6.00 | 9.75 | | 17.73 | 21.80 | | 30.57 | 35.20 | 40.00 | | 50.54 | 1 / 9 | | | |
| reaction time | 0.166 | interval | | 3.75 | | 7.98 | 4.07 | | 8.77 | 4.63 | 4.80 | | | 11.73 | 12.84 | | |
| | | velocity | 7.50 | 9.33 | | 8.77 | 8.60 | | 7.98 | 7.56 | 7.29 | | 7.91 | 8.95 | 8.18 | | |
| H1 lead leg | L | strides | 21 | 13 | | | 14 | | | 15 | 15 | | 78 | | | | |

**Juan, Jaime (ESP) (1977)**

**FINAL** - 1998 Spanish National Championships (San Sebastián, ESP) *Ruiz (1998) - campeonato des españa absoluto: análisis de la carreras con villas*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Aug-98 | time | 6.22 | 10.26 | 14.35 | 18.57 | 22.96 | | 27.51 | 32.00 | 36.51 | 41.27 | 46.19 | | 52.40 | 8 / 6 | | | |
| reaction time | | interval | | 4.04 | 4.09 | 4.22 | 4.39 | | 4.55 | 4.49 | 4.51 | 4.76 | 4.92 | 6.21 | | | 12.35 | 13.43 | 14.19 |
| | | velocity | 7.23 | 8.66 | 8.56 | 8.29 | 7.97 | | 7.69 | 7.80 | 7.76 | 7.35 | 7.11 | 6.44 | 7.63 | | 8.50 | 7.82 | 7.40 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.5 | 170.5 | | | | |

**Juránek, Martin (CZE) (1991)**

**FINAL** - 2020 Golden Spike (Ostrava, CZE) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-20 | time | 6.10 | 10.04 | 13.98 | 17.95 | 22.09 | | | 30.63 | 35.30 | 40.24 | | | 51.71 | 2 / 7 | | | |
| reaction time | 0.166 | interval | | 3.94 | 3.94 | 3.97 | 4.14 | | | 8.54 | 4.67 | 4.94 | | | | | 11.85 | 12.68 | |
| | | velocity | 7.38 | 8.88 | 8.88 | 8.82 | 8.45 | | | 8.20 | 7.49 | 7.09 | | | 7.74 | | 8.86 | 8.28 | |
| H1 lead leg | L | strides | 22 | 15 | | 15 | 15 | | | | | 17 | 17 | | 101 | | | | |

**Juricic, Darko (CRO) (1969)**

**Heat 5** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.04 | 9.92 | 13.76 | 17.72 | 21.80 | | 25.96 | 30.64 | 35.60 | 40.88 | 46.16 | | 52.39 | 1 / 6 | | | |
| reaction time | 0.167 | interval | | 3.88 | 3.84 | 3.96 | 4.08 | | 4.16 | 4.68 | 4.96 | 5.28 | 5.28 | 6.23 | | | 11.68 | 12.92 | 15.52 |
| | | velocity | 7.45 | 9.02 | 9.11 | 8.84 | 8.58 | | 8.41 | 7.48 | 7.06 | 6.63 | 6.63 | 6.42 | 7.64 | | 8.99 | 8.13 | 6.77 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 16 | 17 | 18 | 18 | 21.9 | 182.9 | | | | |

**Kageyama, Ayata (JPN) (2000)**

**FINAL** - 2018 Japanese National High School Championships (Nagoya, JPN) *Kota (2018) - 71st high school championships: JAF scientific committee - biomechanics data collection*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Aug-18 | time | 6.49 | 10.73 | 15.28 | 19.92 | 24.61 | | 29.31 | 34.00 | 38.61 | 43.36 | 48.25 | | 53.79 | 7 / 8 | | | |
| reaction time | | interval | | 4.24 | 4.55 | 4.64 | 4.69 | | 4.70 | 4.69 | 4.61 | 4.75 | 4.89 | 5.54 | | | 13.43 | 14.08 | 14.25 |
| | | velocity | 6.93 | 8.25 | 7.69 | 7.54 | 7.46 | | 7.45 | 7.46 | 7.59 | 7.37 | 7.16 | 7.22 | 7.44 | | 7.82 | 7.46 | 7.37 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**Kajiki, Ryo (JPN) (1995)**

**C FINAL** - 2021 Denka Athletics Challenge Cup (Niigata, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jun-21 | time | 5.96 | 9.78 | 13.66 | 17.65 | 21.79 | | 26.13 | 30.58 | 35.19 | 39.92 | 44.81 | | 50.33 | 9 / 1 | | | |
| reaction time | | interval | | 3.82 | 3.88 | 3.99 | 4.14 | | 4.34 | 4.45 | 4.61 | 4.73 | 4.89 | 5.52 | | | 11.69 | 12.93 | 14.23 |
| | | velocity | 7.55 | 9.16 | 9.02 | 8.77 | 8.45 | | 8.06 | 7.87 | 7.59 | 7.40 | 7.16 | 7.25 | 7.95 | | 8.98 | 8.12 | 7.38 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | | 129 | | | | |

**B FINAL** - 2021 Michitaka Kinami Memorial (Osaka, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jun-21 | time | 6.04 | 9.79 | 13.61 | 17.60 | 21.64 | | 25.88 | 30.35 | 34.90 | 39.69 | 44.58 | | 50.16 | 7 / 3 | | | |
| reaction time | 0.248 | interval | | 3.75 | 3.82 | 3.99 | 4.04 | | 4.24 | 4.47 | 4.55 | 4.79 | 4.89 | 5.58 | | | 11.56 | 12.75 | 14.23 |
| | | velocity | 7.45 | 9.33 | 9.16 | 8.77 | 8.66 | | 8.25 | 7.83 | 7.69 | 7.31 | 7.16 | 7.17 | 7.97 | | 9.08 | 8.24 | 7.38 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18.5 | 161.5 | | | | |

**FINAL** - 2020 All Japan Corporate Championships (Kumagaya, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Sep-20 | time | 6.14 | 9.99 | 13.95 | 18.02 | 22.24 | | 26.66 | 31.13 | 35.89 | 40.86 | 46.01 | | 51.89 | 8 / 7 | | | |
| reaction time | 0.258 | interval | | 3.85 | 3.96 | 4.07 | 4.22 | | 4.42 | 4.47 | 4.76 | 4.97 | 5.15 | 5.88 | | | 11.88 | 13.11 | 14.88 |
| | | velocity | 7.33 | 9.09 | 8.84 | 8.60 | 8.29 | | 7.92 | 7.83 | 7.35 | 7.04 | 6.80 | 6.80 | 7.71 | | 8.84 | 8.01 | 7.06 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**FINAL** - 2018 National Sports Festival (Fukui, JPN) *Morioka (2018) - race pattern analysis of Japan's top 400m hurdles - main national competitions in 2018*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Oct-18 | time | 6.04 | 9.86 | 13.76 | 17.73 | 21.83 | | 26.15 | 30.64 | 35.14 | 39.78 | 44.50 | | 49.61 | 6 / 1 | | | |
| reaction time | 0.190 | interval | | 3.82 | 3.90 | 3.97 | 4.10 | | 4.32 | 4.49 | 4.50 | 4.64 | 4.72 | 5.11 | | | 11.69 | 12.91 | 13.86 |
| | | velocity | 7.45 | 9.16 | 8.97 | 8.82 | 8.54 | | 8.10 | 7.80 | 7.78 | 7.54 | 7.42 | 7.83 | 8.06 | | 8.98 | 8.13 | 7.58 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**Kakimori, Hiroshi (JPN) (1968)**

**FINAL** - 1986 IAAF World Junor Championships (Athens, GRE) *Miskos (1986) - IAAF biomechanical research - Athens 1986 - hurdle races*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Jul-86 | time | 6.21 | 9.92 | 13.94 | 18.30 | 21.95 | | 26.08 | 30.48 | 34.98 | 39.68 | 44.50 | | 50.09 | / 2 | | | |
| reaction time | | interval | | 3.71 | 4.02 | 4.36 | 3.65 | | 4.13 | 4.40 | 4.50 | 4.70 | 4.82 | 5.59 | | | 12.09 | 12.18 | 14.02 |
| | | velocity | 7.25 | 9.43 | 8.71 | 8.03 | 9.59 | | 8.47 | 7.95 | 7.78 | 7.45 | 7.26 | 7.16 | 7.99 | | 8.68 | 8.62 | 7.49 |
| H1 lead leg | | strides | 22 | 13 | 13 | 13 | 13 | | 15 | 15 | 15 | 15 | 15 | 19 | 168 | | | | |

**Kamani, Bayano (PAN) (1980)**

**FINAL** - 2004 Olympic Games (Athîna, GRE) *Behm (2005) - Athènes 2004: Les Haies Basses*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Aug-04 | time | 5.9 | 9.5 | 13.2 | 17.0 | 21.1 | | 25.1 | 29.3 | 33.9 | 38.3 | 42.9 | | 48.74 | 2 / 5 | | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.233 | interval | | 3.60 | 3.70 | 3.80 | 4.10 | 4.00 | 4.20 | 4.60 | 4.40 | 4.60 | 5.84 | | | 11.10 | 12.30 | 13.60 |
| | | velocity | 7.63 | 9.72 | 9.46 | 9.21 | 8.54 | 8.75 | 8.33 | 7.61 | 7.95 | 7.61 | 6.85 | 8.21 | | 9.46 | 8.54 | 7.72 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | 19 | 166 | | | | |

**Kanbara, Daichi (JPN)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 2** - 2016 Japanese National Youth Championships (Mizuho, JPN) | | | | | | | | | | *(2016.11.17) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en* | | | | | | | | | |
| date | 23-Oct-16 | time | | | | | 23.85 | | | | 38.93 | | | | 56.20 | 5 / 4 | | | |
| reaction time | | interval | | | | | | | | | 15.08 | | | | | | | | |
| | | velocity | | | | | 7.76 | | | | 6.96 | | | | 7.12 | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Kanno, Kohei (JPN) (2002)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Japanese U20 National Championships (Osaka, JPN) | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | | | | | | | |
| date | 26-Jun-21 | time | 6.46 | 10.51 | 14.60 | 18.67 | 22.84 | | 27.08 | 31.38 | 35.77 | 40.37 | 45.31 | | 50.88 | 9 / 4 | | | |
| reaction time | 0.200 | interval | | 4.05 | 4.09 | 4.07 | 4.17 | | 4.24 | 4.30 | 4.39 | 4.60 | 4.94 | 5.57 | | | 12.21 | 12.71 | 13.93 |
| | | velocity | 6.97 | 8.64 | 8.56 | 8.60 | 8.39 | | 8.25 | 8.14 | 7.97 | 7.61 | 7.09 | 7.18 | 7.86 | | 8.60 | 8.26 | 7.54 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 17 | 19.5 | 178.5 | | | | |

**Kato, Seiya (JPN) (1992)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C FINAL** - 2014 Shizuoka International Athletics Meeting (Fukuroi, JPN) | | | | | | | | | | *Yasunori (2014) - race pattern analysis of Japanese top 400m hurdlers for major domestic competitions* | | | | | | | | | |
| date | 03-May-14 | time | 6.17 | 10.01 | 13.93 | 17.93 | 22.13 | | 26.35 | 30.74 | 35.26 | 39.90 | 44.74 | | 50.40 | / 1 | | | |
| reaction time | | interval | | 3.84 | 3.92 | 4.00 | 4.20 | | 4.22 | 4.39 | 4.52 | 4.64 | 4.84 | 5.66 | PB | | 11.76 | 12.81 | 14.00 |
| | | velocity | 7.29 | 9.11 | 8.93 | 8.75 | 8.33 | | 8.29 | 7.97 | 7.74 | 7.54 | 7.23 | 7.07 | 7.94 | | 8.93 | 8.20 | 7.50 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 14 | | 14 | 15 | 15 | 15 | 15 | | 127 | | | | |
| **FINAL** - 2010 Japanese National High School Championships (Okinawa, JPN) | | | | | | | | | | *Matsuo (2010) - 63rd high school championships: JAF scientific committee- biomechanics data* | | | | | | | | | |
| date | 31-Jul-10 | time | 6.37 | 10.32 | 14.27 | 18.24 | 22.41 | | 26.63 | 30.98 | 35.62 | 40.46 | 45.45 | | 51.04 | / 1 | | | |
| reaction time | | interval | | 3.95 | 3.95 | 3.97 | 4.17 | | 4.22 | 4.35 | 4.64 | 4.84 | 4.99 | 5.59 | | | 11.87 | 12.74 | 14.47 |
| | | velocity | 7.06 | 8.86 | 8.86 | 8.82 | 8.39 | | 8.29 | 8.05 | 7.54 | 7.23 | 7.01 | 7.16 | 7.84 | | 8.85 | 8.24 | 7.26 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 14 | | 14 | 15 | 15 | 15 | 15 | | 127 | | | | |
| **FINAL** - 2009 Japanese National High School Championships (Nara, JPN) | | | | | | | | | | *Matsuo (2009) - 62nd high school championships: JAF scientific committee- biomechanics* | | | | | | | | | |
| date | 31-Jul-09 | time | 6.32 | 10.46 | 14.73 | 19.05 | 23.45 | | 28.05 | 32.74 | 37.47 | 42.24 | 47.00 | | 52.42 | / 3 | | | |
| reaction time | | interval | | 4.14 | 4.27 | 4.32 | 4.40 | | 4.60 | 4.69 | 4.73 | 4.77 | 4.76 | 5.42 | | | 12.73 | 13.69 | 14.26 |
| | | velocity | 7.12 | 8.45 | 8.20 | 8.10 | 7.95 | | 7.61 | 7.46 | 7.40 | 7.34 | 7.35 | 7.38 | 7.63 | | 8.25 | 7.67 | 7.36 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Kawagoe, Hiroya (JPN) (1997)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Japanese National Championsips (Osaka, JPN) | | | | | | | | | | *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season* | | | | | | | | | |
| date | 11-Jun-22 | time | 6.01 | 9.84 | 13.76 | 17.82 | 21.94 | | 26.21 | 30.63 | 35.10 | 39.66 | 44.33 | | 49.72 | 4 / 2 | | | |
| reaction time | 0.193 | interval | | 3.83 | 3.92 | 4.06 | 4.12 | | 4.27 | 4.42 | 4.47 | 4.56 | 4.67 | 5.39 | PB | | 11.81 | 12.81 | 13.70 |
| | | velocity | 7.49 | 9.14 | 8.93 | 8.62 | 8.50 | | 8.20 | 7.92 | 7.83 | 7.68 | 7.49 | 7.42 | 8.05 | | 8.89 | 8.20 | 7.66 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.7 | 170.7 | | | | |
| **FINAL** - 2022 Seiko Golden Grand Prix (Tokyo, JPN) | | | | | | | | | | *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season* | | | | | | | | | |
| date | 08-May-22 | time | 5.97 | 9.73 | 13.70 | 17.67 | 21.79 | | 26.21 | 30.76 | 35.40 | 40.12 | 45.01 | | 50.66 | 8 / 9 | | | |
| reaction time | 0.177 | interval | | 3.76 | 3.97 | 3.97 | 4.12 | | 4.42 | 4.55 | 4.64 | 4.72 | 4.89 | 5.65 | | | 11.70 | 13.09 | 14.25 |
| | | velocity | 7.54 | 9.31 | 8.82 | 8.82 | 8.50 | | 7.92 | 7.69 | 7.54 | 7.42 | 7.16 | 7.08 | 7.90 | | 8.97 | 8.02 | 7.37 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.2 | 170.2 | | | | |
| **FINAL** - 2022 Michitaka Kinami Memorial (Osaka, JPN) | | | | | | | | | | *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season* | | | | | | | | | |
| date | 01-May-22 | time | 6.02 | 9.84 | 13.85 | 17.92 | 22.07 | | 26.39 | 30.88 | 35.47 | 40.14 | 44.91 | | 50.36 | 8 / 6 | | | |
| reaction time | 0.167 | interval | | 3.82 | 4.01 | 4.07 | 4.15 | | 4.32 | 4.49 | 4.59 | 4.67 | 4.77 | 5.45 | | | 11.90 | 12.96 | 14.03 |
| | | velocity | 7.48 | 9.16 | 8.73 | 8.60 | 8.43 | | 8.10 | 7.80 | 7.63 | 7.49 | 7.34 | 7.34 | 7.94 | | 8.82 | 8.10 | 7.48 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |
| **FINAL** - 2021 Japanese National Championships (Osaka, JPN) | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | | | | | | | |
| date | 26-Jun-21 | time | 6.06 | 9.93 | 13.96 | 18.05 | 22.26 | | 26.64 | 31.16 | 35.82 | 40.57 | 45.40 | | 50.71 | 3 / 7 | | | |
| reaction time | 0.191 | interval | | 3.87 | 4.03 | 4.09 | 4.21 | | 4.38 | 4.52 | 4.66 | 4.75 | 4.83 | 5.31 | | | 11.99 | 13.11 | 14.24 |
| | | velocity | 7.43 | 9.04 | 8.68 | 8.56 | 8.31 | | 7.99 | 7.74 | 7.51 | 7.37 | 7.25 | 7.53 | 7.89 | | 8.76 | 8.01 | 7.37 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 152 | | | | |
| **FINAL** - 2021 Denka Athletics Challenge Cup (Niigata, JPN) | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | | | | | | | |
| date | 06-Jun-21 | time | 6.09 | 10.03 | 14.03 | 18.07 | 22.19 | | 26.51 | 30.88 | 35.35 | 39.97 | 44.68 | | 50.11 | 8 / 4 | | | |
| reaction time | | interval | | 3.94 | 4.00 | 4.04 | 4.12 | | 4.32 | 4.37 | 4.47 | 4.62 | 4.71 | 5.43 | | | 11.98 | 12.81 | 13.80 |
| | | velocity | 7.39 | 8.88 | 8.75 | 8.66 | 8.50 | | 8.10 | 8.01 | 7.83 | 7.58 | 7.43 | 7.37 | 7.98 | | 8.76 | 8.20 | 7.61 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 152 | | | | |
| **FINAL** - 2021 Michitaka Kinami Memorial (Osaka, JPN) | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | | | | | | | |
| date | 01-Jun-21 | time | 6.21 | 10.14 | 14.11 | 18.17 | 22.36 | | 26.63 | 31.06 | 35.59 | 40.29 | 45.10 | | 50.61 | 4 / 3 | | | |
| reaction time | 0.182 | interval | | 3.93 | 3.97 | 4.06 | 4.19 | | 4.27 | 4.43 | 4.53 | 4.70 | 4.81 | 5.51 | | | 11.96 | 12.89 | 14.04 |
| | | velocity | 7.25 | 8.91 | 8.82 | 8.62 | 8.35 | | 8.20 | 7.90 | 7.73 | 7.45 | 7.28 | 7.26 | 7.90 | | 8.78 | 8.15 | 7.48 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.5 | 170.5 | | | | |
| **FINAL** - 2021 Ready Steady Tokyo (Tokyo, JPN) | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | | | | | | | |
| date | 09-May-21 | time | 5.96 | 9.79 | 13.75 | 17.75 | 21.86 | | 26.16 | 30.50 | 35.04 | 39.62 | 44.29 | | 49.76 | 9 / 6 | | | |
| reaction time | 0.142 | interval | | 3.83 | 3.96 | 4.00 | 4.11 | | 4.30 | 4.34 | 4.54 | 4.58 | 4.67 | 5.47 | PB | | 11.79 | 12.75 | 13.79 |
| | | velocity | 7.55 | 9.14 | 8.84 | 8.75 | 8.52 | | 8.14 | 8.06 | 7.71 | 7.64 | 7.49 | 7.31 | 8.04 | | 8.91 | 8.24 | 7.61 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**B FINAL** - 2021 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-21 | time | 6.09 | 9.96 | 13.91 | 17.95 | 22.07 | 26.36 | 30.76 | 35.24 | 39.77 | 44.48 | | 49.91 | 5 / 1 | | | |
| reaction time | 0.184 | interval | | 3.87 | 3.95 | 4.04 | 4.12 | 4.29 | 4.40 | 4.48 | 4.53 | 4.71 | 5.43 | | | 11.86 | 12.81 | 13.72 |
| | | velocity | 7.39 | 9.04 | 8.86 | 8.66 | 8.50 | 8.16 | 7.95 | 7.81 | 7.73 | 7.43 | 7.37 | 8.01 | | 8.85 | 8.20 | 7.65 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 19 | 171 | | | | |

**FINAL** - 2020 Japanese National Championships (Niigata, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Oct-20 | time | 6.07 | 9.96 | 13.98 | 18.02 | 22.19 | 26.59 | 31.05 | 35.57 | 40.24 | 45.05 | | 50.61 | 7 / 6 | | | |
| reaction time | 0.170 | interval | | 3.89 | 4.02 | 4.04 | 4.17 | 4.40 | 4.46 | 4.52 | 4.67 | 4.81 | 5.56 | | | 11.95 | 13.03 | 14.00 |
| | | velocity | 7.41 | 9.00 | 8.71 | 8.66 | 8.39 | 7.95 | 7.85 | 7.74 | 7.49 | 7.28 | 7.19 | 7.90 | | 8.79 | 8.06 | 7.50 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 19 | 171 | | | | |

**FINAL** - 2020 Seiko Golden Grand Prix (Tokyo, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-20 | time | 5.92 | 9.76 | 13.65 | 17.63 | 21.74 | 26.01 | 30.38 | 34.87 | 39.56 | 44.93 | | 52.17 | 3 / 8 | | | |
| reaction time | 0.142 | interval | | 3.84 | 3.89 | 3.98 | 4.11 | 4.27 | 4.37 | 4.49 | 4.69 | 5.37 | 7.24 | | | 11.71 | 12.75 | 14.55 |
| | | velocity | 7.60 | 9.11 | 9.00 | 8.79 | 8.52 | 8.20 | 8.01 | 7.80 | 7.46 | 6.52 | 5.52 | 7.67 | | 8.97 | 8.24 | 7.22 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 17 | | 133 | | | | |

**Kawaguchi, Takuto (JPN)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 2** - 2016 Japanese National Youth Championships (Mizuho, JPN) *(2016.11.17) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Oct-16 | time | | | | | 24.15 | | | 39.79 | | | | 58.08 | 6 / 6 | | | |
| reaction time | | interval | | | | | | | | 15.64 | | | | | | | | |
| | | velocity | | | | | 7.66 | | | 6.71 | | | | 6.89 | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Kawakita, Naohiro (JPN) (1980)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2010 Japanese National Championships (Marugume, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jun-10 | time | 6.16 | 10.07 | 13.98 | 17.95 | 22.02 | 26.31 | 30.65 | 35.19 | 39.78 | 44.42 | | 49.63 | / 2 | | | |
| reaction time | 0.169 | interval | | 3.91 | 3.91 | 3.97 | 4.07 | 4.29 | 4.34 | 4.54 | 4.59 | 4.64 | 5.21 | | | 11.79 | 12.70 | 13.77 |
| | | velocity | 7.31 | 8.95 | 8.95 | 8.82 | 8.60 | 8.16 | 8.06 | 7.71 | 7.63 | 7.54 | 7.68 | 8.06 | | 8.91 | 8.27 | 7.63 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | | 124 | | | | |

**FINAL** - 2009 Japanese National Championships (Hiroshima, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Jun-09 | time | 6.13 | 9.97 | 13.86 | 17.85 | 21.95 | 26.30 | 30.75 | 35.30 | 39.94 | 44.59 | | 49.74 | 4 / 3 | | | |
| reaction time | | interval | | 3.84 | 3.89 | 3.99 | 4.10 | 4.35 | 4.45 | 4.55 | 4.64 | 4.65 | 5.15 | | | 11.72 | 12.90 | 13.84 |
| | | velocity | 7.34 | 9.11 | 9.00 | 8.77 | 8.54 | 8.05 | 7.87 | 7.69 | 7.54 | 7.53 | 7.77 | 8.04 | | 8.96 | 8.14 | 7.59 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | | 124 | | | | |

**FINAL** - 2006 Seiko Super Grand Prix (Yokohama, JPN) *Yasunori (2007) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-06 | time | 6.06 | 9.83 | 13.63 | 17.57 | 21.66 | 26.04 | 30.41 | 34.88 | 39.47 | 44.09 | | 49.30 | / 2 | | | |
| reaction time | | interval | | 3.77 | 3.80 | 3.94 | 4.09 | 4.38 | 4.37 | 4.47 | 4.59 | 4.62 | 5.21 | | | 11.51 | 12.84 | 13.68 |
| | | velocity | 7.43 | 9.28 | 9.21 | 8.88 | 8.56 | 7.99 | 8.01 | 7.83 | 7.63 | 7.58 | 7.68 | 8.11 | | 9.12 | 8.18 | 7.68 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2006 Japanese National Championships (Kobe, JPN) *Yasunori (2007) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jul-06 | time | 6.16 | 10.01 | 13.95 | 17.94 | 22.01 | 26.25 | 30.69 | 35.33 | 39.98 | 44.63 | | 49.70 | / 3 | | | |
| reaction time | | interval | | 3.85 | 3.94 | 3.99 | 4.07 | 4.24 | 4.44 | 4.64 | 4.65 | 4.65 | 5.07 | | | 11.78 | 12.75 | 13.94 |
| | | velocity | 7.31 | 9.09 | 8.88 | 8.77 | 8.60 | 8.25 | 7.88 | 7.54 | 7.53 | 7.53 | 7.89 | 8.05 | | 8.91 | 8.24 | 7.53 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2006 Osaka Grand Prix (Osaka, JPN) *Yasunori (2007) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-May-06 | time | 6.12 | 9.89 | 13.78 | 17.67 | 21.67 | 25.81 | 30.20 | 34.70 | 39.36 | 44.01 | | 49.25 | / 7 | | | |
| reaction time | | interval | | 3.77 | 3.89 | 3.89 | 4.00 | 4.14 | 4.39 | 4.50 | 4.66 | 4.65 | 5.24 | **PB** | | 11.55 | 12.53 | 13.81 |
| | | velocity | 7.35 | 9.28 | 9.00 | 9.00 | 8.75 | 8.45 | 7.97 | 7.78 | 7.51 | 7.53 | 7.63 | 8.12 | | 9.09 | 8.38 | 7.60 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2005 Japanese National Championships (Tokyo, JPN) *Yasunori (2006) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jun-05 | time | 6.14 | 10.06 | 14.06 | 18.10 | 22.22 | 26.52 | 31.07 | 35.71 | 40.40 | 45.24 | | 50.66 | / 3 | | | |
| reaction time | | interval | | 3.92 | 4.00 | 4.04 | 4.12 | 4.30 | 4.55 | 4.64 | 4.69 | 4.84 | 5.42 | | | 11.96 | 12.97 | 14.17 |
| | | velocity | 7.33 | 8.93 | 8.75 | 8.66 | 8.50 | 8.14 | 7.69 | 7.54 | 7.46 | 7.23 | 7.38 | 7.90 | | 8.78 | 8.10 | 7.41 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**Kawamura, Hideaki (JPN) (1974)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2004 Japanese National Championships (Tottori, JPN) *Yasunori (2005) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jun-04 | time | 5.97 | 9.77 | 13.64 | 17.68 | 21.92 | 26.27 | 30.72 | 35.16 | 39.70 | 44.34 | | 49.66 | / 3 | | | |
| reaction time | | interval | | 3.80 | 3.87 | 4.04 | 4.24 | 4.35 | 4.45 | 4.44 | 4.54 | 4.64 | 5.32 | | | 11.71 | 13.04 | 13.62 |
| | | velocity | 7.54 | 9.21 | 9.04 | 8.66 | 8.25 | 8.05 | 7.87 | 7.88 | 7.71 | 7.54 | 7.52 | 8.05 | | 8.97 | 8.05 | 7.71 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**FINAL** - 2004 Osaka Grand Prix (Osaka, JPN) *Yasunori (2005) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-04 | time | 6.10 | 9.90 | 13.87 | 17.99 | 22.28 | 26.63 | 31.00 | 35.40 | 39.95 | 44.62 | | 50.01 | / 6 | | | |
| reaction time | | interval | | 3.80 | 3.97 | 4.12 | 4.29 | 4.35 | 4.37 | 4.40 | 4.55 | 4.67 | 5.39 | | | 11.89 | 13.01 | 13.62 |
| | | velocity | 7.38 | 9.21 | 8.82 | 8.50 | 8.16 | 8.05 | 8.01 | 7.95 | 7.69 | 7.49 | 7.42 | 8.00 | | 8.83 | 8.07 | 7.71 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Heat 4** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.96 | 9.68 | 13.80 | 17.52 | 21.52 | | 25.64 | 30.04 | 34.60 | 39.68 | 44.72 | | 50.68 | 4 / 4 | | | |
| reaction time | 0.172 | interval | | 3.72 | 4.12 | 3.72 | 4.00 | | 4.12 | 4.40 | 4.56 | 5.08 | 5.04 | 5.96 | | | 11.56 | 12.52 | 14.68 |
| | | lead leg | 7.55 | 9.41 | 8.50 | 9.41 | 8.75 | | 8.50 | 7.95 | 7.68 | 6.89 | 6.94 | 6.71 | 7.89 | | 9.08 | 8.39 | 7.15 |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 17 | 16 | 20 | 175 | | | | |

**Kechi, Heni (FRA) (1980)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2010 European Championships (Barcelona, ESP) | | | | | | | | | | | | | | | | *Behm (2010) - les haies bases* | | | |
| date | 31-Jul-10 | time | 6.1 | 10.0 | 14.0 | 18.1 | 22.3 | | 26.5 | 30.7 | 35.0 | 39.4 | 44.0 | | 49.34 | 7 / 4 | | | |
| reaction time | 0.186 | interval | | 3.90 | 4.00 | 4.10 | 4.20 | | 4.20 | 4.20 | 4.30 | 4.40 | 4.60 | 5.34 | | | 12.00 | 12.60 | 13.30 |
| | | velocity | 7.38 | 8.97 | 8.75 | 8.54 | 8.33 | | 8.33 | 8.33 | 8.14 | 7.95 | 7.61 | 7.49 | 8.11 | | 8.75 | 8.33 | 7.89 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 19.5 | 176.5 | | | | |

**Keïta, Naman (FRA) (1978)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2007 European Cup (Munich, GER) | | | | | | | | | | | | | | | | *Graubner (2007) - http://www.fgs.uni-halle.de* | | | |
| date | 23-Jun-07 | time | 6.25 | 9.94 | 13.60 | 17.68 | 21.63 | | 25.72 | 29.98 | 34.32 | 38.73 | 43.50 | | 48.90 | / 3 | | | |
| reaction time | 0.248 | interval | | 3.69 | 3.66 | 4.08 | 3.95 | | 4.09 | 4.26 | 4.34 | 4.41 | 4.77 | 5.40 | | | 11.43 | 12.30 | 13.52 |
| | | velocity | 7.20 | 9.49 | 9.56 | 8.58 | 8.86 | | 8.56 | 8.22 | 8.06 | 7.94 | 7.34 | 7.41 | 8.18 | | 9.19 | 8.54 | 7.77 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **FINAL** - 2006 European Championships (Göteborg, SWE) | | | | | | | | | | | | | | | | *Behm (2006) - Göteborg 2006: Le quatrache* | | | |
| date | 10-Aug-06 | time | 5.9 | 9.4 | 13.1 | 17.0 | 20.9 | | 25.0 | 29.5 | 34.0 | 38.7 | 43.5 | | 49.13 | / 4 | | | |
| reaction time | | interval | | 3.50 | 3.70 | 3.90 | 3.90 | | 4.10 | 4.50 | 4.50 | 4.70 | 4.80 | 5.63 | | | 11.10 | 12.50 | 14.00 |
| | | velocity | 7.63 | 10.00 | 9.46 | 8.97 | 8.97 | | 8.54 | 7.78 | 7.78 | 7.45 | 7.29 | 7.10 | 8.14 | | 9.46 | 8.40 | 7.50 |
| H1 lead leg | R | strides | 20 | 12 | 12 | 12 | 12 | | 13 | 13 | 14 | 14 | 14 | | 136 | | | | |
| **FINAL** - 2004 Olympic Games (Athens, GRE) | | | | | | | | | | | | | | | | *Ruiz (2004) - las carreras con vallas de juegos olimpicos de atenas '04* | | | |
| date | 26-Aug-04 | time | 6.00 | 9.62 | 13.46 | 17.26 | 21.41 | | 25.50 | 29.68 | 33.99 | 38.32 | 42.92 | | 48.26 | 7 / 3 | | | |
| reaction time | 0.268 | interval | | 3.62 | 3.84 | 3.80 | 4.15 | | 4.09 | 4.18 | 4.31 | 4.33 | 4.60 | 5.34 | | | 11.26 | 12.42 | 13.24 |
| | | velocity | 7.50 | 9.67 | 9.11 | 9.21 | 8.43 | | 8.56 | 8.37 | 8.12 | 8.08 | 7.61 | 7.49 | 8.29 | | 9.33 | 8.45 | 7.93 |
| H1 lead leg | R | strides | 20 | 12 | 12 | 12 | 13 | | 13 | 13 | 13 | 13 | 13 | 17 | 151 | | | | |
| **Semi-Final 2** - 2003 IAAF World Championships (Paris, FRA) | | | | | | | | | | | | | | | | *Behm (2003) - Paris 2003:Le quatrache masculn - féminin* | | | |
| date | 27-Aug-03 | time | 6.0 | 9.8 | 13.6 | 17.8 | 22.0 | | 26.3 | 30.6 | 35.1 | 39.7 | | | 49.57 | 1 / 8 | | | |
| reaction time | 0.169 | interval | | 3.80 | 3.80 | 4.20 | 4.20 | | 4.30 | 4.30 | 4.50 | 4.60 | | 9.87 | | | 11.80 | 12.80 | |
| | | velocity | 7.50 | 9.21 | 9.21 | 8.33 | 8.33 | | 8.14 | 8.14 | 7.78 | 7.61 | | 7.60 | 8.07 | | 8.90 | 8.20 | |
| H1 lead leg | | strides | 21 | 12 | 12 | 13 | 12 | | 13 | 13 | 13 | 13 | 14 | 18 | 154 | | | | |
| **Heat 2** - 2003 IAAF World Championships (Paris, FRA) | | | | | | | | | | | | | | | | *Behm (2003) - Paris 2003:Le quatrache masculn - féminin* | | | |
| date | 26-Aug-03 | time | 5.7 | 9.7 | 13.4 | 17.3 | 21.3 | | 25.5 | 29.7 | 34.2 | 38.8 | 43.6 | | 49.08 | 5 / 5 | | | |
| reaction time | 0.232 | interval | | 4.00 | 3.70 | 3.90 | 4.00 | | 4.20 | 4.20 | 4.50 | 4.60 | 4.80 | 5.48 | | | 11.60 | 12.40 | 13.90 |
| | | velocity | 7.89 | 8.75 | 9.46 | 8.97 | 8.75 | | 8.33 | 8.33 | 7.78 | 7.61 | 7.29 | 7.30 | 8.15 | | 9.05 | 8.47 | 7.55 |
| H1 lead leg | | strides | 21 | 12 | 12 | 13 | 12 | | 13 | 13 | 13 | 13 | 14 | 17.5 | 153.5 | | | | |

**Kendziera, Dave (USA) (1994)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2023 USATF National Championships (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | |
| date | 09-Jul-23 | time | 6.00 | 9.84 | 13.58 | 17.35 | 21.25 | | 25.29 | 29.59 | 34.13 | 38.90 | | | 49.74 | 8 / 7 | | | |
| reaction time | | interval | | 3.84 | 3.74 | 3.77 | 3.90 | | 4.04 | 4.30 | 4.54 | 4.77 | | 10.84 | | | 11.35 | 12.24 | |
| | | velocity | 7.50 | 9.11 | 9.36 | 9.28 | 8.97 | | 8.66 | 8.14 | 7.71 | 7.34 | | 6.92 | 8.04 | | 9.25 | 8.58 | |
| H1 lead leg | L | strides | 21 | 14 | 13 | 13 | 13 | | | 14 | 14 | 15 | | | 117 | | | | |
| **FINAL** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 26-Jun-21 | time | 5.80 | 9.57 | 13.41 | 17.38 | 21.38 | | 25.52 | 29.73 | 34.16 | 38.57 | 43.06 | | 48.38 | 4 / 3 | | | |
| reaction time | 0.172 | interval | | 3.77 | 3.84 | 3.97 | 4.00 | | 4.14 | 4.21 | 4.43 | 4.41 | 4.49 | 5.32 | **PB** | | 11.58 | 12.35 | 13.33 |
| | | velocity | 7.76 | 9.28 | 9.11 | 8.82 | 8.75 | | 8.45 | 8.31 | 7.90 | 7.94 | 7.80 | 7.52 | 8.27 | | 9.07 | 8.50 | 7.88 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 18.2 | 158.2 | | | | |
| **Semi-Final 2** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 25-Jun-21 | time | 6.00 | 9.82 | 13.70 | 17.58 | 21.55 | | 25.72 | 30.10 | 34.56 | 39.10 | 43.91 | | 49.05 | 8 / 3 | | | |
| reaction time | 0.190 | interval | | 3.82 | 3.88 | 3.88 | 3.97 | | 4.17 | 4.38 | 4.46 | 4.54 | 4.81 | 5.14 | | | 11.58 | 12.52 | 13.81 |
| | | velocity | 7.50 | 9.16 | 9.02 | 9.02 | 8.82 | | 8.39 | 7.99 | 7.85 | 7.71 | 7.28 | 7.78 | 8.15 | | 9.07 | 8.39 | 7.60 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 18 | 138 | | | | |
| **Heat 2** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 24-Jun-21 | time | 5.94 | 9.74 | 13.61 | 17.58 | 21.65 | | 25.89 | 30.23 | 34.67 | 39.17 | 43.78 | | 49.19 | 8 / 2 | | | |
| reaction time | 0.250 | interval | | 3.80 | 3.87 | 3.97 | 4.07 | | 4.24 | 4.34 | 4.44 | 4.50 | 4.61 | 5.41 | | | 11.64 | 12.65 | 13.55 |
| | | velocity | 7.58 | 9.21 | 9.04 | 8.82 | 8.60 | | 8.25 | 8.06 | 7.88 | 7.78 | 7.59 | 7.39 | 8.13 | | 9.02 | 8.30 | 7.75 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17.5 | 137.5 | | | | |
| **FINAL** - 2021 Doha Diamond League (Doha, QAT) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 28-May-21 | time | 5.90 | 9.84 | 13.85 | 17.88 | 22.02 | 23.7 | 26.26 | 30.60 | 35.20 | 39.94 | 44.74 | | 50.39 | 8 / 8 | | | |
| reaction time | 0.197 | interval | | 3.94 | 4.01 | 4.03 | 4.14 | | 4.24 | 4.34 | 4.60 | 4.74 | 4.80 | 5.65 | | | 11.98 | 12.72 | 14.14 |
| | | velocity | 7.63 | 8.88 | 8.73 | 8.68 | 8.45 | 8.44 | 8.25 | 8.06 | 7.61 | 7.38 | 7.29 | 7.08 | 7.94 | | 8.76 | 8.25 | 7.43 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | | 140 | | | | |
| **FINAL** - 2020 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2020 year end hurdle report* | | | |
| date | 17-Sep-20 | time | 5.81 | 9.58 | 13.35 | 17.25 | 21.25 | 23.0 | 25.36 | 29.73 | 34.30 | 39.04 | 43.84 | | 49.35 | 9 / 4 | | | |
| reaction time | 0.172 | interval | | 3.77 | 3.77 | 3.90 | 4.00 | | 4.11 | 4.37 | 4.57 | 4.74 | 4.80 | 5.51 | | | 11.44 | 12.48 | 14.11 |
| | | velocity | 7.75 | 9.28 | 9.28 | 8.97 | 8.75 | 8.70 | 8.52 | 8.01 | 7.66 | 7.38 | 7.29 | 7.26 | 8.11 | | 9.18 | 8.41 | 7.44 |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 15 | 18.2 | 159.2 | | | | |

**FINAL** - 2020 ISTAF (Berlin, GER) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Sep-20 | time | 5.88 | | 13.56 | 17.40 | | | 25.60 | 29.96 | 34.52 | 39.32 | 44.36 | | 50.28 | 4 / 3 | | | |
| reaction time | 0.198 | interval | | | 7.68 | 3.84 | | | 8.20 | 4.36 | 4.56 | 4.80 | 5.04 | 5.92 | | | 11.52 | 12.56 | 14.40 |
| | | velocity | 7.65 | | 9.11 | 9.11 | | | 8.54 | 8.03 | 7.68 | 7.29 | 6.94 | 6.76 | 7.96 | | 9.11 | 8.36 | 7.29 |
| H1 lead leg | L | strides | 21 | | | 13 | | | | | 14 | 15 | 15 | | 78 | | | | |

**FINAL** - 2020 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-20 | time | 5.68 | 9.46 | 13.30 | 17.28 | 21.34 | 23.1 | 25.50 | 29.78 | 34.24 | 38.94 | 43.68 | | 49.47 | 7 / 5 | | | |
| reaction time | 0.170 | interval | | 3.78 | 3.84 | 3.98 | 4.06 | | 4.16 | 4.28 | 4.46 | 4.70 | 4.74 | 5.79 | | | 11.60 | 12.50 | 13.90 |
| | | velocity | 7.92 | 9.26 | 9.11 | 8.79 | 8.62 | 8.66 | 8.41 | 8.18 | 7.85 | 7.45 | 7.38 | 6.91 | 8.09 | | 9.05 | 8.40 | 7.55 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | 13 | | 13 | 14 | 14 | 18.5 | 124.5 | | | | |

**FINAL** - 2019 The Match - Europe v USA (Minsk, BLR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Sep-19 | time | 5.80 | 9.56 | 13.40 | 17.23 | 21.20 | | 25.33 | 29.73 | 34.16 | 38.76 | 43.46 | | 48.99 | 6 / 1 | | | |
| reaction time | 0.157 | interval | | 3.76 | 3.84 | 3.83 | 3.97 | | 4.13 | 4.40 | 4.43 | 4.60 | 4.70 | 5.53 | | | 11.43 | 12.50 | 13.73 |
| | | velocity | 7.76 | 9.31 | 9.11 | 9.14 | 8.82 | | 8.47 | 7.95 | 7.90 | 7.61 | 7.45 | 7.23 | 8.16 | | 9.19 | 8.40 | 7.65 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 18.2 | 138.2 | | | | |

**FINAL** - 2019 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Aug-19 | time | 5.80 | 9.52 | | 17.30 | 21.28 | 22.9 | 25.40 | 29.68 | | 38.80 | 43.56 | | 48.98 | 3 / 5 | | | |
| reaction time | 0.156 | interval | | 3.72 | | 7.78 | 3.98 | | 4.12 | 4.28 | | 9.12 | 4.76 | 5.42 | | | 11.50 | 12.38 | 13.88 |
| | | velocity | 7.76 | 9.41 | | 9.00 | 8.79 | 8.73 | 8.50 | 8.18 | | 7.68 | 7.35 | 7.38 | 8.17 | | 9.13 | 8.48 | 7.56 |
| H1 lead leg | R | strides | 20 | 13 | | | 13 | | 13 | 13 | | | 14 | | 86 | | | | |

**FINAL** - 2019 Meeting de Paris (Paris, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-19 | time | 5.80 | 9.60 | 13.52 | 17.42 | 21.50 | 23.2 | 25.66 | 30.00 | 34.44 | 39.08 | 43.78 | | 49.16 | 5 / 6 | | | |
| reaction time | 0.152 | interval | | 3.80 | 3.92 | 3.90 | 4.08 | | 4.16 | 4.34 | 4.44 | 4.64 | 4.70 | 5.38 | | | 11.62 | 12.58 | 13.78 |
| | | velocity | 7.76 | 9.21 | 8.93 | 8.97 | 8.58 | 8.62 | 8.41 | 8.06 | 7.88 | 7.54 | 7.45 | 7.43 | 8.14 | | 9.04 | 8.35 | 7.62 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17.5 | 156.5 | | | | |

**FINAL** - 2019 Müller Grand Prix (Birmingham, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-19 | time | 5.84 | 9.68 | 13.52 | 17.36 | 21.28 | 23.1 | 25.40 | 29.76 | 34.32 | 38.92 | 43.68 | | 49.29 | 7 / 3 | | | |
| reaction time | 0.130 | interval | | 3.84 | 3.84 | 3.84 | 3.92 | | 4.12 | 4.36 | 4.56 | 4.60 | 4.76 | 5.61 | | | 11.52 | 12.40 | 13.92 |
| | | velocity | 7.71 | 9.11 | 9.11 | 9.11 | 8.93 | 8.66 | 8.50 | 8.03 | 7.68 | 7.61 | 7.35 | 7.13 | 8.12 | | 9.11 | 8.47 | 7.54 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 15 | 18.5 | 159.5 | | | | |

**FINAL** - 2019 Prefontaine Classic (Stanford, CA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-19 | time | 5.73 | 9.50 | 13.43 | 17.43 | 21.46 | | 25.70 | 30.10 | 34.66 | 39.30 | 43.97 | | 49.46 | 7 / 4 | | | |
| reaction time | 0.247 | interval | | 3.77 | 3.93 | 4.00 | 4.03 | | 4.24 | 4.40 | 4.56 | 4.64 | 4.67 | 5.49 | | | 11.70 | 12.67 | 13.87 |
| | | velocity | 7.85 | 9.28 | 8.91 | 8.75 | 8.68 | | 8.25 | 7.95 | 7.68 | 7.54 | 7.49 | 7.29 | 8.09 | | 8.97 | 8.29 | 7.57 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | | 15 | | 127 | | | | |

**FINAL** - 2019 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Jun-19 | time | 5.88 | 9.68 | 13.58 | | 21.55 | 23.3 | 25.69 | 30.02 | 34.39 | 39.04 | 43.74 | | 49.27 | 4 / 4 | | | |
| reaction time | 0.163 | interval | | 3.80 | 3.90 | | 7.97 | | 4.14 | 4.33 | 4.37 | 4.65 | 4.70 | 5.53 | | | | | 13.72 |
| | | velocity | 7.65 | 9.21 | 8.97 | | 8.78 | 8.58 | 8.45 | 8.08 | 8.01 | 7.53 | 7.45 | 7.23 | 8.12 | | | | 7.65 |
| H1 lead leg | R | strides | 20 | 13 | 13 | | | | 13 | 13 | 13 | 14 | 14 | 18 | 131 | | | | |

**FINAL** - 2019 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jun-19 | time | 5.82 | 9.65 | 13.49 | 17.50 | 21.55 | | 25.76 | 29.99 | 34.46 | 39.01 | 43.67 | | 48.99 | 9 / 2 | | | |
| reaction time | 0.142 | interval | | 3.83 | 3.84 | 4.01 | 4.05 | | 4.21 | 4.23 | 4.47 | 4.55 | 4.66 | 5.32 | | | 11.68 | 12.49 | 13.68 |
| | | velocity | 7.73 | 9.14 | 9.11 | 8.73 | 8.64 | | 8.31 | 8.27 | 7.83 | 7.69 | 7.51 | 7.52 | 8.16 | | 8.99 | 8.41 | 7.68 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17 | 157 | | | | |

**FINAL** - 2018 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jul-18 | time | 5.80 | 9.64 | | | 21.60 | | 25.72 | 30.04 | 34.52 | 39.04 | 43.64 | | 49.02 | 3 / 4 | | | |
| reaction time | 0.167 | interval | | 3.84 | | | 11.96 | | 4.12 | 4.32 | 4.48 | 4.52 | 4.60 | 5.38 | | | | | 13.60 |
| | | velocity | 7.76 | 9.11 | | | 8.78 | | 8.50 | 8.10 | 7.81 | 7.74 | 7.61 | 7.43 | 8.16 | | | | 7.72 |
| H1 lead leg | R | strides | 20 | 13 | | | | | 13 | 13 | 14 | 14 | 15 | 18 | 120 | | | | |

**FINAL** - 2018 NCAA Championships (Eugene, OR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Jun-18 | time | 5.86 | | 13.43 | 17.20 | 21.03 | | 25.06 | | | 38.43 | 43.03 | | 48.42 | 3 / 3 | | | |
| reaction time | | interval | | | 7.57 | 3.77 | 3.83 | | 4.03 | | | 13.37 | 4.60 | 5.39 | **PB** | | 11.34 | | |
| | | velocity | 7.68 | | 9.25 | 9.28 | 9.14 | | 8.68 | | | 7.85 | 7.61 | 7.42 | 8.26 | | 9.26 | | |
| H1 lead leg | R | strides | | | | 13 | 13 | | 13 | | | | 15 | 19 | 73 | | | | |

| **Keter, Erick (KEN) (1966)** | | | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 3** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | | | | | | | | | | | | | | | | | |
| date | 25-Sep-00 | time | 6.14 | 9.90 | 13.70 | 17.70 | 21.98 | | 26.26 | 30.74 | 35.34 | | | | 51.25 | 7 / 8 | | | |
| reaction time | 0.202 | interval | | 3.76 | 3.80 | 4.00 | 4.28 | | 4.28 | 4.48 | 4.60 | | | | | | 11.56 | 13.04 | |
| | | velocity | 7.33 | 9.31 | 9.21 | 8.75 | 8.18 | | 8.18 | 7.81 | 7.61 | | | | 7.80 | | 9.08 | 8.05 | |
| H1 lead leg | | strides | 21 | 13 | 13 | 15 | 15 | | 15 | 15 | 15 | | | | 122 | | | | |
| **Heat 2** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | | | | | | | | | | | | | | | | | |
| date | 24-Sep-00 | time | 6.18 | 10.02 | 13.90 | 17.98 | 22.10 | | 26.34 | | 35.22 | 39.86 | 44.58 | | 50.06 | 3 / 6 | | | |
| reaction time | 0.269 | interval | | 3.84 | 3.88 | 4.08 | 4.12 | | 4.24 | | 8.88 | 4.64 | 4.72 | 5.48 | | | 11.80 | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.28 | 9.11 | 9.02 | 8.58 | 8.50 | | 8.25 | | 7.88 | 7.54 | 7.42 | 7.30 | 7.99 | | | 8.90 | |
| H1 lead leg | | strides | 21 | 13 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 18.1 | 172.1 | | | | |

**Kharlov, Aleksandr (URS) (1958)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1983 IAAF World Championships (Helsinki, FIN) — *McFarlane (1988) - The Science of Hurdling*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-83 | time | 5.79 | 9.58 | 13.75 | | 21.80 | | 25.80 | 29.97 | 34.47 | 39.05 | 43.76 | | 49.03 | 1 / 3 | | | |
| reaction time | | interval | | 3.79 | 4.17 | | 8.05 | | 4.00 | 4.17 | 4.50 | 4.58 | 4.71 | 5.27 | | | | | 13.79 |
| | | velocity | 7.77 | 9.23 | 8.39 | | 8.70 | | 8.75 | 8.39 | 7.78 | 7.64 | 7.43 | 7.59 | 8.16 | | | | 7.61 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 17 | 155 | | | | |

**Kino, Tomoharu (JPN) (1989)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**D FINAL** - 2012 Shizuoka International Athletics Meeting (Fukuroi, JPN) — *Yasunori (2013) - race pattern analysis for the top Japanese 400m hurdlers in major domestic competitions*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-12 | time | 6.07 | 9.92 | 13.87 | 17.87 | 21.97 | | 26.26 | 30.68 | 35.28 | 40.07 | 44.83 | | 50.08 | / 1 | | | |
| reaction time | | interval | | 3.85 | 3.95 | 4.00 | 4.10 | | 4.29 | 4.42 | 4.60 | 4.79 | 4.76 | 5.25 | | | 11.80 | 12.81 | 14.15 |
| | | velocity | 7.41 | 9.09 | 8.86 | 8.75 | 8.54 | | 8.16 | 7.92 | 7.61 | 7.31 | 7.35 | 7.62 | 7.99 | | 8.90 | 8.20 | 7.42 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 14 | | 14 | 15 | 15 | 15 | 15 | | 127 | | | | |

**Kishimoto, Takayuki (JPN) (1990)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 2** - 2022 World Athletics Championships (Eugene, OR) — *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 5.99 | 9.81 | 13.75 | 17.82 | 22.06 | 23.76 | 26.39 | 30.83 | 35.47 | 40.17 | 45.03 | | 50.66 | 2 / 6 | | | |
| reaction time | 0.117 | interval | | 3.82 | 3.94 | 4.07 | 4.24 | | 4.33 | 4.44 | 4.64 | 4.70 | 4.86 | 5.63 | | | 11.83 | 13.01 | 14.20 |
| | | velocity | 7.51 | 9.16 | 8.88 | 8.60 | 8.25 | 8.42 | 8.08 | 7.88 | 7.54 | 7.45 | 7.20 | 7.10 | 7.90 | | 8.88 | 8.07 | 7.39 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2022 Japanese National Championsips (Osaka, JPN) — *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-22 | time | 5.96 | 9.73 | 13.65 | 17.71 | 21.94 | | 26.26 | 30.61 | 35.19 | 39.79 | 44.51 | | 49.99 | 6 / 4 | | | |
| reaction time | 0.164 | interval | | 3.77 | 3.92 | 4.06 | 4.23 | | 4.32 | 4.35 | 4.58 | 4.60 | 4.72 | 5.48 | | | 11.75 | 12.90 | 13.90 |
| | | velocity | 7.55 | 9.28 | 8.93 | 8.62 | 8.27 | | 8.10 | 8.05 | 7.64 | 7.61 | 7.42 | 7.30 | 8.00 | | 8.94 | 8.14 | 7.55 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.2 | 164.2 | | | | |

**FINAL** - 2022 Seiko Golden Grand Prix (Tokyo, JPN) — *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-22 | time | 5.91 | 9.69 | 13.58 | 17.60 | 21.74 | | 26.03 | 30.43 | 35.02 | 39.61 | 44.41 | | 49.86 | 5 / 5 | | | |
| reaction time | 0.138 | interval | | 3.78 | 3.89 | 4.02 | 4.14 | | 4.29 | 4.40 | 4.59 | 4.59 | 4.80 | 5.45 | | | 11.69 | 12.83 | 13.98 |
| | | velocity | 7.61 | 9.26 | 9.00 | 8.71 | 8.45 | | 8.16 | 7.95 | 7.63 | 7.63 | 7.29 | 7.34 | 8.02 | | 8.98 | 8.18 | 7.51 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.2 | 164.2 | | | | |

**FINAL** - 2022 Michitaka Kinami Memorial (Osaka, JPN) — *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-May-22 | time | 5.94 | 9.79 | 13.76 | 17.83 | 21.96 | | 26.18 | 30.46 | 34.97 | 39.57 | 44.34 | | 49.84 | 9 / 4 | | | |
| reaction time | 0.125 | interval | | 3.85 | 3.97 | 4.07 | 4.13 | | 4.22 | 4.28 | 4.51 | 4.60 | 4.77 | 5.50 | | | 11.89 | 12.63 | 13.88 |
| | | velocity | 7.58 | 9.09 | 8.82 | 8.60 | 8.47 | | 8.29 | 8.18 | 7.76 | 7.61 | 7.34 | 7.27 | 8.03 | | 8.83 | 8.31 | 7.56 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2021 Japanese National Championships (Osaka, JPN) — *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 5.92 | 9.71 | 13.61 | 17.63 | 21.72 | | 25.93 | 30.23 | 34.70 | 39.20 | 43.88 | | 49.29 | 8 / 3 | | | |
| reaction time | 0.156 | interval | | 3.79 | 3.90 | 4.02 | 4.09 | | 4.21 | 4.30 | 4.47 | 4.50 | 4.68 | 5.41 | | | 11.71 | 12.60 | 13.65 |
| | | velocity | 7.60 | 9.23 | 8.97 | 8.71 | 8.56 | | 8.31 | 8.14 | 7.83 | 7.78 | 7.48 | 7.39 | 8.12 | | 8.97 | 8.33 | 7.69 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18 | 164 | | | | |

**FINAL** - 2021 Denka Athletics Challenge Cup (Niigata, JPN) — *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jun-21 | time | 5.96 | 9.79 | 13.66 | 17.67 | 21.76 | | 25.93 | 30.18 | 34.70 | 39.27 | 43.98 | | 49.38 | 3 / 1 | | | |
| reaction time | | interval | | 3.83 | 3.87 | 4.01 | 4.09 | | 4.17 | 4.25 | 4.52 | 4.57 | 4.71 | 5.40 | | | 11.71 | 12.51 | 13.80 |
| | | velocity | 7.55 | 9.14 | 9.04 | 8.73 | 8.56 | | 8.39 | 8.24 | 7.74 | 7.66 | 7.43 | 7.41 | 8.10 | | 8.97 | 8.39 | 7.61 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2021 Michitaka Kinami Memorial (Osaka, JPN) — *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jun-21 | time | 6.01 | 9.79 | 13.66 | 17.62 | 21.67 | | 25.99 | 30.25 | 34.73 | 39.55 | 44.44 | | 49.97 | 5 / 2 | | | |
| reaction time | 0.140 | interval | | 3.78 | 3.87 | 3.96 | 4.05 | | 4.32 | 4.26 | 4.48 | 4.82 | 4.89 | 5.53 | | | 11.61 | 12.63 | 14.19 |
| | | velocity | 7.49 | 9.26 | 9.04 | 8.84 | 8.64 | | 8.10 | 8.22 | 7.81 | 7.26 | 7.16 | 7.23 | 8.00 | | 9.04 | 8.31 | 7.40 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 15 | 18.2 | 163.2 | | | | |

**B FINAL** - 2021 Shizuoka International Athletics Meeting (Fukuroi, JPN) — *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-21 | time | 5.99 | 9.83 | 13.75 | 17.83 | 22.04 | | 26.39 | 30.81 | 35.39 | 40.06 | 44.91 | | 50.56 | 4 / 3 | | | |
| reaction time | 0.145 | interval | | 3.84 | 3.92 | 4.08 | 4.21 | | 4.35 | 4.42 | 4.58 | 4.67 | 4.85 | 5.65 | | | 11.84 | 12.98 | 14.10 |
| | | velocity | 7.51 | 9.11 | 8.93 | 8.58 | 8.31 | | 8.05 | 7.92 | 7.64 | 7.49 | 7.22 | 7.08 | 7.91 | | 8.87 | 8.09 | 7.45 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 164.5 | | | | |

**FINAL** - 2018 Japanese National Championships (Yamaguchi, JPN) — *Morioka (2018) - race pattern analysis of Japan's top 400m hurdles - main national competitions in 2018*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jun-18 | time | 5.82 | 9.52 | 13.36 | 17.30 | 21.44 | | 25.71 | 30.05 | 34.57 | 39.14 | 43.86 | | 49.30 | 4 / 1 | | | |
| reaction time | 0.148 | interval | | 3.70 | 3.84 | 3.94 | 4.14 | | 4.27 | 4.34 | 4.52 | 4.57 | 4.72 | 5.44 | | | 11.48 | 12.75 | 13.81 |
| | | velocity | 7.73 | 9.46 | 9.11 | 8.88 | 8.45 | | 8.20 | 8.06 | 7.74 | 7.66 | 7.42 | 7.35 | 8.11 | | 9.15 | 8.24 | 7.60 |
| H1 lead leg | R | | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 164.5 | | | | |

**FINAL** - 2018 Seiko Golden Grand Prix (Osaka, JPN) — *Morioka (2018) - race pattern analysis of Japan's top 400m hurdles - main national competitions in 2018*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-May-18 | time | 5.85 | 9.54 | 13.33 | 17.22 | 21.24 | | 25.44 | 29.91 | 34.51 | 39.13 | 43.88 | | 49.36 | 5 / 2 | | | |
| reaction time | 0.140 | interval | | 3.69 | 3.79 | 3.89 | 4.02 | | 4.20 | 4.47 | 4.60 | 4.62 | 4.75 | 5.48 | | | 11.37 | 12.69 | 13.97 |
| | | velocity | 7.69 | 9.49 | 9.23 | 9.00 | 8.71 | | 8.33 | 7.83 | 7.61 | 7.58 | 7.37 | 7.30 | 8.10 | | 9.23 | 8.27 | 7.52 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.2 | 163.2 | | | | |

**A FINAL** - 2018 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Morioka (2018) - race pattern analysis of Japan's top 400m hurdles - main national competitions in 2018*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-18 | time | 5.89 | 9.68 | 13.53 | 17.50 | 21.55 | 25.74 | 30.16 | 34.70 | 39.29 | 43.98 | | 49.33 | 1 / 2 | | | |
| reaction time | 0.170 | interval | | 3.79 | 3.85 | 3.97 | 4.05 | 4.19 | 4.42 | 4.54 | 4.59 | 4.69 | 5.35 | | | 11.61 | 12.66 | 13.82 |
| | | velocity | 7.64 | 9.23 | 9.09 | 8.82 | 8.64 | 8.35 | 7.92 | 7.71 | 7.63 | 7.46 | 7.48 | 8.11 | | 9.04 | 8.29 | 7.60 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18.2 | 164.2 | | | | |

**FINAL** - 2017 National Sport Festival (Matsuyama, JPN) *Morioka (2018) - Analysis of the race patterns of the top 400m hurdles in Japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Oct-17 | time | 5.84 | 9.54 | 13.41 | 17.41 | 21.51 | 25.78 | 30.08 | 34.60 | 39.27 | 44.01 | | 49.39 | / 1 | | | |
| reaction time | 0.149 | interval | | 3.70 | 3.87 | 4.00 | 4.10 | 4.27 | 4.30 | 4.52 | 4.67 | 4.74 | 5.38 | | | 11.57 | 12.67 | 13.93 |
| | | velocity | 7.71 | 9.46 | 9.04 | 8.75 | 8.54 | 8.20 | 8.14 | 7.74 | 7.49 | 7.38 | 7.43 | 8.10 | | 9.08 | 8.29 | 7.54 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**A FINAL** - 2017 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Morioka (2018) - Analysis of the race patterns of the top 400m hurdles in Japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-17 | time | 5.93 | 9.65 | 13.50 | 17.44 | 21.51 | 25.76 | 30.16 | 34.73 | 39.42 | 44.26 | | 49.93 | / 1 | | | |
| reaction time | | interval | | 3.72 | 3.85 | 3.94 | 4.07 | 4.25 | 4.40 | 4.57 | 4.69 | 4.84 | 5.67 | | | 11.51 | 12.72 | 14.10 |
| | | velocity | 7.59 | 9.41 | 9.09 | 8.88 | 8.60 | 8.24 | 7.95 | 7.66 | 7.46 | 7.23 | 7.05 | 8.01 | | 9.12 | 8.25 | 7.45 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2015 Japanese National Championships (Niigata, JPN) *Yasunori (2015) - race pattern analysis of the top 400m hurdlers in Japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Jun-15 | time | 6.01 | 9.76 | 13.61 | 17.55 | 21.64 | 25.91 | 30.26 | 34.78 | 39.42 | 44.26 | | 49.81 | 5 / 2 | | | |
| reaction time | 0.134 | interval | | 3.75 | 3.85 | 3.94 | 4.09 | 4.27 | 4.35 | 4.52 | 4.64 | 4.84 | 5.55 | | | 11.54 | 12.71 | 14.00 |
| | | velocity | 7.49 | 9.33 | 9.09 | 8.88 | 8.56 | 8.20 | 8.05 | 7.74 | 7.54 | 7.23 | 7.21 | 8.03 | | 9.10 | 8.26 | 7.50 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 19 | 165 | | | | |

**FINAL** - 2014 Japanese National Championships (Fukushima, JPN) *Yasunori (2014) - race pattern analysis of Japanese top 400m hurdlers for major domestic competitions*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Jun-14 | time | 5.89 | 9.64 | 13.53 | 17.52 | 21.62 | 25.89 | 30.28 | 34.75 | 39.32 | 44.01 | | 49.49 | 4 / 1 | | | |
| reaction time | | interval | | 3.75 | 3.89 | 3.99 | 4.10 | 4.27 | 4.39 | 4.47 | 4.57 | 4.69 | 5.48 | | | 11.63 | 12.76 | 13.73 |
| | | velocity | 7.64 | 9.33 | 9.00 | 8.77 | 8.54 | 8.20 | 7.97 | 7.83 | 7.66 | 7.46 | 7.30 | 8.08 | | 9.03 | 8.23 | 7.65 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18.5 | 165 | | | | |

**FINAL** - 2014 Seiko Golden Grand Prix (Tokyo, JPN) *Yasunori (2014) - race pattern analysis of Japanese top 400m hurdlers for major domestic competitions*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-May-14 | time | 5.92 | 9.64 | 13.46 | 17.41 | 21.60 | 25.97 | 30.47 | 34.97 | 39.61 | 44.33 | | 49.81 | / 4 | | | |
| reaction time | | interval | | 3.72 | 3.82 | 3.95 | 4.19 | 4.37 | 4.50 | 4.50 | 4.64 | 4.72 | 5.48 | | | 11.49 | 13.06 | 13.86 |
| | | velocity | 7.60 | 9.41 | 9.16 | 8.86 | 8.35 | 8.01 | 7.78 | 7.78 | 7.54 | 7.42 | 7.30 | 8.03 | | 9.14 | 8.04 | 7.58 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**A FINAL** - 2014 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Yasunori (2014) - race pattern analysis of Japanese top 400m hurdlers for major domestic competitions*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-14 | time | 5.96 | 9.71 | 13.56 | 17.60 | 21.75 | 26.07 | 30.49 | 35.03 | 39.70 | 44.42 | | 49.75 | / 1 | | | |
| reaction time | | interval | | 3.75 | 3.85 | 4.04 | 4.15 | 4.32 | 4.42 | 4.54 | 4.67 | 4.72 | 5.33 | | | 11.64 | 12.89 | 13.93 |
| | | velocity | 7.55 | 9.33 | 9.09 | 8.66 | 8.43 | 8.10 | 7.92 | 7.71 | 7.49 | 7.42 | 7.50 | 8.04 | | 9.02 | 8.15 | 7.54 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2012 Japanese National Championships (Osaka, JPN) *Yasunori (2013) - race pattern analysis for the top Japanese 400m hurdlers in major domestic competitions*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-12 | time | 5.76 | 9.43 | 13.25 | 17.15 | 21.25 | 25.49 | 29.74 | 34.16 | 38.66 | 43.28 | | 48.41 | 5 / 1 | | | |
| reaction time | | interval | | 3.67 | 3.82 | 3.90 | 4.10 | 4.24 | 4.25 | 4.42 | 4.50 | 4.62 | 5.13 | PB | | 11.39 | 12.59 | 13.54 |
| | | velocity | 7.81 | 9.54 | 9.16 | 8.97 | 8.54 | 8.25 | 8.24 | 7.92 | 7.78 | 7.58 | 7.80 | 8.26 | | 9.22 | 8.34 | 7.75 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18 | 164 | | | | |

**FINAL** - 2012 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Yasunori (2013) - race pattern analysis for the top Japanese 400m hurdlers in major domestic competitions*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-12 | time | 5.77 | 9.51 | 13.31 | 17.25 | 21.35 | 25.69 | 30.04 | 34.54 | 39.09 | 43.69 | | 48.88 | / 1 | | | |
| reaction time | | interval | | 3.74 | 3.80 | 3.94 | 4.10 | 4.34 | 4.35 | 4.50 | 4.55 | 4.60 | 5.19 | | | 11.48 | 12.79 | 13.65 |
| | | velocity | 7.80 | 9.36 | 9.21 | 8.88 | 8.54 | 8.06 | 8.05 | 7.78 | 7.69 | 7.61 | 7.71 | 8.18 | | 9.15 | 8.21 | 7.69 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2011 Japanese National Championships (Kumagaya, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-11 | time | 5.94 | 9.74 | 13.63 | 17.62 | 21.81 | 25.91 | 30.21 | 34.63 | 39.23 | 43.92 | | 49.28 | / 1 | | | |
| reaction time | | interval | | 3.80 | 3.89 | 3.99 | 4.19 | 4.10 | 4.30 | 4.42 | 4.60 | 4.69 | 5.36 | | | 11.68 | 12.59 | 13.71 |
| | | velocity | 7.58 | 9.21 | 9.00 | 8.77 | 8.35 | 8.54 | 8.14 | 7.92 | 7.61 | 7.46 | 7.46 | 8.12 | | 8.99 | 8.34 | 7.66 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | | 125 | | | | |

**Race A** - 2011 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-11 | time | 5.97 | 9.76 | 13.66 | 17.66 | 21.85 | 26.09 | 30.38 | 34.75 | 39.35 | 43.96 | | 49.27 | / 2 | | | |
| reaction time | | interval | | 3.79 | 3.90 | 4.00 | 4.19 | 4.24 | 4.29 | 4.37 | 4.60 | 4.61 | 5.31 | PB | | 11.69 | 12.72 | 13.58 |
| | | velocity | 7.54 | 9.23 | 8.97 | 8.75 | 8.35 | 8.25 | 8.16 | 8.01 | 7.61 | 7.59 | 7.53 | 8.12 | | 8.98 | 8.25 | 7.73 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | | 125 | | | | |

**FINAL** - 2010 Osaka Grand Prix (Osaka, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-10 | time | 5.97 | 9.84 | 13.85 | 17.86 | 22.06 | 26.28 | 30.60 | 35.09 | 39.71 | 44.45 | | 49.95 | / 6 | | | |
| reaction time | | interval | | 3.87 | 4.01 | 4.01 | 4.20 | 4.22 | 4.32 | 4.49 | 4.62 | 4.74 | 5.50 | | | 11.89 | 12.74 | 13.85 |
| | | velocity | 7.54 | 9.04 | 8.73 | 8.73 | 8.33 | 8.29 | 8.10 | 7.80 | 7.58 | 7.38 | 7.27 | 8.01 | | 8.83 | 8.24 | 7.58 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | | 127 | | | | |

**FINAL** - 2008 Japanese National High School Championships (Kumagaya, JPN) *Abe (2008) - 61st high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-08 | time | 6.06 | 10.08 | 14.24 | 18.51 | 22.91 | 27.37 | 31.75 | 36.21 | 40.75 | 45.40 | | 50.64 | / 1 | | | |
| reaction time | | interval | | 4.02 | 4.16 | 4.27 | 4.40 | 4.46 | 4.38 | 4.46 | 4.54 | 4.65 | 5.24 | | | 12.45 | 13.24 | 13.65 |
| | | velocity | 7.43 | 8.71 | 8.41 | 8.20 | 7.95 | 7.85 | 7.99 | 7.85 | 7.71 | 7.53 | 7.63 | 7.90 | | 8.43 | 7.93 | 7.69 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

| Kitur, Simon (KEN) (1959) | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 2** - 1988 Olympic Games (Seoul, KOR) | | | | | | | | | | *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988* | | | | | | | | | |
| date | 24-Sep-88 | time | 6.12 | 9.92 | 13.81 | 17.81 | 21.90 | | 26.10 | 30.45 | 34.91 | 39.63 | 44.45 | | 49.74 | 1 / 6 | | | |
| reaction time | | interval | | 3.80 | 3.89 | 4.00 | 4.09 | | 4.20 | 4.35 | 4.46 | 4.72 | 4.82 | 5.29 | | | 11.69 | 12.64 | 14.00 |
| | | velocity | 7.35 | 9.21 | 9.00 | 8.75 | 8.56 | | 8.33 | 8.05 | 7.85 | 7.42 | 7.26 | 7.56 | 8.04 | | 8.98 | 8.31 | 7.50 |
| H1 lead leg | | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 16 | 18.1 | 177.1 | | | | |

| Kjerpeset, Øyrind Strømmen (NOR) ( | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2016 Bislett Games (Oslo, NOR) (TV Analysis) | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2016 year end hurdle report* | | | | | | |
| date | 09-Jun-16 | time | 6.08 | 9.92 | 13.84 | 17.92 | 22.24 | | 26.56 | 31.00 | 35.48 | 40.24 | 45.16 | | 50.98 | 2 / 8 | | | |
| reaction time | 0.153 | interval | | 3.84 | 3.92 | 4.08 | 4.32 | | 4.32 | 4.44 | 4.48 | 4.76 | 4.92 | 5.82 | | | 11.84 | 13.08 | 14.16 |
| | | velocity | 7.40 | 9.11 | 8.93 | 8.58 | 8.10 | | 8.10 | 7.88 | 7.81 | 7.35 | 7.11 | 6.87 | 7.85 | | 8.87 | 8.03 | 7.42 |
| H1 lead leg | L | strides | 21 | 13 | | 13 | 13 | | 14 | 14 | 14 | 14 | 15 | | 131 | | | | |

| Knoke, Gary (AUS) (1942) | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1964 Olympic Games (Tokyo, JPN) | | | | | | | | | | *Breitschaft (1965) - die leichtathletik wettkampfe der 1964 olympischen sommerspielen - 400m hürdenlauf* | | | | | | | | | |
| date | 16-Oct-64 | time | 5.8 | | 13.7 | | 21.8 | | | 30.6 | | 40.1 | | | 50.4 | 2 / 4 | | | |
| reaction time | | interval | | | 7.90 | | 8.10 | | | 8.80 | | 9.50 | | 10.30 | | | | | |
| | | velocity | 7.76 | | 8.86 | | 8.64 | | | 7.95 | | 7.37 | | 7.28 | 7.94 | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

| Koech, Haron (KEN) (1990) | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2019 Seiko Golden Grand Prix (Osaka, JPN) | | | | | | | | | | | | | *Hirokawa (2019) - research on athlete performance and technique- 2019 data book* | | | | | | |
| date | 19-May-19 | time | 6.46 | 10.44 | 14.51 | 18.65 | 22.89 | | 27.34 | 31.92 | 36.72 | 41.65 | 46.63 | | 52.48 | 5 / 7 | | | |
| reaction time | 0.174 | interval | | 3.98 | 4.07 | 4.14 | 4.24 | | 4.45 | 4.58 | 4.80 | 4.93 | 4.98 | 5.85 | | | 12.19 | 13.27 | 14.71 |
| | | velocity | 6.97 | 8.79 | 8.60 | 8.45 | 8.25 | | 7.87 | 7.64 | 7.29 | 7.10 | 7.03 | 6.84 | 7.62 | | 8.61 | 7.91 | 7.14 |
| H1 lead leg | R | strides | 23 | 13 | 15 | 13 | 13 | | 15 | 15 | 15 | 15 | 15 | 18.7 | 170.7 | | | | |

| Köhler, Hermann (FRG) (1950) | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1975 West German National Championships (Gelsenkirchen, FRG) | | | | | | | | | | | | | | | *Helbig (1975) - 400-m-hürdenlauf* | | | | |
| date | 28-Jun-75 | time | 6.1 | 10.2 | 14.2 | 18.3 | 22.6 | 24.6 | 27.0 | 32.0 | 36.1 | 40.8 | 45.6 | | 51.37 | 3 / 3 | | | |
| reaction time | | interval | | 4.11 | 4.02 | 4.13 | 4.26 | | 4.38 | 5.00 | 4.16 | 4.65 | 4.78 | 5.82 | | | 12.26 | 13.64 | 13.59 |
| | | velocity | 7.43 | 8.52 | 8.71 | 8.47 | 8.22 | 8.14 | 7.99 | 7.00 | 8.41 | 7.53 | 7.32 | 6.87 | 7.79 | | 8.56 | 7.70 | 7.73 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

| Köhrbrück, Carsten (FRG) (1967) | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1985 European Junior Championships (Cottbus, GDR) | | | | | | | | | | | | | *Warburton (1985) - 1985 european junior championships - hurdles* | | | | | | |
| date | 25-Aug-85 | time | 6.46 | 10.09 | 14.09 | 18.37 | 22.66 | | 27.21 | 31.50 | 36.24 | 40.78 | 45.63 | | 51.23 | / 3 | | | |
| reaction time | | interval | | 3.63 | 4.00 | 4.28 | 4.29 | | 4.55 | 4.29 | 4.74 | 4.54 | 4.85 | 5.60 | | | 11.91 | 13.13 | 14.13 |
| | | velocity | 6.97 | 9.64 | 8.75 | 8.18 | 8.16 | | 7.69 | 8.16 | 7.38 | 7.71 | 7.22 | 7.14 | 7.81 | | 8.82 | 8.00 | 7.43 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

| Koike, Takayuki (JPN) (1984) | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2010 Japanese National Championships (Marugume, JPN) | | | | | | | | | | *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11* | | | | | | | | | |
| date | 05-Jun-10 | time | 6.02 | 9.79 | 13.71 | 17.66 | 21.78 | | 26.03 | 30.40 | 34.94 | 39.51 | 44.23 | | 49.76 | / 3 | | | |
| reaction time | 0.197 | interval | | 3.77 | 3.92 | 3.95 | 4.12 | | 4.25 | 4.37 | 4.54 | 4.57 | 4.72 | 5.53 | | | 11.64 | 12.74 | 13.83 |
| | | velocity | 7.48 | 9.28 | 8.93 | 8.86 | 8.50 | | 8.24 | 8.01 | 7.71 | 7.66 | 7.42 | 7.23 | 8.04 | | 9.02 | 8.24 | 7.59 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |
| **FINAL** - 2010 Osaka Grand Prix (Osaka, JPN) | | | | | | | | | | *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11* | | | | | | | | | |
| date | 08-May-10 | time | 6.11 | 9.91 | 13.75 | 17.59 | 21.59 | | 25.76 | 30.08 | 34.53 | 39.03 | 43.85 | | 49.42 | / 3 | | | |
| reaction time | | interval | | 3.80 | 3.84 | 3.84 | 4.00 | | 4.17 | 4.32 | 4.45 | 4.50 | 4.82 | 5.57 | | | 11.48 | 12.49 | 13.77 |
| | | velocity | 7.36 | 9.21 | 9.11 | 9.11 | 8.75 | | 8.39 | 8.10 | 7.87 | 7.78 | 7.26 | 7.18 | 8.09 | | 9.15 | 8.41 | 7.63 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |
| **FINAL** - 2009 Osaka Grand Prix (Osaka, JPN) | | | | | | | | | | *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11* | | | | | | | | | |
| date | 09-May-09 | time | 6.02 | 9.79 | 13.63 | 17.57 | 21.59 | | 25.78 | 30.15 | 34.77 | 39.44 | 44.28 | | 49.93 | / 7 | | | |
| reaction time | | interval | | 3.77 | 3.84 | 3.94 | 4.02 | | 4.19 | 4.37 | 4.62 | 4.67 | 4.84 | 5.65 | | | 11.55 | 12.58 | 14.13 |
| | | velocity | 7.48 | 9.28 | 9.11 | 8.88 | 8.71 | | 8.35 | 8.01 | 7.58 | 7.49 | 7.23 | 7.08 | 8.01 | | 9.09 | 8.35 | 7.43 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | | 129 | | | | |
| **FINAL** - 2008 Japanese National Championships (Kawasaki, JPN) | | | | | | | | | | | | | *Yasunori (2009) - race pattern analysis of prestigious Japanese 400m hurdlers* | | | | | | |
| date | 27-Jun-08 | time | 5.92 | 9.62 | 13.44 | 17.31 | 21.36 | | 25.56 | 29.93 | 34.40 | 39.07 | 44.11 | | 50.09 | / 3 | | | |
| reaction time | | interval | | 3.70 | 3.82 | 3.87 | 4.05 | | 4.20 | 4.37 | 4.47 | 4.67 | 5.04 | 5.98 | | | 11.39 | 12.62 | 14.18 |
| | | velocity | 7.60 | 9.46 | 9.16 | 9.04 | 8.64 | | 8.33 | 8.01 | 7.83 | 7.49 | 6.94 | 6.69 | 7.99 | | 9.22 | 8.32 | 7.40 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |
| **FINAL** - 2006 Seiko Super Grand Prix (Yokohama, JPN) | | | | | | | | | | | | | *Yasunori (2007) - race pattern analysis of top Japanese 400m hurdlers* | | | | | | |
| date | 24-Sep-06 | time | 6.06 | 9.85 | 13.70 | 17.62 | 21.72 | | 25.99 | 30.36 | 34.81 | 39.33 | 43.95 | | 49.45 | / 3 | | | |
| reaction time | | interval | | 3.79 | 3.85 | 3.92 | 4.10 | | 4.27 | 4.37 | 4.45 | 4.52 | 4.62 | 5.50 | | | 11.56 | 12.74 | 13.59 |
| | | velocity | 7.43 | 9.23 | 9.09 | 8.93 | 8.54 | | 8.20 | 8.01 | 7.87 | 7.74 | 7.58 | 7.27 | 8.09 | | 9.08 | 8.24 | 7.73 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

| Kong Jie (CHN) (2003) | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 National Grand Prix (Chengdu, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 02-Apr-21 | time | 6.33 | 10.43 | 14.71 | 19.08 | 23.48 | | 28.09 | 32.92 | 37.90 | 43.07 | 48.43 | | 54.89 | 1 / 7 | | | |
| reaction time | 0.264 | interval | | 4.10 | 4.28 | 4.37 | 4.40 | | 4.61 | 4.83 | 4.98 | 5.17 | 5.36 | 6.46 | | | 12.75 | 13.84 | 15.51 |
| | | velocity | 7.11 | 8.54 | 8.18 | 8.01 | 7.95 | | 7.59 | 7.25 | 7.03 | 6.77 | 6.53 | 6.19 | 7.29 | | 8.24 | 7.59 | 6.77 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | L | strides | 21 | 17 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 177 | | | | |

**Heat 1** - 2021 National Grand Prix (Chengdu, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Apr-21 | time | 6.28 | 10.46 | 14.80 | 19.08 | 23.54 | 28.10 | 32.82 | 37.68 | 42.70 | 47.96 | | 53.91 | 6 / 4 | | | |
| reaction time | 0.233 | interval | | 4.18 | 4.34 | 4.28 | 4.46 | 4.56 | 4.72 | 4.86 | 5.02 | 5.26 | 5.95 | | | 12.80 | 13.74 | 15.14 |
| | | velocity | 7.17 | 8.37 | 8.06 | 8.18 | 7.85 | 7.68 | 7.42 | 7.20 | 6.97 | 6.65 | 6.72 | 7.42 | | 8.20 | 7.64 | 6.94 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18 | 174 | | | | |

**Königsmark, Varg (GER) (1992)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2014 European Championships (Zurich, SUI) | | | | | | | | | | | | | | | *Green (2015) - twitter.com/jackpgreen (from Behm?)* | | | | |
| date | 15-Aug-14 | time | 6.03 | 9.79 | 13.71 | 17.59 | 21.51 | | 25.71 | 30.03 | 34.55 | 39.31 | 44.35 | | 49.91 | / 7 | | | |
| reaction time | 0.190 | interval | | 3.76 | 3.92 | 3.88 | 3.92 | | 4.20 | 4.32 | 4.52 | 4.76 | 5.04 | 5.56 | | | 11.56 | 12.44 | 14.32 |
| | | velocity | 7.46 | 9.31 | 8.93 | 9.02 | 8.93 | | 8.33 | 8.10 | 7.74 | 7.35 | 6.94 | 7.19 | 8.01 | | 9.08 | 8.44 | 7.33 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 15 | | 124 | | | | |
| **FINAL** - 2011 DLV Junioren-Gala (Mannheim, GER) | | | | | | | | | | | | | | | *Beck (2011) - 400-meter-hürdensprinter im aufschwung* | | | | |
| date | 03-Jul-11 | time | 6.12 | 10.02 | 14.06 | 18.10 | 22.22 | | 26.44 | 30.74 | 35.22 | 39.97 | 44.86 | | 50.46 | / 1 | | | |
| reaction time | | interval | | 3.90 | 4.04 | 4.04 | 4.12 | | 4.22 | 4.30 | 4.48 | 4.75 | 4.89 | 5.60 | | | 11.98 | 12.64 | 14.12 |
| | | velocity | 7.35 | 8.97 | 8.66 | 8.66 | 8.50 | | 8.29 | 8.14 | 7.81 | 7.37 | 7.16 | 7.14 | 7.93 | | 8.76 | 8.31 | 7.44 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 143 | | | | |
| **FINAL** - 2011 German National Junior Championships (Bremen, GER) | | | | | | | | | | | | | | | *Beck (2011) - 400-meter-hürdensprinter im aufschwung* | | | | |
| date | 26-Jun-11 | time | 6.22 | 10.12 | 14.14 | 18.21 | 22.40 | | 26.84 | 31.38 | 35.98 | 40.54 | 45.18 | | 50.24 | / 1 | | | |
| reaction time | | interval | | 3.90 | 4.02 | 4.07 | 4.19 | | 4.44 | 4.54 | 4.60 | 4.56 | 4.64 | 5.06 | | | 11.99 | 13.17 | 13.80 |
| | | velocity | 7.23 | 8.97 | 8.71 | 8.60 | 8.35 | | 7.88 | 7.71 | 7.61 | 7.68 | 7.54 | 7.91 | 7.96 | | 8.76 | 7.97 | 7.61 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 14 | | 142 | | | | |

**Konishi, Yuta (JPN) (1990)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2017 Seiko Golden Grand Prix (Kawasaki, JPN) | | | | | | | | | | | | | | | *(2017) - tfdata-store.com/2017/05/22/post-605/* | | | | |
| date | 21-May-17 | time | 6.13 | 9.99 | 13.86 | 17.82 | 21.94 | | 26.18 | 30.45 | 34.89 | 39.54 | 44.38 | | 49.95 | 4 / 5 | | | |
| reaction time | 0.146 | interval | | 3.86 | 3.87 | 3.96 | 4.12 | | 4.24 | 4.27 | 4.44 | 4.65 | 4.84 | 5.57 | | | 11.69 | 12.63 | 13.93 |
| | | velocity | 7.34 | 9.07 | 9.04 | 8.84 | 8.50 | | 8.25 | 8.20 | 7.88 | 7.53 | 7.23 | 7.18 | 8.01 | | 8.98 | 8.31 | 7.54 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 19 | 164 | | | | |
| **FINAL** - 2016 Japanese National Championships (Nagoya, JPN) | | | | | | | | | | | | | | | *Morioka (2016) - race pattern of top 400m hurdlers in japan* | | | | |
| date | 24-Jun-16 | time | 6.08 | 9.90 | 13.77 | 17.67 | 21.62 | | 25.84 | 30.09 | 34.56 | 39.16 | 43.98 | | 49.55 | 4 / 3 | | | |
| reaction time | 0.165 | interval | | 3.82 | 3.87 | 3.90 | 3.95 | | 4.22 | 4.25 | 4.47 | 4.60 | 4.82 | 5.57 | | | 11.59 | 12.42 | 13.89 |
| | | velocity | 7.40 | 9.16 | 9.04 | 8.97 | 8.86 | | 8.29 | 8.24 | 7.83 | 7.61 | 7.26 | 7.18 | 8.07 | | 9.06 | 8.45 | 7.56 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |
| **FINAL** - 2016 Kansai Business Championships (Osaka, JPN) | | | | | | | | | | | | | | | *(2017) - tfdata-store.com/2017/05/22/post-605/* | | | | |
| date | 20-May-16 | time | 6.12 | 10.01 | 13.90 | 17.83 | 21.95 | | 26.32 | 30.64 | 35.10 | 39.72 | 44.44 | | 49.76 | 5 / 1 | | | |
| reaction time | | interval | | 3.89 | 3.89 | 3.93 | 4.12 | | 4.37 | 4.32 | 4.46 | 4.62 | 4.72 | 5.32 | | | 11.71 | 12.81 | 13.80 |
| | | velocity | 7.35 | 9.00 | 9.00 | 8.91 | 8.50 | | 8.01 | 8.10 | 7.85 | 7.58 | 7.42 | 7.52 | 8.04 | | 8.97 | 8.20 | 7.61 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |
| **FINAL** - 2015 Japanese National Championships (Niigata, JPN) | | | | | | | | | | | | | | | *Yasunori (2015) - race pattern analysis of the top 400m hurdlers in Japan* | | | | |
| date | 28-Jun-15 | time | 6.21 | 10.05 | 14.00 | 18.02 | 22.12 | | 26.37 | 30.71 | 35.21 | 39.86 | 44.58 | | 50.06 | 4 / 3 | | | |
| reaction time | 0.166 | interval | | 3.84 | 3.95 | 4.02 | 4.10 | | 4.25 | 4.34 | 4.50 | 4.65 | 4.72 | 5.48 | | | 11.81 | 12.69 | 13.87 |
| | | velocity | 7.25 | 9.11 | 8.86 | 8.71 | 8.54 | | 8.24 | 8.06 | 7.78 | 7.53 | 7.42 | 7.30 | 7.99 | | 8.89 | 8.27 | 7.57 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 19 | 165 | | | | |
| **FINAL** - 2015 Seiko Golden Grand Prix (Kawaskai, JPN) | | | | | | | | | | | | | | | *Yasunori (2015) - race pattern analysis of the top 400m hurdlers in Japan* | | | | |
| date | 10-May-15 | time | 6.17 | 10.14 | 14.16 | 18.30 | 22.42 | | 26.57 | 30.79 | 35.21 | 39.71 | 44.38 | | 49.70 | / 2 | | | |
| reaction time | | interval | | 3.97 | 4.02 | 4.14 | 4.12 | | 4.15 | 4.22 | 4.42 | 4.50 | 4.67 | 5.32 | | | 12.13 | 12.49 | 13.59 |
| | | velocity | 7.29 | 8.82 | 8.71 | 8.45 | 8.50 | | 8.43 | 8.29 | 7.92 | 7.78 | 7.49 | 7.52 | 8.05 | | 8.66 | 8.41 | 7.73 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |
| **FINAL** - 2015 Shizuoka International Athletics Meeting (Fukuroi, JPN) | | | | | | | | | | | | | | | *Yasunori (2015) - race pattern analysis of the top 400m hurdlers in Japan* | | | | |
| date | 03-May-15 | time | 6.17 | 10.04 | 13.98 | 18.00 | 22.15 | | 26.32 | 30.76 | 35.30 | 39.97 | 44.64 | | 49.98 | / 3 | | | |
| reaction time | 0.189 | interval | | 3.87 | 3.94 | 4.02 | 4.15 | | 4.17 | 4.44 | 4.54 | 4.67 | 4.67 | 5.34 | | | 11.83 | 12.76 | 13.88 |
| | | velocity | 7.29 | 9.04 | 8.88 | 8.71 | 8.43 | | 8.39 | 7.88 | 7.71 | 7.49 | 7.49 | 7.49 | 8.00 | | 8.88 | 8.23 | 7.56 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | | 130 | | | | |
| **FINAL** - 2014 Japanese National Championships (Fukushima, JPN) | | | | | | | | | | | | | | | *Yasunori (2014) - race pattern analysis of Japanese top 400m hurdlers for major domestic competitions* | | | | |
| date | 08-Jun-14 | time | 5.99 | 9.83 | 13.68 | 17.58 | 21.55 | | 25.74 | 30.06 | 34.60 | 39.27 | 44.19 | | 49.97 | 7 / 3 | | | |
| reaction time | | interval | | 3.84 | 3.85 | 3.90 | 3.97 | | 4.19 | 4.32 | 4.54 | 4.67 | 4.92 | 5.78 | | | 11.59 | 12.48 | 14.13 |
| | | velocity | 7.51 | 9.11 | 9.09 | 8.97 | 8.82 | | 8.35 | 8.10 | 7.71 | 7.49 | 7.11 | 6.92 | 8.00 | | 9.06 | 8.41 | 7.43 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 19.2 | 171 | | | | |

**Konno, Ryoma (JPN) (2004)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Japanese National High School Championships (Naruto, JPN) | | | | | | | | | | | | | | | *Kishima (2022) - national high school championships biomechanics data collection* | | | | |
| date | 05-Aug-22 | time | 6.07 | 9.93 | 13.85 | 17.95 | 22.13 | | 26.42 | 30.82 | 35.25 | 39.67 | 44.67 | | 50.46 | 4 / 1 | | | |
| reaction time | 0.161 | interval | | 3.86 | 3.92 | 4.10 | 4.18 | | 4.29 | 4.40 | 4.43 | 4.42 | 5.00 | 5.79 | | | 11.88 | 12.87 | 13.85 |
| | | velocity | 7.41 | 9.07 | 8.93 | 8.54 | 8.37 | | 8.16 | 7.95 | 7.90 | 7.92 | 7.00 | 6.91 | 7.93 | | 8.84 | 8.16 | 7.58 |
| H1 lead leg | R | strides | 21 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 19 | 175 | | | | |

**FINAL** - 2022 Japanese U20 National Championsips (Osaka, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-22 | time | 6.21 | 10.24 | 14.36 | 18.59 | 22.76 | | 27.03 | 31.35 | 35.72 | 40.14 | 44.73 | | 50.17 | 9 / 1 | | | |
| reaction time | 0.177 | interval | | 4.03 | 4.12 | 4.23 | 4.17 | | 4.27 | 4.32 | 4.37 | 4.42 | 4.59 | 5.44 | PB | | 12.38 | 12.76 | 13.38 |
| | | velocity | 7.25 | 8.68 | 8.50 | 8.27 | 8.39 | | 8.20 | 8.10 | 8.01 | 7.92 | 7.63 | 7.35 | 7.97 | | 8.48 | 8.23 | 7.85 |
| H1 lead leg | R | strides | 21 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 18.5 | 174.5 | | | | |

**Kono, Shoma (JPN) (2000)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2018 Japanese National High School Championships (Nagoya, JPN) *Kota (2018) - 71st high school championships: JAF scientific committee - biomechanics data collection*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Aug-18 | time | 6.39 | 10.58 | 14.98 | 19.37 | 23.81 | | 28.28 | 32.83 | 37.42 | 42.09 | 46.88 | | 52.12 | 3 / 5 | | | |
| reaction time | | interval | | 4.19 | 4.40 | 4.39 | 4.44 | | 4.47 | 4.55 | 4.59 | 4.67 | 4.79 | 5.24 | | | 12.98 | 13.46 | 14.05 |
| | | velocity | 7.04 | 8.35 | 7.95 | 7.97 | 7.88 | | 7.83 | 7.69 | 7.63 | 7.49 | 7.31 | 7.63 | 7.67 | | 8.09 | 7.80 | 7.47 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**Kucej, Jožef (TCH) (1965)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1991 European Cup (Frankfurt, GER) *Federle (2003) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jun-91 | time | 6.09 | 9.93 | 13.82 | 17.82 | 21.96 | | 26.24 | 30.55 | 35.04 | 39.75 | 44.63 | | 50.27 | / 5 | | | |
| reaction time | | interval | | 3.84 | 3.89 | 4.00 | 4.14 | | 4.28 | 4.31 | 4.49 | 4.71 | 4.88 | 5.64 | | | 11.73 | 12.73 | 14.08 |
| | | velocity | 7.39 | 9.11 | 9.00 | 8.75 | 8.45 | | 8.18 | 8.12 | 7.80 | 7.43 | 7.17 | 7.09 | 7.96 | | 8.95 | 8.25 | 7.46 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Kučera, Martin (SVK) (1990)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2020 Golden Spike (Ostrava, CZE) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-20 | time | 6.17 | 10.08 | 14.11 | 18.12 | 22.25 | | 26.59 | 31.06 | 35.90 | 40.57 | | | 50.84 | 7 / 5 | | | |
| reaction time | 0.185 | interval | | 3.91 | 4.03 | 4.01 | 4.13 | | 4.34 | 4.47 | 4.84 | 4.67 | | | | | 11.95 | 12.94 | |
| | | velocity | 7.29 | 8.95 | 8.68 | 8.73 | 8.47 | | 8.06 | 7.83 | 7.23 | 7.49 | | | 7.87 | | 8.79 | 8.11 | |
| H1 lead leg | R | strides | 20 | 13 | | 13 | 13 | | | 14 | | 14 | | | 87 | | | | |

**FINAL** - 2016 European Championships (Amsterdam, NED) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Jul-16 | time | 6.08 | 9.96 | 13.92 | 18.08 | 22.20 | | | 30.60 | 35.00 | 39.64 | 44.52 | | 49.82 | 1 / 7 | | | |
| reaction time | 0.121 | interval | | 3.88 | 3.96 | 4.16 | 4.12 | | | 8.40 | 4.40 | 4.64 | 4.88 | 5.30 | | | 12.00 | 12.52 | 13.92 |
| | | velocity | 7.40 | 9.02 | 8.84 | 8.41 | 8.50 | | | 8.33 | 7.95 | 7.54 | 7.17 | 7.55 | 8.03 | | 8.75 | 8.39 | 7.54 |
| H1 lead leg | R | strides | 20 | 13 | | 13 | 13 | | | | 13 | 14 | 14 | 16.7 | 116.7 | | | | |

**Kudryavtsev, Denis (RUS) (1992)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2015 IAAF World Championships (Beijing, CHN) (TV Analysis) *Henson (2021) - Athlete First: major championships report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-15 | time | 5.84 | 9.48 | 13.20 | 16.96 | 20.84 | | 24.84 | 29.08 | 33.40 | 37.96 | 42.68 | | 48.05 | 6 / 2 | | | |
| reaction time | 0.146 | interval | | 3.64 | 3.72 | 3.76 | 3.88 | | 4.00 | 4.24 | 4.32 | 4.56 | 4.72 | 5.37 | NR PB | | 11.12 | 12.12 | 13.60 |
| | | velocity | 7.71 | 9.62 | 9.41 | 9.31 | 9.02 | | 8.75 | 8.25 | 8.10 | 7.68 | 7.42 | 7.45 | 8.32 | | 9.44 | 8.66 | 7.72 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 19 | 142 | | | | |

**FINAL** - 2014 European Championships (Zurich, SUI) *Green (2015) - twitter.com/jackpgreen (from Behm?)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-14 | time | 6.12 | 9.92 | 13.80 | 17.68 | 21.64 | | 25.76 | 30.12 | 34.48 | 39.08 | 43.84 | | 49.16 | / 3 | | | |
| reaction time | 0.158 | interval | | 3.80 | 3.88 | 3.88 | 3.96 | | 4.12 | 4.36 | 4.36 | 4.60 | 4.76 | 5.32 | | | 11.56 | 12.44 | 13.72 |
| | | velocity | 7.35 | 9.21 | 9.02 | 9.02 | 8.84 | | 8.50 | 8.03 | 8.03 | 7.61 | 7.35 | 7.52 | 8.14 | | 9.08 | 8.44 | 7.65 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**Kunkel, Adam (CAN) (1981)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2007 IAAF World Championships (Osaka, JPN) *Behm (2007) - Osaka 2007: Le quatrache*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Aug-07 | time | 5.8 | 9.5 | 13.3 | 17.3 | 21.9 | | | | | | | | dnf | 3 / -- | | | |
| reaction time | 0.181 | interval | | 3.70 | 3.80 | 4.00 | 4.60 | | | | | | | | | | 11.50 | | |
| | | velocity | 7.76 | 9.46 | 9.21 | 8.75 | 7.61 | | | | | | | | | | 9.13 | | |
| H1 lead leg | L | strides | 21 | 13 | 14 | 14 | 14 | | | | | | | | 76 | | | | |

**Kurokawa, Kazuki (JPN) (2001)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Semi-Final 2** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-23 | time | 5.77 | 9.47 | 13.21 | 16.88 | 20.89 | | 25.09 | 29.33 | 33.81 | 38.44 | 43.21 | | 48.58 | 5 / 4 | | | |
| reaction time | 0.144 | interval | | 3.70 | 3.74 | 3.67 | 4.01 | | 4.20 | 4.24 | 4.48 | 4.63 | 4.77 | 5.37 | PB | | 11.11 | 12.45 | 13.88 |
| | | velocity | 7.80 | 9.46 | 9.36 | 9.54 | 8.73 | | 8.33 | 8.25 | 7.81 | 7.56 | 7.34 | 7.45 | 8.23 | | 9.45 | 8.43 | 7.56 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 19 | 165 | | | | |

**Heat 5** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 5.73 | 9.46 | 13.20 | 17.00 | 20.83 | | 25.03 | 29.36 | 33.83 | 38.46 | 43.23 | | 48.71 | 3 / 3 | | | |
| reaction time | 0.158 | interval | | 3.73 | 3.74 | 3.80 | 3.83 | | 4.20 | 4.33 | 4.47 | 4.63 | 4.77 | 5.48 | | | 11.27 | 12.36 | 13.87 |
| | | velocity | 7.85 | 9.38 | 9.36 | 9.21 | 9.14 | | 8.33 | 8.08 | 7.83 | 7.56 | 7.34 | 7.30 | 8.21 | | 9.32 | 8.50 | 7.57 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.7 | 164.7 | | | | |

**Semi-Final 3** - 2022 World Athletics Championships (Eugene, OR) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.81 | 9.49 | 13.35 | 17.18 | 21.14 | 22.76 | 25.33 | 29.68 | 34.25 | 39.02 | 43.93 | | 49.69 | 1 / 6 | | | |
| reaction time | 0.136 | interval | | 3.68 | 3.86 | 3.83 | 3.96 | | 4.19 | 4.35 | 4.57 | 4.77 | 4.91 | 5.76 | | | 11.37 | 12.50 | 14.25 |
| | | velocity | 7.75 | 9.51 | 9.07 | 9.14 | 8.84 | 8.79 | 8.35 | 8.05 | 7.66 | 7.34 | 7.13 | 6.94 | 8.05 | | 9.23 | 8.40 | 7.37 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18 | 143 | | | | |

**Heat 1** - 2022 World Athletics Championships (Eugene, OR) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 5.86 | 9.53 | 13.31 | 17.20 | 21.42 | 23.14 | 25.76 | 30.23 | 34.87 | 39.64 | 44.51 | | 50.02 | 3 / 4 | | | |
| reaction time | 0.142 | interval | | 3.67 | 3.78 | 3.89 | 4.22 | | 4.34 | 4.47 | 4.64 | 4.77 | 4.87 | 5.51 | | | 11.34 | 13.03 | 14.28 |
| | | velocity | 7.68 | 9.54 | 9.26 | 9.00 | 8.29 | 8.64 | 8.06 | 7.83 | 7.54 | 7.34 | 7.19 | 7.26 | 8.00 | | 9.26 | 8.06 | 7.35 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 15 | 15 | 15 | 15 | 18 | 166 | | | | |

**FINAL** - 2022 Japanese National Championsips (Osaka, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-22 | time | 5.77 | 9.38 | 13.10 | 16.97 | 20.99 | 25.23 | 29.48 | 34.00 | 38.64 | 43.38 | 48.89 | 5 / 1 | | | | | |
| reaction time | 0.192 | interval | | 3.61 | 3.72 | 3.87 | 4.02 | 4.24 | 4.25 | 4.52 | 4.64 | 4.74 | 5.51 | | 11.20 | 12.51 | 13.90 | | |
| | | velocity | 7.80 | 9.70 | 9.41 | 9.04 | 8.71 | 8.25 | 8.24 | 7.74 | 7.54 | 7.38 | 7.26 | 8.18 | 9.38 | 8.39 | 7.55 | | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18.2 | 164.2 | | | | | |

**FINAL** - 2022 Seiko Golden Grand Prix (Tokyo, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-22 | time | 5.86 | 9.57 | 13.26 | 17.05 | 21.02 | 25.19 | 29.48 | 33.98 | 38.69 | 43.54 | 49.08 | 7 / 2 | | | | | |
| reaction time | 0.206 | interval | | 3.71 | 3.69 | 3.79 | 3.97 | 4.17 | 4.29 | 4.50 | 4.71 | 4.85 | 5.54 | | 11.19 | 12.43 | 14.06 | | |
| | | velocity | 7.68 | 9.43 | 9.49 | 9.23 | 8.82 | 8.39 | 8.16 | 7.78 | 7.43 | 7.22 | 7.22 | 8.15 | 9.38 | 8.45 | 7.47 | | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18.5 | 164.5 | | | | | |

**FINAL** - 2022 Michitaka Kinami Memorial (Osaka, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-May-22 | time | 5.91 | 9.54 | 13.28 | 17.08 | 21.02 | 25.21 | 29.48 | 33.95 | 38.64 | 43.44 | 48.90 | 6 / 1 | | | | | |
| reaction time | 0.157 | interval | | 3.63 | 3.74 | 3.80 | 3.94 | 4.19 | 4.27 | 4.47 | 4.69 | 4.80 | 5.46 | | 11.17 | 12.40 | 13.96 | | |
| | | velocity | 7.61 | 9.64 | 9.36 | 9.21 | 8.88 | 8.35 | 8.20 | 7.83 | 7.46 | 7.29 | 7.33 | 8.18 | 9.40 | 8.47 | 7.52 | | |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | | |

**FINAL** - 2021 Japanese National Championships (Osaka, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 5.83 | 9.43 | 13.10 | 16.87 | 20.79 | 24.94 | 29.21 | 33.61 | 38.26 | 43.10 | 48.69 | 7 / 1 | | | | | |
| reaction time | 0.202 | interval | | 3.60 | 3.67 | 3.77 | 3.92 | 4.15 | 4.27 | 4.40 | 4.65 | 4.84 | 5.59 | | 11.04 | 12.34 | 13.89 | | |
| | | velocity | 7.72 | 9.72 | 9.54 | 9.28 | 8.93 | 8.43 | 8.20 | 7.95 | 7.53 | 7.23 | 7.16 | 8.22 | 9.51 | 8.51 | 7.56 | | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 19 | 165 | | | | | |

**FINAL** - 2021 Ready Steady Tokyo (Tokyo, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-May-21 | time | 5.77 | 9.36 | 13.06 | 16.92 | 20.97 | 25.23 | 29.40 | 33.80 | 38.36 | 43.14 | 48.68 | 6 / 1 | | | | | |
| reaction time | 0.150 | interval | | 3.59 | 3.70 | 3.86 | 4.05 | 4.26 | 4.17 | 4.40 | 4.56 | 4.78 | 5.54 | **PB** | 11.15 | 12.48 | 13.74 | | |
| | | velocity | 7.80 | 9.75 | 9.46 | 9.07 | 8.64 | 8.22 | 8.39 | 7.95 | 7.68 | 7.32 | 7.22 | 8.22 | 9.42 | 8.41 | 7.64 | | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 19 | 165 | | | | | |

**FINAL** - 2021 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-21 | time | 5.96 | 9.61 | 13.43 | 17.38 | 21.54 | 25.94 | 30.28 | 34.80 | 39.46 | 44.36 | 50.20 | 6 / 1 | | | | | |
| reaction time | 0.185 | interval | | 3.65 | 3.82 | 3.95 | 4.16 | 4.40 | 4.34 | 4.52 | 4.66 | 4.90 | 5.84 | | 11.42 | 12.90 | 14.08 | | |
| | | velocity | 7.55 | 9.59 | 9.16 | 8.86 | 8.41 | 7.95 | 8.06 | 7.74 | 7.51 | 7.14 | 6.85 | 7.97 | 9.19 | 8.14 | 7.46 | | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 20 | 166 | | | | | |

**FINAL** - 2020 Japanese National Championships (Niigata, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Oct-20 | time | 6.09 | 9.94 | 13.93 | 18.00 | 22.26 | 26.71 | 31.26 | 36.02 | 41.04 | 46.15 | 52.46 | 2 / 8 | | | | | |
| reaction time | 0.184 | interval | | 3.85 | 3.99 | 4.07 | 4.26 | 4.45 | 4.55 | 4.76 | 5.02 | 5.11 | 6.31 | | 11.91 | 13.26 | 14.89 | | |
| | | velocity | 7.39 | 9.09 | 8.77 | 8.60 | 8.22 | 7.87 | 7.69 | 7.35 | 6.97 | 6.85 | 6.34 | 7.62 | 8.82 | 7.92 | 7.05 | | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 146 | | | | | |

**FINAL** - 2019 Japanese National High School Championships (Okinawa, JPN) *Kota (2019) - 72nd high school championships: JAF scientific committee - biomechanics data collection*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-19 | time | 6.18 | 10.23 | 14.33 | 18.78 | 23.43 | 28.29 | 32.97 | 37.69 | 42.43 | 47.17 | 52.27 | 5 / 3 | | | | | |
| reaction time | | interval | | 4.05 | 4.10 | 4.45 | 4.65 | 4.86 | 4.68 | 4.72 | 4.74 | 4.74 | 5.10 | | 12.60 | 14.19 | 14.20 | | |
| | | velocity | 7.28 | 8.64 | 8.54 | 7.87 | 7.53 | 7.20 | 7.48 | 7.42 | 7.38 | 7.38 | 7.84 | 7.65 | 8.33 | 7.40 | 7.39 | | |
| H1 lead leg | | strides | | 13 | 13 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | | 125 | | | | | |

**Kyotake, Taiga (JPN) (2003)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2022 Japanese U20 National Championsips (Osaka, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-22 | time | 6.29 | 10.31 | 14.38 | 18.49 | 22.76 | 27.08 | 31.46 | 36.10 | 40.85 | 45.60 | 50.96 | 4 / 4 | | | | | |
| reaction time | 0.203 | interval | | 4.02 | 4.07 | 4.11 | 4.27 | 4.32 | 4.38 | 4.64 | 4.75 | 4.75 | 5.36 | **PB** | 12.20 | 12.97 | 14.14 | | |
| | | velocity | 7.15 | 8.71 | 8.60 | 8.52 | 8.20 | 8.10 | 7.99 | 7.54 | 7.37 | 7.37 | 7.46 | 7.85 | 8.61 | 8.10 | 7.43 | | |
| H1 lead leg | L | strides | 22 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 174 | | | | | |

**Lahoulou, Abdelmalik (ALG) (1992)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2023 Bislett Games (Oslo, NOR) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Jun-23 | time | 5.94 | 9.59 | 13.26 | 17.04 | 20.97 | 25.07 | 29.40 | 33.90 | 38.57 | 43.47 | 49.27 | 8 / 7 | | | | | |
| reaction time | 0.178 | interval | | 3.65 | 3.67 | 3.78 | 3.93 | 4.10 | 4.33 | 4.50 | 4.67 | 4.90 | 5.80 | | 11.10 | 12.36 | 14.07 | | |
| | | velocity | 7.58 | 9.59 | 9.54 | 9.26 | 8.91 | 8.54 | 8.08 | 7.78 | 7.49 | 7.14 | 6.90 | 8.12 | 9.46 | 8.50 | 7.46 | | |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | 14 | | | 15 | | | 103 | | | | | |

**FINAL** - 2023 FBK Games (Hengelo, NED) *Omega Timing (2023) - continental tour race analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jun-23 | time | 5.98 | 9.68 | 13.48 | 17.34 | 21.27 | 25.42 | 29.90 | 34.54 | 39.40 | 44.28 | 49.96 | 1 / 8 | | | | | |
| reaction time | 0.173 | interval | | 3.70 | 3.80 | 3.86 | 3.93 | 4.15 | 4.48 | 4.64 | 4.86 | 4.88 | 5.68 | | 11.36 | 12.56 | 14.38 | | |
| | | velocity | 7.53 | 9.46 | 9.21 | 9.07 | 8.91 | 8.43 | 7.81 | 7.54 | 7.20 | 7.17 | 7.04 | 8.01 | 9.24 | 8.36 | 7.30 | | |
| H1 lead leg | L | strides | 22 | 13 | | | | | | | 15 | 15 | 18 | 83 | | | | | |

**Semi-Final 2** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 6.03 | 9.67 | 13.43 | 17.16 | 21.07 | 22.79 | 25.17 | 29.53 | 33.97 | 38.63 | 43.47 | 48.90 | 3 / 5 | | | | |
| reaction time | 0.157 | interval | | 3.64 | 3.76 | 3.73 | 3.91 | | 4.10 | 4.36 | 4.44 | 4.66 | 4.84 | 5.43 | | 11.13 | 12.37 | 13.94 | |
| | | velocity | 7.46 | 9.62 | 9.31 | 9.38 | 8.95 | 8.78 | 8.54 | 8.03 | 7.88 | 7.51 | 7.23 | 7.37 | 8.18 | 9.43 | 8.49 | 7.53 | |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 17.2 | 162.2 | | | | |

**Heat 1** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 6.10 | 9.86 | 13.70 | 17.66 | 21.76 | 23.44 | 30.16 | 34.67 | 39.43 | 44.26 | 49.58 | 6 / 2 | | | | | |
| reaction time | 0.171 | interval | | 3.76 | 3.84 | 3.96 | 4.10 | | 8.40 | 4.51 | 4.76 | 4.83 | 5.32 | | 11.56 | 12.50 | 14.10 | | |
| | | velocity | 7.38 | 9.31 | 9.11 | 8.84 | 8.54 | 8.53 | 8.33 | 7.76 | 7.35 | 7.25 | 7.52 | 8.07 | 9.08 | 8.40 | 7.45 | | |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | | | 14 | | 15 | 17 | 120 | | | | | |

**FINAL** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Sep-19 | time | 6.02 | 9.60 | 13.23 | 16.96 | 20.84 | 24.97 | 29.36 | 33.94 | 38.72 | 43.67 | 49.46 | 8 / 8 | | | | |
| reaction time | 0.187 | interval | | 3.58 | 3.63 | 3.73 | 3.88 | 4.13 | 4.39 | 4.58 | 4.78 | 4.95 | 5.79 | | 10.94 | 12.40 | 14.31 | |
| | | velocity | 7.48 | 9.78 | 9.64 | 9.38 | 9.02 | 8.47 | 7.97 | 7.64 | 7.32 | 7.07 | 6.91 | 8.09 | 9.60 | 8.47 | 7.34 | |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18 | 165 | | | | |

**Semi-Final 2** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 6.05 | 9.67 | 13.30 | 17.03 | 20.93 | 25.05 | 29.38 | 33.90 | 38.48 | 43.11 | 48.39 | 6 / 2 | | | | |
| reaction time | 0.159 | interval | | 3.62 | 3.63 | 3.73 | 3.90 | 4.12 | 4.33 | 4.52 | 4.58 | 4.63 | 5.28 | **NR PB** | 10.98 | 12.35 | 13.73 | |
| | | velocity | 7.44 | 9.67 | 9.64 | 9.38 | 8.97 | 8.50 | 8.08 | 7.74 | 7.64 | 7.56 | 7.58 | 8.27 | 9.56 | 8.50 | 7.65 | |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 18 | 160 | | | | |

**FINAL** - 2019 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-May-19 | time | 6.06 | 9.80 | 13.80 | 17.93 | 22.06 | 23.7 | 26.40 | 31.00 | 35.66 | 40.80 | 45.86 | 51.82 | 3 / 8 | | | | |
| reaction time | 0.151 | interval | | 3.74 | 4.00 | 4.13 | 4.13 | | 4.34 | 4.60 | 4.66 | 5.14 | 5.06 | 5.96 | | 11.87 | 13.07 | 14.86 | |
| | | velocity | 7.43 | 9.36 | 8.75 | 8.47 | 8.47 | 8.44 | 8.06 | 7.61 | 7.51 | 6.81 | 6.92 | 6.71 | 7.72 | 8.85 | 8.03 | 7.07 | |
| H1 lead leg | L | strides | 22 | 13 | 14 | 14 | 14 | | 14 | 15 | | 15 | 15 | | 136 | | | | |

**FINAL** - 2018 IAAF Continental Cup (Ostrava, CZE) (TV Analysis) *Henson (2021) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-18 | time | 6.04 | 9.76 | 13.44 | 17.24 | 21.16 | | 25.32 | 29.68 | 34.24 | 38.96 | 43.76 | 49.12 | 6 / 5 | | | | |
| reaction time | 0.179 | interval | | 3.72 | 3.68 | 3.80 | 3.92 | | 4.16 | 4.36 | 4.56 | 4.72 | 4.80 | 5.36 | | 11.20 | 12.44 | 14.08 | |
| | | velocity | 7.45 | 9.41 | 9.51 | 9.21 | 8.93 | | 8.41 | 8.03 | 7.68 | 7.42 | 7.29 | 7.46 | 8.14 | 9.38 | 8.44 | 7.46 | |
| H1 lead leg | L | strides | 23 | 13 | 13 | 13 | 13 | | | 14 | 15 | 15 | 15 | 17.2 | 151.2 | | | | |

**FINAL** - 2016 Meeting Paris (Saint-Denis, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Aug-16 | time | 6.08 | 9.84 | 13.60 | 17.48 | 21.48 | | 25.60 | 29.96 | 34.44 | 39.08 | 43.84 | 48.92 | 8 / 6 | | | | |
| reaction time | 0.191 | interval | | 3.76 | 3.76 | 3.88 | 4.00 | | 4.12 | 4.36 | 4.48 | 4.64 | 4.76 | 5.08 | | 11.40 | 12.48 | 13.88 | |
| | | velocity | 7.40 | 9.31 | 9.31 | 9.02 | 8.75 | | 8.50 | 8.03 | 7.81 | 7.54 | 7.35 | 7.87 | 8.18 | 9.21 | 8.41 | 7.56 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 144 | | | | |

**Lambrughi, Mario (ITA) (1992)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 4** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 5.90 | 9.86 | 13.66 | 17.56 | 21.40 | | 25.53 | | 34.40 | 39.03 | 43.73 | 49.05 | 1 / 6 | | | | |
| reaction time | 0.129 | interval | | 3.96 | 3.80 | 3.90 | 3.84 | | 4.13 | | 8.87 | 4.63 | 4.70 | 5.32 | | 11.66 | | | |
| | | velocity | 7.63 | 8.84 | 9.21 | 8.97 | 9.11 | | 8.47 | | 7.89 | 7.56 | 7.45 | 7.52 | 8.15 | 9.01 | | | |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | | | 15 | 15 | 18.5 | 140.5 | | | | |

**FINAL** - 2020 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Sep-20 | time | 5.94 | 9.74 | | | 21.79 | 23.6 | | 30.46 | 35.03 | 39.74 | 44.54 | 49.87 | 2 / 6 | | | | |
| reaction time | 0.136 | interval | | 3.80 | | | 12.05 | | | 8.67 | 4.57 | 4.71 | 4.80 | 5.33 | | | | 14.08 | |
| | | velocity | 7.58 | 9.21 | | | 8.71 | 8.47 | | 8.07 | 7.66 | 7.43 | 7.29 | 7.50 | 8.02 | | | 7.46 | |
| H1 lead leg | R | strides | 22 | 14 | | | | | | | | 15 | 15 | 15 | 18.5 | | | | |

**FINAL** - 2018 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-May-18 | time | 5.84 | 9.80 | 13.76 | 17.88 | | | | | | | | dnf | 1 / -- | | | | |
| reaction time | 0.135 | interval | | 3.96 | 3.96 | 4.12 | | | | | | | | | | 12.04 | | | |
| | | velocity | 7.71 | 8.84 | 8.84 | 8.50 | | | | | | | | | | 8.72 | | | |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | | | | | | | | 64 | | | | | |

**Lan Jie (CHN) (2000)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**U20 Heat 3** - 2019 Chinese National Youth Games (Taiyuan, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.32 | 10.45 | 14.72 | 18.95 | 23.26 | | 27.69 | 32.30 | 37.28 | 42.45 | 47.78 | 53.70 | 7 / 4 | | | | |
| reaction time | 0.203 | interval | | 4.13 | 4.27 | 4.23 | 4.31 | | 4.43 | 4.61 | 4.98 | 5.17 | 5.33 | 5.92 | | 12.63 | 13.35 | 15.48 | |
| | | velocity | 7.12 | 8.47 | 8.20 | 8.27 | 8.12 | | 7.90 | 7.59 | 7.03 | 6.77 | 6.57 | 6.76 | 7.45 | 8.31 | 7.87 | 6.78 | |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 16 | 16 | 17 | 20.5 | 181.5 | | | | |

**Lattin, Amere (USA) (1997)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-22 | time | 5.77 | 9.43 | 13.16 | 17.07 | 21.03 | 22.71 | | | 34.10 | 38.73 | 43.43 | 48.79 | 2 / 4 | | | | |
| reaction time | 0.147 | interval | | 3.66 | 3.73 | 3.91 | 3.96 | | | | 13.07 | 4.63 | 4.70 | 5.36 | | 11.30 | | | |
| | | velocity | 7.80 | 9.56 | 9.38 | 8.95 | 8.84 | 8.81 | | | 8.03 | 7.56 | 7.45 | 7.46 | 8.20 | 9.29 | | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | | 13 | | | | | 14 | 14 | 17 | 104 | | | | |

**FINAL** - 2022 USATF National Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-22 | time | 5.87 | 9.51 | 13.28 | 17.08 | 21.05 | 22.70 | 25.12 | 29.56 | 34.06 | 38.73 | 43.37 | 48.53 | 2 / 6 | | | | |
| reaction time | | interval | | 3.64 | 3.77 | 3.80 | 3.97 | | 4.07 | 4.44 | 4.50 | 4.67 | 4.64 | 5.16 | **PB** | 11.21 | 12.48 | 13.81 | |
| | | velocity | 7.67 | 9.62 | 9.28 | 9.21 | 8.82 | 8.81 | 8.60 | 7.88 | 7.78 | 7.49 | 7.54 | 7.75 | 8.24 | 9.37 | 8.41 | 7.60 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17 | 158 | | | | |

**FINAL** - 2021 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jul-21 | time | 5.72 | 9.44 | 13.24 | 17.20 | 21.28 | 23.1 | 25.64 | | 34.64 | 39.36 | 44.20 | 49.87 | 3 / 7 | | | | |
| reaction time | 0.140 | interval | | 3.72 | 3.80 | 3.96 | 4.08 | | 4.36 | | 9.00 | 4.72 | 4.84 | 5.67 | | 11.48 | | | |
| | | velocity | 7.87 | 9.41 | 9.21 | 8.84 | 8.58 | 8.66 | 8.03 | | 7.78 | 7.42 | 7.23 | 7.05 | 8.02 | 9.15 | | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 14 | | | 15 | 15 | 17 | 133 | | | | |

**Semi-Final 1** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 5.93 | 9.71 | 13.64 | 17.66 | 21.74 | | 25.91 | 30.29 | 34.66 | 39.27 | 43.85 | 49.20 | 2 / 6 | | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.152 | interval | | 3.78 | 3.93 | 4.02 | 4.08 | 4.17 | 4.38 | 4.37 | 4.61 | 4.58 | 5.35 | | | 11.73 | 12.63 | 13.56 |
| | | velocity | 7.59 | 9.26 | 8.91 | 8.71 | 8.58 | 8.39 | 7.99 | 8.01 | 7.59 | 7.64 | 7.48 | 8.13 | | 8.95 | 8.31 | 7.74 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17 | 158 | | | | |

**FINAL** - 2019 The Match - Europe v USA (Minsk, BLR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Sep-19 | time | 5.90 | 9.63 | 13.53 | 17.46 | 21.60 | 25.90 | 30.26 | 34.76 | 39.20 | 43.93 | | 49.12 | 4 / 2 | | | |
| reaction time | 0.171 | interval | | 3.73 | 3.90 | 3.93 | 4.14 | 4.30 | 4.36 | 4.50 | 4.44 | 4.73 | 5.19 | | | 11.56 | 12.80 | 13.67 |
| | | velocity | 7.63 | 9.38 | 8.97 | 8.91 | 8.45 | 8.14 | 8.03 | 7.78 | 7.88 | 7.40 | 7.71 | 8.14 | | 9.08 | 8.20 | 7.68 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 15 | 17.2 | 127.2 | | | | |

**FINAL** - 2019 Müller Grand Prix (Birmingham, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-19 | time | 5.76 | 9.64 | 13.48 | 17.32 | 21.28 | 23.1 | 25.60 | 30.04 | 34.64 | 39.48 | 44.88 | | 51.15 | 5 / 8 | | |
| reaction time | 0.145 | interval | | 3.88 | 3.84 | 3.84 | 3.96 | | 4.32 | 4.44 | 4.60 | 4.84 | 5.40 | 6.27 | | | 11.56 | 12.72 | 14.84 |
| | | velocity | 7.81 | 9.02 | 9.11 | 9.11 | 8.84 | 8.66 | 8.10 | 7.88 | 7.61 | 7.23 | 6.48 | 6.38 | 7.82 | | 9.08 | 8.25 | 7.08 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 16 | | 145 | | | | |

**FINAL** - 2019 Pan American Games (Lima, PER) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Aug-19 | time | 5.80 | 9.57 | 13.38 | 17.25 | 21.15 | 25.36 | 29.69 | 34.06 | | | | 48.98 | 7 / 2 | | | |
| reaction time | 0.175 | interval | | 3.77 | 3.81 | 3.87 | 3.90 | 4.21 | 4.33 | 4.37 | | | | | | 11.45 | 12.44 | |
| | | velocity | 7.76 | 9.28 | 9.19 | 9.04 | 8.97 | 8.31 | 8.08 | 8.01 | | | | 8.17 | | 9.17 | 8.44 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | | 13 | 14 | 14 | | | | 100 | | | | |

**FINAL** - 2019 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Jul-19 | time | 5.88 | 9.56 | 13.32 | 17.16 | 21.12 | 22.9 | 25.28 | | 34.20 | 38.96 | 43.80 | | 49.18 | 8 / 3 | | |
| reaction time | 0.140 | interval | | 3.68 | 3.76 | 3.84 | 3.96 | | 4.16 | | 8.92 | 4.76 | 4.84 | 5.38 | | | 11.28 | |
| | | velocity | 7.65 | 9.51 | 9.31 | 9.11 | 8.84 | 8.73 | 8.41 | | 7.85 | 7.35 | 7.23 | 7.43 | 8.13 | | 9.31 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | | 15 | 15 | 17.7 | 146.7 | | | |

**FINAL** - 2019 Prefontaine Classic (Stanford, CA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-19 | time | 5.73 | 9.43 | 13.33 | 17.26 | 21.26 | 25.50 | 30.10 | 34.80 | 39.53 | 44.36 | | 50.01 | 1 / 7 | | | |
| reaction time | 0.183 | interval | | 3.70 | 3.90 | 3.93 | 4.00 | 4.24 | 4.60 | 4.70 | 4.73 | 4.83 | 5.65 | | | 11.53 | 12.84 | 14.26 |
| | | velocity | 7.85 | 9.46 | 8.97 | 8.91 | 8.75 | 8.25 | 7.61 | 7.45 | 7.40 | 7.25 | 7.08 | 8.00 | | 9.11 | 8.18 | 7.36 |
| H1 lead leg | L | strides | 21 | 13 | | 13 | 13 | 13 | 15 | 15 | | 15 | | 118 | | | | |

**FINAL** - 2019 NCAA Championships (Austin, TX) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-19 | time | 6.00 | 9.76 | 13.63 | 17.50 | 21.40 | 25.46 | | 34.20 | 38.83 | 43.56 | | 48.72 | 4 / 3 | | | |
| reaction time | 0.212 | interval | | 3.76 | 3.87 | 3.87 | 3.90 | 4.06 | | 8.74 | 4.63 | 4.73 | 5.16 | PB | | 11.50 | | |
| | | velocity | 7.50 | 9.31 | 9.04 | 9.04 | 8.97 | 8.62 | | 8.01 | 7.56 | 7.40 | 7.75 | 8.21 | | 9.13 | | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | | | 15 | 15 | 17 | 133 | | | | |

**Ledgister, Leonardo (JAM) (1999)**

**FINAL** - 2021 NCAA Championships (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-21 | time | 5.97 | 9.60 | | 17.17 | 21.10 | 25.20 | 29.50 | 34.03 | 38.80 | 43.77 | | 49.28 | 3 / 6 | | | |
| reaction time | 0.228 | interval | | 3.63 | | 7.57 | 3.93 | 4.10 | 4.30 | 4.53 | 4.77 | 4.97 | 5.51 | | | 11.20 | 12.33 | 14.27 |
| | | velocity | 7.54 | 9.64 | | 9.25 | 8.91 | 8.54 | 8.14 | 7.73 | 7.34 | 7.04 | 7.26 | 8.12 | | 9.38 | 8.52 | 7.36 |
| H1 lead leg | R | strides | 22 | 14 | | | 14 | 14 | 15 | 15 | 16 | 16 | 18.2 | 144.2 | | | | |

**Lee, David (USA) (1959)**

**FINAL** - 1982 TAC Naitonal Championships (Knoxville, TN) *Mann (1987) - the elite athlete program biomechanical analysis of the long hurdles: tac championship meet*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Jun-82 | time | 6.36 | 10.18 | 14.08 | 17.94 | 21.80 | 25.82 | 30.00 | 34.44 | 38.98 | 43.80 | | 48.96 | / 3 | | | |
| reaction time | | interval | | 3.82 | 3.90 | 3.86 | 3.86 | 4.02 | 4.18 | 4.44 | 4.54 | 4.82 | 5.16 | | | 11.58 | 12.06 | 13.80 |
| | | velocity | 7.08 | 9.16 | 8.97 | 9.07 | 9.07 | 8.71 | 8.37 | 7.88 | 7.71 | 7.26 | 7.75 | 8.17 | | 9.07 | 8.71 | 7.61 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Lee Doo-Yeon (KOR) (1975)**

**Heat 4** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.12 | 10.04 | 14.04 | 18.16 | 22.32 | 26.60 | 31.40 | 36.20 | | | 52.61 | 5 / 8 | | | |
| reaction time | 0.192 | interval | | 3.92 | 4.00 | 4.12 | 4.16 | 4.28 | 4.80 | 4.80 | | | | | 12.04 | 13.24 | |
| | | velocity | 7.35 | 8.93 | 8.75 | 8.50 | 8.41 | 8.18 | 7.29 | 7.29 | | | 7.60 | | 8.72 | 7.93 | |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | | | 116 | | | | |

**Leger, Stéphane (FRA) (1968)**

**FINAL** - 1987 European Junior Championships (Birmingham, GBR) *Veney - split times from PJ*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-87 | time | 6.26 | 10.18 | 14.30 | 18.33 | 22.49 | 26.72 | 31.34 | 35.88 | 40.72 | 46.02 | | 51.37 | / 3 | | | |
| reaction time | | interval | | 3.92 | 4.12 | 4.03 | 4.16 | 4.23 | 4.62 | 4.54 | 4.84 | 5.30 | 5.35 | | | 12.07 | 13.01 | 14.68 |
| | | velocity | 7.19 | 8.93 | 8.50 | 8.68 | 8.41 | 8.27 | 7.58 | 7.71 | 7.23 | 6.60 | 7.48 | 7.79 | | 8.70 | 8.07 | 7.15 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 16 | | 136 | | | | |

**Leng Ziheng (CHN) (2000)**

**U20 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) *CAA Hurdle Development (2019)*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.40 | 10.64 | 15.01 | 19.34 | 23.80 | 28.48 | 33.28 | 38.18 | 43.58 | 49.16 | | 55.34 | 3 / 8 | | | |
| reaction time | 0.195 | interval | | 4.24 | 4.37 | 4.33 | 4.46 | 4.68 | 4.80 | 4.90 | 5.40 | 5.58 | 6.18 | | | 12.94 | 13.94 | 15.88 |
| | | velocity | 7.03 | 8.25 | 8.01 | 8.08 | 7.85 | 7.48 | 7.29 | 7.14 | 6.48 | 6.27 | 6.47 | 7.23 | | 8.11 | 7.53 | 6.61 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 17 | 17 | 19 | 179 | | | | |

**U20 Heat 3** - 2019 Chinese National Youth Games (Taiyuan, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.35 | 10.55 | 14.83 | 19.20 | 23.68 | 28.33 | 33.10 | 37.88 | 43.02 | 48.03 | | 53.51 | 3 / 3 | | | |
| reaction time | 0.202 | interval | | 4.20 | 4.28 | 4.37 | 4.48 | 4.65 | 4.77 | 4.78 | 5.14 | 5.01 | 5.48 | PB | | 12.85 | 13.90 | 14.93 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.09 | 8.33 | 8.18 | 8.01 | 7.81 | | 7.53 | 7.34 | 7.32 | 6.81 | 6.99 | 7.30 | 7.48 | | 8.17 | 7.55 | 7.03 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 16 | 19.5 | 177.5 | | | | |

**Levingston, Isaiah (USA) (1998)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 26-Jun-21 | time | 5.80 | 9.61 | 13.51 | 17.65 | 21.95 | | 26.29 | 30.66 | | 39.40 | 43.94 | | 49.25 | 9 / 6 | | | |
| reaction time | 0.231 | interval | | 3.81 | 3.90 | 4.14 | 4.30 | | 4.34 | 4.37 | | 8.74 | 4.54 | 5.31 | | | 11.85 | 13.01 | 13.28 |
| | | velocity | 7.76 | 9.19 | 8.97 | 8.45 | 8.14 | | 8.06 | 8.01 | | 8.01 | 7.71 | 7.53 | 8.12 | | 8.86 | 8.07 | 7.91 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | | 13 | | 104 | | | | |
| **Semi-Final 1** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 25-Jun-21 | time | 6.13 | 10.00 | 13.90 | 18.00 | 22.20 | | 26.47 | 30.77 | 35.13 | 39.60 | 44.10 | | 49.34 | 8 / 3 | | | |
| reaction time | 0.247 | interval | | 3.87 | 3.90 | 4.10 | 4.20 | | 4.27 | 4.30 | 4.36 | 4.47 | 4.50 | 5.24 | | | 11.87 | 12.77 | 13.33 |
| | | velocity | 7.34 | 9.04 | 8.97 | 8.54 | 8.33 | | 8.20 | 8.14 | 8.03 | 7.83 | 7.78 | 7.63 | 8.11 | | 8.85 | 8.22 | 7.88 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 31 | 16.2 | 172.2 | | | | |
| **Heat 1** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 24-Jun-21 | time | 5.97 | 9.84 | 13.81 | 17.85 | 21.99 | | 26.20 | 30.46 | 34.80 | 39.20 | 43.78 | | 49.06 | 8 / 2 | | | |
| reaction time | 0.192 | interval | | 3.87 | 3.97 | 4.04 | 4.14 | | 4.21 | 4.26 | 4.34 | 4.40 | 4.58 | 5.28 | | | 11.88 | 12.61 | 13.32 |
| | | velocity | 7.54 | 9.04 | 8.82 | 8.66 | 8.45 | | 8.31 | 8.22 | 8.06 | 7.95 | 7.64 | 7.58 | 8.15 | | 8.84 | 8.33 | 7.88 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16 | 133 | | | | |
| **FINAL** - 2021 NCAA Championships (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 11-Jun-21 | time | 5.97 | 9.77 | | 17.75 | 21.80 | | | 30.16 | 34.57 | 39.07 | 43.57 | | 48.49 | 9 / 2 | | | |
| reaction time | 0.233 | interval | | 3.80 | | 7.98 | 4.05 | | | 8.36 | 4.41 | 4.50 | 4.50 | 4.92 | PB | | 11.78 | 12.41 | 13.41 |
| | | velocity | 7.54 | 9.21 | | 8.77 | 8.64 | | | 8.37 | 7.94 | 7.78 | 7.78 | 8.13 | 8.25 | | 8.91 | 8.46 | 7.83 |
| H1 lead leg | L | strides | 21 | 13 | | | 13 | | | | 13 | 14 | 14 | 16.5 | 104.5 | | | | |

**Li Guancheng (CHN) (2002)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 1** - 2021 Chinese National Championships (Chongqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 26-Jun-21 | time | 6.22 | 10.43 | 14.81 | 19.28 | 23.96 | | 28.56 | 33.68 | 39.41 | | | | 58.41 | 2 / 6 | | | |
| reaction time | 0.211 | interval | | 4.21 | 4.38 | 4.47 | 4.68 | | 4.60 | 5.12 | 5.73 | | | | | | 13.06 | 14.40 | |
| | | velocity | 7.23 | 8.31 | 7.99 | 7.83 | 7.48 | | 7.62 | 6.83 | 6.11 | | | | 6.85 | | 8.04 | 7.29 | |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 16 | | | | | 107 | | | | |
| **FINAL** - 2021 National Grand Prix (Chengdu, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 02-Apr-21 | time | 6.21 | 10.40 | 14.68 | 19.03 | 23.46 | | 27.99 | 32.59 | 37.32 | 42.35 | 47.83 | | 54.09 | 4 / 6 | | | |
| reaction time | 0.204 | interval | | 4.19 | 4.28 | 4.35 | 4.43 | | 4.53 | 4.60 | 4.73 | 5.03 | 5.48 | 6.26 | | | 12.82 | 13.56 | 15.24 |
| | | velocity | 7.25 | 8.35 | 8.18 | 8.05 | 7.90 | | 7.73 | 7.61 | 7.40 | 6.96 | 6.39 | 6.39 | 7.40 | | 8.19 | 7.74 | 6.89 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 13 | 13 | | 14 | 14 | 14 | 14 | 15 | 18 | 164 | | | | |
| **Heat 1** - 2021 National Grand Prix (Chengdu, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 01-Apr-21 | time | 6.12 | 10.32 | 14.64 | 19.04 | 23.48 | | 27.92 | 32.40 | 36.98 | 41.82 | 46.88 | | 52.61 | 5 / 2 | | | |
| reaction time | 0.212 | interval | | 4.20 | 4.32 | 4.40 | 4.44 | | 4.44 | 4.48 | 4.58 | 4.84 | 5.06 | 5.73 | PB | | 12.92 | 13.36 | 14.48 |
| | | velocity | 7.35 | 8.33 | 8.10 | 7.95 | 7.88 | | 7.88 | 7.81 | 7.64 | 7.23 | 6.92 | 6.98 | 7.60 | | 8.13 | 7.86 | 7.25 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 14 | 15 | 15 | 18 | 167 | | | | |

**Li Guangzhen (CHN) (1995)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Chinese National Championships (Chongqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 26-Jun-21 | time | 6.40 | 10.51 | 14.65 | 18.83 | 23.24 | | 27.86 | 32.51 | 37.27 | 42.01 | 46.66 | | 51.72 | 4 / ~~4~~ 3 | | | |
| reaction time | 0.218 | interval | | 4.11 | 4.14 | 4.18 | 4.41 | | 4.62 | 4.65 | 4.76 | 4.74 | 4.65 | 5.06 | | | 12.43 | 13.68 | 14.15 |
| | | velocity | 7.03 | 8.52 | 8.45 | 8.37 | 7.94 | | 7.58 | 7.53 | 7.35 | 7.38 | 7.53 | 7.91 | 7.73 | | 8.45 | 7.68 | 7.42 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 17.2 | 169.2 | | | | |
| **Heat 4** - 2021 Chinese National Championships (Chongqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 26-Jun-21 | time | 6.16 | 10.11 | 14.26 | 18.57 | 23.07 | | 27.68 | 32.25 | 36.89 | 41.57 | 46.16 | | 51.33 | 5 / 1 | | | |
| reaction time | 0.183 | interval | | 3.95 | 4.15 | 4.31 | 4.50 | | 4.61 | 4.57 | 4.64 | 4.68 | 4.59 | 5.17 | | | 12.41 | 13.68 | 13.91 |
| | | velocity | 7.31 | 8.86 | 8.43 | 8.12 | 7.78 | | 7.59 | 7.66 | 7.54 | 7.48 | 7.63 | 7.74 | 7.79 | | 8.46 | 7.68 | 7.55 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 14 | 15 | 15 | 17.2 | 169.2 | | | | |
| **FINAL** - 2020 Chinese Olympic Trials (Shaoxing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 13-Jun-21 | time | 6.19 | 10.16 | 14.18 | 18.28 | 22.52 | | 26.83 | 31.35 | 36.04 | 40.67 | 45.33 | | 50.58 | 3 / 2 | | | |
| reaction time | 0.195 | interval | | 3.97 | 4.02 | 4.10 | 4.24 | | 4.31 | 4.52 | 4.69 | 4.63 | 4.66 | 5.25 | PB | | 12.09 | 13.07 | 13.98 |
| | | velocity | 7.27 | 8.82 | 8.71 | 8.54 | 8.25 | | 8.12 | 7.74 | 7.46 | 7.56 | 7.51 | 7.62 | 7.91 | | 8.68 | 8.03 | 7.51 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 17.7 | 170.7 | | | | |
| **FINAL** - 2021 Philippe Cup Athletics Invitational (Wuhan, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 20-May-21 | time | 6.47 | 10.49 | 14.48 | 18.55 | 22.76 | | 27.19 | 31.75 | 36.37 | 41.02 | 45.86 | | 51.17 | 7 / 1 | | | |
| reaction time | 0.210 | interval | | 4.02 | 3.99 | 4.07 | 4.21 | | 4.43 | 4.56 | 4.62 | 4.65 | 4.84 | 5.31 | | | 12.08 | 13.20 | 14.11 |
| | | velocity | 6.96 | 8.71 | 8.77 | 8.60 | 8.31 | | 7.90 | 7.68 | 7.58 | 7.53 | 7.23 | 7.53 | 7.82 | | 8.69 | 7.95 | 7.44 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |
| **FINAL** - 2019 Chinese National Grand Prix Final (Daqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 23-Aug-19 | time | 6.74 | 10.51 | 14.48 | 18.67 | 22.89 | | 27.21 | 31.70 | 36.37 | 41.02 | 45.75 | | 51.02 | 6 / 2 | | | |
| reaction time | 0.213 | interval | | 3.77 | 3.97 | 4.19 | 4.22 | | 4.32 | 4.49 | 4.67 | 4.65 | 4.73 | 5.27 | | | 11.93 | 13.03 | 14.05 |
| | | velocity | 6.68 | 9.28 | 8.82 | 8.35 | 8.29 | | 8.10 | 7.80 | 7.49 | 7.53 | 7.40 | 7.59 | 7.84 | | 8.80 | 8.06 | 7.47 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

**Heat 1** - 2019 Chinese National Grand Prix Final (Daqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Aug-19 | time | 6.66 | 10.90 | 15.12 | 19.50 | 23.95 | 28.45 | 32.96 | 37.67 | 42.36 | 47.05 | | 52.20 | 9 / 1 | | | | |
| reaction time | 0.258 | interval | | 4.24 | 4.22 | 4.38 | 4.45 | 4.50 | 4.51 | 4.71 | 4.69 | 4.69 | 5.15 | | | 12.84 | 13.46 | 14.09 | |
| | | velocity | 6.76 | 8.25 | 8.29 | 7.99 | 7.87 | 7.78 | 7.76 | 7.43 | 7.46 | 7.46 | 7.77 | 7.66 | | 8.18 | 7.80 | 7.45 | |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | | |

**FINAL** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.14 | 10.17 | 14.08 | 18.17 | 22.59 | 27.03 | 31.57 | 36.19 | 40.81 | 45.58 | | 50.92 | 4 / 3 | | | | |
| reaction time | 0.174 | interval | | 4.03 | 3.91 | 4.09 | 4.42 | 4.44 | 4.54 | 4.62 | 4.62 | 4.77 | 5.34 | PB | | 12.03 | 13.40 | 14.01 | |
| | | velocity | 7.33 | 8.68 | 8.95 | 8.56 | 7.92 | 7.88 | 7.71 | 7.58 | 7.58 | 7.34 | 7.49 | 7.86 | | 8.73 | 7.84 | 7.49 | |
| H1 lead leg | L | strides | 22 | 14 | 14 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | 18 | 169 | | | | | |

**Heat 1** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.40 | 10.63 | 14.88 | 19.12 | 23.40 | 27.75 | 32.13 | 36.64 | 41.60 | 46.52 | | 51.88 | 6 / 1 | | | | |
| reaction time | 0.186 | interval | | 4.23 | 4.25 | 4.24 | 4.28 | 4.35 | 4.38 | 4.51 | 4.96 | 4.92 | 5.36 | PB | | 12.72 | 13.01 | 14.39 | |
| | | velocity | 7.03 | 8.27 | 8.24 | 8.25 | 8.18 | 8.05 | 7.99 | 7.76 | 7.06 | 7.11 | 7.46 | 7.71 | | 8.25 | 8.07 | 7.30 | |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18 | 171 | | | | | |

**Heat 2** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-19 | time | 6.45 | 10.51 | 14.59 | 18.73 | 22.86 | 27.15 | 31.53 | 36.02 | 40.62 | 45.36 | | 50.83 | 3 / ~~1~~ | | | | |
| reaction time | 0.276 | interval | | 4.06 | 4.08 | 4.14 | 4.13 | 4.29 | 4.38 | 4.49 | 4.60 | 4.74 | 5.47 | DQ | | 12.28 | 12.80 | 13.83 | |
| | | velocity | 6.98 | 8.62 | 8.58 | 8.45 | 8.47 | 8.16 | 7.99 | 7.80 | 7.61 | 7.38 | 7.31 | 7.87 | | 8.55 | 8.20 | 7.59 | |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 17.5 | 168.5 | | | | | |

## Li Zhilong (CHN) (1988)

**FINAL** - 2013 Chinese National Grand Prix Final (Shenyang, CHN) *Li (2008) - research on training characteristics of Li Zhilong's of Chinese men's 400m hurdles*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jun-13 | time | 6.16 | 10.08 | 14.08 | 18.12 | 22.28 | | 26.56 | 30.92 | 35.36 | 39.96 | 44.72 | | 49.96 | / 1 | | | |
| reaction time | | interval | | 3.92 | 4.00 | 4.04 | 4.16 | | 4.28 | 4.36 | 4.44 | 4.60 | 4.76 | 5.24 | | | 11.96 | 12.80 | 13.80 |
| | | velocity | 7.31 | 8.93 | 8.75 | 8.66 | 8.41 | | 8.18 | 8.03 | 7.88 | 7.61 | 7.35 | 7.63 | 8.01 | | 8.78 | 8.20 | 7.61 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2013 Chinese National Championships (Suzhou, CHN) *Li (2008) - research on training characteristics of Li Zhilong's of Chinese men's 400m hurdles*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-May-13 | time | 6.08 | 9.96 | 13.96 | 18.00 | 22.16 | 26.48 | 30.92 | 35.52 | 40.32 | 45.56 | | 51.41 | / 3 | | | | |
| reaction time | | interval | | 3.88 | 4.00 | 4.04 | 4.16 | 4.32 | 4.44 | 4.60 | 4.80 | 5.24 | 5.85 | | | 11.92 | 12.92 | 14.64 | |
| | | velocity | 7.40 | 9.02 | 8.75 | 8.66 | 8.41 | 8.10 | 7.88 | 7.61 | 7.29 | 6.68 | 6.84 | 7.78 | | 8.81 | 8.13 | 7.17 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2013 Chinese National Grand Prix (Zhaoqing, CHN) *Li (2008) - research on training characteristics of Li Zhilong's of Chinese men's 400m hurdles*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Apr-13 | time | 6.24 | 10.16 | 14.20 | 18.28 | 22.44 | 26.72 | 31.16 | 35.76 | 40.48 | 45.44 | | 50.95 | / 2 | | | | |
| reaction time | | interval | | 3.92 | 4.04 | 4.08 | 4.16 | 4.28 | 4.44 | 4.60 | 4.72 | 4.96 | 5.51 | | | 12.04 | 12.88 | 14.28 | |
| | | velocity | 7.21 | 8.93 | 8.66 | 8.58 | 8.41 | 8.18 | 7.88 | 7.61 | 7.42 | 7.06 | 7.26 | 7.85 | | 8.72 | 8.15 | 7.35 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2012 Chinese National Championships (Kunshan, CHN) *Li (2008) - research on training characteristics of Li Zhilong's of Chinese men's 400m hurdles*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Sep-12 | time | 6.04 | 9.88 | 13.84 | 17.88 | 22.00 | 26.28 | 30.72 | 35.24 | 39.92 | 44.76 | | 50.25 | / 1 | | | | |
| reaction time | | interval | | 3.84 | 3.96 | 4.04 | 4.12 | 4.28 | 4.44 | 4.52 | 4.68 | 4.84 | 5.49 | | | 11.84 | 12.84 | 14.04 | |
| | | velocity | 7.45 | 9.11 | 8.84 | 8.66 | 8.50 | 8.18 | 7.88 | 7.74 | 7.48 | 7.23 | 7.29 | 7.96 | | 8.87 | 8.18 | 7.48 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2011 Chinese National Championships (Hefei, CHN) *Li (2008) - research on training characteristics of Li Zhilong's of Chinese men's 400m hurdles*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Sep-11 | time | 6.08 | 9.92 | 13.92 | 17.92 | 22.04 | 26.36 | 30.68 | 35.08 | 39.60 | 44.20 | | 49.47 | / 1 | | | | |
| reaction time | | interval | | 3.84 | 4.00 | 4.00 | 4.12 | 4.32 | 4.32 | 4.40 | 4.52 | 4.60 | 5.27 | PB | | 11.84 | 12.76 | 13.52 | |
| | | velocity | 7.40 | 9.11 | 8.75 | 8.75 | 8.50 | 8.10 | 8.10 | 7.95 | 7.74 | 7.61 | 7.59 | 8.09 | | 8.87 | 8.23 | 7.77 | |
| H1 lead leg | | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18 | 175 | | | | | |

**FINAL** - 2011 Chinese National Grand Prix (Fuzhou, CHN) *Li (2008) - research on training characteristics of Li Zhilong's of Chinese men's 400m hurdles*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-11 | time | 6.08 | 9.88 | 13.84 | 17.80 | 21.88 | 26.16 | 30.48 | 35.04 | 39.68 | 44.48 | | 49.58 | / 2 | | | | |
| reaction time | | interval | | 3.80 | 3.96 | 3.96 | 4.08 | 4.28 | 4.32 | 4.56 | 4.64 | 4.80 | 5.10 | PB | | 11.72 | 12.68 | 14.00 | |
| | | velocity | 7.40 | 9.21 | 8.84 | 8.84 | 8.58 | 8.18 | 8.10 | 7.68 | 7.54 | 7.29 | 7.84 | 8.07 | | 8.96 | 8.28 | 7.50 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

## Liang Chao (CHN) (2000)

**Heat 1** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.22 | 10.34 | 14.54 | 18.92 | 23.38 | | 28.06 | 32.85 | 37.74 | 42.81 | 48.01 | | 53.86 | 8 / 5 | | | |
| reaction time | 0.168 | interval | | 4.12 | 4.20 | 4.38 | 4.46 | | 4.68 | 4.79 | 4.89 | 5.07 | 5.20 | 5.85 | | | 12.70 | 13.93 | 15.16 |
| | | velocity | 7.23 | 8.50 | 8.33 | 7.99 | 7.85 | | 7.48 | 7.31 | 7.16 | 6.90 | 6.73 | 6.84 | 7.43 | | 8.27 | 7.54 | 6.93 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 19 | 171 | | | | |

## Lin Yingxian (CHN) (2002)

**U18 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) (84cm) *CAA Hurdle Development (2019)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.50 | 10.65 | 14.90 | 19.16 | 23.62 | | 28.26 | 33.02 | 37.68 | 42.68 | 47.62 | | 53.18 | 5 / 3 | | | |
| reaction time | 0.211 | interval | | 4.15 | 4.25 | 4.26 | 4.46 | | 4.64 | 4.76 | 4.66 | 5.00 | 4.94 | 5.56 | | | 12.66 | 13.86 | 14.60 |
| | | velocity | 6.92 | 8.43 | 8.24 | 8.22 | 7.85 | | 7.54 | 7.35 | 7.51 | 7.00 | 7.09 | 7.19 | 7.52 | | 8.29 | 7.58 | 7.19 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 19.5 | 177.5 | | | | |

## Lin Zhikai (CHN) (2001)

**Heat 2** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.23 | 10.23 | 14.27 | 18.43 | 22.70 | | 27.11 | 31.63 | 36.29 | 41.09 | 46.05 | | 51.70 | 6 / 2 | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.187 | interval | | 4.00 | 4.04 | 4.16 | 4.27 | 4.41 | 4.52 | 4.66 | 4.80 | 4.96 | 5.65 | | | 12.20 | 13.20 | 14.42 |
| | | velocity | 7.22 | 8.75 | 8.66 | 8.41 | 8.20 | 7.94 | 7.74 | 7.51 | 7.29 | 7.06 | 7.08 | 7.74 | | 8.61 | 7.95 | 7.28 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18.2 | 175.2 | | | | |

**FINAL** - 2020 Chinese Olympic Trials (Shaoxing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Jun-21 | time | 6.19 | 10.19 | 14.30 | 18.45 | 22.74 | 27.16 | | 36.39 | 41.24 | 46.21 | | 52.13 | 2 / 7 | | | |
| reaction time | 0.168 | interval | | 4.00 | 4.11 | 4.15 | 4.29 | 4.42 | | 9.23 | 4.85 | 4.97 | 5.92 | | | 12.26 | | |
| | | velocity | 7.27 | 8.75 | 8.52 | 8.43 | 8.16 | 7.92 | | 7.58 | 7.22 | 7.04 | 6.76 | 7.67 | | 8.56 | | |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18.5 | 175.5 | | | | |

**FINAL** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.30 | 10.28 | 14.35 | 18.50 | 22.79 | 27.17 | 31.72 | 36.40 | 41.19 | 46.13 | | 51.81 | 3 / 3 | | | |
| reaction time | 0.201 | interval | | 3.98 | 4.07 | 4.15 | 4.29 | 4.38 | 4.55 | 4.68 | 4.79 | 4.94 | 5.68 | | | 12.20 | 13.22 | 14.41 |
| | | velocity | 7.14 | 8.79 | 8.60 | 8.43 | 8.16 | 7.99 | 7.69 | 7.48 | 7.31 | 7.09 | 7.04 | 7.72 | | 8.61 | 7.94 | 7.29 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18.5 | 175.5 | | | | |

**Heat 3** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.30 | 10.34 | 14.46 | 18.66 | 23.00 | 27.42 | 31.98 | 36.62 | 41.42 | 46.42 | | 52.54 | 7 / 2 | | | |
| reaction time | 0.203 | interval | | 4.04 | 4.12 | 4.20 | 4.34 | 4.42 | 4.56 | 4.64 | 4.80 | 5.00 | 6.12 | | | 12.36 | 13.32 | 14.44 |
| | | velocity | 7.14 | 8.66 | 8.50 | 8.33 | 8.06 | 7.92 | 7.68 | 7.54 | 7.29 | 7.00 | 6.54 | 7.61 | | 8.50 | 7.88 | 7.27 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 176 | | | | |

**FINAL** - 2020 Chinese National Championships (Shaoxing, CHN) *CAA Hurdle Development (2020)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Sep-20 | time | 6.08 | 10.21 | 14.29 | 18.42 | 22.75 | 27.21 | 31.75 | 36.42 | 41.08 | 45.87 | | 51.33 | 3 / 4 | | | |
| reaction time | | interval | | 4.13 | 4.08 | 4.13 | 4.33 | 4.46 | 4.54 | 4.67 | 4.66 | 4.79 | 5.46 | | | 12.34 | 13.33 | 14.12 |
| | | velocity | 7.40 | 8.47 | 8.58 | 8.47 | 8.08 | 7.85 | 7.71 | 7.49 | 7.51 | 7.31 | 7.33 | 7.79 | | 8.51 | 7.88 | 7.44 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18 | 175 | | | | |

**U20 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.44 | 10.58 | 14.79 | 19.02 | 23.38 | 27.90 | 32.50 | 37.22 | 41.96 | 46.74 | | 51.95 | 2 / 5 | | | |
| reaction time | 0.203 | interval | | 4.14 | 4.21 | 4.23 | 4.36 | 4.52 | 4.60 | 4.72 | 4.74 | 4.78 | 5.21 | PB | | 12.58 | 13.48 | 14.24 |
| | | velocity | 6.99 | 8.45 | 8.31 | 8.27 | 8.03 | 7.74 | 7.61 | 7.42 | 7.38 | 7.32 | 7.68 | 7.70 | | 8.35 | 7.79 | 7.37 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18 | 175 | | | | |

**U20 Heat 1** - 2019 Chinese National Youth Games (Taiyuan, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.65 | 10.98 | 15.24 | 19.58 | 24.00 | 28.56 | 33.14 | 37.84 | 42.62 | 47.56 | | 53.12 | 7 / 3 | | | |
| reaction time | 0.197 | interval | | 4.33 | 4.26 | 4.34 | 4.42 | 4.56 | 4.58 | 4.70 | 4.78 | 4.94 | 5.56 | | | 12.93 | 13.56 | 14.42 |
| | | velocity | 6.77 | 8.08 | 8.22 | 8.06 | 7.92 | 7.68 | 7.64 | 7.45 | 7.32 | 7.09 | 7.19 | 7.53 | | 8.12 | 7.74 | 7.28 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 17.8 | 175.8 | | | | |

**Lituyev, Yury (URS) (1925)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1953 Hungary vs. USSR (Budapest, HUN) | | | | | | | | | | | | | | | *Quercentani (2000). Athletics: A history of modern track and field athletics (1860-2000)* | | | |
| date | 20-Sep-53 | time | | | | | 23.5 | | | | | | | 50.4 | / 1 | | | |
| reaction time | | interval | | | | | | | | | | 26.9 | | WR | | | | |
| | | velocity | | | | | 8.51 | | | | | 7.43 | | 7.94 | | | | |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | | 121 | | | | |

**Liu Shuang (CHN) (2000)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **U20 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.20 | 10.08 | 14.02 | 18.10 | 22.32 | 26.66 | 31.16 | 35.88 | 40.76 | 46.04 | | 51.84 | 9 / 4 | | | |
| reaction time | 0.173 | interval | | 3.88 | 3.94 | 4.08 | 4.22 | 4.34 | 4.50 | 4.72 | 4.88 | 5.28 | 5.80 | PB | | 11.90 | 13.06 | 14.88 |
| | | velocity | 7.26 | 9.02 | 8.88 | 8.58 | 8.29 | 8.06 | 7.78 | 7.42 | 7.17 | 6.63 | 6.90 | 7.72 | | 8.82 | 8.04 | 7.06 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 17 | 19.5 | 179.5 | | | | |

**U20 Heat 3** - 2019 Chinese National Youth Games (Taiyuan, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.41 | 10.41 | 14.46 | 18.64 | 22.96 | 27.41 | 32.05 | 36.78 | 41.73 | 47.06 | | 53.11 | 5 / 2 | | | |
| reaction time | 0.203 | interval | | 4.00 | 4.05 | 4.18 | 4.32 | 4.45 | 4.64 | 4.73 | 4.95 | 5.33 | 6.05 | PB | | 12.23 | 13.41 | 15.01 |
| | | velocity | 7.02 | 8.75 | 8.64 | 8.37 | 8.10 | 7.87 | 7.54 | 7.40 | 7.07 | 6.57 | 6.61 | 7.53 | | 8.59 | 7.83 | 7.00 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 17 | 19.5 | 179.5 | | | | |

**Liu Yangyang (CHN) (1995)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 3** - 2021 Chinese National Championships (Chongqing, CHN) | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 26-Jun-21 | time | 6.42 | 10.59 | 14.85 | 19.22 | 23.81 | 28.40 | 33.17 | 37.82 | 42.63 | 47.50 | | 52.90 | 3 / 6 | | | |
| reaction time | 0.222 | interval | | 4.17 | 4.26 | 4.37 | 4.59 | 4.59 | 4.77 | 4.65 | 4.81 | 4.87 | 5.40 | | | 12.80 | 13.95 | 14.33 |
| | | velocity | 7.01 | 8.39 | 8.22 | 8.01 | 7.63 | 7.63 | 7.34 | 7.53 | 7.28 | 7.19 | 7.41 | 7.56 | | 8.20 | 7.53 | 7.33 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 176 | | | | |

**Heat 1** - 2019 Chinese National Grand Prix Final (Daqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Aug-19 | time | 6.45 | 10.59 | 14.85 | 19.24 | 23.67 | 28.22 | 32.87 | 37.64 | 42.44 | 47.25 | | 52.44 | 5 / 4 | | | |
| reaction time | 0.200 | interval | | 4.14 | 4.26 | 4.39 | 4.43 | 4.55 | 4.65 | 4.77 | 4.80 | 4.81 | 5.19 | | | 12.79 | 13.63 | 14.38 |
| | | velocity | 6.98 | 8.45 | 8.22 | 7.97 | 7.90 | 7.69 | 7.53 | 7.34 | 7.29 | 7.28 | 7.71 | 7.63 | | 8.21 | 7.70 | 7.30 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18.5 | 175.5 | | | | |

**FINAL** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.26 | 10.30 | 14.46 | 18.64 | 22.97 | 27.36 | 31.80 | 36.20 | 40.64 | 45.16 | | 50.32 | 7 / 1 | | | |
| reaction time | 0.177 | interval | | 4.04 | 4.16 | 4.18 | 4.33 | 4.39 | 4.44 | 4.40 | 4.44 | 4.52 | 5.16 | PB | | 12.38 | 13.16 | 13.36 |
| | | velocity | 7.19 | 8.66 | 8.41 | 8.37 | 8.08 | 7.97 | 7.88 | 7.95 | 7.88 | 7.74 | 7.75 | 7.95 | | 8.48 | 7.98 | 7.86 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18.5 | 175.5 | | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

**Heat 1** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.66 | 10.90 | 15.28 | 19.68 | 24.20 | 28.90 | 33.58 | 38.32 | 43.10 | 48.08 | | 54.44 | 8 / 3 | | | |
| reaction time | 0.333 | interval | | 4.24 | 4.38 | 4.40 | 4.52 | 4.70 | 4.68 | 4.74 | 4.78 | 4.98 | 6.36 | | | 13.02 | 13.90 | 14.50 |
| | | velocity | 6.76 | 8.25 | 7.99 | 7.95 | 7.74 | 7.45 | 7.48 | 7.38 | 7.32 | 7.03 | 6.29 | 7.35 | | 8.06 | 7.55 | 7.24 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18.5 | 175.5 | | | | |

**FINAL** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-19 | time | 6.45 | 10.56 | 14.80 | 19.22 | 23.70 | 28.28 | 32.83 | 37.46 | 42.06 | 46.70 | | 52.00 | 8 / ~~8~~ 7 | | | |
| reaction time | 0.313 | interval | | 4.11 | 4.24 | 4.42 | 4.48 | 4.58 | 4.55 | 4.63 | 4.60 | 4.64 | 5.30 | | | 12.77 | 13.61 | 13.87 |
| | | velocity | 6.98 | 8.52 | 8.25 | 7.92 | 7.81 | 7.64 | 7.69 | 7.56 | 7.61 | 7.54 | 7.55 | 7.69 | | 8.22 | 7.71 | 7.57 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 17.8 | 174.8 | | | | |

**Heat 2** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-19 | time | 6.36 | 10.39 | 14.56 | 18.81 | 23.17 | 27.58 | 32.14 | 36.77 | 41.46 | 46.13 | | 51.32 | 2 / ~~4~~ 3 | | | |
| reaction time | 0.216 | interval | | 4.03 | 4.17 | 4.25 | 4.36 | 4.41 | 4.56 | 4.63 | 4.69 | 4.67 | 5.19 | PB | | 12.45 | 13.33 | 13.99 |
| | | velocity | 7.08 | 8.68 | 8.39 | 8.24 | 8.03 | 7.94 | 7.68 | 7.56 | 7.46 | 7.49 | 7.71 | 7.79 | | 8.43 | 7.88 | 7.51 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18.5 | 175.5 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 2 (Huangshi, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Apr-19 | time | 6.50 | 10.68 | 15.10 | 19.58 | 24.10 | 28.70 | 33.36 | 38.06 | 42.76 | 47.46 | | 52.58 | 4 / 1 | | | |
| reaction time | 0.204 | interval | | 4.18 | 4.42 | 4.48 | 4.52 | 4.60 | 4.66 | 4.70 | 4.70 | 4.70 | 5.12 | | | 13.08 | 13.78 | 14.10 |
| | | velocity | 6.92 | 8.37 | 7.92 | 7.81 | 7.74 | 7.61 | 7.51 | 7.45 | 7.45 | 7.45 | 7.81 | 7.61 | | 8.03 | 7.62 | 7.45 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19.2 | 175.2 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 1 (Zhaoqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Apr-19 | time | 6.52 | 10.51 | 15.15 | 19.59 | 24.06 | 28.71 | 33.41 | 38.02 | 42.62 | 47.26 | | 52.30 | 8 / 5 | | | |
| reaction time | 0.207 | interval | | 3.99 | 4.64 | 4.44 | 4.47 | 4.65 | 4.70 | 4.61 | 4.60 | 4.64 | 5.04 | | | 13.07 | 13.82 | 13.85 |
| | | velocity | 6.90 | 8.77 | 7.54 | 7.88 | 7.83 | 7.53 | 7.45 | 7.59 | 7.61 | 7.54 | 7.94 | 7.65 | | 8.03 | 7.60 | 7.58 |
| H1 lead leg | L | strides | 22 | 15 | 16 | 16 | 16 | 15 | 15 | 15 | 15 | 15 | 18 | 178 | | | | |

**Liu Yunlang (CHN) (2002)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**U18 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) (84cm) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.34 | 10.48 | 14.72 | 19.06 | 23.56 | 28.24 | 32.96 | 37.66 | 42.60 | 47.90 | | 53.96 | 7 / 4 | | | |
| reaction time | 0.190 | interval | | 4.14 | 4.24 | 4.34 | 4.50 | 4.68 | 4.72 | 4.70 | 4.94 | 5.30 | 6.06 | | | 12.72 | 13.90 | 14.94 |
| | | velocity | 7.10 | 8.45 | 8.25 | 8.06 | 7.78 | 7.48 | 7.42 | 7.45 | 7.09 | 6.60 | 6.60 | 7.41 | | 8.25 | 7.55 | 7.03 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 17 | 19.5 | 178.5 | | | | |

**Long, Corde (USA) (2002)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2023 NCAA Championships (Austin, TX) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-23 | time | 5.99 | 9.71 | 13.56 | 17.46 | 21.54 | 25.76 | 30.28 | 34.62 | 39.09 | 43.49 | | 48.53 | 5 / 2 | | | |
| reaction time | | interval | | 3.72 | 3.85 | 3.90 | 4.08 | 4.22 | 4.52 | 4.34 | 4.47 | 4.40 | 5.04 | PB | | 11.47 | 12.82 | 13.21 |
| | | velocity | 7.51 | 9.41 | 9.09 | 8.97 | 8.58 | 8.29 | 7.74 | 8.06 | 7.83 | 7.95 | 7.94 | 8.24 | | 9.15 | 8.19 | 7.95 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 13 | 16.7 | 157.7 | | | | |

**Long Wei (CHN) (1997)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 1** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.13 | 10.08 | 14.10 | 18.20 | 22.47 | 26.92 | 31.51 | 36.18 | 41.06 | 46.24 | | 52.33 | 8 / 5 | | | |
| reaction time | 0.227 | interval | | 3.95 | 4.02 | 4.10 | 4.27 | 4.45 | 4.59 | 4.67 | 4.88 | 5.18 | 6.09 | | | 12.07 | 13.31 | 14.73 |
| | | velocity | 7.34 | 8.86 | 8.71 | 8.54 | 8.20 | 7.87 | 7.63 | 7.49 | 7.17 | 6.76 | 6.57 | 7.64 | | 8.70 | 7.89 | 7.13 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 175 | | | | |

**Heat 1** - 2019 Chinese National Grand Prix Final (Daqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Aug-19 | time | 6.36 | 10.58 | 14.81 | 19.12 | 23.59 | 28.19 | 32.88 | 37.65 | 42.61 | 47.68 | | 53.57 | 3 / 6 | | | |
| reaction time | 0.219 | interval | | 4.22 | 4.23 | 4.31 | 4.47 | 4.60 | 4.69 | 4.77 | 4.96 | 5.07 | 5.89 | | | 12.76 | 13.76 | 14.80 |
| | | velocity | 7.08 | 8.29 | 8.27 | 8.12 | 7.83 | 7.61 | 7.46 | 7.34 | 7.06 | 6.90 | 6.79 | 7.47 | | 8.23 | 7.63 | 7.09 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 176 | | | | |

**Heat 2** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 7.01 | 11.70 | 16.40 | 21.15 | 26.09 | 31.31 | 36.89 | 42.34 | | 53.38 | | 59.62 | 3 / 6 | | | |
| reaction time | 0.252 | interval | | 4.69 | 4.70 | 4.75 | 4.94 | 5.22 | 5.58 | 5.45 | | 11.04 | 6.24 | | | 14.14 | 15.74 | 16.49 |
| | | velocity | 6.42 | 7.46 | 7.45 | 7.37 | 7.09 | 6.70 | 6.27 | 6.42 | | 6.34 | 6.41 | 6.71 | | 7.43 | 6.67 | 6.37 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 17 | 17 | | | 19.2 | 150.2 | | | | |

**Heat 1** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-19 | time | 6.04 | 10.08 | 14.15 | 18.28 | 22.54 | 26.89 | 31.28 | 35.85 | 40.61 | 45.58 | | 51.39 | 4 / 6 | | | |
| reaction time | 0.188 | interval | | 4.04 | 4.07 | 4.13 | 4.26 | 4.35 | 4.39 | 4.57 | 4.76 | 4.97 | 5.81 | PB | | 12.24 | 13.00 | 14.30 |
| | | velocity | 7.45 | 8.66 | 8.60 | 8.47 | 8.22 | 8.05 | 7.97 | 7.66 | 7.35 | 7.04 | 6.88 | 7.78 | | 8.58 | 8.08 | 7.34 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18.8 | 174.8 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 4 (Luoyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-May-19 | time | 6.22 | 10.21 | 14.36 | 18.58 | 22.92 | 27.42 | 32.04 | 36.70 | 41.47 | 46.34 | | 51.87 | 2 / 3 | | | |
| reaction time | 0.208 | interval | | 3.99 | 4.15 | 4.22 | 4.34 | 4.50 | 4.62 | 4.66 | 4.77 | 4.87 | 5.53 | PB | | 12.36 | 13.46 | 14.30 |
| | | velocity | 7.23 | 8.77 | 8.43 | 8.29 | 8.06 | 7.78 | 7.58 | 7.51 | 7.34 | 7.19 | 7.23 | 7.71 | | 8.50 | 7.80 | 7.34 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18.2 | 176.2 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 2 (Huangshi, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Apr-19 | time | 6.19 | 10.19 | 14.45 | 18.71 | 23.14 | 27.68 | 32.30 | 37.09 | 42.04 | 47.06 | | 52.83 | 9 / 3 | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.250 | interval | | 4.00 | 4.26 | 4.26 | 4.43 | 4.54 | 4.62 | 4.79 | 4.95 | 5.02 | 5.77 | | | 12.52 | 13.59 | 14.76 |
| | | velocity | 7.27 | 8.75 | 8.22 | 8.22 | 7.90 | 7.71 | 7.58 | 7.31 | 7.07 | 6.97 | 6.93 | 7.57 | | 8.39 | 7.73 | 7.11 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 175 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 1 (Zhaoqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Apr-19 | time | 6.21 | 10.29 | 14.46 | 18.68 | 22.97 | 27.44 | 32.08 | 36.90 | 41.82 | 46.86 | | 52.73 | 9 / 8 | | | |
| reaction time | 0.271 | interval | | 4.08 | 4.17 | 4.22 | 4.29 | 4.47 | 4.64 | 4.82 | 4.92 | 5.04 | 5.87 | | | 12.47 | 13.40 | 14.78 |
| | | velocity | 7.25 | 8.58 | 8.39 | 8.29 | 8.16 | 7.83 | 7.54 | 7.26 | 7.11 | 6.94 | 6.81 | 7.59 | | 8.42 | 7.84 | 7.10 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 175 | | | | |

**López, Guillermo (ESP) (1977)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1998 Spanish National Championships (San Sebastián, ESP) | | | | | | | | | | | | | | | | *Ruiz (1998) - campeonato des españa absoluto: análisis de la carreras con villas* | | | |
| date | 02-Aug-98 | time | 6.19 | 10.32 | 14.39 | 18.54 | 22.87 | 27.28 | 31.88 | 36.59 | 41.52 | 46.57 | | 52.50 | 1 / 7 | | | |
| reaction time | | interval | | 4.13 | 4.07 | 4.15 | 4.33 | 4.41 | 4.60 | 4.71 | 4.93 | 5.05 | 5.93 | | | 12.35 | 13.34 | 14.69 |
| | | velocity | 7.27 | 8.47 | 8.60 | 8.43 | 8.08 | 7.94 | 7.61 | 7.43 | 7.10 | 6.93 | 6.75 | 7.62 | | 8.50 | 7.87 | 7.15 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 20 | 181 | | | | |

**Lü Baoliang (CHN) (2000)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **U20 Heat 3** - 2019 Chinese National Youth Games (Taiyuan, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.65 | 10.98 | 15.36 | 19.84 | 24.41 | 29.28 | 34.32 | 39.37 | 44.68 | 49.90 | | 55.71 | 8 / 5 | | | |
| reaction time | 0.200 | interval | | 4.33 | 4.38 | 4.48 | 4.57 | 4.87 | 5.04 | 5.05 | 5.31 | 5.22 | 5.81 | | | 13.19 | 14.48 | 15.58 |
| | | velocity | 6.77 | 8.08 | 7.99 | 7.81 | 7.66 | 7.19 | 6.94 | 6.93 | 6.59 | 6.70 | 6.88 | 7.18 | | 7.96 | 7.25 | 6.74 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 19 | 183 | | | | |

**Lu Shengjing (CHN) (1998)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Chinese National Championships (Chongqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 26-Jun-21 | time | 6.24 | 10.29 | 14.55 | 18.88 | 23.37 | 27.91 | 32.45 | 37.02 | 41.71 | 46.48 | | 51.78 | 1 / ~~5~~ 4 | | | |
| reaction time | 0.187 | interval | | 4.05 | 4.26 | 4.33 | 4.49 | 4.54 | 4.54 | 4.57 | 4.69 | 4.77 | 5.30 | | | 12.64 | 13.57 | 14.03 |
| | | velocity | 7.21 | 8.64 | 8.22 | 8.08 | 7.80 | 7.71 | 7.71 | 7.66 | 7.46 | 7.34 | 7.55 | 7.72 | | 8.31 | 7.74 | 7.48 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18.5 | 175.5 | | | | |

**Heat 4** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.34 | 10.37 | 14.62 | 18.98 | 23.39 | 27.73 | 32.12 | 36.60 | 41.25 | 46.03 | | 51.54 | 8 / 2 | | | |
| reaction time | 0.228 | interval | | 4.03 | 4.25 | 4.36 | 4.41 | 4.34 | 4.39 | 4.48 | 4.65 | 4.78 | 5.51 | =PB | | 12.64 | 13.14 | 13.91 |
| | | velocity | 7.10 | 8.68 | 8.24 | 8.03 | 7.94 | 8.06 | 7.97 | 7.81 | 7.53 | 7.32 | 7.26 | 7.76 | | 8.31 | 7.99 | 7.55 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 176 | | | | |

**FINAL** - 2021 Philippe Cup Athletics Invitational (Wuhan, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-May-21 | time | 6.17 | 10.24 | 14.35 | 18.53 | 22.81 | 27.21 | 31.68 | 36.33 | 41.04 | 46.06 | | 51.83 | 6 / 3 | | | |
| reaction time | 0.189 | interval | | 4.07 | 4.11 | 4.18 | 4.28 | 4.40 | 4.47 | 4.65 | 4.71 | 5.02 | 5.77 | PB | | 12.36 | 13.15 | 14.38 |
| | | velocity | 7.29 | 8.60 | 8.52 | 8.37 | 8.18 | 7.95 | 7.83 | 7.53 | 7.43 | 6.97 | 6.93 | 7.72 | | 8.50 | 7.98 | 7.30 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 176 | | | | |

**FINAL** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.36 | 10.48 | 14.77 | 19.14 | 23.59 | 28.06 | 32.78 | 37.59 | 42.39 | 47.13 | | 52.34 | 4 / 5 | | | |
| reaction time | 0.217 | interval | | 4.12 | 4.29 | 4.37 | 4.45 | 4.47 | 4.72 | 4.81 | 4.80 | 4.74 | 5.21 | | | 12.78 | 13.64 | 14.35 |
| | | velocity | 7.08 | 8.50 | 8.16 | 8.01 | 7.87 | 7.83 | 7.42 | 7.28 | 7.29 | 7.38 | 7.68 | 7.64 | | 8.22 | 7.70 | 7.32 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 16 | 16 | 15 | 15 | 18 | 177 | | | | |

**Heat 2** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.47 | 10.64 | 14.98 | 19.37 | 23.79 | 28.23 | 32.78 | 37.33 | 41.99 | 46.71 | | 51.96 | 3 / 2 | | | |
| reaction time | 0.240 | interval | | 4.17 | 4.34 | 4.39 | 4.42 | 4.44 | 4.55 | 4.55 | 4.66 | 4.72 | 5.25 | PB | | 12.90 | 13.41 | 13.93 |
| | | velocity | 6.96 | 8.39 | 8.06 | 7.97 | 7.92 | 7.88 | 7.69 | 7.69 | 7.51 | 7.42 | 7.62 | 7.70 | | 8.14 | 7.83 | 7.54 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18 | 175 | | | | |

**Luck, Jay (USA) (1940)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1964 Olympic Games (Tokyo, JPN) | | | | | | | | | | *Breitschaft (1965) - die leichtathletik wettkampfe der 1964 olympischen sommerspielen - 400m hürdenlauf* | | | | | | | | | |
| date | 16-Oct-64 | time | 5.7 | | 13.8 | | 22.0 | | | 30.5 | | 39.6 | | | 50.5 | 3 / 5 | | | |
| reaction time | | interval | | | 8.10 | | 8.20 | | | 8.50 | | 9.10 | | 10.90 | | | | | |
| | | velocity | 7.89 | | 8.64 | | 8.54 | | | 8.24 | | 7.69 | | 6.88 | 7.92 | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Lunn, Atle (NOR) (1969)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1997 European Cup (Munich, GER) | | | | | | | | | | | | | | | | *Jung (2003) - http://www.fgs.uni-halle.de* | | | |
| date | 21-Jun-97 | time | 6.30 | 10.24 | 14.29 | 18.56 | 22.98 | 27.62 | 32.47 | 36.40 | 42.56 | 47.94 | | 54.09 | / 7 | | | |
| reaction time | | interval | | 3.94 | 4.05 | 4.27 | 4.42 | 4.64 | 4.85 | 3.93 | 6.16 | 5.38 | 6.15 | | | 12.26 | 13.91 | 15.47 |
| | | velocity | 7.14 | 8.88 | 8.64 | 8.20 | 7.92 | 7.54 | 7.22 | 8.91 | 5.68 | 6.51 | 6.50 | 7.40 | | 8.56 | 7.55 | 6.79 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Luo Xinyu (CHN) (2002)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 National Grand Prix (Chengdu, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 02-Apr-21 | time | 6.21 | 10.31 | 14.56 | 18.83 | 23.16 | 27.72 | 32.44 | 37.22 | 42.24 | 47.17 | | 52.54 | 6 / 4 | | | |
| reaction time | 0.198 | interval | | 4.10 | 4.25 | 4.27 | 4.33 | 4.56 | 4.72 | 4.78 | 5.02 | 4.93 | 5.37 | PB | | 12.62 | 13.61 | 14.73 |
| | | velocity | 7.25 | 8.54 | 8.24 | 8.20 | 8.08 | 7.68 | 7.42 | 7.32 | 6.97 | 7.10 | 7.45 | 7.61 | | 8.32 | 7.71 | 7.13 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.5 | 170.5 | | | | |

**Heat 2** - 2021 National Grand Prix (Chengdu, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Apr-21 | time | 6.28 | 10.36 | 14.60 | 18.90 | 23.30 | 27.84 | 32.44 | 37.26 | 42.22 | 47.14 | | 52.62 | 4 / 2 | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.235 | interval | | 4.08 | 4.24 | 4.30 | 4.40 | 4.54 | 4.60 | 4.82 | 4.96 | 4.92 | 5.48 | PB | 12.62 | 13.54 | 14.70 |
| | | velocity | 7.17 | 8.58 | 8.25 | 8.14 | 7.95 | 7.71 | 7.61 | 7.26 | 7.06 | 7.11 | 7.30 | 7.60 | 8.32 | 7.75 | 7.14 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.5 | 170.5 | | | |

**Machida, Reo (JPN) (2003)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Japanese High School National Championships (Fukui, JPN) | | | | | | | | | | | | | | | *Shibayama (2021) - national high school and U20 national championhsips* | | | | |
| date | 30-Jul-21 | time | 6.57 | 10.79 | 15.32 | 19.82 | 24.41 | | 28.98 | 33.62 | 38.41 | 43.34 | 48.25 | | 53.54 | 8 / 7 | | | |
| reaction time | 0.202 | interval | | 4.22 | 4.53 | 4.50 | 4.59 | | 4.57 | 4.64 | 4.79 | 4.93 | 4.91 | 5.29 | | | 13.25 | 13.80 | 14.63 |
| | | velocity | 6.85 | 8.29 | 7.73 | 7.78 | 7.63 | | 7.66 | 7.54 | 7.31 | 7.10 | 7.13 | 7.56 | 7.47 | | 7.92 | 7.61 | 7.18 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 17 | 17 | | 139 | | | | |

**Madari Palliyalil, Jabir (IND) (1996)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Doha Diamond League (Doha, QAT) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | | |
| date | 13-May-22 | time | 5.90 | 9.67 | 13.68 | 17.82 | 22.05 | 23.8 | 26.32 | | 35.27 | 39.97 | 44.81 | | 50.42 | 1 / 7 | | | |
| reaction time | 0.156 | interval | | 3.77 | 4.01 | 4.14 | 4.23 | | 4.27 | | 8.95 | 4.70 | 4.84 | 5.61 | | | 11.92 | | |
| | | velocity | 7.63 | 9.28 | 8.73 | 8.45 | 8.27 | 8.40 | 8.20 | | 7.82 | 7.45 | 7.23 | 7.13 | 7.93 | | 8.81 | | |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | | | 16 | 16 | | 129 | | | | |
| **Semi-Final 3** - 2019 IAAF World Championships (Doha, QAT) | | | | | | | | | | | | | | | *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships* | | | | |
| date | 28-Sep-19 | time | 5.95 | 9.82 | 13.69 | 17.64 | 21.74 | | 25.92 | 30.19 | 34.61 | 39.24 | 44.12 | | 49.71 | 9 / 5 | | | |
| reaction time | 0.199 | interval | | 3.87 | 3.87 | 3.95 | 4.10 | | 4.18 | 4.27 | 4.42 | 4.63 | 4.88 | 5.59 | | | 11.69 | 12.55 | 13.93 |
| | | velocity | 7.56 | 9.04 | 9.04 | 8.86 | 8.54 | | 8.37 | 8.20 | 7.92 | 7.56 | 7.17 | 7.16 | 8.05 | | 8.98 | 8.37 | 7.54 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 16 | 19.7 | 178.7 | | | | |

**Maeno, Kei (JPN) (1991)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B FINAL** - 2019 Kinami Memorial (Osaka, JPN) | | | | | | | | | | | | | | | *Matsubayashi (2019) - research on athlete performance and technique- 2019 data book* | | | | |
| date | 06-May-19 | time | 6.04 | 9.83 | 13.68 | 17.53 | 21.67 | | 25.91 | 30.34 | 34.87 | 39.56 | 44.49 | | 50.37 | 6 / 2 | | | |
| reaction time | | interval | | 3.79 | 3.85 | 3.85 | 4.14 | | 4.24 | 4.43 | 4.53 | 4.69 | 4.93 | 5.88 | | | 11.49 | 12.81 | 14.15 |
| | | velocity | 7.45 | 9.23 | 9.09 | 9.09 | 8.45 | | 8.25 | 7.90 | 7.73 | 7.46 | 7.10 | 6.80 | 7.94 | | 9.14 | 8.20 | 7.42 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 15 | 15 | 15 | 17 | 19.2 | 169.2 | | | | |
| **FINAL** - 2018 Japanese National Championships (Yamaguchi, JPN) | | | | | | | | | | | | | | | *Morioka (2018) - race pattern analysis of Japan's top 400m hurdles - main national competitions in 2018* | | | | |
| date | 23-Jun-18 | time | 6.02 | 9.82 | 13.74 | 17.76 | 21.98 | | 26.22 | 30.62 | 35.17 | 39.76 | 44.45 | | 49.86 | 5 / 3 | | | |
| reaction time | 0.215 | interval | | 3.80 | 3.92 | 4.02 | 4.22 | | 4.24 | 4.40 | 4.55 | 4.59 | 4.69 | 5.41 | | | 11.74 | 12.86 | 13.83 |
| | | velocity | 7.48 | 9.21 | 8.93 | 8.71 | 8.29 | | 8.25 | 7.95 | 7.69 | 7.63 | 7.46 | 7.39 | 8.02 | | 8.94 | 8.16 | 7.59 |
| H1 lead leg | R | | 21 | 13 | 13 | 13 | 14 | | 14 | 15 | 15 | 15 | 15 | 18.2 | 166.2 | | | | |
| **FINAL** - 2017 Nambu Memorial (Sapporo, JPN) | | | | | | | | | | | | | | | *(2017) - tfdata-store.com/2017/07/11/post-1019/* | | | | |
| date | 09-Jul-17 | time | 6.03 | 9.77 | 13.64 | 17.57 | 21.78 | | 26.03 | 30.40 | 34.85 | 39.44 | 44.11 | | 49.48 | 4 / 3 | | | |
| reaction time | | interval | | 3.74 | 3.87 | 3.93 | 4.21 | | 4.25 | 4.37 | 4.45 | 4.59 | 4.67 | 5.37 | | | 11.54 | 12.83 | 13.71 |
| | | velocity | 7.46 | 9.36 | 9.04 | 8.91 | 8.31 | | 8.24 | 8.01 | 7.87 | 7.63 | 7.49 | 7.45 | 8.08 | | 9.10 | 8.18 | 7.66 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 15 | 15 | 15 | 15 | 18.2 | 166.2 | | | | |

**Maillard, Sébastien (FRA) (1981)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2006 European Championships (Göteborg, SWE) | | | | | | | | | | | | | | | *Behm (2006) - Göteborg 2006: Le quatrache* | | | | |
| date | 10-Aug-06 | time | 6.0 | 9.7 | 13.5 | 17.6 | 21.7 | | 25.9 | 30.2 | 34.5 | 39.1 | 43.9 | | 49.54 | / 5 | | | |
| reaction time | | interval | | 3.70 | 3.80 | 4.10 | 4.10 | | 4.20 | 4.30 | 4.30 | 4.60 | 4.80 | 5.64 | | | 11.60 | 12.60 | 13.70 |
| | | velocity | 7.50 | 9.46 | 9.21 | 8.54 | 8.54 | | 8.33 | 8.14 | 8.14 | 7.61 | 7.29 | 7.09 | 8.07 | | 9.05 | 8.33 | 7.66 |
| H1 lead leg | L | strides | 21 | 13 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 19.5 | 169.5 | | | | |
| **Semi-Final 3** - 2003 IAAF World Championships (Paris, FRA) | | | | | | | | | | | | | | | *Behm (2003) - Paris 2003:Le quatrache masculn - féminin* | | | | |
| date | 27-Aug-03 | time | 5.9 | 9.6 | 13.4 | 17.3 | 21.4 | | 25.6 | 30.0 | 34.6 | | | | 50.70 | 8 / 8 | | | |
| reaction time | 0.186 | interval | | 3.70 | 3.80 | 3.90 | 4.10 | | 4.20 | 4.40 | 4.60 | | | 16.10 | | | 11.40 | 12.70 | |
| | | velocity | 7.63 | 9.46 | 9.21 | 8.97 | 8.54 | | 8.33 | 7.95 | 7.61 | | | 6.83 | 7.89 | | 9.21 | 8.27 | |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 16 | 16 | 19.5 | 173.5 | | | | |
| **Heat 4** - 2003 IAAF World Championships (Paris, FRA) | | | | | | | | | | | | | | | *Behm (2003) - Paris 2003:Le quatrache masculn - féminin* | | | | |
| date | 26-Aug-03 | time | 5.9 | 9.7 | 13.5 | 17.4 | 21.4 | | 25.5 | 29.6 | 33.9 | 38.6 | 43.5 | | 49.25 | 7 / 4 | | | |
| reaction time | 0.191 | interval | | 3.80 | 3.80 | 3.90 | 4.00 | | 4.10 | 4.10 | 4.30 | 4.70 | 4.90 | 5.75 | | | 11.50 | 12.20 | 13.90 |
| | | velocity | 7.63 | 9.21 | 9.21 | 8.97 | 8.75 | | 8.54 | 8.54 | 8.14 | 7.45 | 7.14 | 6.96 | 8.12 | | 9.13 | 8.61 | 7.55 |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 16 | 16 | 19.5 | 173.5 | | | | |

**Mägi, Rasmus (EST) (1992)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2023 Prefontaine Classic (Eugene, OR) | | | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | | |
| date | 16-Sep-23 | time | 5.96 | 9.70 | 13.46 | 17.26 | 21.18 | | 25.26 | 29.46 | 33.82 | 38.28 | 42.74 | | 47.99 | 9 / 7 | | | |
| reaction time | 0.155 | interval | | 3.74 | 3.76 | 3.80 | 3.92 | | 4.08 | 4.20 | 4.36 | 4.46 | 4.46 | 5.25 | | | 11.30 | 12.20 | 13.28 |
| | | velocity | 7.55 | 9.36 | 9.31 | 9.21 | 8.93 | | 8.58 | 8.33 | 8.03 | 7.85 | 7.85 | 7.62 | 8.34 | | 9.29 | 8.61 | 7.91 |
| H1 lead leg | R | strides | 21 | | | 13 | 13 | | 13 | 13 | 14 | | | | 87 | | | | |
| **FINAL** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | | |
| date | 23-Aug-23 | time | 6.04 | 9.86 | 13.45 | 17.18 | 21.09 | | | 29.36 | 33.83 | 38.41 | 43.09 | | 48.33 | 4 / 7 | | | |
| reaction time | 0.161 | interval | | 3.82 | 3.59 | 3.73 | 3.91 | | | 8.27 | 4.47 | 4.58 | 4.68 | 5.24 | | | 11.14 | 12.18 | 13.73 |
| | | velocity | 7.45 | 9.16 | 9.75 | 9.38 | 8.95 | | | 8.46 | 7.83 | 7.64 | 7.48 | 7.63 | 8.28 | | 9.43 | 8.62 | 7.65 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | | | 14 | 14 | 14 | 17.2 | 132.2 | | | | |
| **Semi-Final 1** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | | |
| date | 21-Aug-23 | time | 6.07 | 10.03 | 13.77 | 17.53 | 21.43 | | 25.50 | 29.68 | 34.03 | | 43.13 | | 48.30 | 7 / 2 | | | |
| reaction time | 0.180 | interval | | 3.96 | 3.74 | 3.76 | 3.90 | | 4.07 | 4.18 | 4.35 | | 9.10 | 5.17 | | | 11.46 | 12.15 | 13.45 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.41 | 8.84 | 9.36 | 9.31 | 8.97 | 8.60 | 8.37 | 8.05 | 7.69 | 7.74 | 8.28 | 9.16 | 8.64 | 7.81 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 17.5 | 130.5 | | | | |

**Heat 2** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 6.20 | 10.06 | 13.70 | 17.60 | 21.63 | 25.70 | 29.93 | 34.33 | 38.86 | 43.46 | 48.58 | 7 / 2 | | | | |
| reaction time | 0.205 | interval | | 3.86 | 3.64 | 3.90 | 4.03 | 4.07 | 4.23 | 4.40 | 4.53 | 4.60 | 5.12 | 11.40 | 12.33 | 13.53 |
| | | velocity | 7.26 | 9.07 | 9.62 | 8.97 | 8.68 | 8.60 | 8.27 | 7.95 | 7.73 | 7.61 | 7.81 | 8.23 | 9.21 | 8.52 | 7.76 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17 | 158 | | | | |

**FINAL** - 2023 Bauhaus Galan (Stockholm, SWE) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Jul-23 | time | 5.92 | 9.69 | 13.48 | 17.27 | 21.16 | 25.20 | 29.50 | 34.02 | 38.65 | 43.38 | 49.04 | 3 / 3 | | | | |
| reaction time | 0.165 | interval | | 3.77 | 3.79 | 3.79 | 3.89 | 4.04 | 4.30 | 4.52 | 4.63 | 4.73 | 5.66 | 11.35 | 12.23 | 13.88 |
| | | velocity | 7.60 | 9.28 | 9.23 | 9.23 | 9.00 | 8.66 | 8.14 | 7.74 | 7.56 | 7.40 | 7.07 | 8.16 | 9.25 | 8.59 | 7.56 |
| H1 lead leg | R | strides | 21 | 13 | | 13 | 13 | 13 | 14 | | 14 | 15 | 18 | 134 | | | | |

**FINAL** - 2022 World Athletics Championships (Eugene, OR) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Jul-22 | time | 5.99 | 9.71 | 13.50 | 17.27 | 21.12 | 22.71 | 25.14 | 29.45 | 33.87 | 38.52 | 43.28 | 48.92 | 2 / 8 | | | |
| reaction time | 0.140 | interval | | 3.72 | 3.79 | 3.77 | 3.85 | | 4.02 | 4.31 | 4.42 | 4.65 | 4.76 | 5.64 | 11.28 | 12.18 | 13.83 |
| | | velocity | 7.51 | 9.41 | 9.23 | 9.28 | 9.09 | 8.81 | 8.71 | 8.12 | 7.92 | 7.53 | 7.35 | 7.09 | 8.18 | 9.31 | 8.62 | 7.59 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 15 | 18 | 139 | | | |

**Semi-Final 2** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.93 | 9.70 | 13.53 | 17.33 | 21.27 | 23.00 | 25.33 | 29.67 | 33.97 | 38.46 | 43.07 | 48.40 | 4 / 3 | | | |
| reaction time | 0.137 | interval | | 3.77 | 3.83 | 3.80 | 3.94 | | 4.06 | 4.34 | 4.30 | 4.49 | 4.61 | 5.33 | 11.40 | 12.34 | 13.40 |
| | | velocity | 7.59 | 9.28 | 9.14 | 9.21 | 8.88 | 8.70 | 8.62 | 8.06 | 8.14 | 7.80 | 7.59 | 7.50 | 8.26 | 9.21 | 8.51 | 7.84 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17.5 | 158.5 | | | |

**Heat 4** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 6.13 | 10.00 | 13.87 | 17.73 | 21.67 | 23.23 | 25.73 | 29.96 | 34.33 | 38.87 | 43.46 | 48.78 | 5 / 1 | | | |
| reaction time | 0.169 | interval | | 3.87 | 3.87 | 3.86 | 3.94 | | 4.06 | 4.23 | 4.37 | 4.54 | 4.59 | 5.32 | 11.60 | 12.23 | 13.50 |
| | | velocity | 7.34 | 9.04 | 9.04 | 9.07 | 8.88 | 8.61 | 8.62 | 8.27 | 8.01 | 7.71 | 7.63 | 7.52 | 8.20 | 9.05 | 8.59 | 7.78 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17 | 158 | | | |

**FINAL** - 2022 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-22 | time | 5.86 | 9.56 | 13.28 | 17.10 | 20.98 | 22.58 | 25.04 | 29.36 | 33.90 | 38.48 | 43.28 | 48.77 | 4 / 4 | | | |
| reaction time | 0.155 | interval | | 3.70 | 3.72 | 3.82 | 3.88 | | 4.06 | 4.32 | 4.54 | 4.58 | 4.80 | 5.49 | 11.24 | 12.26 | 13.92 |
| | | velocity | 7.68 | 9.46 | 9.41 | 9.16 | 9.02 | 8.86 | 8.62 | 8.10 | 7.71 | 7.64 | 7.29 | 7.29 | 8.20 | 9.34 | 8.56 | 7.54 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 17.7 | 160.7 | | | |

**FINAL** - 2022 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jun-22 | time | 5.84 | 9.56 | 13.28 | 17.12 | 21.04 | 22.73 | 25.22 | 29.44 | 33.76 | 38.28 | 43.00 | 48.51 | 6 / 2 | | | |
| reaction time | 0.165 | interval | | 3.72 | 3.72 | 3.84 | 3.92 | | 4.18 | 4.22 | 4.32 | 4.52 | 4.72 | 5.51 | 11.28 | 12.32 | 13.56 |
| | | velocity | 7.71 | 9.41 | 9.41 | 9.11 | 8.93 | 8.80 | 8.37 | 8.29 | 8.10 | 7.74 | 7.42 | 7.26 | 8.25 | 9.31 | 8.52 | 7.74 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 18 | 159 | | | |

**FINAL** - FINAL - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jun-22 | time | 5.63 | 9.50 | 13.23 | 17.07 | 21.00 | 22.67 | 25.03 | 29.37 | 33.87 | 38.50 | 43.23 | 48.73 | 4 / 2 | | | |
| reaction time | 0.146 | interval | | 3.87 | 3.73 | 3.84 | 3.93 | | 4.03 | 4.34 | 4.50 | 4.63 | 4.73 | 5.50 | 11.44 | 12.30 | 13.86 |
| | | velocity | 7.99 | 9.04 | 9.38 | 9.11 | 8.91 | 8.82 | 8.68 | 8.06 | 7.78 | 7.56 | 7.40 | 7.27 | 8.21 | 9.18 | 8.54 | 7.58 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | | 141 | | | |

**FINAL** - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-22 | time | 5.87 | 9.66 | 13.50 | 17.36 | 21.30 | 23.05 | 25.35 | 29.60 | 34.09 | 38.73 | 43.33 | 48.66 | 3 / 5 | | | |
| reaction time | 0.174 | interval | | 3.79 | 3.84 | 3.86 | 3.94 | | 4.05 | 4.25 | 4.49 | 4.64 | 4.60 | 5.33 | 11.49 | 12.24 | 13.73 |
| | | velocity | 7.67 | 9.23 | 9.11 | 9.07 | 8.88 | 8.68 | 8.64 | 8.24 | 7.80 | 7.54 | 7.61 | 7.50 | 8.22 | 9.14 | 8.58 | 7.65 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | | 142 | | | |

**FINAL** - 2021 ISTAF (Berlin, GER) (TV Analysis) *Henson (2021) - Athlete First: 2021 Karsten Warholm 400m Hurdles World Record Season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Sep-21 | time | 6.04 | | 13.64 | 17.52 | 21.48 | 25.60 | 29.92 | | 38.92 | 43.52 | 48.73 | 6 / 2 | | | | |
| reaction time | 0.191 | interval | | | 7.60 | 3.88 | 3.96 | 4.12 | 4.32 | | 9.00 | 4.60 | 5.21 | 11.48 | 12.40 | 13.60 |
| | | velocity | 7.45 | | 9.21 | 9.02 | 8.84 | 8.50 | 8.10 | | 7.78 | 7.61 | 7.68 | 8.21 | 9.15 | 8.47 | 7.72 |
| H1 lead leg | R | strides | 20 | | | 13 | | 13 | 13 | 14 | | 14 | 17 | 104 | | | | |

**FINAL** - 2021 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Sep-21 | time | 6.00 | | | | 21.44 | 23.0 | 25.56 | 29.84 | | 38.80 | 43.52 | 48.84 | 3 / 4 | | | |
| reaction time | 0.158 | interval | | | | | 15.44 | | 4.12 | 4.28 | | 8.96 | 4.72 | 5.32 | | | | 13.68 |
| | | velocity | 7.50 | | | | 9.07 | 8.70 | 8.50 | 8.18 | | 7.81 | 7.42 | 7.52 | 8.19 | | | 7.68 |
| H1 lead leg | R | strides | 20 | | | | | | 13 | 13 | | | 14 | 17 | 77 | | | |

**FINAL** - 2021 Memorial van Damme (Brussels, BEL) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Sep-21 | time | 6.00 | 9.80 | 13.64 | 17.60 | 21.64 | 23.4 | 25.80 | 30.12 | 34.64 | 39.24 | 43.92 | 49.13 | 3 / 5 | | | |
| reaction time | 0.178 | interval | | 3.80 | 3.84 | 3.96 | 4.04 | | 4.16 | 4.32 | 4.52 | 4.60 | 4.68 | 5.21 | 11.60 | 12.52 | 13.80 |
| | | velocity | 7.50 | 9.21 | 9.11 | 8.84 | 8.66 | 8.55 | 8.41 | 8.10 | 7.74 | 7.61 | 7.48 | 7.68 | 8.14 | 9.05 | 8.39 | 7.61 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17 | 158 | | | |

**FINAL** - 2020 Olympic Games (Tokyo, JPN) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-21 | time | 5.92 | 9.60 | 13.32 | 17.16 | 21.12 | 25.28 | 29.56 | 33.96 | 38.44 | 42.88 | 48.11 | 9 / 7 | | | | |
| reaction time | 0.167 | interval | | 3.68 | 3.72 | 3.84 | 3.96 | 4.16 | 4.28 | 4.40 | 4.48 | 4.44 | 5.23 | 11.24 | 12.40 | 13.32 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.60 | 9.51 | 9.41 | 9.11 | 8.84 | | 8.41 | 8.18 | 7.95 | 7.81 | 7.88 | 7.65 | 8.31 | | 9.34 | 8.47 | 7.88 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | | 140 | | | | |

**FINAL** - 2021 Herculis Meeting International d'Athletisme (Monaco, MON) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-21 | time | 5.92 | 9.64 | | 17.30 | 21.25 | 23.0 | 25.39 | 29.64 | 34.10 | 38.70 | 43.41 | | 48.83 | 5 / 3 | | | |
| reaction time | 0.152 | interval | | 3.72 | | 7.66 | 3.95 | | 4.14 | 4.25 | 4.46 | 4.60 | 4.71 | 5.42 | | | 11.38 | 12.34 | 13.77 |
| | | velocity | 7.60 | 9.41 | | 9.14 | 8.86 | 8.70 | 8.45 | 8.24 | 7.85 | 7.61 | 7.43 | 7.38 | 8.19 | | 9.23 | 8.51 | 7.63 |
| H1 lead leg | R | strides | 20 | 13 | | | 13 | | 13 | 13 | 14 | 14 | 14 | | 114 | | | | |

**FINAL** - 2021 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jul-21 | time | 5.88 | 9.68 | 13.44 | 17.32 | 21.32 | 23.1 | 25.44 | 29.76 | 34.24 | 38.76 | 43.36 | | 48.81 | 5 / 4 | | | |
| reaction time | 0.128 | interval | | 3.80 | 3.76 | 3.88 | 4.00 | | 4.12 | 4.32 | 4.48 | 4.52 | 4.60 | 5.45 | | | 11.44 | 12.44 | 13.60 |
| | | velocity | 7.65 | 9.21 | 9.31 | 9.02 | 8.75 | 8.66 | 8.50 | 8.10 | 7.81 | 7.74 | 7.61 | 7.34 | 8.20 | | 9.18 | 8.44 | 7.72 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17.2 | 137.2 | | | | |

**FINAL** - 2021 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jul-21 | time | 5.90 | 9.68 | 13.44 | 17.30 | 21.20 | | 25.28 | | 33.98 | 38.58 | 43.34 | | 48.95 | 3 / 4 | | | |
| reaction time | 0.161 | interval | | 3.78 | 3.76 | 3.86 | 3.90 | | 4.08 | | 8.70 | 4.60 | 4.76 | 5.61 | | | 11.40 | | |
| | | velocity | 7.63 | 9.26 | 9.31 | 9.07 | 8.97 | | 8.58 | | 8.05 | 7.61 | 7.35 | 7.13 | 8.17 | | 9.21 | | |
| H1 lead leg | R | strides | 20 | 13 | 13 | | 13 | | 13 | 13 | | 14 | 14 | | 113 | | | | |

**FINAL** - 2020 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Sep-20 | time | 5.97 | 9.74 | | | 21.45 | 23.2 | | 29.96 | 34.43 | 38.94 | 43.51 | | 48.72 | 4 / 3 | | | |
| reaction time | 0.150 | interval | | 3.77 | | | 11.71 | | | 8.51 | 4.47 | 4.51 | 4.57 | 5.21 | | | | | 13.55 |
| | | velocity | 7.54 | 9.28 | | | 8.97 | 8.62 | | 8.23 | 7.83 | 7.76 | 7.66 | 7.68 | 8.21 | | | | 7.75 |
| H1 lead leg | R | strides | 20 | 13 | | | | | | | 14 | 14 | 14 | 17.5 | 92.5 | | | | |

**FINAL** - 2020 ISTAF (Berlin, GER) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Sep-20 | time | 6.00 | | 13.52 | 17.40 | | | 25.60 | 29.92 | 34.36 | 38.92 | 43.72 | | 49.22 | 6 / 2 | | | |
| reaction time | 0.238 | interval | | | 7.52 | 3.88 | | | 8.20 | 4.32 | 4.44 | 4.56 | 4.80 | 5.50 | | | 11.40 | 12.52 | 13.80 |
| | | velocity | 7.50 | | 9.31 | 9.02 | | | 8.54 | 8.10 | 7.88 | 7.68 | 7.29 | 7.27 | 8.13 | | 9.21 | 8.39 | 7.61 |
| H1 lead leg | R | strides | 20 | | | 13 | | | | 13 | 14 | 14 | 14 | | 88 | | | | |

**FINAL** - 2020 Golden Spike (Ostrava, CZE) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-20 | time | 6.04 | 9.88 | | 17.52 | 21.49 | | | 30.03 | 34.87 | 39.64 | 44.51 | | 50.18 | 5 / 3 | | | |
| reaction time | 0.177 | interval | | 3.84 | | 7.64 | 3.97 | | | 8.54 | 4.84 | 4.77 | 4.87 | 5.67 | | | 11.48 | 12.51 | 14.48 |
| | | velocity | 7.45 | 9.11 | | 9.16 | 8.82 | | | 8.20 | 7.23 | 7.34 | 7.19 | 7.05 | 7.97 | | 9.15 | 8.39 | 7.25 |
| H1 lead leg | L | strides | 21 | 13 | | | 13 | | | | | 15 | 15 | | 77 | | | | |

**FINAL** - 2020 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-20 | time | 5.98 | | 13.68 | 17.62 | 21.60 | 23.4 | 25.76 | | 34.72 | 39.32 | 43.98 | | 49.40 | 4 / 4 | | | |
| reaction time | 0.159 | interval | | | 7.70 | 3.94 | 3.98 | | 4.16 | | 8.96 | 4.60 | 4.66 | 5.42 | | | 11.64 | | |
| | | velocity | 7.53 | | 9.09 | 8.88 | 8.79 | 8.55 | 8.41 | | 7.81 | 7.61 | 7.51 | 7.38 | 8.10 | | 9.02 | | |
| H1 lead leg | L | strides | 20 | 13 | | 13 | 13 | | 13 | | | 14 | 14 | 17.2 | 117.2 | | | | |

**FINAL** - 2020 Herculis Meeting International d'Athletisme (Monaco, MON) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-Aug-20 | time | 6.00 | 9.74 | 13.61 | 17.55 | | | 25.79 | 30.16 | 34.60 | 39.24 | 43.88 | | 49.23 | 4 / 3 | | | |
| reaction time | 0.146 | interval | | 3.74 | 3.87 | 3.94 | | | 8.24 | 4.37 | 4.44 | 4.64 | 4.64 | 5.35 | | | 11.55 | 12.61 | 13.72 |
| | | velocity | 7.50 | 9.36 | 9.04 | 8.88 | | | 8.50 | 8.01 | 7.88 | 7.54 | 7.54 | 7.48 | 8.13 | | 9.09 | 8.33 | 7.65 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | | | | 14 | 14 | 14 | 14 | 17.2 | 133.2 | | | | |

**Semi-Final 1** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 6.15 | 9.94 | 13.77 | 17.70 | 21.77 | | 25.97 | 30.34 | 34.72 | 39.19 | 43.72 | | 48.93 | 7 / 4 | | | |
| reaction time | 0.140 | interval | | 3.79 | 3.83 | 3.93 | 4.07 | | 4.20 | 4.37 | 4.38 | 4.47 | 4.53 | 5.21 | | | 11.55 | 12.64 | 13.38 |
| | | velocity | 7.32 | 9.23 | 9.14 | 8.91 | 8.60 | | 8.33 | 8.01 | 7.99 | 7.83 | 7.73 | 7.68 | 8.17 | | 9.09 | 8.31 | 7.85 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.2 | 159.2 | | | | |

**FINAL** - 2019 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Jul-19 | time | 6.12 | 9.92 | 13.72 | 17.64 | 21.76 | 23.5 | 25.96 | | 34.88 | 39.52 | | | 49.71 | 9 / 5 | | | |
| reaction time | 0.158 | interval | | 3.80 | 3.80 | 3.92 | 4.12 | | 4.20 | | 8.92 | 4.64 | | | | | 11.52 | | |
| | | velocity | 7.35 | 9.21 | 9.21 | 8.93 | 8.50 | 8.51 | 8.33 | | 7.85 | 7.54 | | | 8.05 | | 9.11 | | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | | | 14 | | | 100 | | | | |

**FINAL** - 2019 Prefontaine Classic (Stanford, CA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-19 | time | 6.06 | 9.93 | 13.96 | 18.03 | 22.16 | | 26.43 | 31.00 | 35.50 | 40.13 | 44.80 | | 50.25 | 4 / 9 | | | |
| reaction time | 0.208 | interval | | 3.87 | 4.03 | 4.07 | 4.13 | | 4.27 | 4.57 | 4.50 | 4.63 | 4.67 | 5.45 | | | 11.97 | 12.97 | 13.80 |
| | | velocity | 7.43 | 9.04 | 8.68 | 8.60 | 8.47 | | 8.20 | 7.66 | 7.78 | 7.56 | 7.49 | 7.34 | 7.96 | | 8.77 | 8.10 | 7.61 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | | 14 | | 128 | | | | |

**FINAL** - 2019 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jun-19 | time | 6.02 | 9.86 | 13.86 | 17.95 | 22.11 | | 26.36 | 30.93 | 35.45 | 40.21 | 45.05 | | 50.52 | 4 / 9 | | | |
| reaction time | 0.150 | interval | | 3.84 | 4.00 | 4.09 | 4.16 | | 4.25 | 4.57 | 4.52 | 4.76 | 4.84 | 5.47 | | | 11.93 | 12.98 | 14.12 |
| | | velocity | 7.48 | 9.11 | 8.75 | 8.56 | 8.41 | | 8.24 | 7.66 | 7.74 | 7.35 | 7.23 | 7.31 | 7.92 | | 8.80 | 8.09 | 7.44 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 17.5 | 161.5 | | | | |

**FINAL** - 2018 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Aug-18 | time | 5.92 | 9.68 | 13.44 | 17.36 | 21.40 | 23.3 | 25.56 | 30.04 | | 39.20 | 43.88 | | 49.28 | 7 / 4 | | | |
| reaction time | 0.176 | interval | | 3.76 | 3.76 | 3.92 | 4.04 | | 4.16 | 4.48 | | 9.16 | 4.68 | 5.40 | | | 11.44 | 12.68 | 13.84 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.60 | 9.31 | 9.31 | 8.93 | 8.66 | 8.58 | 8.41 | 7.81 | | 7.64 | 7.48 | 7.41 | 8.12 | | 9.18 | 8.28 | 7.59 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | | 14 | | 128 | | | | |

**FINAL** - 2018 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jul-18 | time | 5.96 | 9.84 | 13.68 | 17.60 | 21.56 | | 25.76 | 30.16 | 34.56 | 39.16 | 43.76 | | 49.11 | 9 / 5 | | | |
| reaction time | 0.158 | interval | | 3.88 | 3.84 | 3.92 | 3.96 | | 4.20 | 4.40 | 4.40 | 4.60 | 4.60 | 5.35 | | | 11.64 | 12.56 | 13.60 |
| | | velocity | 7.55 | 9.02 | 9.11 | 8.93 | 8.84 | | 8.33 | 7.95 | 7.95 | 7.61 | 7.61 | 7.48 | 8.14 | | 9.02 | 8.36 | 7.72 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.2 | 159.2 | | | | |

**FINAL** - 2018 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jul-18 | time | 6.00 | 9.80 | 13.72 | | 21.64 | | 25.72 | 30.16 | 34.56 | 39.12 | 43.72 | | 49.04 | 2 / 5 | | | |
| reaction time | 0.159 | interval | | 3.80 | 3.92 | | 7.92 | | 4.08 | 4.44 | 4.40 | 4.56 | 4.60 | 5.32 | | | | | 13.56 |
| | | velocity | 7.50 | 9.21 | 8.93 | | 8.84 | | 8.58 | 7.88 | 7.95 | 7.68 | 7.61 | 7.52 | 8.16 | | | | 7.74 |
| H1 lead leg | L | strides | 21 | 13 | 13 | | | | 13 | 14 | | 14 | 14 | 17 | 119 | | | | |

**FINAL** - 2018 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jun-18 | time | 6.00 | 9.88 | 13.88 | 17.84 | 21.96 | | 26.20 | 30.64 | 35.20 | 39.88 | 44.56 | | 50.11 | 4 / 7 | | | |
| reaction time | 0.135 | interval | | 3.88 | 4.00 | 3.96 | 4.12 | | 4.24 | 4.44 | 4.56 | 4.68 | 4.68 | 5.55 | | | 11.84 | 12.80 | 13.92 |
| | | velocity | 7.50 | 9.02 | 8.75 | 8.84 | 8.50 | | 8.25 | 7.88 | 7.68 | 7.48 | 7.48 | 7.21 | 7.98 | | 8.87 | 8.20 | 7.54 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 14 | 17.2 | 160.2 | | | | |

**FINAL** - 2018 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-18 | time | 5.88 | 9.60 | 13.36 | 17.20 | 21.28 | 23.1 | 25.48 | 30.00 | 34.44 | 39.08 | 43.80 | | 49.35 | 8 / 6 | | | |
| reaction time | 0.142 | interval | | 3.72 | 3.76 | 3.84 | 4.08 | | 4.20 | 4.52 | 4.44 | 4.64 | 4.72 | 5.55 | | | 11.32 | 12.80 | 13.80 |
| | | velocity | 7.65 | 9.41 | 9.31 | 9.11 | 8.58 | 8.66 | 8.33 | 7.74 | 7.88 | 7.54 | 7.42 | 7.21 | 8.11 | | 9.28 | 8.20 | 7.61 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | | 142 | | | | |

**FINAL** - 2018 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-May-18 | time | 6.04 | 9.92 | 13.76 | 17.68 | 21.72 | | 25.88 | 30.28 | 34.72 | 39.32 | 43.92 | | 49.19 | 9 / 5 | | | |
| reaction time | 0.140 | interval | | 3.88 | 3.84 | 3.92 | 4.04 | | 4.16 | 4.40 | 4.44 | 4.60 | 4.60 | 5.27 | | | 11.64 | 12.60 | 13.64 |
| | | velocity | 7.45 | 9.02 | 9.11 | 8.93 | 8.66 | | 8.41 | 7.95 | 7.88 | 7.61 | 7.61 | 7.59 | 8.13 | | 9.02 | 8.33 | 7.70 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17 | 159 | | | | |

**FINAL** - 2017 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jul-17 | time | 6.08 | 9.92 | 13.80 | 17.72 | 21.68 | | 25.84 | 30.24 | 34.64 | 39.20 | 43.72 | | 48.94 | 7 / 3 | | | |
| reaction time | 0.127 | interval | | 3.84 | 3.88 | 3.92 | 3.96 | | 4.16 | 4.40 | 4.40 | 4.56 | 4.52 | 5.22 | | | 11.64 | 12.52 | 13.48 |
| | | velocity | 7.40 | 9.11 | 9.02 | 8.93 | 8.84 | | 8.41 | 7.95 | 7.95 | 7.68 | 7.74 | 7.66 | 8.17 | | 9.02 | 8.39 | 7.79 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.2 | 159.2 | | | | |

**FINAL** - 2017 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Jun-17 | time | 6.04 | 9.84 | | 17.64 | 21.68 | | 25.88 | 30.24 | 34.68 | 39.24 | 43.84 | | 49.16 | 3 / 2 | | | |
| reaction time | 0.142 | interval | | 3.80 | | 7.80 | 4.04 | | 4.20 | 4.36 | 4.44 | 4.56 | 4.60 | 5.32 | | | 11.60 | 12.60 | 13.60 |
| | | velocity | 7.45 | 9.21 | | 8.97 | 8.66 | | 8.33 | 8.03 | 7.88 | 7.68 | 7.61 | 7.52 | 8.14 | | 9.05 | 8.33 | 7.72 |
| H1 lead leg | L | strides | 21 | 13 | | | 13 | | 13 | 14 | | 14 | 14 | 17.5 | 119.5 | | | | |

**FINAL** - 2017 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Jun-17 | time | 6.03 | 9.83 | 13.70 | 17.66 | 21.73 | | 25.86 | 30.33 | 34.73 | 39.23 | 43.80 | | 49.10 | 3 / 5 | | | |
| reaction time | 0.147 | interval | | 3.80 | 3.87 | 3.96 | 4.07 | | 4.13 | 4.47 | 4.40 | 4.50 | 4.57 | 5.30 | | | 11.63 | 12.67 | 13.47 |
| | | velocity | 7.46 | 9.21 | 9.04 | 8.84 | 8.60 | | 8.47 | 7.83 | 7.95 | 7.78 | 7.66 | 7.55 | 8.15 | | 9.03 | 8.29 | 7.80 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | | 14 | 14 | 14 | 14 | 17.2 | 146.2 | | | | |

**FINAL** - 2017 Shanghai Diamond League (Shanghai, CHN) (TV Analysis) *Henson (2021) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-May-17 | time | 6.08 | 9.92 | 13.80 | 17.76 | 21.84 | | 26.04 | 30.44 | 34.88 | 39.48 | 44.12 | | 49.38 | 8 / 3 | | | |
| reaction time | 0.138 | interval | | 3.84 | 3.88 | 3.96 | 4.08 | | 4.20 | 4.40 | 4.44 | 4.60 | 4.64 | 5.26 | | | 11.68 | 12.68 | 13.68 |
| | | velocity | 7.40 | 9.11 | 9.02 | 8.84 | 8.58 | | 8.33 | 7.95 | 7.88 | 7.61 | 7.54 | 7.60 | 8.10 | | 8.99 | 8.28 | 7.68 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.5 | 159.5 | | | | |

**FINAL** - 2016 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-16 | time | 6.00 | 9.76 | 13.52 | 17.40 | 21.40 | | 25.52 | 29.92 | 34.44 | 39.12 | 43.72 | | 48.90 | 8 / 4 | | | |
| reaction time | 0.114 | interval | | 3.76 | 3.76 | 3.88 | 4.00 | | 4.12 | 4.40 | 4.52 | 4.68 | 4.60 | 5.18 | | | 11.40 | 12.52 | 13.80 |
| | | velocity | 7.50 | 9.31 | 9.31 | 9.02 | 8.75 | | 8.50 | 7.95 | 7.74 | 7.48 | 7.61 | 7.72 | 8.18 | | 9.21 | 8.39 | 7.61 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 16 | 158 | | | | |

**FINAL** - 2016 Meeting Paris (Saint-Denis, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Aug-16 | time | 6.04 | 9.80 | | 17.48 | 21.44 | | 25.52 | | 34.28 | 38.88 | 43.44 | | 48.66 | 3 / 5 | | | |
| reaction time | 0.147 | interval | | 3.76 | | 7.68 | 3.96 | | 4.08 | | 8.76 | 4.60 | 4.56 | 5.22 | | | 11.44 | | |
| | | velocity | 7.45 | 9.31 | | 9.11 | 8.84 | | 8.58 | | 7.99 | 7.61 | 7.68 | 7.66 | 8.22 | | 9.18 | | |
| H1 lead leg | L | strides | 20 | 13 | | | 13 | | 13 | | | 14 | 14 | 17 | 104 | | | | |

**FINAL** - 2016 Athletissime (Laussane, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-16 | time | 5.86 | 9.63 | 13.43 | 17.30 | 21.30 | | 25.46 | 29.80 | 34.26 | 38.80 | 43.36 | | 48.59 | 4 / 1 | | | |
| reaction time | 0.113 | interval | | 3.77 | 3.80 | 3.87 | 4.00 | | 4.16 | 4.34 | 4.46 | 4.54 | 4.56 | 5.23 | | | 11.44 | 12.50 | 13.56 |
| | | velocity | 7.68 | 9.28 | 9.21 | 9.04 | 8.75 | | 8.41 | 8.06 | 7.85 | 7.71 | 7.68 | 7.65 | 8.23 | | 9.18 | 8.40 | 7.74 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.2 | 159.2 | | | | |

**FINAL** - 2014 European Championships (Zurich, SUI) *Green (2015) - twitter.com/jackpgreen (from Behm?)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-14 | time | 6.10 | 9.90 | 13.78 | 17.70 | 21.74 | | 25.86 | 30.26 | 34.70 | 39.30 | 43.90 | | 49.06 | / 2 | | | |
| reaction time | 0.156 | interval | | 3.80 | 3.88 | 3.92 | 4.04 | | 4.12 | 4.40 | 4.44 | 4.60 | 4.60 | 5.16 | | | 11.60 | 12.56 | 13.64 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.38 | 9.21 | 9.02 | 8.93 | 8.66 | | 8.50 | 7.95 | 7.88 | 7.61 | 7.61 | 7.75 | 8.15 | | 9.05 | 8.36 | 7.70 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | | 121 | | | | |

**Mann, Ralph (USA) (1949)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1972 Olympic Games (Munich, FRG) | | | | | | | | | | | | | *Le Masurier (1977) - die olympischen 400-m-hürdenlauf vom Mexico City, München und Montreal* | | | | |
| date 03-Sep-72 time | 6.0 | 9.7 | 13.6 | 17.6 | 21.3 | 23.0 | 25.4 | 29.7 | 33.9 | 38.4 | 43.1 | | 48.51 | 6 / 2 | | | |
| reaction time interval | | 3.70 | 3.90 | 4.00 | 3.70 | | 4.10 | 4.30 | 4.20 | 4.50 | 4.70 | 5.41 | | | 11.60 | 12.10 | 13.40 |
| velocity | 7.50 | 9.46 | 8.97 | 8.75 | 9.46 | 8.70 | 8.54 | 8.14 | 8.33 | 7.78 | 7.45 | 7.39 | 8.25 | | 9.05 | 8.68 | 7.84 |
| H1 lead leg L strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | 19 | 163 | | | | |
| **Heat 3** - 1972 Olympic Games (Munich, FRG) | | | | | | | | | | | | | *Schmidt (1973) - vorolympishces training von john akii-bua über 400 hürden* | | | | |
| date 01-Sep-72 time | | | | | 21.8 | | | | | | 44.6 | | 50.18 | 5 / 2 | | | |
| reaction time interval | | | | | | | | | | | 22.80 | 5.58 | | | | | |
| velocity | | | | | 8.49 | | | | | | 7.68 | 7.17 | 7.97 | | | | |
| H1 lead leg strides | | | | | | | | | | | | | | | | | |
| **FINAL** - 1972 USA Olympic Trials (Eugene, OR) | | | | | | | | | | | | | *(1972) - die große olympia-vorschau: von wettbewarb zu wettbewaib* | | | | |
| date 02-Jul-72 time | 5.9 | 9.5 | 13.5 | 17.3 | 21.2 | | 25.3 | 29.7 | 34.0 | 38.5 | 42.1 | | 48.4 | 8 / 1 | | | |
| reaction time interval | | 3.60 | 4.00 | 3.80 | 3.90 | | 4.10 | 4.40 | 4.30 | 4.50 | 3.60 | 6.30 | *(48.34)* | | 11.40 | 12.40 | 12.40 |
| velocity | 7.63 | 9.72 | 8.75 | 9.21 | 8.97 | | 8.54 | 7.95 | 8.14 | 7.78 | 9.72 | 6.35 | 8.26 | | 9.21 | 8.47 | 8.47 |
| H1 lead leg L strides | | | | | | | | | | | | | | | | | |

**Mano, Yutaro (JPN) (1996)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2019 Japanese National Championships (Fukuoka, JPN) | | | | | | | | | | | | | *Yamanaka (2019) - research on athlete performance and technique- 2019 data book* | | | | |
| date 29-Jun-19 time | 6.02 | 9.93 | 13.90 | 17.97 | 22.01 | | 26.28 | 30.66 | 35.20 | 39.86 | 44.59 | | 50.07 | 2 / 6 | | | |
| reaction time 0.157 interval | | 3.91 | 3.97 | 4.07 | 4.04 | | 4.27 | 4.38 | 4.54 | 4.66 | 4.73 | 5.48 | | | 11.95 | 12.69 | 13.93 |
| velocity | 7.48 | 8.95 | 8.82 | 8.60 | 8.66 | | 8.20 | 7.99 | 7.71 | 7.51 | 7.40 | 7.30 | 7.99 | | 8.79 | 8.27 | 7.54 |
| H1 lead leg R strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 152 | | | | |
| **A FINAL** - 2019 Kinami Memorial (Osaka, JPN) | | | | | | | | | | | | | *Matsubayashi (2019) - research on athlete performance and technique- 2019 data book* | | | | |
| date 06-May-19 time | 6.16 | 10.14 | 14.11 | 18.12 | 22.32 | | 26.63 | 30.13 | 35.57 | 40.27 | 45.03 | | 50.51 | 6 / 5 | | | |
| reaction time interval | | 3.98 | 3.97 | 4.01 | 4.20 | | 4.31 | 3.50 | 5.44 | 4.70 | 4.76 | 5.48 | | | 11.96 | 12.01 | 14.90 |
| velocity | 7.31 | 8.79 | 8.82 | 8.73 | 8.33 | | 8.12 | 10.00 | 6.43 | 7.45 | 7.35 | 7.30 | 7.92 | | 8.78 | 8.74 | 7.05 |
| H1 lead leg R strides | 21 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 18.5 | 169.5 | | | | |
| **A FINAL** - 2019 Shizuoka International Athletics Meeting (Fukuroi, JPN) | | | | | | | | | | | | | *Kobayashi (2019) - research on athlete performance and technique- 2019 data book* | | | | |
| date 03-May-19 time | 6.12 | 10.01 | 13.90 | 17.97 | 22.12 | | 26.36 | 30.78 | 35.30 | 40.01 | 44.95 | | 50.57 | 5 / 4 | | | |
| reaction time interval | | 3.89 | 3.89 | 4.07 | 4.15 | | 4.24 | 4.42 | 4.52 | 4.71 | 4.94 | 5.62 | | | 11.85 | 12.81 | 14.17 |
| velocity | 7.35 | 9.00 | 9.00 | 8.60 | 8.43 | | 8.25 | 7.92 | 7.74 | 7.43 | 7.09 | 7.12 | 7.91 | | 8.86 | 8.20 | 7.41 |
| H1 lead leg R strides | 21 | 16 | 16 | 16 | 16 | | 17 | 17 | 17 | 19 | 19 | | 174 | | | | |

**Maran, Pascal (FRA) (1967)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1986 IAAF World Junor Championships (Athens, GRE) | | | | | | | | | | | | | *Miskos (1986) - IAAF biomechanical research - Athens 1986 - hurdle races* | | | | |
| date 18-Jul-86 time | 6.09 | 10.04 | 14.08 | 18.17 | 22.36 | | 26.66 | 31.10 | 35.74 | 40.36 | 45.08 | | 50.39 | / 3 | | | |
| reaction time interval | | 3.95 | 4.04 | 4.09 | 4.19 | | 4.30 | 4.44 | 4.64 | 4.62 | 4.72 | 5.31 | | | 12.08 | 12.93 | 13.98 |
| velocity | 7.39 | 8.86 | 8.66 | 8.56 | 8.35 | | 8.14 | 7.88 | 7.54 | 7.58 | 7.42 | 7.53 | 7.94 | | 8.69 | 8.12 | 7.51 |
| H1 lead leg strides | 20 | 13 | 13 | 13 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 164 | | | | |

**Maritim, Hillary (KEN) (1973)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 3** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | | |
| date 24-Sep-00 time | 6.10 | 9.98 | 13.94 | 17.98 | 22.14 | | 26.46 | 30.90 | 35.54 | 40.26 | 45.34 | | 51.04 | 3 / 6 | | | |
| reaction time interval | | 3.88 | 3.96 | 4.04 | 4.16 | | 4.32 | 4.44 | 4.64 | 4.72 | 5.08 | 5.70 | | | 11.88 | 12.92 | 14.44 |
| velocity | 7.38 | 9.02 | 8.84 | 8.66 | 8.41 | | 8.10 | 7.88 | 7.54 | 7.42 | 6.89 | 7.02 | 7.84 | | 8.84 | 8.13 | 7.27 |
| H1 lead leg strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 17 | | 159 | | | | |

**Maritim, Joseph (KEN) (1968)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 1** - 1988 Olympic Games (Seoul, KOR) | | | | | | | | | | | | | *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988* | | | | |
| date 24-Sep-88 time | 6.48 | 10.40 | 14.44 | 18.37 | 22.44 | | 26.62 | 30.86 | 35.26 | 39.79 | 44.35 | | 49.50 | 4 / 5 | | | |
| reaction time 0.180 interval | | 3.92 | 4.04 | 3.93 | 4.07 | | 4.18 | 4.24 | 4.40 | 4.53 | 4.56 | 5.15 | | | 11.89 | 12.49 | 13.49 |
| velocity | 6.94 | 8.93 | 8.66 | 8.91 | 8.60 | | 8.37 | 8.25 | 7.95 | 7.73 | 7.68 | 7.77 | 8.08 | | 8.83 | 8.41 | 7.78 |
| H1 lead leg strides | 22 | 15 | 15 | 13 | 13 | | 15 | 13 | 15 | 15 | 15 | 18 | 169 | | | | |

**Maritz, Hardus (NAM) (1990)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2017 North-West University Pukke Invitational (Sasolburg, RSA) (TV Analysis) | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2017 year end hurdle report* | | | | |
| date 28-Mar-17 time | 6.08 | 9.96 | 13.88 | 17.92 | 22.12 | | 26.36 | 30.68 | 35.12 | 39.88 | 44.76 | | 50.38 | 3 / 3 | | | |
| reaction time interval | | 3.88 | 3.92 | 4.04 | 4.20 | | 4.24 | 4.32 | 4.44 | 4.76 | 4.88 | 5.62 | | | 11.84 | 12.76 | 14.08 |
| velocity | 7.40 | 9.02 | 8.93 | 8.66 | 8.33 | | 8.25 | 8.10 | 7.88 | 7.35 | 7.17 | 7.12 | 7.94 | | 8.87 | 8.23 | 7.46 |
| H1 lead leg R strides | | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | | 119 | | | | |

**Maruyama, Tomoyo (JPN) (2005)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Japanese National High School Championships (Naruto, JPN) | | | | | | | | | | | | | *Kishima (2022) - national high school championships biomechanics data collection* | | | | |
| date 05-Aug-22 time | 6.17 | 10.22 | 14.27 | 18.52 | 22.95 | | 27.48 | 32.02 | 36.77 | 41.65 | 46.73 | | 52.86 | 7 / 6 | | | |
| reaction time 0.187 interval | | 4.05 | 4.05 | 4.25 | 4.43 | | 4.53 | 4.54 | 4.75 | 4.88 | 5.08 | 6.13 | | | 12.35 | 13.50 | 14.71 |
| velocity | 7.29 | 8.64 | 8.64 | 8.24 | 7.90 | | 7.73 | 7.71 | 7.37 | 7.17 | 6.89 | 6.53 | 7.57 | | 8.50 | 7.78 | 7.14 |
| H1 lead leg R strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 17 | 17 | | 161 | | | | |

**Mashchenko, Ruslan (RUS) (1971)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2002 European Championships (Munich, GER) | | | | | | | | | | | | | *Graubner (2009) - http://www.fgs.uni-halle.de* | | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-02 | time | 6.11 | 9.92 | 13.73 | 17.61 | 21.96 | 25.75 | 30.15 | 34.62 | 39.34 | 44.16 | | 50.02 | / 7 | | | |
| reaction time | 0.184 | interval | | 3.81 | 3.81 | 3.88 | 4.35 | 3.79 | 4.40 | 4.47 | 4.72 | 4.82 | 5.86 | | | 11.50 | 12.54 | 14.01 |
| | | velocity | 7.36 | 9.19 | 9.19 | 9.02 | 8.05 | 9.23 | 7.95 | 7.83 | 7.42 | 7.26 | 6.83 | 8.00 | | 9.13 | 8.37 | 7.49 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Heat 4** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Aug-02 | time | 6.08 | 9.90 | 13.74 | 17.64 | 21.67 | 25.80 | 30.18 | 34.66 | 39.30 | 44.03 | | 49.62 | / 1 | | | |
| reaction time | | interval | | 3.82 | 3.84 | 3.90 | 4.03 | 4.13 | 4.38 | 4.48 | 4.64 | 4.73 | 5.59 | | | 11.56 | 12.54 | 13.85 |
| | | velocity | 7.40 | 9.16 | 9.11 | 8.97 | 8.68 | 8.47 | 7.99 | 7.81 | 7.54 | 7.40 | 7.16 | 8.06 | | 9.08 | 8.37 | 7.58 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 2001 European Cup (Bremen, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jun-01 | time | 6.08 | 9.90 | 13.76 | 17.62 | 21.62 | 25.70 | 30.04 | 34.46 | 39.14 | 43.92 | | 49.53 | / 4 | | | |
| reaction time | | interval | | 3.82 | 3.86 | 3.86 | 4.00 | 4.08 | 4.34 | 4.42 | 4.68 | 4.78 | 5.61 | | | 11.54 | 12.42 | 13.88 |
| | | velocity | 7.40 | 9.16 | 9.07 | 9.07 | 8.75 | 8.58 | 8.06 | 7.92 | 7.48 | 7.32 | 7.13 | 8.08 | | 9.10 | 8.45 | 7.56 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Semi-Final 2** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 5.88 | 9.72 | 13.44 | 17.24 | 21.12 | 22.64 | 25.16 | 29.40 | 33.80 | 38.40 | 43.16 | | 48.94 | 7 / 3 | | |
| reaction time | 0.177 | interval | | 3.84 | 3.72 | 3.80 | 3.88 | | 4.04 | 4.24 | 4.40 | 4.60 | 4.76 | 5.78 | | | 11.36 | 12.16 | 13.76 |
| | | velocity | 7.65 | 9.11 | 9.41 | 9.21 | 9.02 | 8.83 | 8.66 | 8.25 | 7.95 | 7.61 | 7.35 | 6.92 | 8.17 | | 9.24 | 8.63 | 7.63 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18.6 | 141.6 | | | | |

**Heat 1** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.94 | 9.62 | 13.38 | 17.22 | 21.18 | 25.34 | 29.62 | 34.14 | 39.06 | 44.06 | | 50.01 | 3 / 3 | | | |
| reaction time | 0.225 | interval | | 3.68 | 3.76 | 3.84 | 3.96 | 4.16 | 4.28 | 4.52 | 4.92 | 5.00 | 5.95 | | | 11.28 | 12.40 | 14.44 |
| | | velocity | 7.58 | 9.51 | 9.31 | 9.11 | 8.84 | 8.41 | 8.18 | 7.74 | 7.11 | 7.00 | 6.72 | 8.00 | | 9.31 | 8.47 | 7.27 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18.3 | 161.3 | | | | |

**FINAL** - 1998 European Championships (Budapest, HUN) *Sanchez (1998) - Budapest '98: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-98 | time | 5.95 | 9.75 | 13.59 | 17.51 | 21.38 | 25.39 | 29.47 | 33.70 | 38.12 | 42.70 | | 48.25 | 5 / 2 | | | |
| reaction time | | interval | | 3.80 | 3.84 | 3.92 | 3.87 | 4.01 | 4.08 | 4.23 | 4.42 | 4.58 | 5.55 | | | 11.56 | 11.96 | 13.23 |
| | | velocity | 7.56 | 9.21 | 9.11 | 8.93 | 9.04 | 8.73 | 8.58 | 8.27 | 7.92 | 7.64 | 7.21 | 8.29 | | 9.08 | 8.78 | 7.94 |
| H1 lead leg | L | strides | 19 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17 | 157 | | | | |

**FINAL** - 1997 IAAF World Championships (Athens, GRE) *Hommel (1999) - biomechanical research project, athens 1997: final report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Aug-97 | time | 5.88 | 9.60 | 13.36 | 17.16 | 21.02 | 25.02 | 29.30 | 33.61 | 38.26 | 43.06 | | 48.62 | 5 / 6 | | | |
| reaction time | 0.166 | interval | | 3.72 | 3.76 | 3.80 | 3.86 | 4.00 | 4.28 | 4.31 | 4.65 | 4.80 | 5.56 | | | 11.28 | 12.14 | 13.76 |
| | | velocity | 7.65 | 9.41 | 9.31 | 9.21 | 9.07 | 8.75 | 8.18 | 8.12 | 7.53 | 7.29 | 7.19 | 8.23 | | 9.31 | 8.65 | 7.63 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 1997 European Cup (Munich, GER) *Jung (2003) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-97 | time | 6.05 | 9.79 | 13.70 | 17.72 | 21.84 | 26.06 | 30.47 | 34.94 | 39.60 | 44.33 | | 49.74 | / 3 | | | |
| reaction time | | interval | | 3.74 | 3.91 | 4.02 | 4.12 | 4.22 | 4.41 | 4.47 | 4.66 | 4.73 | 5.41 | | | 11.67 | 12.75 | 13.86 |
| | | velocity | 7.44 | 9.36 | 8.95 | 8.71 | 8.50 | 8.29 | 7.94 | 7.83 | 7.51 | 7.40 | 7.39 | 8.04 | | 9.00 | 8.24 | 7.58 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Matete, Samuel (ZAM) (1968)**

**Semi-Final 3** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 6.06 | 9.82 | 13.70 | 17.66 | 21.66 | 23.18 | 25.74 | 29.98 | 34.38 | 38.90 | 43.50 | | 48.98 | 6 / 3 | | | |
| reaction time | 0.228 | interval | | 3.76 | 3.88 | 3.96 | 4.00 | | 4.08 | 4.24 | 4.40 | 4.52 | 4.60 | 5.48 | | | 11.60 | 12.32 | 13.52 |
| | | velocity | 7.43 | 9.31 | 9.02 | 8.84 | 8.75 | 8.63 | 8.58 | 8.25 | 7.95 | 7.74 | 7.61 | 7.30 | 8.17 | | 9.05 | 8.52 | 7.77 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 18 | 160 | | | | |

**Heat 7** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.92 | 9.64 | 13.52 | 17.80 | 21.64 | 25.80 | 30.16 | 34.52 | 39.04 | 43.60 | | 48.98 | 1 / 1 | | | |
| reaction time | 0.184 | interval | | 3.72 | 3.88 | 4.28 | 3.84 | 4.16 | 4.36 | 4.36 | 4.52 | 4.56 | 5.38 | | | 11.88 | 12.36 | 13.44 |
| | | velocity | 7.60 | 9.41 | 9.02 | 8.18 | 9.11 | 8.41 | 8.03 | 8.03 | 7.74 | 7.68 | 7.43 | 8.17 | | 8.84 | 8.50 | 7.81 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 15 | 17.8 | 161.8 | | | | |

**FINAL** - 2000 ISTAF (Berlin, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-00 | time | 6.21 | 10.08 | 13.98 | 17.92 | 21.90 | 25.98 | 30.18 | 34.41 | 38.78 | 43.26 | | 48.38 | / 2 | | | |
| reaction time | | interval | | 3.87 | 3.90 | 3.94 | 3.98 | 4.08 | 4.20 | 4.23 | 4.37 | 4.48 | 5.12 | | | 11.71 | 12.26 | 13.08 |
| | | velocity | 7.25 | 9.04 | 8.97 | 8.88 | 8.79 | 8.58 | 8.33 | 8.27 | 8.01 | 7.81 | 7.81 | 8.27 | | 8.97 | 8.56 | 8.03 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Semi-Final 1** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-99 | time | 5.68 | 9.44 | 13.23 | 17.25 | 21.31 | 25.38 | 29.66 | 34.10 | 38.59 | 43.28 | | 49.28 | 3 / 6 | | | |
| reaction time | 0.169 | interval | | 3.76 | 3.79 | 4.02 | 4.06 | 4.07 | 4.28 | 4.44 | 4.49 | 4.69 | 6.00 | | | 11.57 | 12.41 | 13.62 |
| | | velocity | 7.92 | 9.31 | 9.23 | 8.71 | 8.62 | 8.60 | 8.18 | 7.88 | 7.80 | 7.46 | 6.67 | 8.12 | | 9.08 | 8.46 | 7.71 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 18.5 | 160.5 | | | | |

**FINAL** - 1997 IAAF World Championships (Athens, GRE) *Hommel (1999) - biomechanical research project, athens 1997: final report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Aug-97 | time | 5.98 | 9.66 | 13.41 | 17.24 | 21.16 | 25.18 | 29.20 | 33.62 | 38.10 | 42.70 | | 48.11 | 8 / 5 | | | |
| reaction time | 0.237 | interval | | 3.68 | 3.75 | 3.83 | 3.92 | 4.02 | 4.02 | 4.42 | 4.48 | 4.60 | 5.41 | | | 11.26 | 11.96 | 13.50 |
| | | velocity | 7.53 | 9.51 | 9.33 | 9.14 | 8.93 | 8.71 | 8.71 | 7.92 | 7.81 | 7.61 | 7.39 | 8.31 | | 9.33 | 8.78 | 7.78 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 1996 Olympic Games (Atlanta, GA) *McFarlane (2000) - the science of hurdling and speed*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Aug-96 | time | 5.84 | 9.61 | 13.43 | 17.29 | 21.24 | 25.22 | 29.30 | 33.44 | 37.74 | 42.25 | | 47.78 | 1 / 2 | | | |
| reaction time | 0.184 | interval | | 3.77 | 3.82 | 3.86 | 3.95 | 3.98 | 4.08 | 4.14 | 4.30 | 4.51 | 5.53 | | | 11.45 | 12.01 | 12.95 |
| | | velocity | 7.71 | 9.28 | 9.16 | 9.07 | 8.86 | 8.79 | 8.58 | 8.45 | 8.14 | 7.76 | 7.23 | 8.37 | | 9.17 | 8.74 | 8.11 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | | 141 | | | | |

**FINAL** - 1995 IAAF World Championships (Göteborg, SWE) *Behm (1999) - Les chiffres: Les podiums de tous le championnats*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-95 | time | | | | | 21.0 | | | | | | | 48.03 | 3 / 2 | | | |
| reaction time | | interval | | | | | | | | | | | | | | | | |
| | | velocity | | | | | 8.81 | | | | | | | 8.33 | | | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 18.5 | 160 | | | | |

**FINAL** - 1993 IAAF World Championships (Stuttgart, GER) *Graubner (2008) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Aug-93 | time | 5.96 | 9.67 | 13.42 | 17.26 | 21.20 | 25.16 | 29.30 | 33.64 | 38.13 | 42.63 | | 47.60 | 3 / 2 | | | |
| reaction time | 0.265 | interval | | 3.71 | 3.75 | 3.84 | 3.94 | 3.96 | 4.14 | 4.34 | 4.49 | 4.50 | 4.97 | | | 11.30 | 12.04 | 13.33 |
| | | velocity | 7.55 | 9.43 | 9.33 | 9.11 | 8.88 | 8.84 | 8.45 | 8.06 | 7.80 | 7.78 | 8.05 | 8.40 | | 9.29 | 8.72 | 7.88 |
| H1 lead leg | L | strides | 21 | 13 | 13 | | 13 | 13 | 13 | | | 15 | 18 | 119 | | | | |

**Semi-Final 2** - 1993 IAAF World Championships (Stuttgart, GER) *Letzelter (1995) - schrittgestaltung im 400m-hürdenlauf der jugend*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-93 | time | 5.74 | 9.44 | 13.18 | 16.96 | 20.82 | 24.78 | 28.96 | 33.46 | 38.12 | 42.74 | | 48.18 | 3 / 1 | | | |
| reaction time | | interval | | 3.70 | 3.74 | 3.78 | 3.86 | 3.96 | 4.18 | 4.50 | 4.66 | 4.62 | 5.44 | | | 11.22 | 12.00 | 13.78 |
| | | velocity | 7.84 | 9.46 | 9.36 | 9.26 | 9.07 | 8.84 | 8.37 | 7.78 | 7.51 | 7.58 | 7.35 | 8.30 | | 9.36 | 8.75 | 7.62 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 15 | 17.5 | 162 | | | | |

**FINAL** - 1991 IAAF World Championships (Tokyo, JPN) *Behm (1995) - la tactique du 400 haies*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Aug-91 | time | 5.8 | 9.4 | 13.1 | 16.7 | 20.4 | 24.3 | 28.5 | 32.8 | 37.4 | 42.1 | | 47.64 | 6 / 1 | | | |
| reaction time | | interval | | 3.60 | 3.70 | 3.60 | 3.70 | 3.90 | 4.20 | 4.30 | 4.60 | 4.70 | 5.54 | | | 10.90 | 11.80 | 13.60 |
| | | velocity | 7.76 | 9.72 | 9.46 | 9.72 | 9.46 | 8.97 | 8.33 | 8.14 | 7.61 | 7.45 | 7.22 | 8.40 | | 9.63 | 8.90 | 7.72 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 15 | 18.5 | 161.5 | | | | |

**Matsumoto, Takahiro (JPN) (1994)**

**FINAL** - 2011 Japanese National High School Championships (Kitakami, JPN) *Abe (2011) - 64th high school championships: JAF scientific committee - biomechanics*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 05-Aug-11 | time | 6.22 | 10.40 | 14.69 | 19.02 | 23.37 | | 27.77 | 32.19 | 36.82 | 41.71 | 46.74 | | 52.34 | 6 / 2 | | | |
| reaction time | interval | | 4.18 | 4.29 | 4.33 | 4.35 | | 4.40 | 4.42 | 4.63 | 4.89 | 5.03 | 5.60 | | | 12.80 | 13.17 | 14.55 |
| | velocity | 7.23 | 8.37 | 8.16 | 8.08 | 8.05 | | 7.95 | 7.92 | 7.56 | 7.16 | 6.96 | 7.14 | 7.64 | | 8.20 | 7.97 | 7.22 |
| H1 lead leg | strides | | | | | | | | | | | | | | | | | |

**Matsushita, Yuki (JPN) (1991)**

**FINAL** - 2022 Japanese National Championsips (Osaka, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 11-Jun-22 | time | 6.16 | 10.04 | 14.05 | 18.15 | 22.29 | | 26.59 | 31.05 | 35.72 | 40.44 | 45.15 | | 50.57 | 3 / 7 | | | |
| reaction time 0.171 | interval | | 3.88 | 4.01 | 4.10 | 4.14 | | 4.30 | 4.46 | 4.67 | 4.72 | 4.71 | 5.42 | | | 11.99 | 12.90 | 14.10 |
| | velocity | 7.31 | 9.02 | 8.73 | 8.54 | 8.45 | | 8.14 | 7.85 | 7.49 | 7.42 | 7.43 | 7.38 | 7.91 | | 8.76 | 8.14 | 7.45 |
| H1 lead leg R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 146 | | | | |

**FINAL** - 2022 Seiko Golden Grand Prix (Tokyo, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-22 | time | 6.16 | 10.08 | 14.01 | 18.02 | 22.07 | 26.43 | 30.91 | 35.52 | 40.14 | 44.84 | | 50.31 | 2 / 8 | | | |
| reaction time | 0.199 | interval | | 3.92 | 3.93 | 4.01 | 4.05 | 4.36 | 4.48 | 4.61 | 4.62 | 4.70 | 5.47 | | | 11.86 | 12.89 | 13.93 |
| | | velocity | 7.31 | 8.93 | 8.91 | 8.73 | 8.64 | 8.03 | 7.81 | 7.59 | 7.58 | 7.45 | 7.31 | 7.95 | | 8.85 | 8.15 | 7.54 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 19 | 165 | | | | |

**FINAL** - 2022 Michitaka Kinami Memorial (Osaka, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-May-22 | time | 6.14 | 10.01 | 13.98 | 18.07 | 22.17 | 26.34 | 30.95 | 35.54 | 40.19 | 44.99 | | 50.56 | 2 / 8 | | | |
| reaction time | 0.139 | interval | | 3.87 | 3.97 | 4.09 | 4.10 | 4.17 | 4.61 | 4.59 | 4.65 | 4.80 | 5.57 | | | 11.93 | 12.88 | 14.04 |
| | | velocity | 7.33 | 9.04 | 8.82 | 8.56 | 8.54 | 8.39 | 7.59 | 7.63 | 7.53 | 7.29 | 7.18 | 7.91 | | 8.80 | 8.15 | 7.48 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**B FINAL** - 2021 Denka Athletics Challenge Cup (Niigata, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jun-21 | time | 6.16 | 9.99 | 13.96 | 17.97 | 22.12 | 26.53 | 31.01 | 35.62 | 40.26 | 44.94 | | 50.31 | 5 / 2 | | | |
| reaction time | | interval | | 3.83 | 3.97 | 4.01 | 4.15 | 4.41 | 4.48 | 4.61 | 4.64 | 4.68 | 5.37 | | | 11.81 | 13.04 | 13.93 |
| | | velocity | 7.31 | 9.14 | 8.82 | 8.73 | 8.43 | 7.94 | 7.81 | 7.59 | 7.54 | 7.48 | 7.45 | 7.95 | | 8.89 | 8.05 | 7.54 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18.2 | 164.2 | | | | |

**FINAL** - 2021 Ready Steady Tokyo (Tokyo, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-May-21 | time | 5.97 | 9.71 | 13.56 | 17.47 | 21.59 | 25.93 | 30.41 | 34.97 | 39.62 | 44.31 | | 49.88 | 8 / 7 | | | |
| reaction time | 0.164 | interval | | 3.74 | 3.85 | 3.91 | 4.12 | 4.34 | 4.48 | 4.56 | 4.65 | 4.69 | 5.57 | | | 11.50 | 12.94 | 13.90 |
| | | velocity | 7.54 | 9.36 | 9.09 | 8.95 | 8.50 | 8.06 | 7.81 | 7.68 | 7.53 | 7.46 | 7.18 | 8.02 | | 9.13 | 8.11 | 7.55 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**B FINAL** - 2021 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-21 | time | 6.19 | 10.01 | 13.93 | 17.92 | 22.06 | 26.44 | 30.90 | 35.52 | 40.21 | 44.98 | | 50.52 | 9 / 2 | | | |
| reaction time | 0.218 | interval | | 3.82 | 3.92 | 3.99 | 4.14 | 4.38 | 4.46 | 4.62 | 4.69 | 4.77 | 5.54 | | | 11.73 | 12.98 | 14.08 |
| | | velocity | 7.27 | 9.16 | 8.93 | 8.77 | 8.45 | 7.99 | 7.85 | 7.58 | 7.46 | 7.34 | 7.22 | 7.92 | | 8.95 | 8.09 | 7.46 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18.5 | 164.5 | | | | |

**FINAL** - 2020 Michitaka Kinami Memorial (Osaka, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Oct-20 | time | 6.07 | 9.93 | 13.80 | 17.63 | 21.60 | 25.78 | 30.11 | 34.68 | 39.47 | 44.44 | | 50.34 | 7 / 4 | | | |
| reaction time | | interval | | 3.86 | 3.87 | 3.83 | 3.97 | 4.18 | 4.33 | 4.57 | 4.79 | 4.97 | 5.90 | | | 11.56 | 12.48 | 14.33 |
| | | velocity | 7.41 | 9.07 | 9.04 | 9.14 | 8.82 | 8.37 | 8.08 | 7.66 | 7.31 | 7.04 | 6.78 | 7.95 | | 9.08 | 8.41 | 7.33 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 19.2 | 165.2 | | | | |

**FINAL** - 2020 All Japan Corporate Championships (Kumagaya, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Sep-20 | time | 6.22 | 10.03 | 13.95 | 17.93 | 22.11 | 26.48 | 31.05 | 35.79 | 40.57 | 45.40 | | 50.97 | 9 / 5 | | | |
| reaction time | 0.209 | interval | | 3.81 | 3.92 | 3.98 | 4.18 | 4.37 | 4.57 | 4.74 | 4.78 | 4.83 | 5.57 | | | 11.71 | 13.12 | 14.35 |
| | | velocity | 7.23 | 9.19 | 8.93 | 8.79 | 8.37 | 8.01 | 7.66 | 7.38 | 7.32 | 7.25 | 7.18 | 7.85 | | 8.97 | 8.00 | 7.32 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2020 Seiko Golden Grand Prix (Tokyo, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-20 | time | 6.14 | 9.91 | 13.78 | 17.82 | 22.01 | 26.36 | 30.83 | 35.42 | 40.09 | 44.89 | | 50.60 | 7 / 5 | | | |
| reaction time | 0.147 | interval | | 3.77 | 3.87 | 4.04 | 4.19 | 4.35 | 4.47 | 4.59 | 4.67 | 4.80 | 5.71 | | | 11.68 | 13.01 | 14.06 |
| | | velocity | 7.33 | 9.28 | 9.04 | 8.66 | 8.35 | 8.05 | 7.83 | 7.63 | 7.49 | 7.29 | 7.01 | 7.91 | | 8.99 | 8.07 | 7.47 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2019 Japanese National Championships (Fukuoka, JPN) *Yamanaka (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jun-19 | time | 6.09 | 9.84 | 13.74 | 17.70 | 21.71 | 25.93 | 30.25 | 34.75 | 39.31 | 43.99 | | 49.47 | 6 / 3 | | | |
| reaction time | 0.161 | interval | | 3.75 | 3.90 | 3.96 | 4.01 | 4.22 | 4.32 | 4.50 | 4.56 | 4.68 | 5.48 | | | 11.61 | 12.55 | 13.74 |
| | | velocity | 7.39 | 9.33 | 8.97 | 8.84 | 8.73 | 8.29 | 8.10 | 7.78 | 7.68 | 7.48 | 7.30 | 8.09 | | 9.04 | 8.37 | 7.64 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 19.2 | 165.2 | | | | |

**A FINAL** - 2019 Kinami Memorial (Osaka, JPN) *Matsubayashi (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-May-19 | time | 6.11 | 9.93 | 13.83 | 17.74 | 21.72 | 25.94 | 30.23 | 34.70 | 39.31 | 44.01 | | 49.57 | 3 / 2 | | | |
| reaction time | | interval | | 3.82 | 3.90 | 3.91 | 3.98 | 4.22 | 4.29 | 4.47 | 4.61 | 4.70 | 5.56 | | | 11.63 | 12.49 | 13.78 |
| | | velocity | 7.36 | 9.16 | 8.97 | 8.95 | 8.79 | 8.29 | 8.16 | 7.83 | 7.59 | 7.45 | 7.19 | 8.07 | | 9.03 | 8.41 | 7.62 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 19 | 165 | | | | |

**FINAL** - 2017 Japanese National Championships (Osaka, JPN) *Morioka (2018) - Analysis of the race patterns of the top 400m hurdles in Japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jun-17 | time | 6.14 | 9.96 | 13.88 | 17.80 | 21.79 | 26.09 | 30.43 | 34.92 | 39.54 | 44.33 | | 49.92 | / 3 | | | |
| reaction time | 0.155 | interval | | 3.82 | 3.92 | 3.92 | 3.99 | 4.30 | 4.34 | 4.49 | 4.62 | 4.79 | 5.59 | | | 11.66 | 12.63 | 13.90 |
| | | velocity | 7.33 | 9.16 | 8.93 | 8.93 | 8.77 | 8.14 | 8.06 | 7.80 | 7.58 | 7.31 | 7.16 | 8.01 | | 9.01 | 8.31 | 7.55 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2017 Nambu Memorial (Sapporo, JPN) *(2017) - tfdata-store.com/2017/07/11/post-1019/*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-17 | time | 6.16 | 9.90 | 13.73 | 17.65 | 21.68 | 25.91 | 30.28 | 34.80 | 39.46 | 44.13 | | 49.41 | 7 / 2 | | | |
| reaction time | | interval | | 3.74 | 3.83 | 3.92 | 4.03 | 4.23 | 4.37 | 4.52 | 4.66 | 4.67 | 5.28 | | | 11.49 | 12.63 | 13.85 |
| | | velocity | 7.31 | 9.36 | 9.14 | 8.93 | 8.68 | 8.27 | 8.01 | 7.74 | 7.51 | 7.49 | 7.58 | 8.10 | | 9.14 | 8.31 | 7.58 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18.5 | 164.5 | | | | |

**FINAL** - 2016 Japanese National Championships (Nagoya, JPN) *Morioka (2016) - race pattern of top 400m hurdlers in japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jun-16 | time | 6.09 | 9.93 | 13.80 | 17.72 | 21.74 | 25.93 | 30.25 | 34.75 | 39.32 | 43.96 | | 49.31 | 6 / 2 | | | |
| reaction time | 0.169 | interval | | 3.84 | 3.87 | 3.92 | 4.02 | 4.19 | 4.32 | 4.50 | 4.57 | 4.64 | 5.35 | | | 11.63 | 12.53 | 13.71 |
| | | velocity | 7.39 | 9.11 | 9.04 | 8.93 | 8.71 | 8.35 | 8.10 | 7.78 | 7.66 | 7.54 | 7.48 | 8.11 | | 9.03 | 8.38 | 7.66 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2016 Seiko Golden Grand Prix (Kawasaki, JPN) *Morioka (2016) - race pattern of top 400m hurdlers in japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-16 | time | 6.02 | 9.82 | 13.66 | 17.58 | 21.57 | 25.77 | 30.17 | 34.69 | 39.26 | 43.88 | | 49.10 | 3 / 3 | | | |
| reaction time | 0.191 | interval | | 3.80 | 3.84 | 3.92 | 3.99 | 4.20 | 4.40 | 4.52 | 4.57 | 4.62 | 5.22 | | | 11.56 | 12.59 | 13.71 |
| | | velocity | 7.48 | 9.21 | 9.11 | 8.93 | 8.77 | 8.33 | 7.95 | 7.74 | 7.66 | 7.58 | 7.66 | 8.15 | | 9.08 | 8.34 | 7.66 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18.5 | 164.5 | | | | |

**FINAL** - 2015 Japanese National Championships (Niigata, JPN) *Yasunori (2015) - race pattern analysis of the top 400m hurdlers in Japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Jun-15 | time | 6.11 | 9.91 | 13.83 | 17.78 | 21.88 | 26.15 | 30.57 | 35.21 | 39.86 | 44.55 | | 49.76 | 6 / 1 | | | |
| reaction time | 0.169 | interval | | 3.80 | 3.92 | 3.95 | 4.10 | 4.27 | 4.42 | 4.64 | 4.65 | 4.69 | 5.21 | | | 11.67 | 12.79 | 13.98 |
| | | velocity | 7.36 | 9.21 | 8.93 | 8.86 | 8.54 | 8.20 | 7.92 | 7.54 | 7.53 | 7.46 | 7.68 | 8.04 | | 9.00 | 8.21 | 7.51 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 19 | 165 | | | | |

**B Race** - 2015 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Yasunori (2015) - race pattern analysis of the top 400m hurdlers in Japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-15 | time | 6.04 | 9.88 | 13.78 | 17.72 | 21.76 | 26.03 | 30.40 | 35.00 | 39.67 | 44.47 | | 49.78 | / 3 | | | |
| reaction time | 0.164 | interval | | 3.84 | 3.90 | 3.94 | 4.04 | 4.27 | 4.37 | 4.60 | 4.67 | 4.80 | 5.31 | | | 11.68 | 12.68 | 14.07 |
| | | velocity | 7.45 | 9.11 | 8.97 | 8.88 | 8.66 | 8.20 | 8.01 | 7.61 | 7.49 | 7.29 | 7.53 | 8.04 | | 8.99 | 8.28 | 7.46 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**Mbaye, Amadou (SEN) (1964)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1996 French National Championships (Evry, FRA) | | | | | | | | | | | | | | | | *Veney - split times from PJ* | | | |
| date | ??? | time | 6.1 | 9.9 | 13.9 | 18.0 | 22.0 | | 26.2 | 30.5 | 35.0 | 39.6 | 44.5 | | 50.30 | / 2 | | | |
| reaction time | | interval | | 3.80 | 4.00 | 4.10 | 4.00 | | 4.20 | 4.30 | 4.50 | 4.60 | 4.90 | 5.80 | | | 11.90 | 12.50 | 14.00 |
| | | velocity | 7.38 | 9.21 | 8.75 | 8.54 | 8.75 | | 8.33 | 8.14 | 7.78 | 7.61 | 7.14 | 6.90 | 7.95 | | 8.82 | 8.40 | 7.50 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | | 141 | | | | |

**McAlister, Chris (GBR) (1995)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Bauhaus Galan (Stockholm, SWE) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date | 30-Jun-22 | time | 6.12 | 9.92 | 13.72 | 17.60 | 21.70 | 23.39 | 25.92 | 30.38 | 34.86 | 39.48 | 44.32 | | 49.76 | 8 / 7 | | | |
| reaction time | 0.175 | interval | | 3.80 | 3.80 | 3.88 | 4.10 | | 4.22 | 4.46 | 4.48 | 4.62 | 4.84 | 5.44 | | | 11.48 | 12.78 | 13.94 |
| | | velocity | 7.35 | 9.21 | 9.21 | 9.02 | 8.54 | 8.55 | 8.29 | 7.85 | 7.81 | 7.58 | 7.23 | 7.35 | 8.04 | | 9.15 | 8.22 | 7.53 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | | 152 | | | | |
| **FINAL** - 2021 Weltklasse (Zürich, SUI) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 09-Sep-21 | time | 6.24 | | | | 22.40 | 24.1 | 26.64 | | | 39.88 | 44.48 | | 49.73 | 1 / 7 | | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.168 | interval | | | | 16.16 | | 4.24 | | | 13.24 | 4.60 | 5.25 | | | | | | |
| | | velocity | 7.21 | | | 8.66 | 8.30 | 8.25 | | | 7.93 | 7.61 | 7.62 | 8.04 | | | | | |
| H1 lead leg | R | strides | 22 | | | | | 14 | | | | 15 | | 51 | | | | | |

**FINAL** - 2021 Memorial van Damme (Brussels, BEL) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Sep-21 | time | 6.08 | 9.92 | 13.92 | 18.00 | 22.08 | 23.9 | 26.28 | 30.72 | 35.32 | 39.96 | 44.80 | | 50.09 | 1 / 7 | | | |
| reaction time | 0.144 | interval | | 3.84 | 4.00 | 4.08 | 4.08 | | 4.20 | 4.44 | 4.60 | 4.64 | 4.84 | 5.29 | | | 11.92 | 12.72 | 14.08 |
| | | velocity | 7.40 | 9.11 | 8.75 | 8.58 | 8.58 | 8.37 | 8.33 | 7.88 | 7.61 | 7.54 | 7.23 | 7.56 | 7.99 | | 8.81 | 8.25 | 7.46 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | | 15 | 15 | 15 | | 137 | | | | |

**FINAL** - 2021 Herculis Meeting International d'Athletisme (Monaco, MON) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-21 | time | 5.97 | 9.77 | | 17.65 | | 23.5 | | | 34.77 | 39.60 | 44.57 | | 49.98 | 2 / 6 | | | |
| reaction time | 0.144 | interval | | 3.80 | | 7.88 | | | | | 17.12 | 4.83 | 4.97 | 5.41 | | | 11.68 | | |
| | | velocity | 7.54 | 9.21 | | 8.88 | | 8.51 | | | 8.18 | 7.25 | 7.04 | 7.39 | 8.00 | | 8.99 | | |
| H1 lead leg | R | strides | 22 | 14 | | | | | | | | 16 | 16 | | 68 | | | | |

**FINAL** - 2021 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jul-21 | time | 6.04 | 9.88 | 13.84 | 17.80 | 21.80 | 23.6 | 25.88 | | 34.72 | 39.36 | 43.92 | | 49.16 | 1 / 5 | | | |
| reaction time | 0.134 | interval | | 3.84 | 3.96 | 3.96 | 4.00 | | 4.08 | | 8.84 | 4.64 | 4.56 | 5.24 | **PB** | | 11.76 | | |
| | | velocity | 7.45 | 9.11 | 8.84 | 8.84 | 8.75 | 8.47 | 8.58 | | 7.92 | 7.54 | 7.68 | 7.63 | 8.14 | | 8.93 | | |
| H1 lead leg | R | strides | | 14 | 14 | 14 | 14 | | 14 | | | 15 | 15 | 18.5 | 118.5 | | | | |

**FINAL** - 2020 ISTAF (Berlin, GER) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Sep-20 | time | 6.24 | | 14.28 | 18.44 | 22.64 | | 26.88 | | 35.84 | 40.56 | | | 51.03 | 1 / 6 | | | |
| reaction time | 0.188 | interval | | | 8.04 | 4.16 | 4.20 | | 4.24 | | 8.96 | 4.72 | | | | | 12.20 | | |
| | | velocity | 7.21 | | 8.71 | 8.41 | 8.33 | | 8.25 | | 7.81 | 7.42 | | | 7.84 | | 8.61 | | |
| H1 lead leg | R | strides | 22 | | | 15 | | | 15 | | | 15 | | | 67 | | | | |

**Semi-Final 2** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 6.13 | 9.96 | 13.84 | 17.76 | 21.82 | | 26.01 | 30.33 | 34.80 | 39.32 | 43.94 | | 49.18 | 9 / 5 | | | |
| reaction time | 0.165 | interval | | 3.83 | 3.88 | 3.92 | 4.06 | | 4.19 | 4.32 | 4.47 | 4.52 | 4.62 | 5.24 | **PB** | | 11.63 | 12.57 | 13.61 |
| | | velocity | 7.34 | 9.14 | 9.02 | 8.93 | 8.62 | | 8.35 | 8.10 | 7.83 | 7.74 | 7.58 | 7.63 | 8.13 | | 9.03 | 8.35 | 7.71 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 19 | 171 | | | | |

**FINAL** - 2019 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Jul-19 | time | 6.28 | 10.08 | 14.04 | 18.00 | 22.12 | 23.8 | 26.28 | | 35.04 | 39.60 | 44.40 | | 49.93 | 3 / 8 | | | |
| reaction time | 0.179 | interval | | 3.80 | 3.96 | 3.96 | 4.12 | | 4.16 | | 8.76 | 4.56 | 4.80 | 5.53 | | | 11.72 | | |
| | | velocity | 7.17 | 9.21 | 8.84 | 8.84 | 8.50 | 8.40 | 8.41 | | 7.99 | 7.68 | 7.29 | 7.23 | 8.01 | | 8.96 | | |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | | | 15 | 15 | 19.2 | 141.2 | | | | |

**McCoy, Reuben (USA) (1986)**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
| **FINAL** - 2008 USA Olympic Trials (Eugene, OR) | | | | | | | | | | | | | | | *USATF Hurdle Development (2008)* | | | | |
| date | 29-Jun-08 | time | 6.07 | 9.88 | 13.68 | 17.67 | 21.81 | | 26.01 | 30.31 | 34.70 | 39.12 | 43.71 | | 49.18 | 6 / 7 | | | |
| reaction time | | interval | | 3.81 | 3.80 | 3.99 | 4.14 | | 4.20 | 4.30 | 4.39 | 4.42 | 4.59 | 5.47 | | | 11.60 | 12.64 | 13.40 |
| | | velocity | 7.41 | 9.19 | 9.21 | 8.77 | 8.45 | | 8.33 | 8.14 | 7.97 | 7.92 | 7.63 | 7.31 | 8.13 | | 9.05 | 8.31 | 7.84 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 146 | | | | |

**Heat 3** - 2007 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2007)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-07 | time | 6.21 | 9.99 | 13.93 | 18.03 | 22.37 | | 26.86 | 31.33 | 35.79 | 40.32 | 44.89 | | 50.16 | 8 / 3 | | | |
| reaction time | | interval | | 3.78 | 3.94 | 4.10 | 4.34 | | 4.49 | 4.47 | 4.46 | 4.53 | 4.57 | 5.27 | | | 11.82 | 13.30 | 13.56 |
| | | velocity | 7.25 | 9.26 | 8.88 | 8.54 | 8.06 | | 7.80 | 7.83 | 7.85 | 7.73 | 7.66 | 7.59 | 7.97 | | 8.88 | 7.89 | 7.74 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 15 | | 15 | 15 | 15 | 15 | 15 | | 150 | | | | |

**McFarlane, Danny (JAM) (1972)**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
| **FINAL** - 2009 IAAF World Championships (Berlin, GER) | | | | | | | | | | | | | | | *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships* | | | | |
| date | 18-Aug-09 | time | 6.01 | 9.70 | 13.52 | 17.42 | 21.40 | | 25.48 | 29.79 | 34.09 | 38.57 | 43.26 | | 48.65 | 1 / 6 | | | |
| reaction time | 0.162 | interval | | 3.69 | 3.82 | 3.90 | 3.98 | | 4.08 | 4.31 | 4.30 | 4.48 | 4.69 | 5.39 | | | 11.41 | 12.37 | 13.47 |
| | | velocity | 7.49 | 9.49 | 9.16 | 8.97 | 8.79 | | 8.58 | 8.12 | 8.14 | 7.81 | 7.46 | 7.42 | 8.22 | | 9.20 | 8.49 | 7.80 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 18 | 161 | | | | |

**Semi-Final 1** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Aug-09 | time | 5.99 | 9.65 | 13.40 | 17.29 | 21.34 | | 25.46 | 29.78 | 34.08 | 38.54 | 43.16 | | 48.49 | 4 / 4 | | | |
| reaction time | 0.161 | interval | | 3.66 | 3.75 | 3.89 | 4.05 | | 4.12 | 4.32 | 4.30 | 4.46 | 4.62 | 5.33 | | | 11.30 | 12.49 | 13.38 |
| | | velocity | 7.51 | 9.56 | 9.33 | 9.00 | 8.64 | | 8.50 | 8.10 | 8.14 | 7.85 | 7.58 | 7.50 | 8.25 | | 9.29 | 8.41 | 7.85 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 17.7 | 139.7 | | | | |

**Heat 3** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-09 | time | 6.04 | 9.76 | 13.62 | 17.59 | 21.65 | | 25.72 | 29.98 | 34.26 | 38.79 | 43.43 | | 48.65 | 6 / 2 | | | |
| reaction time | 0.187 | interval | | 3.72 | 3.86 | 3.97 | 4.06 | | 4.07 | 4.26 | 4.28 | 4.53 | 4.64 | 5.22 | | | 11.55 | 12.39 | 13.45 |
| | | velocity | 7.45 | 9.41 | 9.07 | 8.82 | 8.62 | | 8.60 | 8.22 | 8.18 | 7.73 | 7.54 | 7.66 | 8.22 | | 9.09 | 8.47 | 7.81 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2008 IAAF World Athletics Final (Stuttgart, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Sep-08 | time | 6.05 | 9.78 | 13.61 | 17.52 | 21.54 | | 25.59 | 29.94 | 34.33 | 38.89 | 43.62 | | 49.00 | 5 / 2 | | | |
| reaction time | 0.166 | interval | | 3.73 | 3.83 | 3.91 | 4.02 | | 4.05 | 4.35 | 4.39 | 4.56 | 4.73 | 5.38 | | | 11.47 | 12.42 | 13.68 |
| | | velocity | 7.44 | 9.38 | 9.14 | 8.95 | 8.71 | | 8.64 | 8.05 | 7.97 | 7.68 | 7.40 | 7.43 | 8.16 | | 9.15 | 8.45 | 7.68 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2008 Olympic Games (Beijing, CHN) *Behm (2008)- Pekin 2008: Le quatrache masculin - féminin*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-08 | time | 5.8 | 9.4 | 13.2 | 17.0 | 20.8 | 24.9 | 29.2 | 33.5 | 38.0 | 42.8 | | 48.30 | 5 / 4 | | | |
| reaction time | 0.213 | interval | | 3.60 | 3.80 | 3.80 | 3.80 | 4.10 | 4.30 | 4.30 | 4.50 | 4.80 | 5.50 | | | 11.20 | 12.20 | 13.60 |
| | | velocity | 7.76 | 9.72 | 9.21 | 9.21 | 9.21 | 8.54 | 8.14 | 8.14 | 7.78 | 7.29 | 7.27 | 8.28 | | 9.38 | 8.61 | 7.72 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | 17 | 162 | | | | |

**FINAL** - 2007 IAAF World Championships (Osaka, JPN) *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Aug-07 | time | 6.02 | 9.76 | 13.56 | 17.43 | 21.43 | 25.50 | 29.76 | 34.06 | 38.51 | 43.18 | | 48.59 | 9 / 5 | | | |
| reaction time | 0.172 | interval | | 3.74 | 3.80 | 3.87 | 4.00 | 4.07 | 4.26 | 4.30 | 4.45 | 4.67 | 5.41 | | | 11.41 | 12.33 | 13.42 |
| | | velocity | 7.48 | 9.36 | 9.21 | 9.04 | 8.75 | 8.60 | 8.22 | 8.14 | 7.87 | 7.49 | 7.39 | 8.23 | | 9.20 | 8.52 | 7.82 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 18 | 160 | | | | |

**FINAL** - 2004 Olympic Games (Athîna, GRE) *Ruiz (2004) - las carreras con vallas de juegos olimpicos de atenas '04*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Aug-04 | time | 6.02 | 9.52 | 13.23 | 17.17 | 21.19 | 25.21 | 29.50 | 33.62 | 38.23 | 42.88 | | 48.11 | 5 / 2 | | | |
| reaction time | 0.256 | interval | | 3.50 | 3.71 | 3.94 | 4.02 | 4.02 | 4.29 | 4.12 | 4.61 | 4.65 | 5.23 | | | 11.15 | 12.33 | 13.38 |
| | | velocity | 7.48 | 10.00 | 9.43 | 8.88 | 8.71 | 8.71 | 8.16 | 8.50 | 7.59 | 7.53 | 7.65 | 8.31 | | 9.42 | 8.52 | 7.85 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 18 | 161 | | | | |

**FINAL** - 2003 IAAF World Championships (Paris, FRA) *Behm (2003) - Paris 2003:Le quatrache masculn - féminin*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Aug-03 | time | 5.9 | 9.6 | 13.5 | 17.3 | 21.2 | 25.3 | 29.6 | 33.9 | 38.5 | 43.1 | | 48.30 | 7 / 4 | | | |
| reaction time | 0.165 | interval | | 3.70 | 3.90 | 3.80 | 3.90 | 4.10 | 4.30 | 4.30 | 4.60 | 4.60 | 5.20 | PB | | 11.40 | 12.30 | 13.50 |
| | | velocity | 7.63 | 9.46 | 8.97 | 9.21 | 8.97 | 8.54 | 8.14 | 8.14 | 7.61 | 7.61 | 7.69 | 8.28 | | 9.21 | 8.54 | 7.78 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | 18 | 163 | | | | |

**McGuirk, Tom (IRL) (1971)**

**Heat 4** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.96 | 9.80 | 13.72 | 17.72 | 21.84 | | 25.92 | 30.48 | 35.40 | 40.48 | 45.72 | | 51.73 | 3 / 7 | | | |
| reaction time | 0.183 | interval | | 3.84 | 3.92 | 4.00 | 4.12 | | 4.08 | 4.56 | 4.92 | 5.08 | 5.24 | 6.01 | | | 11.76 | 12.76 | 15.24 |
| | | velocity | 7.55 | 9.11 | 8.93 | 8.75 | 8.50 | | 8.58 | 7.68 | 7.11 | 6.89 | 6.68 | 6.66 | 7.73 | | 8.93 | 8.23 | 6.89 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 17 | 16 | 17 | 18 | | 161 | | | | |

**McLaughlin, Taylor (USA) (1997)**

**FINAL** - 2023 USATF National Championships (Eugene, OR) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-23 | time | 5.97 | 9.71 | 13.51 | 17.38 | 21.32 | | 25.39 | | 34.06 | 38.77 | 43.57 | | 49.14 | 1 / 5 | | | |
| reaction time | | interval | | 3.74 | 3.80 | 3.87 | 3.94 | | 4.07 | | 8.67 | 4.71 | 4.80 | 5.57 | | | 11.41 | | |
| | | velocity | 7.54 | 9.36 | 9.21 | 9.04 | 8.88 | | 8.60 | | 8.07 | 7.43 | 7.29 | 7.18 | 8.14 | | 9.20 | | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | | | 15 | 15 | 18 | 134 | | | | |

**FINAL** - 2019 NCAA Championships (Austin, TX) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-19 | time | 5.96 | 9.66 | 13.40 | 17.23 | 21.16 | 25.20 | 29.46 | 33.96 | 38.50 | 43.33 | | 48.85 | 6 / ~~5~~ 4 | | | |
| reaction time | 0.199 | interval | | 3.70 | 3.74 | 3.83 | 3.93 | 4.04 | 4.26 | 4.50 | 4.54 | 4.83 | 5.52 | PB | | 11.27 | 12.23 | 13.87 |
| | | velocity | 7.55 | 9.46 | 9.36 | 9.14 | 8.91 | 8.66 | 8.22 | 7.78 | 7.71 | 7.25 | 7.25 | 8.19 | | 9.32 | 8.59 | 7.57 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 18 | 139 | | | | |

**McMaster, Kyron (IVB) (1997)**

**FINAL** - 2023 Prefontaine Classic (Eugene, OR) *Omega Timing (2023) - diamond league race analysis*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Sep-23 | time | 5.58 | 9.11 | 12.71 | 16.42 | 20.29 | | 24.26 | 28.35 | 32.59 | 37.11 | 41.75 | | 47.31 | 6 / 3 | | | |
| reaction time | 0.133 | interval | | 3.53 | 3.60 | 3.71 | 3.87 | | 3.97 | 4.09 | 4.24 | 4.52 | 4.64 | 5.56 | | | 10.84 | 11.93 | 13.40 |
| | | velocity | 8.06 | 9.92 | 9.72 | 9.43 | 9.04 | | 8.82 | 8.56 | 8.25 | 7.74 | 7.54 | 7.19 | 8.45 | | 9.69 | 8.80 | 7.84 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 12 | 13 | | 13 | 13 | 13 | 14 | 14 | 17 | 156 | | | | |

**FINAL** - 2023 Weltklasse (Zürich, SUI) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Aug-23 | time | 5.56 | 9.05 | 12.66 | 16.39 | 20.25 | 24.26 | 28.39 | 32.72 | 37.25 | 41.90 | | 47.27 | 6 / 1 | | | |
| reaction time | 0.149 | interval | | 3.49 | 3.61 | 3.73 | 3.86 | 4.01 | 4.13 | 4.33 | 4.53 | 4.65 | 5.37 | | | 10.83 | 12.00 | 13.51 |
| | | velocity | 8.09 | 10.03 | 9.70 | 9.38 | 9.07 | 8.73 | 8.47 | 8.08 | 7.73 | 7.53 | 7.45 | 8.46 | | 9.70 | 8.75 | 7.77 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17.2 | 158.2 | | | | |

**FINAL** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-23 | time | 5.67 | 9.33 | 12.80 | 16.45 | 20.26 | 24.28 | 28.39 | 32.78 | 37.33 | 41.98 | | 47.34 | 8 / 2 | | | |
| reaction time | 0.151 | interval | | 3.66 | 3.47 | 3.65 | 3.81 | 4.02 | 4.11 | 4.39 | 4.55 | 4.65 | 5.36 | | | 10.78 | 11.94 | 13.59 |
| | | velocity | 7.94 | 9.56 | 10.09 | 9.59 | 9.19 | 8.71 | 8.52 | 7.97 | 7.69 | 7.53 | 7.46 | 8.45 | | 9.74 | 8.79 | 7.73 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17.7 | 158.7 | | | | |

**Semi-Final 1** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-23 | time | 5.73 | 9.46 | 13.06 | 16.63 | 20.53 | 24.56 | 28.67 | 33.01 | 37.52 | 42.17 | | 47.72 | 8 / 1 | | | |
| reaction time | 0.168 | interval | | 3.73 | 3.60 | 3.57 | 3.90 | 4.03 | 4.11 | 4.34 | 4.51 | 4.65 | 5.55 | | | 10.90 | 12.04 | 13.50 |
| | | velocity | 7.85 | 9.38 | 9.72 | 9.80 | 8.97 | 8.68 | 8.52 | 8.06 | 7.76 | 7.53 | 7.21 | 8.38 | | 9.63 | 8.72 | 7.78 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17 | 157 | | | | |

**Heat 2** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 5.80 | 9.50 | | 16.83 | | 24.70 | 28.90 | 33.33 | 38.00 | 42.90 | | 48.47 | 4 / 1 | | | |
| reaction time | 0.156 | interval | | 3.70 | | 7.33 | | 7.87 | 4.20 | 4.43 | 4.67 | 4.90 | 5.57 | | | 11.03 | 12.07 | 14.00 |
| | | velocity | 7.76 | 9.46 | | 9.55 | | 8.89 | 8.33 | 7.90 | 7.49 | 7.14 | 7.18 | 8.25 | | 9.52 | 8.70 | 7.50 |
| H1 lead leg | L | strides | 21 | 13 | 13 | | | | 13 | 14 | 14 | 14 | 17.2 | 119.2 | | | | |

**FINAL** - 2023 P-T-S Meeting (Banská Bystrica, SVK) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Jul-23 | time | 5.78 | 9.32 | 13.00 | 16.78 | 20.66 | 24.66 | 28.80 | 33.10 | 37.58 | 42.12 | | 47.26 | 6 / 1 | | | |
| reaction time | 0.210 | interval | | 3.54 | 3.68 | 3.78 | 3.88 | 4.00 | 4.14 | 4.30 | 4.48 | 4.54 | 5.14 | | | 11.00 | 12.02 | 13.32 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.79 | 9.89 | 9.51 | 9.26 | 9.02 | 8.75 | 8.45 | 8.14 | 7.81 | 7.71 | 7.78 | 8.46 | | 9.55 | 8.74 | 7.88 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.2 | 138.2 | | | | |

**FINAL** - 2023 Bauhaus Galan (Stockholm, SWE) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Jul-23 | time | 5.66 | 9.33 | 13.08 | 16.92 | 20.94 | 25.08 | 29.37 | 33.82 | 38.44 | 43.20 | | 48.94 | 7 / 2 | | | |
| reaction time | 0.147 | interval | | 3.67 | 3.75 | 3.84 | 4.02 | 4.14 | 4.29 | 4.45 | 4.62 | 4.76 | 5.74 | | | 11.26 | 12.45 | 13.83 |
| | | velocity | 7.95 | 9.54 | 9.33 | 9.11 | 8.71 | 8.45 | 8.16 | 7.87 | 7.58 | 7.35 | 6.97 | 8.17 | | 9.33 | 8.43 | 7.59 |
| H1 lead leg | L | strides | 21 | 13 | | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 17.7 | 148.7 | | | | |

**FINAL** - 2023 Meeting de Paris (Paris, FRA) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-23 | time | 5.70 | 9.31 | 13.03 | 16.79 | 20.66 | 24.70 | 28.90 | 33.35 | 38.00 | 42.81 | | 48.65 | 8 / 5 | | | |
| reaction time | 0.157 | interval | | 3.61 | 3.72 | 3.76 | 3.87 | 4.04 | 4.20 | 4.45 | 4.65 | 4.81 | 5.84 | | | 11.09 | 12.11 | 13.91 |
| | | velocity | 7.89 | 9.70 | 9.41 | 9.31 | 9.04 | 8.66 | 8.33 | 7.87 | 7.53 | 7.28 | 6.85 | 8.22 | | 9.47 | 8.67 | 7.55 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 15 | 15 | 17.5 | 160.5 | | | | |

**FINAL** - 2022 NACAC Championships (Freeport, BAH) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-22 | time | 5.60 | 9.23 | 13.03 | 16.87 | 20.77 | 24.80 | 28.86 | 33.06 | 37.43 | | | 47.34 | 6 / 1 | | | |
| reaction time | | interval | | 3.63 | 3.80 | 3.84 | 3.90 | 4.03 | 4.06 | 4.20 | 4.37 | | | **CR** | | 11.27 | 11.99 | |
| | | velocity | 8.04 | 9.64 | 9.21 | 9.11 | 8.97 | 8.68 | 8.62 | 8.33 | 8.01 | | | 8.45 | | 9.32 | 8.76 | |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | | | 105 | | | | |

**Heat 5** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 5.73 | 9.43 | 13.33 | 17.23 | 21.33 | 23.07 | 25.53 | 29.97 | 34.60 | 39.40 | 44.36 | | 49.98 | 4 / 4 | | | |
| reaction time | 0.157 | interval | | 3.70 | 3.90 | 3.90 | 4.10 | | 4.20 | 4.44 | 4.63 | 4.80 | 4.96 | 5.62 | | | 11.50 | 12.74 | 14.39 |
| | | velocity | 7.85 | 9.46 | 8.97 | 8.97 | 8.54 | 8.67 | 8.33 | 7.88 | 7.56 | 7.29 | 7.06 | 7.12 | 8.00 | | 9.13 | 8.24 | 7.30 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 17 | 160 | | | | |

**FINAL** - 2022 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-22 | time | 5.78 | 9.42 | 13.18 | 16.96 | 20.86 | 22.50 | 24.92 | 29.24 | 33.68 | 38.22 | 42.96 | | 48.58 | 5 / 3 | | | |
| reaction time | 0.161 | interval | | 3.64 | 3.76 | 3.78 | 3.90 | | 4.06 | 4.32 | 4.44 | 4.54 | 4.74 | 5.62 | | | 11.18 | 12.28 | 13.72 |
| | | velocity | 7.79 | 9.62 | 9.31 | 9.26 | 8.97 | 8.89 | 8.62 | 8.10 | 7.88 | 7.71 | 7.38 | 7.12 | 8.23 | | 9.39 | 8.55 | 7.65 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 17.5 | 160.5 | | | | |

**FINAL** - 2022 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-May-22 | time | 5.70 | 9.37 | 13.18 | 17.28 | 21.52 | 23.3 | 25.89 | | 34.93 | 39.57 | 44.28 | | 49.93 | 3 / 4 | | | |
| reaction time | 0.208 | interval | | 3.67 | 3.81 | 4.10 | 4.24 | | 4.37 | | 9.04 | 4.64 | 4.71 | 5.65 | | | 11.58 | | |
| | | velocity | 7.89 | 9.54 | 9.19 | 8.54 | 8.25 | 8.58 | 8.01 | | 7.74 | 7.54 | 7.43 | 7.08 | 8.01 | | 9.07 | | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | | | 14 | 14 | | 115 | | | | |

**FINAL** - 2021 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Sep-21 | time | 5.72 | | 13.08 | 16.88 | 20.76 | 22.4 | 24.80 | 29.00 | 33.36 | 37.88 | 42.65 | | 48.24 | 5 / 3 | | | |
| reaction time | 0.160 | interval | | | 7.36 | 3.80 | 3.88 | | 4.04 | 4.20 | 4.36 | 4.52 | 4.77 | 5.59 | | | 11.16 | 12.12 | 13.65 |
| | | velocity | 7.87 | | 9.51 | 9.21 | 9.02 | 8.93 | 8.66 | 8.33 | 8.03 | 7.74 | 7.34 | 7.16 | 8.29 | | 9.41 | 8.66 | 7.69 |
| H1 lead leg | L | strides | 21 | | | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.5 | 133.5 | | | | |

**FINAL** - 2021 Memorial van Damme (Brussels, BEL) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Sep-21 | time | 5.76 | 9.40 | 13.20 | 17.04 | 21.00 | 22.7 | 25.12 | 29.40 | 33.68 | 38.16 | 42.96 | | 48.31 | 5 / 2 | | | |
| reaction time | 0.176 | interval | | 3.64 | 3.80 | 3.84 | 3.96 | | 4.12 | 4.28 | 4.28 | 4.48 | 4.80 | 5.35 | | | 11.28 | 12.36 | 13.56 |
| | | velocity | 7.81 | 9.62 | 9.21 | 9.11 | 8.84 | 8.81 | 8.50 | 8.18 | 8.18 | 7.81 | 7.29 | 7.48 | 8.28 | | 9.31 | 8.50 | 7.74 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 17.5 | 159.5 | | | | |

**FINAL** - 2020 Olympic Games (Tokyo, JPN) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-21 | time | 5.68 | 9.24 | 12.96 | 16.72 | 20.60 | 24.60 | 28.86 | 33.20 | 37.60 | 41.96 | | 47.08 | 4 / 4 | | | |
| reaction time | 0.157 | interval | | 3.56 | 3.72 | 3.76 | 3.88 | 4.00 | 4.26 | 4.34 | 4.40 | 4.36 | 5.12 | **NR PB** | | 11.04 | 12.14 | 13.10 |
| | | velocity | 7.92 | 9.83 | 9.41 | 9.31 | 9.02 | 8.75 | 8.22 | 8.06 | 7.95 | 8.03 | 7.81 | 8.50 | | 9.51 | 8.65 | 8.02 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17 | 158 | | | | |

**FINAL** - 2021 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jul-21 | time | 5.60 | 9.08 | 12.76 | 16.52 | 20.36 | 22.1 | 24.32 | 28.44 | 32.80 | 37.68 | 42.84 | | dnf | 6 / -- | | | |
| reaction time | 0.177 | interval | | 3.48 | 3.68 | 3.76 | 3.84 | | 3.96 | 4.12 | 4.36 | 4.88 | 5.16 | | | | 10.92 | 11.92 | 14.40 |
| | | velocity | 8.04 | 10.06 | 9.51 | 9.31 | 9.11 | 9.05 | 8.84 | 8.50 | 8.03 | 7.17 | 6.78 | | | | 9.62 | 8.81 | 7.29 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 15 | 15 | | 122 | | | | |

**FINAL** - 2021 USATF Golden Games (Walnut, CA) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-May-21 | time | 5.80 | 9.41 | 13.18 | 17.02 | 20.92 | 24.96 | 29.19 | 33.53 | 37.97 | 42.47 | | 47.50 | 6 / 2 | | | |
| reaction time | | interval | | 3.61 | 3.77 | 3.84 | 3.90 | 4.04 | 4.23 | 4.34 | 4.44 | 4.50 | 5.03 | **NR PB** | | 11.22 | 12.17 | 13.28 |
| | | velocity | 7.76 | 9.70 | 9.28 | 9.11 | 8.97 | 8.66 | 8.27 | 8.06 | 7.88 | 7.78 | 7.95 | 8.42 | | 9.36 | 8.63 | 7.91 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 16.7 | 156.7 | | | | |

**FINAL** - 2021 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-21 | time | 5.70 | 9.37 | 13.21 | 17.15 | 21.19 | 22.9 | 25.31 | 29.53 | 33.87 | 38.24 | 42.64 | | 47.82 | 3 / 3 | | | |
| reaction time | 0.199 | interval | | 3.67 | 3.84 | 3.94 | 4.04 | | 4.12 | 4.22 | 4.34 | 4.37 | 4.40 | 5.18 | | | 11.45 | 12.38 | 13.11 |
| | | velocity | 7.89 | 9.54 | 9.11 | 8.88 | 8.66 | 8.73 | 8.50 | 8.29 | 8.06 | 8.01 | 7.95 | 7.72 | 8.36 | | 9.17 | 8.48 | 8.01 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | | | 13 | 13 | 14 | 14 | 14 | 17 | 144 | | | | |

**FINAL** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Sep-19 | time | 5.75 | 9.33 | 13.02 | 16.78 | 20.64 | 24.67 | 28.85 | 33.25 | 37.72 | 42.49 | | 48.10 | 2 / 4 | | | |
| reaction time | 0.171 | interval | | 3.58 | 3.69 | 3.76 | 3.86 | 4.03 | 4.18 | 4.40 | 4.47 | 4.77 | 5.61 | | | 11.03 | 12.07 | 13.64 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.83 | 9.78 | 9.49 | 9.31 | 9.07 | 8.68 | 8.37 | 7.95 | 7.83 | 7.34 | 7.13 | 8.32 | | 9.52 | 8.70 | 7.70 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 18.2 | 160.2 | | | | |

**Semi-Final 1** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 5.88 | 9.76 | 13.51 | 17.29 | 21.19 | 25.24 | 29.42 | 33.85 | 38.35 | 42.97 | | 48.40 | 5 / 3 | | | |
| reaction time | 0.229 | interval | | 3.88 | 3.75 | 3.78 | 3.90 | 4.05 | 4.18 | 4.43 | 4.50 | 4.62 | 5.43 | | | 11.41 | 12.13 | 13.55 |
| | | velocity | 7.65 | 9.02 | 9.33 | 9.26 | 8.97 | 8.64 | 8.37 | 7.90 | 7.78 | 7.58 | 7.37 | 8.26 | | 9.20 | 8.66 | 7.75 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 18 | 159 | | | | |

**FINAL** - 2019 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Aug-19 | time | 5.72 | 9.36 | 13.06 | 16.76 | 20.62 | 22.3 | 24.64 | 28.88 | 33.30 | 37.98 | 42.80 | | 48.58 | 6 / 3 | | | |
| reaction time | 0.177 | interval | | 3.64 | 3.70 | 3.70 | 3.86 | | 4.02 | 4.24 | 4.42 | 4.68 | 4.82 | 5.78 | | | 11.04 | 12.12 | 13.92 |
| | | velocity | 7.87 | 9.62 | 9.46 | 9.46 | 9.07 | 8.97 | 8.71 | 8.25 | 7.92 | 7.48 | 7.26 | 6.92 | 8.23 | | 9.51 | 8.66 | 7.54 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | | 15 | | 129 | | | | |

**FINAL** - 2019 Meeting de Paris (Paris, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-19 | time | 5.78 | 9.48 | 13.24 | 17.02 | 20.92 | 22.6 | 24.92 | 29.12 | 33.44 | 38.00 | 42.72 | | 48.33 | 8 / 3 | | | |
| reaction time | 0.172 | interval | | 3.70 | 3.76 | 3.78 | 3.90 | | 4.00 | 4.20 | 4.32 | 4.56 | 4.72 | 5.61 | | | 11.24 | 12.10 | 13.60 |
| | | velocity | 7.79 | 9.46 | 9.31 | 9.26 | 8.97 | 8.85 | 8.75 | 8.33 | 8.10 | 7.68 | 7.42 | 7.13 | 8.28 | | 9.34 | 8.68 | 7.72 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 18 | 160 | | | | |

**FINAL** - 2019 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Jul-19 | time | 5.88 | | | | | | | | | | | | dnf | 6 / -- | | | |
| reaction time | 0.190 | interval | | | | | | | | | | | | | | | | | |
| | | velocity | 7.65 | | | | | | | | | | | | | | | | |
| H1 lead leg | L | strides | 21 | | | | | | | | | | | | | | | | |

**FINAL** - 2019 Prefontaine Classic (Stanford, CA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-19 | time | 5.93 | 9.60 | 13.50 | 17.53 | 21.56 | 25.70 | 30.00 | 34.33 | 38.86 | 43.40 | | 48.94 | 6 / 2 | | | |
| reaction time | 0.268 | interval | | 3.67 | 3.90 | 4.03 | 4.03 | 4.14 | 4.30 | 4.33 | 4.53 | 4.54 | 5.54 | | | 11.60 | 12.47 | 13.40 |
| | | velocity | 7.59 | 9.54 | 8.97 | 8.68 | 8.68 | 8.45 | 8.14 | 8.08 | 7.73 | 7.71 | 7.22 | 8.17 | | 9.05 | 8.42 | 7.84 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.5 | 159.5 | | | | |

**FINAL** - 2019 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Jun-19 | time | 5.68 | 9.24 | 12.88 | 16.66 | 20.61 | 22.3 | 24.74 | 29.01 | 33.45 | 38.03 | 43.00 | | 49.12 | 6 / 3 | | | |
| reaction time | 0.219 | interval | | 3.56 | 3.64 | 3.78 | 3.95 | | 4.13 | 4.27 | 4.44 | 4.58 | 4.97 | 6.12 | | | 10.98 | 12.35 | 13.99 |
| | | velocity | 7.92 | 9.83 | 9.62 | 9.26 | 8.86 | 8.97 | 8.47 | 8.20 | 7.88 | 7.64 | 7.04 | 6.54 | 8.14 | | 9.56 | 8.50 | 7.51 |
| H1 lead leg | R | strides | 20 | 13 | 12 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 18 | 159 | | | | |

**FINAL** - 2018 IAAF Continental Cup (Ostrava, CZE) (TV Analysis) *Henson (2021) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-18 | time | 5.80 | 9.52 | 13.28 | 17.20 | 21.28 | 25.44 | 29.76 | 34.56 | 40.00 | | | | 52.62 | 5 / 8 | | | |
| reaction time | 0.166 | interval | | 3.72 | 3.76 | 3.92 | 4.08 | 4.16 | 4.32 | 4.80 | 5.44 | | | | | | 11.40 | 12.56 | |
| | | velocity | 7.76 | 9.41 | 9.31 | 8.93 | 8.58 | 8.41 | 8.10 | 7.29 | 6.43 | | | | 7.60 | | 9.21 | 8.36 | |
| H1 lead leg | R | strides | 20 | 13 | 12 | 13 | 13 | 13 | 13 | 14 | 15 | 15 | | | 141 | | | | |

**FINAL** - 2018 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Aug-18 | time | 5.80 | 9.50 | 13.30 | | 21.16 | 22.9 | 25.24 | 29.44 | 33.84 | 38.32 | 42.88 | | 48.08 | 3 / 1 | | | |
| reaction time | 0.178 | interval | | 3.70 | 3.80 | | 7.86 | | 4.08 | 4.20 | 4.40 | 4.48 | 4.56 | 5.20 | | | | | 13.44 |
| | | velocity | 7.76 | 9.46 | 9.21 | | 8.91 | 8.73 | 8.58 | 8.33 | 7.95 | 7.81 | 7.68 | 7.69 | 8.32 | | | | 7.81 |
| H1 lead leg | L | strides | 20 | 13 | 13 | | | | 13 | 13 | 14 | 14 | 14 | 17 | 131 | | | | |

**FINAL** - 2018 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jul-18 | time | 5.60 | 9.16 | 12.76 | 16.48 | | | | | | | | | dnf | 4 / -- | | | |
| reaction time | 0.162 | interval | | 3.56 | 3.60 | 3.72 | | | | | | | | | | | 10.88 | | |
| | | velocity | 8.04 | 9.83 | 9.72 | 9.41 | | | | | | | | | | | 9.65 | | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | | | | | | | | | 60 | | | | |

**FINAL** - 2018 Meeting de Paris (Paris, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-18 | time | 5.64 | 9.24 | 12.88 | 16.64 | 20.48 | 22.2 | 24.48 | 28.64 | 32.96 | 37.44 | 42.04 | | 47.54 | 6 / 2 | | | |
| reaction time | 0.183 | interval | | 3.60 | 3.64 | 3.76 | 3.84 | | 4.00 | 4.16 | 4.32 | 4.48 | 4.60 | 5.50 | **NR PB** | | 11.00 | 12.00 | 13.40 |
| | | velocity | 7.98 | 9.72 | 9.62 | 9.31 | 9.11 | 9.01 | 8.75 | 8.41 | 8.10 | 7.81 | 7.61 | 7.27 | 8.41 | | 9.55 | 8.75 | 7.84 |
| H1 lead leg | R | strides | 20 | 12 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17 | 156 | | | | |

**FINAL** - 2018 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-May-18 | time | 5.92 | 9.68 | 13.52 | 17.44 | 21.48 | 25.64 | 30.00 | 34.52 | 39.12 | 43.84 | | 49.46 | 5 / 3 | | | |
| reaction time | 0.215 | interval | | 3.76 | 3.84 | 3.92 | 4.04 | 4.16 | 4.36 | 4.52 | 4.60 | 4.72 | 5.62 | | | 11.52 | 12.56 | 13.84 |
| | | velocity | 7.60 | 9.31 | 9.11 | 8.93 | 8.66 | 8.41 | 8.03 | 7.74 | 7.61 | 7.42 | 7.12 | 8.09 | | 9.11 | 8.36 | 7.59 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | | 14 | 17 | 146 | | | | |

**FINAL** - 2018 Commonwealth Games (Gold Coast, AUS) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Apr-18 | time | 5.94 | 9.67 | 13.41 | 17.28 | 21.25 | 25.36 | 29.56 | 33.93 | 38.44 | 43.04 | | 48.25 | 5 / 1 | | | |
| reaction time | 0.156 | interval | | 3.73 | 3.74 | 3.87 | 3.97 | 4.11 | 4.20 | 4.37 | 4.51 | 4.60 | 5.21 | | | 11.34 | 12.28 | 13.48 |
| | | velocity | 7.58 | 9.38 | 9.36 | 9.04 | 8.82 | 8.52 | 8.33 | 8.01 | 7.76 | 7.61 | 7.68 | 8.29 | | 9.26 | 8.55 | 7.79 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17 | 158 | | | | |

**FINAL** - 2017 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-17 | time | 5.72 | 9.42 | 13.16 | | 21.00 | 25.08 | 29.32 | 33.76 | 38.24 | 42.88 | | 48.07 | 4 / 1 | | | |
| reaction time | 0.153 | interval | | 3.70 | 3.74 | | 7.84 | 4.08 | 4.24 | 4.44 | 4.48 | 4.64 | 5.19 | | | | | 13.56 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.87 | 9.46 | 9.36 | | 8.93 | | 8.58 | 8.25 | 7.88 | 7.81 | 7.54 | 7.71 | 8.32 | | | | 7.74 |
| H1 lead leg | R | strides | 20 | 13 | 13 | | | | 13 | 13 | 14 | 14 | 14 | 17.2 | 131.2 | | | | |

**FINAL** - 2017 Müller's Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-17 | time | 5.76 | 9.32 | 13.04 | 16.72 | 20.60 | | 24.68 | 28.96 | 33.36 | 37.92 | 42.76 | | 48.12 | 6 / 2 | | | |
| reaction time | 0.164 | interval | | 3.56 | 3.72 | 3.68 | 3.88 | | 4.08 | 4.28 | 4.40 | 4.56 | 4.84 | 5.36 | | | 10.96 | 12.24 | 13.80 |
| | | velocity | 7.81 | 9.83 | 9.41 | 9.51 | 9.02 | | 8.58 | 8.18 | 7.95 | 7.68 | 7.23 | 7.46 | 8.31 | | 9.58 | 8.58 | 7.61 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 18 | 160 | | | | |

**FINAL** - 2017 Jamaica International Invitational (Kingston, JAM) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-May-17 | time | | 9.51 | 13.28 | 17.08 | 21.02 | | 24.99 | 29.13 | 33.43 | 37.90 | | | 47.80 | 5 / 1 | | | |
| reaction time | | interval | | | 3.77 | 3.80 | 3.94 | | 3.97 | 4.14 | 4.30 | 4.47 | | | NR PB | | | 12.05 | |
| | | velocity | | 8.41 | 9.28 | 9.21 | 8.88 | | 8.82 | 8.45 | 8.14 | 7.83 | | | 8.37 | | | 8.71 | |
| H1 lead leg | R | strides | | | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | | 107 | | | | |

**Melero, Julio (ESP) (1972)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1998 Spanish National Championships (San Sebastián, ESP) *Ruiz (1998) - campeonato des españa absoluto: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Aug-98 | time | 6.07 | 10.16 | 14.27 | 18.50 | 22.86 | | 27.34 | 31.86 | 36.55 | 41.29 | 46.08 | | 52.08 | 4 / 5 | | | |
| reaction time | | interval | | 4.09 | 4.11 | 4.23 | 4.36 | | 4.48 | 4.52 | 4.69 | 4.74 | 4.79 | 6.00 | | | 12.43 | 13.36 | 14.22 |
| | | velocity | 7.41 | 8.56 | 8.52 | 8.27 | 8.03 | | 7.81 | 7.74 | 7.46 | 7.38 | 7.31 | 6.67 | 7.68 | | 8.45 | 7.86 | 7.38 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18 | 170 | | | | |

**Melnykov, Stanislav (UKR) (1987)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2010 European Championships (Barcelona, ESP) *Behm (2010) - les haies bases*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-10 | time | 6.1 | 9.9 | 13.7 | 17.5 | 21.5 | | 25.7 | 29.9 | 34.4 | 39.0 | 43.7 | | 49.09 | 6 / 3 | | | |
| reaction time | 0.314 | interval | | 3.80 | 3.80 | 3.80 | 4.00 | | 4.20 | 4.20 | 4.50 | 4.60 | 4.70 | 5.39 | | | 11.40 | 12.40 | 13.80 |
| | | velocity | 7.38 | 9.21 | 9.21 | 9.21 | 8.75 | | 8.33 | 8.33 | 7.78 | 7.61 | 7.45 | 7.42 | 8.15 | | 9.21 | 8.47 | 7.61 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 14 | 14 | 15 | 15 | 18 | 164 | | | | |

**Meng Yan (CHN) (1980)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2006 Asian Grand Prix (Bengaluru, IND) *Meng (2009) - a comparative study on rhythm changes between hurdles of chinese and foreign 400m hurdlers*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-May-06 | time | 5.85 | 9.60 | 13.47 | 17.52 | 21.62 | | 25.87 | 30.25 | 34.70 | 39.20 | 43.83 | | 49.03 | / 1 | | | |
| reaction time | | interval | | 3.75 | 3.87 | 4.05 | 4.10 | | 4.25 | 4.38 | 4.45 | 4.50 | 4.63 | 5.20 | NR PB | | 11.67 | 12.73 | 13.58 |
| | | velocity | 7.69 | 9.33 | 9.04 | 8.64 | 8.54 | | 8.24 | 7.99 | 7.87 | 7.78 | 7.56 | 7.69 | 8.16 | | 9.00 | 8.25 | 7.73 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |

**Metivier, Malik (CAN) (1998)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2021 NCAA Championships (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-21 | time | 5.90 | 9.57 | | 17.33 | 21.35 | | 25.60 | 30.17 | 34.77 | 39.43 | 44.10 | | 49.26 | 4 / 5 | | | |
| reaction time | 0.144 | interval | | 3.67 | | 7.76 | 4.02 | | 4.25 | 4.57 | 4.60 | 4.66 | 4.67 | 5.16 | PB | | 11.43 | 12.84 | 13.93 |
| | | velocity | 7.63 | 9.54 | | 9.02 | 8.71 | | 8.24 | 7.66 | 7.61 | 7.51 | 7.49 | 7.75 | 8.12 | | 9.19 | 8.18 | 7.54 |
| H1 lead leg | R | strides | 22 | 13 | | | 13 | | 14 | 14 | 15 | 15 | 15 | 18.2 | 139.2 | | | | |

**Mfomkpa, Alain-Hervé (SUI) (1996)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2017 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jul-17 | time | 6.04 | 9.80 | 13.72 | 17.64 | 21.68 | | 25.96 | 30.36 | 35.04 | 40.00 | 45.24 | | 51.45 | 1 / 8 | | | |
| reaction time | 0.156 | interval | | 3.76 | 3.92 | 3.92 | 4.04 | | 4.28 | 4.40 | 4.68 | 4.96 | 5.24 | 6.21 | | | 11.60 | 12.72 | 14.88 |
| | | velocity | 7.45 | 9.31 | 8.93 | 8.93 | 8.66 | | 8.18 | 7.95 | 7.48 | 7.06 | 6.68 | 6.44 | 7.77 | | 9.05 | 8.25 | 7.06 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 16 | | 146 | | | | |

**FINAL** - 2016 Athletissime (Laussane, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-16 | time | 5.96 | 9.83 | 13.73 | 17.73 | 22.10 | | 26.47 | 30.93 | 35.67 | 40.57 | | | 51.58 | 8 / 6 | | | |
| reaction time | 0.182 | interval | | 3.87 | 3.90 | 4.00 | 4.37 | | 4.37 | 4.46 | 4.74 | 4.90 | | | | | 11.77 | 13.20 | |
| | | velocity | 7.55 | 9.04 | 8.97 | 8.75 | 8.01 | | 8.01 | 7.85 | 7.38 | 7.14 | | | 7.75 | | 8.92 | 7.95 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 15 | 15 | 15 | | | 133 | | | | |

**Michishita, Koya (JPN) (1998)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2016 Japanese National High School Championships (Okayama, JPN) *Kota (2016) - 69th high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-16 | time | 6.31 | 10.56 | 14.80 | 19.22 | 23.69 | | 28.28 | 32.97 | 37.65 | 42.43 | 47.26 | | 52.60 | 5 / 3 | | | |
| reaction time | 0.168 | interval | | 4.25 | 4.24 | 4.42 | 4.47 | | 4.59 | 4.69 | 4.68 | 4.78 | 4.83 | 5.34 | | | 12.91 | 13.75 | 14.29 |
| | | velocity | 7.13 | 8.24 | 8.25 | 7.92 | 7.83 | | 7.63 | 7.46 | 7.48 | 7.32 | 7.25 | 7.49 | 7.60 | | 8.13 | 7.64 | 7.35 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Mikołajewski, Gabriel (POL) (1999)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2020 Golden Spike (Ostrava, CZE) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-20 | time | 6.14 | 10.04 | 14.14 | 18.12 | | | | 31.13 | 35.97 | 40.84 | | | 51.42 | 3 / 6 | | | |
| reaction time | 0.145 | interval | | 3.90 | 4.10 | 3.98 | | | | 13.01 | 4.84 | 4.87 | | | | | 11.98 | 13.01 | |
| | | velocity | 7.33 | 8.97 | 8.54 | 8.79 | | | | 8.07 | 7.23 | 7.19 | | | 7.78 | | 8.76 | 8.07 | |
| H1 lead leg | L | strides | 21 | 14 | | 14 | 14 | | | | | 15 | | | 78 | | | | |

**Minato, Ozora (JPN) (1997)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2015 Japanese National High School Championships (Wakayama, JPN) *Enomoto (2015) - 68th high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-15 | time | 6.47 | 10.53 | 14.70 | 18.85 | 23.16 | | 27.66 | 32.45 | 37.60 | 43.04 | 48.43 | | 54.55 | 2 / 8 | | | |
| reaction time | | interval | | 4.06 | 4.17 | 4.15 | 4.31 | | 4.50 | 4.79 | 5.15 | 5.44 | 5.39 | 6.12 | | | 12.38 | 13.60 | 15.98 |
| | | velocity | 6.96 | 8.62 | 8.39 | 8.43 | 8.12 | | 7.78 | 7.31 | 6.80 | 6.43 | 6.49 | 6.54 | 7.33 | | 8.48 | 7.72 | 6.57 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 17 | 17 | 16 | 17 | 17 | | 144 | | | | |

**Miyako, Kohei (JPN) (1997)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2019 Japanese National Championships (Fukuoka, JPN) *Yamanaka (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jun-19 | time | 6.17 | 10.08 | 14.20 | 18.32 | 22.56 | 26.96 | 31.53 | 36.10 | 40.82 | 45.88 | | 51.37 | 9 / 8 | | | | |
| reaction time | 0.149 | interval | | 3.91 | 4.12 | 4.12 | 4.24 | 4.40 | 4.57 | 4.57 | 4.72 | 5.06 | 5.49 | | | 12.15 | 13.21 | 14.35 | |
| | | velocity | 7.29 | 8.95 | 8.50 | 8.50 | 8.25 | 7.95 | 7.66 | 7.66 | 7.42 | 6.92 | 7.29 | 7.79 | | 8.64 | 7.95 | 7.32 | |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | | 157 | | | | | |

**Miyazaki, Takumi (JPN) (2001)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2019 Japanese National High School Championships (Okinawa, JPN) *Kota (2019) - 72nd high school championships: JAF scientific committee - biomechanics data*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-19 | time | 6.37 | 10.61 | 14.96 | 19.38 | 23.92 | 28.60 | 33.15 | 37.91 | 42.80 | 47.69 | | 53.26 | 2 / 5 | | | | |
| reaction time | | interval | | 4.24 | 4.35 | 4.42 | 4.54 | 4.68 | 4.55 | 4.76 | 4.89 | 4.89 | 5.57 | | | 13.01 | 13.77 | 14.54 | |
| | | velocity | 7.06 | 8.25 | 8.05 | 7.92 | 7.71 | 7.48 | 7.69 | 7.35 | 7.16 | 7.16 | 7.18 | 7.51 | | 8.07 | 7.63 | 7.22 | |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | | 135 | | | | | |

**Miyoshi, Ren (JPN) (1998)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2016 Japanese National High School Championships (Okayama, JPN) *Kota (2016) - 69th high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-16 | time | 6.33 | 10.36 | 14.48 | 18.72 | 23.11 | 27.63 | 32.33 | 37.30 | 42.39 | 47.60 | | 53.42 | 6 / 8 | | | | |
| reaction time | 0.200 | interval | | 4.03 | 4.12 | 4.24 | 4.39 | 4.52 | 4.70 | 4.97 | 5.09 | 5.21 | 5.82 | | | 12.39 | 13.61 | 15.27 | |
| | | velocity | 7.11 | 8.68 | 8.50 | 8.25 | 7.97 | 7.74 | 7.45 | 7.04 | 6.88 | 6.72 | 6.87 | 7.49 | | 8.47 | 7.71 | 6.88 | |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | 15 | 15 | 17 | 17 | 17 | | 141 | | | | | |

**Mizuguchi, Kai (JPN) (2001)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**B FINAL** - 2020 Japanese U20 National Championships (Hiroshima, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Oct-20 | time | 6.41 | 10.64 | 14.96 | 19.34 | 23.89 | 28.81 | 34.03 | 39.37 | 44.94 | 50.53 | | 56.84 | 2 / 4 | | | | |
| reaction time | 0.198 | interval | | 4.23 | 4.32 | 4.38 | 4.55 | 4.92 | 5.22 | 5.34 | 5.57 | 5.59 | 6.31 | | | 12.93 | 14.69 | 16.50 | |
| | | velocity | 7.02 | 8.27 | 8.10 | 7.99 | 7.69 | 7.11 | 6.70 | 6.55 | 6.28 | 6.26 | 6.34 | 7.04 | | 8.12 | 7.15 | 6.36 | |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 17 | 16 | | 155 | | | | | |

**Mizuno, Tatsuhiko (JPN) (1990)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2008 Japanese National High School Championships (Kumagaya, JPN) *Abe (2008) - 61st high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-08 | time | 6.14 | 10.08 | 14.20 | 18.33 | 22.61 | 27.12 | 31.69 | 36.27 | 40.96 | 45.72 | | 51.41 | / 2 | | | | |
| reaction time | | interval | | 3.94 | 4.12 | 4.13 | 4.28 | 4.51 | 4.57 | 4.58 | 4.69 | 4.76 | 5.69 | | | 12.19 | 13.36 | 14.03 | |
| | | velocity | 7.33 | 8.88 | 8.50 | 8.47 | 8.18 | 7.76 | 7.66 | 7.64 | 7.46 | 7.35 | 7.03 | 7.78 | | 8.61 | 7.86 | 7.48 | |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | | |

**Monreal, Íñigo (ESP) (1974)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 8** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.18 | 9.94 | 13.86 | 17.90 | 22.02 | 26.30 | 30.74 | 35.58 | 40.66 | 45.90 | | 51.32 | 5 / 4 | | | | |
| reaction time | 0.502 | interval | | 3.76 | 3.92 | 4.04 | 4.12 | 4.28 | 4.44 | 4.84 | 5.08 | 5.24 | 5.42 | | | 11.72 | 12.84 | 15.16 | |
| | | velocity | 7.28 | 9.31 | 8.93 | 8.66 | 8.50 | 8.18 | 7.88 | 7.23 | 6.89 | 6.68 | 7.38 | 7.79 | | 8.96 | 8.18 | 6.93 | |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 15 | 15 | 15 | | 144 | | | | | |

**FINAL** - 1998 Spanish National Championships (San Sebastián, ESP) *Ruiz (1998) - campeonato des españa absoluto: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Aug-98 | time | 6.00 | 9.99 | 14.04 | 18.19 | 22.47 | 26.95 | 31.27 | 35.78 | 40.41 | 44.99 | | 50.49 | 6 / 1 | | | | |
| reaction time | | interval | | 3.99 | 4.05 | 4.15 | 4.28 | 4.48 | 4.32 | 4.51 | 4.63 | 4.58 | 5.50 | | | 12.19 | 13.08 | 13.72 | |
| | | velocity | 7.50 | 8.77 | 8.64 | 8.43 | 8.18 | 7.81 | 8.10 | 7.76 | 7.56 | 7.64 | 7.27 | 7.92 | | 8.61 | 8.03 | 7.65 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17 | 156 | | | | | |

**Monteiro, Edivaldo (POR) (1976)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 3** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Aug-02 | time | 6.20 | 10.17 | 14.07 | 17.96 | 22.05 | 26.31 | 30.64 | 36.24 | 39.81 | 44.44 | | 49.64 | / 2 | | | | |
| reaction time | | interval | | 3.97 | 3.90 | 3.89 | 4.09 | 4.26 | 4.33 | 5.60 | 3.57 | 4.63 | 5.20 | | | 11.76 | 12.68 | 13.80 | |
| | | velocity | 7.26 | 8.82 | 8.97 | 9.00 | 8.56 | 8.22 | 8.08 | 6.25 | 9.80 | 7.56 | 7.69 | 8.06 | | 8.93 | 8.28 | 7.61 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Moore, Charlie (USA) (1929)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1952 Olympic Games (Helsinki, FIN) *Mitchell (1967) - future of the one-lap hurdles*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jul-52 | time | 6.2 | 10.3 | 14.4 | 18.6 | 22.7 | 27.3 | 31.9 | 36.5 | 41.1 | 45.4 | | 50.8 | 6 / 1 | | | | |
| reaction time | | interval | | 4.10 | 4.10 | 4.20 | 4.10 | 4.60 | 4.60 | 4.60 | 4.60 | 4.30 | 5.40 | **=OR** | | 12.40 | 13.30 | 13.50 | |
| | | velocity | 7.26 | 8.54 | 8.54 | 8.33 | 8.54 | 7.61 | 7.61 | 7.61 | 7.61 | 8.14 | 7.41 | 7.87 | *(51.06)* | 8.47 | 7.89 | 7.78 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Moritaka, Sojiro (JPN) (2003)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2022 Japanese U20 National Championsips (Osaka, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-22 | time | 6.11 | 10.13 | 14.20 | 18.35 | 22.56 | 26.92 | 31.40 | 36.02 | 40.61 | 45.38 | | 50.71 | 8 / 2 | | | | |
| reaction time | 0.216 | interval | | 4.02 | 4.07 | 4.15 | 4.21 | 4.36 | 4.48 | 4.62 | 4.59 | 4.77 | 5.33 | **PB** | | 12.24 | 13.05 | 13.98 | |
| | | velocity | 7.36 | 8.71 | 8.60 | 8.43 | 8.31 | 8.03 | 7.81 | 7.58 | 7.63 | 7.34 | 7.50 | 7.89 | | 8.58 | 8.05 | 7.51 | |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | 20 | 174 | | | | | |

**Morale, Salvatore (ITA) (1938)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1964 Olympic Games (Tokyo, JPN) *Breitschaft (1965) - die leichtathletik wettkampfe der 1964 olympischen sommerspielen - 400m hürdenlauf*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Oct-64 | time | 5.8 | | 13.8 | | 22.0 | | 30.8 | | 40.0 | | | 50.1 | 8 / 3 | | | | |
| reaction time | | interval | | | 8.00 | | 8.20 | | 8.80 | | 9.20 | | 10.10 | | | | | | |
| | | velocity | 7.76 | | 8.75 | | 8.54 | | 7.95 | | 7.61 | | 7.43 | 7.98 | | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 1962 European Championships (Belgrad, YUG) *Nett (1964) - Training des leichtathleten: Hürdenlauf, sprung, wurf, mehrkampf*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-Sep-62 | time | 6.0 | 9.9 | 14.0 | 18.0 | 22.1 | 26.4 | 30.8 | 35.2 | 39.5 | 44.1 | | 49.2 | / 1 | | | | |
| reaction time | | interval | | 3.90 | 4.10 | 4.00 | 4.10 | 4.30 | 4.40 | 4.40 | 4.30 | 4.60 | 5.10 | **=WR** | | 12.00 | 12.80 | 13.30 | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.50 | 8.97 | 8.54 | 8.75 | 8.54 | | 8.14 | 7.95 | 7.95 | 8.14 | 7.61 | 7.84 | 8.13 | | 8.75 | 8.20 | 7.89 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 1961 International Fall Meeting (Rome, ITA) *Nett (1964) - Training des leichtathleten: Hürdenlauf, sprung, wurf, mehrkampf*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Oct-61 | time | 5.8 | 9.8 | 13.8 | 17.8 | 21.8 | 23.4 | 26.0 | 30.2 | 34.6 | 39.6 | 44.4 | | 49.7 | 6 / 1 | | | |
| reaction time | | interval | | 4.00 | 4.00 | 4.00 | 4.00 | | 4.20 | 4.20 | 4.40 | 5.00 | 4.80 | 5.30 | **AR** | | 12.00 | 12.40 | 14.20 |
| | | velocity | 7.76 | 8.75 | 8.75 | 8.75 | 8.75 | 8.55 | 8.33 | 8.33 | 7.95 | 7.00 | 7.29 | 7.55 | 8.05 | *(50.1y)* | 8.75 | 8.47 | 7.39 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 1961 Universiade (Sofia, BUL) *Nett (1964) - Training des leichtathleten: Hürdenlauf, sprung, wurf, mehrkampf*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-61 | time | 5.8 | 9.8 | 13.9 | 18.2 | 22.5 | | 26.8 | 31.1 | 35.5 | 40.0 | 44.7 | | 50.0 | / 1 | | | |
| reaction time | | interval | | 4.00 | 4.10 | 4.30 | 4.30 | | 4.30 | 4.30 | 4.40 | 4.50 | 4.70 | 5.30 | **NR** | | 12.40 | 12.90 | 13.60 |
| | | velocity | 7.76 | 8.75 | 8.54 | 8.14 | 8.14 | | 8.14 | 8.14 | 7.95 | 7.78 | 7.45 | 7.55 | 8.00 | | 8.47 | 8.14 | 7.72 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

## Morgan, Dinsdale (JAM) (1972)

**Semi-Final 3** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 5.86 | 9.54 | 13.34 | 17.30 | 21.42 | 23.02 | 25.70 | 30.02 | 34.70 | 39.46 | 44.42 | | 50.23 | 2 / 7 | | | |
| reaction time | 0.166 | interval | | 3.68 | 3.80 | 3.96 | 4.12 | | 4.28 | 4.32 | 4.68 | 4.76 | 4.96 | 5.81 | | | 11.44 | 12.72 | 14.40 |
| | | velocity | 7.68 | 9.51 | 9.21 | 8.84 | 8.50 | 8.69 | 8.18 | 8.10 | 7.48 | 7.35 | 7.06 | 6.88 | 7.96 | | 9.18 | 8.25 | 7.29 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 16 | 19 | 172 | | | | |

**Heat 3** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.90 | 9.66 | 13.54 | 17.54 | 21.66 | | 25.94 | 30.34 | 34.86 | 39.42 | 44.14 | | 49.64 | 6 / 2 | | | |
| reaction time | 0.171 | interval | | 3.76 | 3.88 | 4.00 | 4.12 | | 4.28 | 4.40 | 4.52 | 4.56 | 4.72 | 5.50 | | | 11.64 | 12.80 | 13.80 |
| | | velocity | 7.63 | 9.31 | 9.02 | 8.75 | 8.50 | | 8.18 | 7.95 | 7.74 | 7.68 | 7.42 | 7.27 | 8.06 | | 9.02 | 8.20 | 7.61 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.5 | 171.5 | | | | |

**FINAL** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Aug-99 | time | 5.46 | 9.27 | 12.98 | 16.90 | 20.94 | | 25.07 | 29.42 | 33.81 | 38.33 | 43.09 | | 48.92 | 2 / 7 | | | |
| reaction time | 0.164 | interval | | 3.81 | 3.71 | 3.92 | 4.04 | | 4.13 | 4.35 | 4.39 | 4.52 | 4.76 | 5.83 | | | 11.44 | 12.52 | 13.67 |
| | | velocity | 8.24 | 9.19 | 9.43 | 8.93 | 8.66 | | 8.47 | 8.05 | 7.97 | 7.74 | 7.35 | 6.86 | 8.18 | | 9.18 | 8.39 | 7.68 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 16 | 18.5 | 171.5 | | | | |

**Semi-Final 2** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-99 | time | 5.58 | 9.34 | 13.14 | 17.06 | 21.17 | | 25.30 | 29.62 | 34.05 | 38.45 | 43.12 | | 48.71 | 3 / 5 | | | |
| reaction time | 0.179 | interval | | 3.76 | 3.80 | 3.92 | 4.11 | | 4.13 | 4.32 | 4.43 | 4.40 | 4.67 | 5.59 | | | 11.48 | 12.56 | 13.50 |
| | | velocity | 8.06 | 9.31 | 9.21 | 8.93 | 8.52 | | 8.47 | 8.10 | 7.90 | 7.95 | 7.49 | 7.16 | 8.21 | | 9.15 | 8.36 | 7.78 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 169.5 | | | | |

**FINAL** - 1997 IAAF World Championships (Athens, GRE) *Hommel (1999) - biomechanical research project, athens 1997: final report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Aug-97 | time | 5.96 | 9.68 | 13.52 | 17.45 | 21.48 | | 25.56 | 29.86 | 34.32 | 38.96 | 43.70 | | 49.06 | 7 / 7 | | | |
| reaction time | 0.152 | interval | | 3.72 | 3.84 | 3.93 | 4.03 | | 4.08 | 4.30 | 4.46 | 4.64 | 4.74 | 5.36 | | | 11.49 | 12.41 | 13.84 |
| | | velocity | 7.55 | 9.41 | 9.11 | 8.91 | 8.68 | | 8.58 | 8.14 | 7.85 | 7.54 | 7.38 | 7.46 | 8.15 | | 9.14 | 8.46 | 7.59 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

## Mori, Fabrizio (ITA) (1969)

**FINAL** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-02 | time | 6.24 | 10.16 | 14.14 | 18.20 | 22.22 | | 26.36 | 30.64 | 35.02 | 39.42 | 43.88 | | 49.05 | / 4 | | | |
| reaction time | 0.133 | interval | | 3.92 | 3.98 | 4.06 | 4.02 | | 4.14 | 4.28 | 4.38 | 4.40 | 4.46 | 5.17 | | | 11.96 | 12.44 | 13.24 |
| | | velocity | 7.21 | 8.93 | 8.79 | 8.62 | 8.71 | | 8.45 | 8.18 | 7.99 | 7.95 | 7.85 | 7.74 | 8.15 | | 8.78 | 8.44 | 7.93 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Semi-Final 1** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Aug-02 | time | 6.17 | 9.99 | 13.82 | 17.66 | 21.65 | | 25.77 | 30.16 | 34.37 | 38.83 | 43.43 | | 48.70 | / 3 | | | |
| reaction time | | interval | | 3.82 | 3.83 | 3.84 | 3.99 | | 4.12 | 4.39 | 4.21 | 4.46 | 4.60 | 5.27 | | | 11.49 | 12.50 | 13.27 |
| | | velocity | 7.29 | 9.16 | 9.14 | 9.11 | 8.77 | | 8.50 | 7.97 | 8.31 | 7.85 | 7.61 | 7.59 | 8.21 | | 9.14 | 8.40 | 7.91 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Heat 1** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Aug-02 | time | 6.37 | 10.33 | 14.29 | 18.25 | 22.28 | | 26.41 | 30.85 | 35.82 | 39.49 | 43.99 | | 49.20 | / 2 | | | |
| reaction time | | interval | | 3.96 | 3.96 | 3.96 | 4.03 | | 4.13 | 4.44 | 4.97 | 3.67 | 4.50 | 5.21 | | | 11.88 | 12.60 | 13.14 |
| | | velocity | 7.06 | 8.84 | 8.84 | 8.84 | 8.68 | | 8.47 | 7.88 | 7.04 | 9.54 | 7.78 | 7.68 | 8.13 | | 8.84 | 8.33 | 7.99 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2001 IAAF World Championships (Edmonton, CAN) *Behm (2001) - Edmonton: Le quatrache: les finales*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-01 | time | 5.9 | 9.7 | 13.5 | 17.3 | 21.2 | | 25.2 | 29.3 | 33.6 | 36.9 | 42.3 | | 47.54 | 4 / 2 | | | |
| reaction time | 0.158 | interval | | 3.80 | 3.80 | 3.80 | 3.90 | | 4.00 | 4.10 | 4.30 | 3.30 | 5.40 | 5.24 | **NR / PB** | | 11.40 | 12.00 | 13.00 |
| | | velocity | 7.63 | 9.21 | 9.21 | 9.21 | 8.97 | | 8.75 | 8.54 | 8.14 | 10.61 | 6.48 | 7.63 | 8.41 | | 9.21 | 8.75 | 8.08 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 19 | 170 | | | | |

**FINAL** - 2001 European Cup (Bremen, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jun-01 | time | 6.13 | 9.95 | 13.76 | 17.72 | 21.71 | | 25.70 | 30.00 | 34.34 | 38.80 | 43.30 | | 49.39 | / 1 | | | |
| reaction time | | interval | | 3.82 | 3.81 | 3.96 | 3.99 | | 3.99 | 4.30 | 4.34 | 4.46 | 4.50 | 6.09 | | | 11.59 | 12.28 | 13.30 |
| | | velocity | 7.34 | 9.16 | 9.19 | 8.84 | 8.77 | | 8.77 | 8.14 | 8.06 | 7.85 | 7.78 | 6.57 | 8.10 | | 9.06 | 8.55 | 7.89 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Sep-00 | time | 6.10 | 9.94 | 13.66 | 17.46 | 21.46 | 22.90 | 25.54 | 29.70 | 34.06 | 38.54 | 43.22 | | 48.78 | 3 / 7 | | | |
| reaction time | 0.198 | interval | | 3.84 | 3.72 | 3.80 | 4.00 | | 4.08 | 4.16 | 4.36 | 4.48 | 4.68 | 5.56 | | | 11.36 | 12.24 | 13.52 |
| | | velocity | 7.38 | 9.11 | 9.41 | 9.21 | 8.75 | 8.73 | 8.58 | 8.41 | 8.03 | 7.81 | 7.48 | 7.19 | 8.20 | | 9.24 | 8.58 | 7.77 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 169.5 | | | | |

**Semi-Final 1** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 6.14 | 10.10 | 13.90 | 17.82 | 21.82 | 23.42 | 25.98 | 30.14 | 34.50 | 38.90 | 43.34 | | 48.40 | 4 / 2 | | | |
| reaction time | | interval | | 3.96 | 3.80 | 3.92 | 4.00 | | 4.16 | 4.16 | 4.36 | 4.40 | 4.44 | 5.06 | | | 11.68 | 12.32 | 13.20 |
| | | velocity | 7.33 | 8.84 | 9.21 | 8.93 | 8.75 | 8.54 | 8.41 | 8.41 | 8.03 | 7.95 | 7.88 | 7.91 | 8.26 | | 8.99 | 8.52 | 7.95 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 19 | 170 | | | | |

**Heat 2** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.22 | 10.06 | 13.94 | 17.86 | 21.94 | | 26.06 | | 34.86 | 39.38 | 43.98 | | 49.35 | 5 / 1 | | | |
| reaction time | 0.162 | interval | | 3.84 | 3.88 | 3.92 | 4.08 | | 4.12 | | 8.05 | 4.52 | 4.60 | 5.37 | | | 11.64 | | |
| | | velocity | 7.23 | 9.11 | 9.02 | 8.93 | 8.58 | | 8.50 | | 8.70 | 7.74 | 7.61 | 7.45 | 8.11 | | 9.02 | | |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.3 | 169.3 | | | | |

**FINAL** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Aug-99 | time | 5.62 | 9.36 | 13.12 | 16.96 | 20.89 | | 24.92 | 29.06 | 33.34 | 37.68 | 42.16 | | 47.72 | 3 / 1 | | | |
| reaction time | 0.157 | interval | | 3.74 | 3.76 | 3.84 | 3.93 | | 4.03 | 4.14 | 4.28 | 4.34 | 4.48 | 5.56 | NR PB | | 11.34 | 12.10 | 13.10 |
| | | velocity | 8.01 | 9.36 | 9.31 | 9.11 | 8.91 | | 8.68 | 8.45 | 8.18 | 8.06 | 7.81 | 7.19 | 8.38 | | 9.26 | 8.68 | 8.02 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |

**Semi-Final 2** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-99 | time | 5.78 | 9.51 | 13.31 | 17.21 | 21.10 | | 25.14 | 29.39 | 33.74 | 38.12 | 42.64 | | 48.29 | 5 / 2 | | | |
| reaction time | 0.164 | interval | | 3.73 | 3.80 | 3.90 | 3.89 | | 4.04 | 4.25 | 4.35 | 4.38 | 4.52 | 5.65 | | | 11.43 | 12.18 | 13.25 |
| | | velocity | 7.79 | 9.38 | 9.21 | 8.97 | 9.00 | | 8.66 | 8.24 | 8.05 | 7.99 | 7.74 | 7.08 | 8.28 | | 9.19 | 8.62 | 7.92 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |

**Heat 3** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-99 | time | 5.96 | 9.84 | 13.78 | 17.68 | 21.72 | | 25.92 | 30.22 | 34.70 | 39.11 | 43.59 | | 49.07 | 6 / 1 | | | |
| reaction time | 0.152 | interval | | 3.88 | 3.94 | 3.90 | 4.04 | | 4.20 | 4.30 | 4.48 | 4.41 | 4.48 | 5.48 | | | 11.72 | 12.54 | 13.37 |
| | | velocity | 7.55 | 9.02 | 8.88 | 8.97 | 8.66 | | 8.33 | 8.14 | 7.81 | 7.94 | 7.81 | 7.30 | 8.15 | | 8.96 | 8.37 | 7.85 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |

**FINAL** - 1998 European Championships (Budapest, HUN) *Behm (1998) - analyse et commentaries: le 400m haies: Pavel la surprise!*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-98 | time | 6.2 | 10.3 | 14.2 | 18.1 | 22.2 | | 26.3 | 30.4 | 34.6 | 38.9 | 43.4 | | 48.71 | 7 / 3 | | | |
| reaction time | | interval | | 4.1 | 3.9 | 3.9 | 4.1 | | 4.1 | 4.1 | 4.2 | 4.3 | 4.5 | 5.31 | | | 11.90 | 12.30 | 13.00 |
| | | velocity | 7.26 | 8.54 | 8.97 | 8.97 | 8.54 | | 8.54 | 8.54 | 8.33 | 8.14 | 7.78 | 7.53 | 8.21 | | 8.82 | 8.54 | 8.08 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 169.5 | | | | |

**FINAL** - 1997 IAAF World Championships (Athens, GRE) *Hommel (1999) - biomechanical research project, athens 1997: final report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Aug-97 | time | 6.14 | 10.02 | 13.78 | 17.72 | 21.72 | | 25.85 | 30.04 | 34.40 | 38.78 | 43.18 | | 48.05 | 4 / 4 | | | |
| reaction time | 0.156 | interval | | 3.88 | 3.76 | 3.94 | 4.00 | | 4.13 | 4.19 | 4.36 | 4.38 | 4.40 | 4.87 | NR | | 11.58 | 12.32 | 13.14 |
| | | velocity | 7.33 | 9.02 | 9.31 | 8.88 | 8.75 | | 8.47 | 8.35 | 8.03 | 7.99 | 7.95 | 8.21 | 8.32 | | 9.07 | 8.52 | 7.99 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 1997 European Cup (Munich, GER) *Jung (2003) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-97 | time | 6.22 | 10.15 | 14.12 | 18.24 | 22.36 | | 26.67 | 31.00 | 35.34 | 39.71 | 44.11 | | 48.93 | / 1 | | | |
| reaction time | | interval | | 3.93 | 3.97 | 4.12 | 4.12 | | 4.31 | 4.33 | 4.34 | 4.37 | 4.40 | 4.82 | | | 12.02 | 12.76 | 13.11 |
| | | velocity | 7.23 | 8.91 | 8.82 | 8.50 | 8.50 | | 8.12 | 8.08 | 8.06 | 8.01 | 7.95 | 8.30 | 8.17 | | 8.74 | 8.23 | 8.01 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 1996 Olympic Games (Atlanta, GA) *Behm (1996) - 400m haies*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Aug-96 | time | 6.0 | 10.0 | 14.0 | 17.9 | 21.9 | | 26.0 | 30.1 | 34.4 | 38.8 | 43.4 | | 48.41 | 7 / 6 | | | |
| reaction time | 0.192 | interval | | 4.00 | 4.00 | 3.90 | 4.00 | | 4.10 | 4.10 | 4.30 | 4.40 | 4.60 | 5.01 | | | 11.90 | 12.20 | 13.30 |
| | | velocity | 7.50 | 8.75 | 8.75 | 8.97 | 8.75 | | 8.54 | 8.54 | 8.14 | 7.95 | 7.61 | 7.98 | 8.26 | | 8.82 | 8.61 | 7.89 |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | | 150 | | | | |

**FINAL** - 1991 European Cup (Frankfurt, GER) *Federle (2003) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jun-91 | time | 6.43 | 10.33 | 14.28 | 18.27 | 22.35 | | 26.60 | 31.01 | 35.38 | 40.01 | 44.65 | | 49.76 | / 3 | | | |
| reaction time | | interval | | 3.90 | 3.95 | 3.99 | 4.08 | | 4.25 | 4.41 | 4.37 | 4.63 | 4.64 | 5.11 | | | 11.84 | 12.74 | 13.64 |
| | | velocity | 7.00 | 8.97 | 8.86 | 8.77 | 8.58 | | 8.24 | 7.94 | 8.01 | 7.56 | 7.54 | 7.83 | 8.04 | | 8.87 | 8.24 | 7.70 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

| **Morioka, Yuuki (JPN) (2003)** | | | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2022 Japanese U20 National Championsips (Osaka, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-22 | time | 6.36 | 10.41 | 14.51 | 18.77 | 23.10 | | 27.48 | 32.00 | 36.74 | 41.39 | 46.15 | | 51.43 | 5 / 5 | | | |
| reaction time | 0.208 | interval | | 4.05 | 4.10 | 4.26 | 4.33 | | 4.38 | 4.52 | 4.74 | 4.65 | 4.76 | 5.28 | | | 12.41 | 13.23 | 14.15 |
| | | velocity | 7.08 | 8.64 | 8.54 | 8.22 | 8.08 | | 7.99 | 7.74 | 7.38 | 7.53 | 7.35 | 7.58 | 7.78 | | 8.46 | 7.94 | 7.42 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.7 | 169.7 | | | | |

**FINAL** - 2021 Japanese High School National Championships (Fukui, JPN) *Shibayama (2021) - national high school and U20 national championhsips*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jul-21 | time | 6.37 | 10.64 | 15.18 | 19.65 | 24.27 | | 28.95 | 33.65 | 38.41 | 43.16 | 47.95 | | 53.10 | 7 / 4 | | | |
| reaction time | 0.154 | interval | | 4.27 | 4.54 | 4.47 | 4.62 | | 4.68 | 4.70 | 4.76 | 4.75 | 4.79 | 5.15 | | | 13.28 | 14.00 | 14.30 |
| | | velocity | 7.06 | 8.20 | 7.71 | 7.83 | 7.58 | | 7.48 | 7.45 | 7.35 | 7.37 | 7.31 | 7.77 | 7.53 | | 7.91 | 7.50 | 7.34 |
| H1 lead leg | | strides | | 14 | 15 | 14 | 15 | | 15 | 15 | 15 | 15 | 15 | | 133 | | | | |

**Mörö, Oskari (FIN) (1993)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2016 Athletissime (Laussane, SUI) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2016 year end hurdle report* | | | |
| date | 25-Aug-16 | time | 6.00 | 9.83 | 13.86 | 17.86 | 21.96 | | 26.26 | 30.60 | 35.06 | 39.63 | 44.33 | | 49.81 | 2 / 4 | | | |
| reaction time | 0.129 | interval | | 3.83 | 4.03 | 4.00 | 4.10 | | 4.30 | 4.34 | 4.46 | 4.57 | 4.70 | 5.48 | | | 11.86 | 12.74 | 13.73 |
| | | velocity | 7.50 | 9.14 | 8.68 | 8.75 | 8.54 | | 8.14 | 8.06 | 7.85 | 7.66 | 7.45 | 7.30 | 8.03 | | 8.85 | 8.24 | 7.65 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18 | 166 | | | | |
| **FINAL** - 2016 European Championships (Amsterdam, NED) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2016 year end hurdle report* | | | |
| date | 08-Jul-16 | time | 6.04 | 9.84 | 13.68 | 17.64 | 21.68 | | 25.92 | 30.16 | 34.60 | 39.24 | 43.92 | | 49.24 | 7 / 4 | | | |
| reaction time | 0.155 | interval | | 3.80 | 3.84 | 3.96 | 4.04 | | 4.24 | 4.24 | 4.44 | 4.64 | 4.68 | 5.32 | | | 11.60 | 12.52 | 13.76 |
| | | velocity | 7.45 | 9.21 | 9.11 | 8.84 | 8.66 | | 8.25 | 8.25 | 7.88 | 7.54 | 7.48 | 7.52 | 8.12 | | 9.05 | 8.39 | 7.63 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 13 | 13 | | 14 | | 15 | 15 | 15 | 18.2 | 152.2 | | | | |
| **FINAL** - 2014 European Championships (Zurich, SUI) | | | | | | | | | | | | | | | | *Green (2015) - twitter.com/jackpgreen (from Behm?)* | | | |
| date | 15-Aug-14 | time | 6.10 | 9.86 | 13.70 | 17.78 | 21.90 | | 26.18 | 30.54 | 35.02 | 39.74 | 44.62 | | 50.14 | / 8 | | | |
| reaction time | 0.149 | interval | | 3.76 | 3.84 | 4.08 | 4.12 | | 4.28 | 4.36 | 4.48 | 4.72 | 4.88 | 5.52 | | | 11.68 | 12.76 | 14.08 |
| | | velocity | 7.38 | 9.31 | 9.11 | 8.58 | 8.50 | | 8.18 | 8.03 | 7.81 | 7.42 | 7.17 | 7.25 | 7.98 | | 8.99 | 8.23 | 7.46 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 15 | | 123 | | | | |

**Moses, Edwin (USA) (1955)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1988 Olympic Games (Seoul, KOR) | | | | | | | | | | | | | | | | *Gill (1990) - atletismo (I) carreras y marcha* | | | |
| date | 25-Sep-88 | time | 5.89 | 9.56 | 13.32 | 17.16 | 21.00 | | 25.01 | 29.08 | 33.26 | 37.60 | 42.19 | | 47.56 | 3 / 3 | | | |
| reaction time | 0.209 | interval | | 3.67 | 3.76 | 3.84 | 3.84 | | 4.01 | 4.07 | 4.18 | 4.34 | 4.59 | 5.37 | | | 11.27 | 11.92 | 13.11 |
| | | velocity | 7.64 | 9.54 | 9.31 | 9.11 | 9.11 | | 8.73 | 8.60 | 8.37 | 8.06 | 7.63 | 7.45 | 8.41 | | 9.32 | 8.81 | 8.01 |
| H1 lead leg | L | strides | 19 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16.5 | 152.5 | | | | |
| **Semi-Final 1** - 1988 Olympic Games (Seoul, KOR) | | | | | | | | | | | | | | | | *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988* | | | |
| date | 24-Sep-88 | time | 5.95 | 9.72 | 13.68 | 17.64 | 21.60 | | 25.65 | 29.78 | 33.94 | 38.35 | 42.79 | | 47.89 | 3 / 1 | | | |
| reaction time | | interval | | 3.77 | 3.96 | 3.96 | 3.96 | | 4.05 | 4.13 | 4.16 | 4.41 | 4.44 | 5.10 | | | 11.69 | 12.14 | 13.01 |
| | | velocity | 7.56 | 9.28 | 8.84 | 8.84 | 8.84 | | 8.64 | 8.47 | 8.41 | 7.94 | 7.88 | 7.84 | 8.35 | | 8.98 | 8.65 | 8.07 |
| H1 lead leg | | strides | 19.00 | 13.00 | 13.00 | 13.00 | 13.00 | | 13.00 | 13.00 | 13.00 | 13.00 | 13.00 | 16.50 | 152.50 | | | | |
| **FINAL** - 1987 IAAF World Championships (Rome, ITA) | | | | | | | | | | | | | | | | *Sušanka (1990) - time analyis of the 400m hurdles - Rome 1987 Scientific Report (2nd ed)* | | | |
| date | 01-Sep-87 | time | 5.82 | 9.49 | 13.21 | 16.97 | 20.73 | | 24.58 | 28.58 | 32.89 | 37.42 | 42.15 | | 47.46 | 3 / 1 | | | |
| reaction time | | interval | | 3.67 | 3.72 | 3.76 | 3.76 | | 3.85 | 4.00 | 4.31 | 4.53 | 4.73 | 5.31 | **CR** | | 11.15 | 11.61 | 13.57 |
| | | velocity | 7.73 | 9.54 | 9.41 | 9.31 | 9.31 | | 9.09 | 8.75 | 8.12 | 7.73 | 7.40 | 7.53 | 8.43 | | 9.42 | 9.04 | 7.74 |
| H1 lead leg | L | strides | 19 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16.7 | 152.7 | | | | |
| **Semi-Final 2** - 1987 IAAF World Championships (Rome, ITA) | | | | | | | | | | | | | | | | *Sušanka (1990) - time analyis of the 400m hurdles - Rome 1987 Scientific Report (2nd ed)* | | | |
| date | 31-Aug-87 | time | 5.92 | 9.61 | 13.37 | 17.17 | 21.14 | | 25.26 | 29.47 | 33.82 | 38.37 | 43.07 | | 48.38 | 6 / 1 | | | |
| reaction time | | interval | | 3.69 | 3.76 | 3.80 | 3.97 | | 4.12 | 4.21 | 4.35 | 4.55 | 4.70 | 5.31 | | | 11.25 | 12.30 | 13.60 |
| | | velocity | 7.60 | 9.49 | 9.31 | 9.21 | 8.82 | | 8.50 | 8.31 | 8.05 | 7.69 | 7.45 | 7.53 | 8.27 | | 9.33 | 8.54 | 7.72 |
| H1 lead leg | L | strides | 19 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16 | 152 | | | | |
| **Heat 1** - 1987 IAAF World Championships (Rome, ITA) | | | | | | | | | | | | | | | | *Sušanka (1990) - time analyis of the 400m hurdles - Rome 1987 Scientific Report (2nd ed)* | | | |
| date | 30-Aug-87 | time | 5.90 | 9.75 | 13.69 | 17.62 | 21.68 | | 25.77 | 30.07 | 34.44 | 38.96 | 43.60 | | 49.03 | 2 / 1 | | | |
| reaction time | | interval | | 3.85 | 3.94 | 3.93 | 4.06 | | 4.09 | 4.30 | 4.37 | 4.52 | 4.64 | 5.43 | | | 11.72 | 12.45 | 13.53 |
| | | velocity | 7.63 | 9.09 | 8.88 | 8.91 | 8.62 | | 8.56 | 8.14 | 8.01 | 7.74 | 7.54 | 7.37 | 8.16 | | 8.96 | 8.43 | 7.76 |
| H1 lead leg | L | strides | 19 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 15.8 | 151.8 | | | | |
| **FINAL** - 1987 Meeting BNP D'Athletisme (Paris, FRA) | | | | | | | | | | | | | | | | | | | *Behm (1988) - 45-39* |
| date | 16-Jul-87 | time | 5.8 | 9.4 | 13.0 | 16.7 | 20.4 | | 24.3 | 28.4 | 32.8 | 37.7 | | | dnf | / -- | | | |
| reaction time | | interval | | 3.62 | 3.61 | 3.67 | 3.72 | | 3.89 | 4.15 | 4.36 | 4.97 | | | *fell* | | 10.90 | 11.76 | |
| | | velocity | 7.83 | 9.67 | 9.70 | 9.54 | 9.41 | | 9.00 | 8.43 | 8.03 | 7.04 | | | | | 9.63 | 8.93 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **FINAL** - 1984 Olympic Games (Los Angeles, CA) | | | | | | | | | | | | | | | | *Behm (1995) - la tactique du 400 haies* | | | |
| date | 05-Aug-84 | time | 5.8 | 9.5 | 13.3 | 17.2 | 21.1 | | 25.1 | 29.2 | 33.4 | 37.7 | 42.4 | | 47.75 | 6 / 1 | | | |
| reaction time | 0.193 | interval | | 3.70 | 3.80 | 3.90 | 3.90 | | 4.00 | 4.10 | 4.20 | 4.30 | 4.70 | 5.35 | | | 11.40 | 12.00 | 13.20 |
| | | velocity | 7.76 | 9.46 | 9.21 | 8.97 | 8.97 | | 8.75 | 8.54 | 8.33 | 8.14 | 7.45 | 7.48 | 8.38 | | 9.21 | 8.75 | 7.95 |
| H1 lead leg | L | strides | 19 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16.2 | 152.2 | | | | |
| **FINAL** - 1983 Internationale Leichtathletiksportfest (Koblenz, FRG) | | | | | | | | | | | | | | | | | | | *Arnold (1992) - Hurdling* |
| date | 31-Aug-83 | time | 5.9 | 9.6 | 13.4 | 17.1 | 21.0 | 22.7 | 24.9 | 29.0 | 33.1 | 37.4 | 41.9 | | 47.02 | / 1 | | | |
| reaction time | | interval | | 3.70 | 3.80 | 3.70 | 3.90 | | 3.90 | 4.10 | 4.10 | 4.30 | 4.50 | 5.12 | **WR** | | 11.20 | 11.90 | 12.90 |
| | | velocity | 7.63 | 9.46 | 9.21 | 9.46 | 8.97 | 8.81 | 8.97 | 8.54 | 8.54 | 8.14 | 7.78 | 7.81 | 8.51 | | 9.38 | 8.82 | 8.14 |
| H1 lead leg | L | strides | 19 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16 | 152 | | | | |
| **FINAL** - 1983 IAAF World Championships (Rome, ITA) | | | | | | | | | | | | | | | | *McFarlane (1988) - The Science of Hurdling* | | | |
| date | 09-Aug-83 | time | 5.58 | 9.29 | 13.21 | 16.79 | 20.71 | | 24.63 | 28.80 | 32.97 | 37.43 | 41.97 | | 47.50 | 2 / 1 | | | |
| reaction time | | interval | | 3.71 | 3.92 | 3.58 | 3.92 | | 3.92 | 4.17 | 4.17 | 4.46 | 4.54 | 5.53 | **CR** | | 11.21 | 12.01 | 13.17 |
| | | velocity | 8.06 | 9.43 | 8.93 | 9.78 | 8.93 | | 8.93 | 8.39 | 8.39 | 7.85 | 7.71 | 7.23 | 8.42 | | 9.37 | 8.74 | 7.97 |
| H1 lead leg | L | strides | 19 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 15.7 | 151.7 | | | | |
| **Semi-Final 1** - 1983 IAAF World Championships (Rome, ITA) | | | | | | | | | | | | | | | | *Lyle - miscellaneous coaching notes* | | | |
| date | 08-Aug-83 | time | 5.59 | 9.38 | 13.30 | 17.18 | 21.03 | | 25.01 | 29.16 | 33.50 | 37.91 | 42.32 | | 48.11 | 1 / 1 | | | |
| reaction time | | interval | | 3.79 | 3.92 | 3.88 | 3.85 | | 3.98 | 4.15 | 4.34 | 4.41 | 4.41 | 5.79 | | | 11.59 | 11.98 | 13.16 |
| | | velocity | 8.05 | 9.23 | 8.93 | 9.02 | 9.09 | | 8.79 | 8.43 | 8.06 | 7.94 | 7.94 | 6.91 | 8.31 | | 9.06 | 8.76 | 7.98 |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | L | strides | 19 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 15.5 | 151.5 | | | | |

**FINAL** - 1981 ISTAF (West Berlin, FRG) *Behm (1988) - 45-39*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-81 | time | 5.7 | 9.4 | 13.3 | 17.1 | 20.9 | | 24.9 | 29.0 | 33.3 | 37.7 | 42.1 | | 47.27 | / 1 | | | |
| reaction time | | interval | | 3.70 | 3.90 | 3.80 | 3.80 | | 4.00 | 4.10 | 4.30 | 4.40 | 4.40 | 5.17 | | | 11.40 | 11.90 | 13.10 |
| | | velocity | 7.89 | 9.46 | 8.97 | 9.21 | 9.21 | | 8.75 | 8.54 | 8.14 | 7.95 | 7.95 | 7.74 | 8.46 | | 9.21 | 8.82 | 8.02 |
| H1 lead leg | | strides | | 13 | 12 | 12 | 13 | | 13 | 13 | 13 | 13 | 13 | | 115 | | | | |

**FINAL** - 1981 Weltklasse (Zurich, SUI) *Behm (1988) - 45-39*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Aug-81 | time | 5.7 | 9.4 | 13.1 | 16.8 | 20.7 | | 24.7 | 28.9 | 33.1 | 37.7 | 42.3 | | 47.64 | / 1 | | | |
| reaction time | | interval | | 3.70 | 3.70 | 3.70 | 3.90 | | 4.00 | 4.20 | 4.20 | 4.60 | 4.60 | 5.34 | | | 11.10 | 12.10 | 13.40 |
| | | velocity | 7.89 | 9.46 | 9.46 | 9.46 | 8.97 | | 8.75 | 8.33 | 8.33 | 7.61 | 7.61 | 7.49 | 8.40 | | 9.46 | 8.68 | 7.84 |
| H1 lead leg | | strides | | 12 | 12 | 12 | 12 | | 13 | 13 | 13 | 13 | 13 | | 113 | | | | |

**FINAL** - 1980 Mario Lanzi Memorial (Milan, ITA) *Behm (1995) - la tactique du 400 haies*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Jul-80 | time | 5.7 | 9.4 | 13.2 | 17.0 | 20.9 | | 24.7 | 28.6 | 32.8 | 37.2 | 41.7 | | 47.13 | / 1 | | | |
| reaction time | | interval | | 3.70 | 3.80 | 3.80 | 3.90 | | 3.80 | 3.90 | 4.20 | 4.40 | 4.50 | 5.43 | **WR** | | 11.30 | 11.60 | 13.10 |
| | | velocity | 7.89 | 9.46 | 9.21 | 9.21 | 8.97 | | 9.21 | 8.97 | 8.33 | 7.95 | 7.78 | 7.37 | 8.49 | | 9.29 | 9.05 | 8.02 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 1976 Olympic Games (Montreal, CAN) *McFarlane (1981) - understanding the 400m hurdles (in Jarver (ed) - the hurdles, 1981)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jul-76 | time | 6.0 | 9.8 | 13.6 | 17.5 | 21.4 | 23.1 | 25.5 | 29.6 | 33.9 | 38.2 | 42.7 | | 47.64 | 4 / 1 | | | |
| reaction time | | interval | | 3.80 | 3.80 | 3.90 | 3.90 | | 4.10 | 4.10 | 4.30 | 4.30 | 4.50 | 4.94 | **WR** | | 11.50 | 12.10 | 13.10 |
| | | velocity | 7.50 | 9.21 | 9.21 | 8.97 | 8.97 | 8.66 | 8.54 | 8.54 | 8.14 | 8.14 | 7.78 | 8.10 | 8.40 | | 9.13 | 8.68 | 8.02 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 16 | 153 | | | | |

**Motima, Satoshi (JPN)**

**FINAL** - 2018 Japanese National High School Championships (Nagoya, JPN) *Kota (2018) - 71st high school championships: JAF scientific committee - biomechanics data collection*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Aug-18 | time | 6.21 | 10.24 | 14.40 | 18.57 | 22.92 | | 27.43 | 31.93 | 36.54 | 41.21 | 46.15 | | 51.66 | 8 / 3 | | | |
| reaction time | | interval | | 4.03 | 4.16 | 4.17 | 4.35 | | 4.51 | 4.50 | 4.61 | 4.67 | 4.94 | 5.51 | **PB** | | 12.36 | 13.36 | 14.22 |
| | | velocity | 7.25 | 8.68 | 8.41 | 8.39 | 8.05 | | 7.76 | 7.78 | 7.59 | 7.49 | 7.09 | 7.26 | 7.74 | | 8.50 | 7.86 | 7.38 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 16 | | 136 | | | | |

**Moumoulídis, Konstadínos (GRE) (1**

**FINAL** - 1997 European Cup (Munich, GER) *Jung (2003) - http://www.fgs.uni-halle.de*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-97 | time | 6.22 | 10.13 | 14.10 | 18.19 | 22.42 | | 26.81 | 31.29 | 36.04 | 41.03 | 46.20 | | 52.01 | / 6 | | | |
| reaction time | | interval | | 3.91 | 3.97 | 4.09 | 4.23 | | 4.39 | 4.48 | 4.75 | 4.99 | 5.17 | 5.81 | | | 11.97 | 13.10 | 14.91 |
| | | velocity | 7.23 | 8.95 | 8.82 | 8.56 | 8.27 | | 7.97 | 7.81 | 7.37 | 7.01 | 6.77 | 6.88 | 7.69 | | 8.77 | 8.02 | 7.04 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Mowatt, Kemar (JAM) (1995)**

**Semi-Final 3** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.76 | 9.33 | 13.17 | 16.86 | 20.77 | 22.53 | | 29.20 | 33.73 | 38.40 | 43.10 | | 48.59 | 4 / 4 | | | |
| reaction time | 0.143 | interval | | 3.57 | 3.84 | 3.69 | 3.91 | | | 8.43 | 4.53 | 4.67 | 4.70 | 5.49 | | | 11.10 | 12.34 | 13.90 |
| | | velocity | 7.81 | 9.80 | 9.11 | 9.49 | 8.95 | 8.88 | | 8.30 | 7.73 | 7.49 | 7.45 | 7.29 | 8.23 | | 9.46 | 8.51 | 7.55 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | | | 15 | 15 | 15 | 18 | 136 | | | | |

**Heat 2** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 5.90 | 9.67 | 13.53 | 17.53 | 21.67 | 23.51 | 25.97 | 30.37 | 34.93 | 39.53 | 44.17 | | 49.44 | 7 / 2 | | | |
| reaction time | 0.146 | interval | | 3.77 | 3.86 | 4.00 | 4.14 | | 4.30 | 4.40 | 4.56 | 4.60 | 4.64 | 5.27 | | | 11.63 | 12.84 | 13.80 |
| | | velocity | 7.63 | 9.28 | 9.07 | 8.75 | 8.45 | 8.51 | 8.14 | 7.95 | 7.68 | 7.61 | 7.54 | 7.59 | 8.09 | | 9.03 | 8.18 | 7.61 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 15 | 17.2 | 161.2 | | | | |

**FINAL** - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-22 | time | 5.80 | 9.56 | 13.36 | 17.33 | 21.34 | 23.20 | 25.56 | 30.07 | 34.73 | 39.73 | | | 50.81 | 8 / 8 | | | |
| reaction time | 0.157 | interval | | 3.76 | 3.80 | 3.97 | 4.01 | | 4.22 | 4.51 | 4.66 | 5.00 | | | | | 11.53 | 12.74 | |
| | | velocity | 7.76 | 9.31 | 9.21 | 8.82 | 8.73 | 8.62 | 8.29 | 7.76 | 7.51 | 7.00 | | | 7.87 | | 9.11 | 8.24 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | | | 130 | | | | |

**FINAL** - 2021 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jul-21 | time | 5.72 | 9.36 | 13.08 | 16.92 | 20.92 | 22.7 | 24.92 | 29.20 | 33.68 | 38.32 | 43.12 | | 48.75 | 8 / 3 | | | |
| reaction time | 0.156 | interval | | 3.64 | 3.72 | 3.84 | 4.00 | | 4.00 | 4.28 | 4.48 | 4.64 | 4.80 | 5.63 | | | 11.20 | 12.28 | 13.92 |
| | | velocity | 7.87 | 9.62 | 9.41 | 9.11 | 8.75 | 8.81 | 8.75 | 8.18 | 7.81 | 7.54 | 7.29 | 7.10 | 8.21 | | 9.38 | 8.55 | 7.54 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.7 | 138.7 | | | | |

**Semi-Final 1** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 5.93 | 9.57 | 13.25 | 17.05 | 20.97 | | 25.15 | 29.43 | 33.92 | 38.54 | 43.42 | | 49.32 | 8 / 7 | | | |
| reaction time | 0.163 | interval | | 3.64 | 3.68 | 3.80 | 3.92 | | 4.18 | 4.28 | 4.49 | 4.62 | 4.88 | 5.90 | | | 11.12 | 12.38 | 13.99 |
| | | velocity | 7.59 | 9.62 | 9.51 | 9.21 | 8.93 | | 8.37 | 8.18 | 7.80 | 7.58 | 7.17 | 6.78 | 8.11 | | 9.44 | 8.48 | 7.51 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18 | 164 | | | | |

**FINAL** - 2019 Müller Grand Prix (Birmingham, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-19 | time | 5.80 | 9.48 | 13.32 | 17.20 | 21.16 | 22.9 | 25.20 | 29.64 | 34.12 | 38.84 | 43.64 | | 49.56 | 3 / 4 | | | |
| reaction time | 0.162 | interval | | 3.68 | 3.84 | 3.88 | 3.96 | | 4.04 | 4.44 | 4.48 | 4.72 | 4.80 | 5.92 | | | 11.40 | 12.44 | 14.00 |
| | | velocity | 7.76 | 9.51 | 9.11 | 9.02 | 8.84 | 8.73 | 8.66 | 7.88 | 7.81 | 7.42 | 7.29 | 6.76 | 8.07 | | 9.21 | 8.44 | 7.50 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18.5 | 162.5 | | | | |

**FINAL** - 2019 Pan American Games (Lima, PER) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Aug-19 | time | 5.77 | 9.47 | 13.21 | 17.08 | | 25.09 | 29.46 | 33.93 | 38.64 | 43.50 | | 49.09 | 4 / 3 | | | |
| reaction time | 0.177 | interval | | 3.70 | 3.74 | 3.87 | | 8.01 | 4.37 | 4.47 | 4.71 | 4.86 | 5.59 | | | 11.31 | 12.38 | 14.04 |
| | | velocity | 7.80 | 9.46 | 9.36 | 9.04 | | 8.74 | 8.01 | 7.83 | 7.43 | 7.20 | 7.16 | 8.15 | | 9.28 | 8.48 | 7.48 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | | | 14 | 14 | 15 | 15 | 18 | 136 | | | | |

**FINAL** - 2018 NCAA Championships (Eugene, OR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Jun-18 | time | 5.86 | 9.53 | 13.23 | 17.00 | 21.00 | 25.13 | 29.40 | 33.80 | 38.36 | 43.13 | | 48.83 | 6 / 4 | | | |
| reaction time | | interval | | 3.67 | 3.70 | 3.77 | 4.00 | 4.13 | 4.27 | 4.40 | 4.56 | 4.77 | 5.70 | | | 11.14 | 12.40 | 13.73 |
| | | velocity | 7.68 | 9.54 | 9.46 | 9.28 | 8.75 | 8.47 | 8.20 | 7.95 | 7.68 | 7.34 | 7.02 | 8.19 | | 9.43 | 8.47 | 7.65 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18.5 | 141.5 | | | | |

**FINAL** - 2017 IAAF World Championships (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-17 | time | 5.92 | 9.72 | 13.52 | 17.40 | 21.40 | 25.64 | 29.92 | 34.36 | 39.00 | 43.64 | | 48.99 | 3 / 4 | | | |
| reaction time | 0.189 | interval | | 3.80 | 3.80 | 3.88 | 4.00 | 4.24 | 4.28 | 4.44 | 4.64 | 4.64 | 5.35 | | | 11.48 | 12.52 | 13.72 |
| | | velocity | 7.60 | 9.21 | 9.21 | 9.02 | 8.75 | 8.25 | 8.18 | 7.88 | 7.54 | 7.54 | 7.48 | 8.16 | | 9.15 | 8.39 | 7.65 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18 | 164 | | | | |

**Mpoke, Moitalel (KEN) (2001)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2021 NCAA Championships (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-21 | time | 6.03 | 9.83 | 13.80 | 17.77 | 21.70 | 25.89 | 30.13 | 34.63 | 39.23 | 43.73 | | 48.70 | 6 / 4 | | | |
| reaction time | 0.267 | interval | | 3.80 | 3.97 | 3.97 | 3.93 | 4.19 | 4.24 | 4.50 | 4.60 | 4.50 | 4.97 | PB | | 11.74 | 12.36 | 13.60 |
| | | velocity | 7.46 | 9.21 | 8.82 | 8.82 | 8.91 | 8.36 | 8.25 | 7.78 | 7.61 | 7.78 | 8.05 | 8.21 | | 8.94 | 8.50 | 7.72 |
| H1 lead leg | R | strides | 21 | 13 | 14 | 14 | 13 | 14 | 14 | 15 | 15 | 15 | 18.5 | 166.5 | | | | |

**Mucheru, Bonface (KEN) (1992)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2017 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-17 | time | 6.23 | 10.16 | 14.16 | 18.23 | 22.40 | 26.66 | 31.03 | 35.50 | 40.10 | 44.86 | | 50.61 | 3 / 7 | | | |
| reaction time | 0.155 | interval | | 3.93 | 4.00 | 4.07 | 4.17 | 4.26 | 4.37 | 4.47 | 4.60 | 4.76 | 5.75 | | | 12.00 | 12.80 | 13.83 |
| | | velocity | 7.22 | 8.91 | 8.75 | 8.60 | 8.39 | 8.22 | 8.01 | 7.83 | 7.61 | 7.35 | 6.96 | 7.90 | | 8.75 | 8.20 | 7.59 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18.5 | 175.5 | | | | |

**FINAL** - 2016 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-16 | time | 6.24 | | | | | | | | | | | dnf | 5 / 8 | | | |
| reaction time | 0.132 | interval | | | | | | | | | | | | | | | | |
| | | velocity | 7.21 | | | | | | | | | | | | | | | |
| H1 lead leg | R | strides | 22 | | | | | | | | | | | | | | | |

**FINAL** - 2016 Athletissime (Laussane, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-16 | time | 5.96 | 9.67 | 13.46 | 17.30 | 21.20 | 25.26 | 29.56 | 34.00 | 38.50 | 44.73 | | 68.05 | 5 / 7 | | | |
| reaction time | 0.153 | interval | | 3.71 | 3.79 | 3.84 | 3.90 | 4.06 | 4.30 | 4.44 | 4.50 | 6.23 | 23.32 | | | 11.34 | 12.26 | 15.17 |
| | | velocity | 7.55 | 9.43 | 9.23 | 9.11 | 8.97 | 8.62 | 8.14 | 7.88 | 7.78 | 5.62 | 1.72 | 5.88 | | 9.26 | 8.56 | 6.92 |
| H1 lead leg | R | strides | 22 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 15 | 17 | | 149 | | | | |

**FINAL** - 2016 Shanghai Golden Grand Prix (Shanghai, CHN) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-May-16 | time | 6.04 | 9.96 | 14.04 | 18.12 | 22.36 | 26.64 | 31.00 | 35.40 | | | | 50.16 | 9 / 9 | | | |
| reaction time | 0.123 | interval | | 3.92 | 4.08 | 4.08 | 4.24 | 4.28 | 4.36 | 4.40 | | | | | | 12.08 | 12.88 | |
| | | velocity | 7.45 | 8.93 | 8.58 | 8.58 | 8.25 | 8.18 | 8.03 | 7.95 | | | | 7.97 | | 8.69 | 8.15 | |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | | | | 127 | | | | |

**FINAL** - 2015 IAAF World Championships (Beijing, CHN) (TV Analysis) *Henson (2021) - Athlete First: major championships report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-15 | time | 5.96 | | 13.56 | 17.32 | 21.20 | 25.32 | 29.64 | 34.04 | 38.48 | 43.00 | | 48.33 | 4 / 5 | | | |
| reaction time | 0.164 | interval | | | 7.60 | 3.76 | 3.88 | 4.12 | 4.32 | 4.40 | 4.44 | 4.52 | 5.33 | | | 11.36 | 12.32 | 13.36 |
| | | velocity | 7.55 | | 9.21 | 9.31 | 9.02 | 8.50 | 8.10 | 7.95 | 7.88 | 7.74 | 7.50 | 8.28 | | 9.24 | 8.52 | 7.86 |
| H1 lead leg | R | strides | | 15 | | 13 | 13 | | 15 | 15 | 15 | 15 | 18.5 | 119.5 | | | | |

**Mukhobe, Wiseman Were (KEN) (199**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Semi-Final 2** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-23 | time | 5.94 | 9.81 | 13.61 | 17.35 | 21.55 | 25.82 | 30.26 | 34.83 | | 44.01 | | 49.40 | 9 / 6 | | | |
| reaction time | 0.196 | interval | | 3.87 | 3.80 | 3.74 | 4.20 | 4.27 | 4.44 | 4.57 | | 9.18 | 5.39 | | | 11.41 | 12.91 | 13.75 |
| | | velocity | 7.58 | 9.04 | 9.21 | 9.36 | 8.33 | 8.20 | 7.88 | 7.66 | | 7.63 | 7.42 | 8.10 | | 9.20 | 8.13 | 7.64 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 13 | 14 | 14 | 15 | | | | 19 | 125 | | | | |

**Heat 2** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 5.93 | | | 17.63 | | 25.83 | | 34.63 | 39.23 | 43.83 | | 49.10 | 1 / 4 | | | |
| reaction time | 0.199 | interval | | | | 11.70 | | 8.20 | | 8.80 | 4.60 | 4.60 | 5.27 | | | 11.70 | | |
| | | velocity | 7.59 | | | 8.97 | | 8.54 | | 7.95 | 7.61 | 7.61 | 7.59 | 8.15 | | 8.97 | | |
| H1 lead leg | R | strides | 20 | | | | | | | | 15 | 15 | 19 | 69 | | | | |

**Müller, Vít (CZE) (1996)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2020 ISTAF (Berlin, GER) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Sep-20 | time | 6.12 | | 13.72 | 17.56 | | 25.76 | | 35.16 | 40.00 | | | 50.47 | 2 / 5 | | | |
| reaction time | 0.204 | interval | | | 7.60 | 3.84 | | 8.20 | | 9.40 | 4.84 | | | | | 11.44 | | |
| | | velocity | 7.35 | | 9.21 | 9.11 | | 8.54 | | 7.45 | 7.23 | | | 7.93 | | 9.18 | | |
| H1 lead leg | L | strides | 21 | | | 13 | | | | | 15 | | | 49 | | | | |

**Semi-Final 3** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 6.08 | 9.83 | 13.56 | 17.39 | 21.44 | 25.60 | 30.04 | 34.66 | 39.36 | 44.23 | | 49.97 | 3 / 7 | | | |
| reaction time | 0.178 | interval | | 3.75 | 3.73 | 3.83 | 4.05 | 4.16 | 4.44 | 4.62 | 4.70 | 4.87 | 5.74 | | | 11.31 | 12.65 | 14.19 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.40 | 9.33 | 9.38 | 9.14 | 8.64 | 8.41 | 7.88 | 7.58 | 7.45 | 7.19 | 6.97 | 8.00 | | 9.28 | 8.30 | 7.40 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18.5 | 162.5 | | | | |

**Muratomi, Kotaro (JPN) (1998)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2016 Japanese National High School Championships (Okayama, JPN) | | | | | | | | | | | | | | *Kota (2016) - 69th high school championships: JAF scientific committee- biomechanics data* | | | |
| date 31-Jul-16 | time | 6.17 | 10.23 | 14.40 | 18.70 | 23.09 | 27.58 | 32.33 | 37.09 | 41.92 | 46.93 | | 52.68 | 4 / 4 | | | |
| reaction time 0.178 | interval | | 4.06 | 4.17 | 4.30 | 4.39 | 4.49 | 4.75 | 4.76 | 4.83 | 5.01 | 5.75 | | | 12.53 | 13.63 | 14.60 |
| | velocity | 7.29 | 8.62 | 8.39 | 8.14 | 7.97 | 7.80 | 7.37 | 7.35 | 7.25 | 6.99 | 6.96 | 7.59 | | 8.38 | 7.70 | 7.19 |
| H1 lead leg | strides | | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | | 130 | | | | |

**Muto, Yuhi (JPN) (2004)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Japanese National High School Championships (Naruto, JPN) | | | | | | | | | | | | | | *Kishima (2022) - national high school championships biomechanics data collection* | | | |
| date 05-Aug-22 | time | 6.47 | 10.43 | 14.48 | 18.67 | 23.03 | 27.52 | 32.05 | 36.63 | 41.62 | 46.57 | | 52.14 | 8 / 5 | | | |
| reaction time 0.199 | interval | | 3.96 | 4.05 | 4.19 | 4.36 | 4.49 | 4.53 | 4.58 | 4.99 | 4.95 | 5.57 | | | 12.20 | 13.38 | 14.52 |
| | velocity | 6.96 | 8.84 | 8.64 | 8.35 | 8.03 | 7.80 | 7.73 | 7.64 | 7.01 | 7.07 | 7.18 | 7.67 | | 8.61 | 7.85 | 7.23 |
| H1 lead leg R | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 17 | | 159 | | | | |
| **FINAL** - 2022 Japanese U20 National Championsips (Osaka, JPN) | | | | | | | | | | | | | | *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season* | | | |
| date 11-Jun-22 | time | 6.39 | 10.33 | 14.41 | 18.52 | 22.86 | 27.29 | 31.82 | 36.47 | 41.21 | 46.06 | | 51.46 | 3 / 6 | | | |
| reaction time 0.189 | interval | | 3.94 | 4.08 | 4.11 | 4.34 | 4.43 | 4.53 | 4.65 | 4.74 | 4.85 | 5.40 | **PB** | | 12.13 | 13.30 | 14.24 |
| | velocity | 7.04 | 8.88 | 8.58 | 8.52 | 8.06 | 7.90 | 7.73 | 7.53 | 7.38 | 7.22 | 7.41 | 7.77 | | 8.66 | 7.89 | 7.37 |
| H1 lead leg R | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19 | 176 | | | | |

**Mužík, Jiří (CZE) (1976)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2002 IAAF World Cup (Madrid, ESP) | | | | | | | | | | | | | | *Sanchez (2002) - copa del mundo de Madrid '02: análisis de la carreras con villas* | | | |
| date 20-Sep-02 | time | 6.08 | 9.93 | 13.91 | 17.81 | 21.94 | 26.05 | 30.23 | 34.65 | 39.23 | 43.86 | | 49.28 | 4 / 4 | | | |
| reaction time 0.185 | interval | | 3.85 | 3.98 | 3.90 | 4.13 | 4.11 | 4.18 | 4.42 | 4.58 | 4.63 | 5.42 | | | 11.73 | 12.42 | 13.63 |
| | velocity | 7.40 | 9.09 | 8.79 | 8.97 | 8.47 | 8.52 | 8.37 | 7.92 | 7.64 | 7.56 | 7.38 | 8.12 | | 8.95 | 8.45 | 7.70 |
| H1 lead leg L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 18.5 | 167.5 | | | | |
| **FINAL** - 2002 European Championships (Munich, GER) | | | | | | | | | | | | | | *Graubner (2009) - http://www.fgs.uni-halle.de* | | | |
| date 09-Aug-02 | time | 6.08 | 9.90 | 13.80 | 17.75 | 21.76 | 25.80 | 29.90 | 34.18 | 38.60 | 43.12 | | 48.43 | / 2 | | | |
| reaction time 0.160 | interval | | 3.82 | 3.90 | 3.95 | 4.01 | 4.04 | 4.10 | 4.28 | 4.42 | 4.52 | 5.31 | | | 11.67 | 12.15 | 13.22 |
| | velocity | 7.40 | 9.16 | 8.97 | 8.86 | 8.73 | 8.66 | 8.54 | 8.18 | 7.92 | 7.74 | 7.53 | 8.26 | | 9.00 | 8.64 | 7.94 |
| H1 lead leg | strides | | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | | 128 | | | | |
| **Semi-Final 1** - 2002 European Championships (Munich, GER) | | | | | | | | | | | | | | *Graubner (2009) - http://www.fgs.uni-halle.de* | | | |
| date 08-Aug-02 | time | 6.15 | 10.01 | 13.87 | 17.81 | 21.83 | 25.94 | 30.08 | 34.31 | 38.71 | 43.25 | | 48.46 | / 1 | | | |
| reaction time | interval | | 3.86 | 3.86 | 3.94 | 4.02 | 4.11 | 4.14 | 4.23 | 4.40 | 4.54 | 5.21 | | | 11.66 | 12.27 | 13.17 |
| | velocity | 7.32 | 9.07 | 9.07 | 8.88 | 8.71 | 8.52 | 8.45 | 8.27 | 7.95 | 7.71 | 7.68 | 8.25 | | 9.01 | 8.56 | 7.97 |
| H1 lead leg | strides | | | | | | | | | | | | | | | | |
| **Heat 2** - 2002 European Championships (Munich, GER) | | | | | | | | | | | | | | *Graubner (2009) - http://www.fgs.uni-halle.de* | | | |
| date 07-Aug-02 | time | 6.24 | 10.23 | 14.29 | 18.37 | 22.52 | 26.69 | 30.95 | 35.31 | 39.85 | 44.47 | | 49.76 | / 1 | | | |
| reaction time 0.169 | interval | | 3.99 | 4.06 | 4.08 | 4.15 | 4.17 | 4.26 | 4.36 | 4.54 | 4.62 | 5.29 | | | 12.13 | 12.58 | 13.52 |
| | velocity | 7.21 | 8.77 | 8.62 | 8.58 | 8.43 | 8.39 | 8.22 | 8.03 | 7.71 | 7.58 | 7.56 | 8.04 | | 8.66 | 8.35 | 7.77 |
| H1 lead leg | strides | | | | | | | | | | | | | | | | |
| **FINAL** - 2001 IAAF World Championships (Edmonton, CAN) | | | | | | | | | | | | | | *Behm (2001) - Edmonton: Le quatrache: les finales* | | | |
| date 10-Aug-01 | time | 5.9 | 9.8 | 13.4 | 17.3 | 21.3 | 25.3 | 29.5 | 34.0 | 38.5 | 43.2 | | 49.07 | 8 / ~~8~~ 7 | | | |
| reaction time 0.203 | interval | | 3.90 | 3.60 | 3.90 | 4.00 | 4.00 | 4.20 | 4.50 | 4.50 | 4.70 | 5.87 | | | 11.40 | 12.20 | 13.70 |
| | velocity | 7.63 | 8.97 | 9.72 | 8.97 | 8.75 | 8.75 | 8.33 | 7.78 | 7.78 | 7.45 | 6.81 | 8.15 | | 9.21 | 8.61 | 7.66 |
| H1 lead leg R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 146 | | | | |
| **Semi-Final 2** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date 25-Sep-00 | time | 5.96 | 9.88 | 13.72 | 17.64 | 21.76 | 23.36 | 25.96 | 30.24 | 34.68 | 39.20 | 43.92 | | 49.23 | 5 / 5 | | |
| reaction time 0.227 | interval | | 3.92 | 3.84 | 3.92 | 4.12 | | 4.20 | 4.28 | 4.44 | 4.52 | 4.72 | 5.31 | | 11.68 | 12.60 | 13.68 |
| | velocity | 7.55 | 8.93 | 9.11 | 8.93 | 8.50 | 8.56 | 8.33 | 8.18 | 7.88 | 7.74 | 7.42 | 7.53 | 8.13 | 8.99 | 8.33 | 7.68 |
| H1 lead leg | strides | | 13 | 13 | 13 | 14 | | 14 | 14 | 15 | 15 | 15 | 19.2 | 145.2 | | | |
| **Heat 4** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date 24-Sep-00 | time | 6.00 | 9.78 | 13.64 | 17.60 | 21.64 | | 25.80 | 30.20 | 34.80 | 39.76 | 44.68 | | 50.11 | 8 / 1 | | |
| reaction time 0.216 | interval | | 3.78 | 3.86 | 3.96 | 4.04 | | 4.16 | 4.40 | 4.60 | 4.96 | 4.92 | 5.43 | | 11.60 | 12.60 | 14.48 |
| | velocity | 7.50 | 9.26 | 9.07 | 8.84 | 8.66 | | 8.41 | 7.95 | 7.61 | 7.06 | 7.11 | 7.37 | 7.98 | 9.05 | 8.33 | 7.25 |
| H1 lead leg | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 16 | 16 | 18.9 | 165.9 | | | |
| **Semi-Final 1** - 1999 IAAF World Championships (Sevilla, ESP) | | | | | | | | | | | | | | *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas* | | | |
| date 25-Aug-99 | time | 5.60 | 9.38 | 13.18 | 17.19 | 21.35 | | 25.51 | 29.85 | 34.30 | 38.82 | 43.50 | | 49.17 | 2 / 5 | | |
| reaction time 0.179 | interval | | 3.78 | 3.80 | 4.01 | 4.16 | | 4.16 | 4.34 | 4.45 | 4.52 | 4.68 | 5.67 | | 11.59 | 12.66 | 13.65 |
| | velocity | 8.04 | 9.26 | 9.21 | 8.73 | 8.41 | | 8.41 | 8.06 | 7.87 | 7.74 | 7.48 | 7.05 | 8.14 | 9.06 | 8.29 | 7.69 |
| H1 lead leg R | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 14 | 14 | 15 | 15 | 18.5 | 164.5 | | | |
| **FINAL** - 1998 European Championships (Budapest, HUN) | | | | | | | | | | | | | | *Sanchez (1998) - Budapest '98: análisis de la carreras con villas* | | | |
| date 20-Aug-98 | time | 6.01 | | | | 21.40 | | | | | | 44.30 | | 50.51 | 8 / 7 | | |
| reaction time | interval | | | | | 15.39 | | | | | | 22.90 | 6.21 | | | | |
| | velocity | 7.49 | | | | 9.10 | | | | | | 7.64 | 6.44 | 7.92 | | | |
| H1 lead leg R | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 19.5 | 169.5 | | | |

**FINAL** - 1997 IAAF World Championships (Athens, GRE) *Hommel (1999) - biomechanical research project, athens 1997: final report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Aug-97 | time | 6.02 | 9.78 | 13.62 | 17.58 | 21.80 | | 26.12 | 30.42 | 34.92 | 39.52 | 44.14 | | 49.51 | 2 / 8 | | | |
| reaction time | 0.179 | interval | | 3.76 | 3.84 | 3.96 | 4.22 | | 4.32 | 4.30 | 4.50 | 4.60 | 4.62 | 5.37 | NR | | 11.56 | 12.84 | 13.72 |
| | | velocity | 7.48 | 9.31 | 9.11 | 8.84 | 8.29 | | 8.10 | 8.14 | 7.78 | 7.61 | 7.58 | 7.45 | 8.08 | | 9.08 | 8.18 | 7.65 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Myburgh, Alwyn (RSA) (1980)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2004 Olympic Games (Athîna, GRE) | | | | | | | | | | | | | | | | *Behm (2005) - Athènes 2004: Les Haies Basses* | | | |
| date | 26-Aug-04 | time | 5.9 | 9.5 | 13.2 | 17.0 | 21.2 | | 25.3 | 29.4 | 33.9 | 38.5 | 43.3 | | 49.07 | 1 / 7 | | | |
| reaction time | 0.150 | interval | | 3.60 | 3.70 | 3.80 | 4.20 | | 4.10 | 4.10 | 4.50 | 4.60 | 4.80 | 5.77 | | | 11.10 | 12.40 | 13.90 |
| | | velocity | 7.63 | 9.72 | 9.46 | 9.21 | 8.33 | | 8.54 | 8.54 | 7.78 | 7.61 | 7.29 | 6.93 | 8.15 | | 9.46 | 8.47 | 7.55 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 19 | 169 | | | | |
| **Semi-Final 3** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 25-Sep-00 | time | 5.78 | 9.50 | 13.34 | 17.26 | 21.22 | 22.74 | 25.26 | 29.50 | 34.06 | 38.74 | 43.58 | | 49.25 | 1 / 4 | | | |
| reaction time | 0.202 | interval | | 3.72 | 3.84 | 3.92 | 3.96 | | 4.04 | 4.24 | 4.56 | 4.68 | 4.84 | 5.67 | | | 11.48 | 12.24 | 14.08 |
| | | velocity | 7.79 | 9.41 | 9.11 | 8.93 | 8.84 | 8.80 | 8.66 | 8.25 | 7.68 | 7.48 | 7.23 | 7.05 | 8.12 | | 9.15 | 8.58 | 7.46 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 19 | 170 | | | | |
| **Heat 6** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 24-Sep-00 | time | 5.98 | 9.82 | 13.82 | 17.82 | 21.94 | | 26.22 | 30.50 | 34.98 | 39.54 | 44.14 | | 49.57 | 6 / 3 | | | |
| reaction time | 0.184 | interval | | 3.84 | 4.00 | 4.00 | 4.12 | | 4.28 | 4.28 | 4.48 | 4.56 | 4.60 | 5.43 | | | 11.84 | 12.68 | 13.64 |
| | | velocity | 7.53 | 9.11 | 8.75 | 8.75 | 8.50 | | 8.18 | 8.18 | 7.81 | 7.68 | 7.61 | 7.37 | 8.07 | | 8.87 | 8.28 | 7.70 |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.7 | 168.7 | | | | |

**Naadokila, Moitalel Mpoke (KEN) (20**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 2** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date | 17-Jul-22 | time | | 9.90 | 14.03 | 18.07 | 22.27 | 24.10 | 26.53 | 30.93 | 35.43 | 39.90 | 44.37 | | 49.34 | 1 / 6 | | | |
| reaction time | 0.149 | interval | | | 4.13 | 4.04 | 4.20 | | 4.26 | 4.40 | 4.50 | 4.47 | 4.47 | 4.97 | | | | 12.86 | 13.44 |
| | | velocity | | 8.08 | 8.47 | 8.66 | 8.33 | 8.30 | 8.22 | 7.95 | 7.78 | 7.83 | 7.83 | 8.05 | 8.11 | | | 8.16 | 7.81 |
| H1 lead leg | | strides | | | 14 | 14 | 14 | | 14 | 14 | 14 | 14 | 14 | 17 | 129 | | | | |
| **Heat 3** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date | 16-Jul-22 | time | 6.03 | 10.00 | 14.03 | 18.10 | 22.16 | 24.03 | 26.50 | 30.90 | 35.46 | 40.20 | 44.83 | | 50.19 | 8 / 4 | | | |
| reaction time | 0.177 | interval | | 3.97 | 4.03 | 4.07 | 4.06 | | 4.34 | 4.40 | 4.56 | 4.74 | 4.63 | 5.36 | | | 12.07 | 12.80 | 13.93 |
| | | velocity | 7.46 | 8.82 | 8.68 | 8.60 | 8.62 | 8.32 | 8.06 | 7.95 | 7.68 | 7.38 | 7.56 | 7.46 | 7.97 | | 8.70 | 8.20 | 7.54 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 14 | 14 | 14 | 17 | 164 | | | | |

**Nagano, Yuichi (JPN) (1993)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2010 Japanese National High School Championships (Okinawa, JPN) | | | | | | | | | | | | | | | | *Matsuo (2010) - 63rd high school championships: JAF scientific committee- biomechanics data* | | | |
| date | 31-Jul-10 | time | 6.44 | 10.41 | 14.45 | 18.52 | 22.67 | | 26.97 | 31.37 | 35.91 | 40.90 | 46.09 | | 52.03 | / 2 | | | |
| reaction time | | interval | | 3.97 | 4.04 | 4.07 | 4.15 | | 4.30 | 4.40 | 4.54 | 4.99 | 5.19 | 5.94 | | | 12.08 | 12.85 | 14.72 |
| | | velocity | 6.99 | 8.82 | 8.66 | 8.60 | 8.43 | | 8.14 | 7.95 | 7.71 | 7.01 | 6.74 | 6.73 | 7.69 | | 8.69 | 8.17 | 7.13 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 15 | | 124 | | | | |

**Nagiko, Kazushi (JPN)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 2** - 2016 Japanese National Youth Championships (Mizuho, JPN) | | | | | | | | | | | | | | | | *(2016.11.17) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en* | | | |
| date | 23-Oct-16 | time | 6.53 | 10.87 | 15.16 | 19.47 | 23.86 | | 28.36 | 32.99 | 37.95 | 43.20 | 48.69 | | 54.86 | 8 / 1 | | | |
| reaction time | | interval | | 4.34 | 4.29 | 4.31 | 4.39 | | 4.50 | 4.63 | 4.96 | 5.25 | 5.49 | 6.17 | | | 12.94 | 13.52 | 15.70 |
| | | velocity | 6.89 | 8.06 | 8.16 | 8.12 | 7.97 | | 7.78 | 7.56 | 7.06 | 6.67 | 6.38 | 6.48 | 7.29 | | 8.11 | 7.77 | 6.69 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Naito, Genichiro (JPN) (2002)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Japanese U20 National Championships (Osaka, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | |
| date | 26-Jun-21 | time | 6.27 | 10.24 | 14.21 | 18.30 | 22.54 | | 26.96 | 31.53 | 36.17 | 40.96 | 45.98 | | 51.70 | 6 / 5 | | | |
| reaction time | 0.183 | interval | | 3.97 | 3.97 | 4.09 | 4.24 | | 4.42 | 4.57 | 4.64 | 4.79 | 5.02 | 5.72 | | | 12.03 | 13.23 | 14.45 |
| | | velocity | 7.18 | 8.82 | 8.82 | 8.56 | 8.25 | | 7.92 | 7.66 | 7.54 | 7.31 | 6.97 | 6.99 | 7.74 | | 8.73 | 7.94 | 7.27 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 152 | | | | |

**Nakamura, Akihiko (JPN) (1990)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2014 Japanese National Championships (Fukushima, JPN) | | | | | | | | | | | | | | | | *Yasunori (2014) - race pattern analysis of Japanese top 400m hurdlers for major domestic competitions* | | | |
| date | 08-Jun-14 | time | 6.09 | 10.03 | 14.05 | 18.12 | 22.32 | | 26.62 | 31.01 | 35.55 | 40.19 | 44.74 | | 49.95 | 5 / 2 | | | |
| reaction time | | interval | | 3.94 | 4.02 | 4.07 | 4.20 | | 4.30 | 4.39 | 4.54 | 4.64 | 4.55 | 5.21 | | | 12.03 | 12.89 | 13.73 |
| | | velocity | 7.39 | 8.88 | 8.71 | 8.60 | 8.33 | | 8.14 | 7.97 | 7.71 | 7.54 | 7.69 | 7.68 | 8.01 | | 8.73 | 8.15 | 7.65 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 14 | 14 | 15 | 15 | 19 | 165 | | | | |
| **FINAL** - 2012 Japanese National Championships (Osaka, JPN) | | | | | | | | | | | | | | | | *Yasunori (2013) - race pattern analysis for the top Japanese 400m hurdlers in major domestic competitions* | | | |
| date | 09-Jun-12 | time | 6.09 | 9.96 | 14.01 | 18.15 | 22.34 | | 26.63 | 30.98 | 35.42 | 40.01 | 44.49 | | 49.38 | 6 / 2 | | | |
| reaction time | | interval | | 3.87 | 4.05 | 4.14 | 4.19 | | 4.29 | 4.35 | 4.44 | 4.59 | 4.48 | 4.89 | PB | | 12.06 | 12.83 | 13.51 |
| | | velocity | 7.39 | 9.04 | 8.64 | 8.45 | 8.35 | | 8.16 | 8.05 | 7.88 | 7.63 | 7.81 | 8.18 | 8.10 | | 8.71 | 8.18 | 7.77 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 15 | 18.2 | 163 | | | | |

**Nakamashi, Haruki (JPN) (2004)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Japanese High School National Championships (Fukui, JPN) | | | | | | | | | | | | | | | | *Shibayama (2021) - national high school and U20 national championhsips* | | | |
| date | 30-Jul-21 | time | 6.07 | 10.04 | 14.28 | 18.60 | 22.97 | | 27.43 | 31.92 | 36.50 | 41.42 | 46.36 | | 51.70 | 4 / 2 | | | |
| reaction time | 0.145 | interval | | 3.97 | 4.24 | 4.32 | 4.37 | | 4.46 | 4.49 | 4.58 | 4.92 | 4.94 | 5.34 | | | 12.53 | 13.32 | 14.44 |
| | | velocity | 7.41 | 8.82 | 8.25 | 8.10 | 8.01 | | 7.85 | 7.80 | 7.64 | 7.11 | 7.09 | 7.49 | 7.74 | | 8.38 | 7.88 | 7.27 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 17 | 17 | | 139 | | | | |

**FINAL** - 2021 Japanese U20 National Championships (Osaka, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.17 | 10.16 | 14.18 | 18.30 | 22.48 | 26.78 | 31.16 | 35.62 | 40.34 | 45.08 | 50.53 | 7 / 2 | | | |
| reaction time | 0.181 | interval | | 3.99 | 4.02 | 4.12 | 4.18 | 4.30 | 4.38 | 4.46 | 4.72 | 4.74 | 5.45 | PB | 12.13 | 12.86 | 13.92 |
| | | velocity | 7.29 | 8.77 | 8.71 | 8.50 | 8.37 | 8.14 | 7.99 | 7.85 | 7.42 | 7.38 | 7.34 | 7.92 | 8.66 | 8.16 | 7.54 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 20.7 | 177.7 | | | |

**Nallet, Jean-Claude (FRA) (1947)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 2** - 1978 European Championships (Prague, TCH) | | | | | | | | | | | | | | | | *Lamare (1978) - championnats d'Europa 1978* | | | |
| date | 30-Aug-78 | time | 6.23 | 10.36 | 14.14 | 18.16 | 22.22 | | | | | | | | 49.98 | / 2 | | | |
| reaction time | | interval | | 4.13 | 3.78 | 4.02 | 4.06 | | | | | | | | | | 11.93 | | |
| | | velocity | 7.22 | 8.47 | 9.26 | 8.71 | 8.62 | | | | | | | | 8.00 | | 8.80 | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **Semi-Final 2** - 1976 Olympic Games (Montreal, CAN) | | | | | | | | | | | | | | | | *Behm (1995) - la tactique du 400 haies* | | | |
| date | 24-Jul-76 | time | 5.8 | 9.8 | 13.8 | 17.8 | 22.0 | | 26.0 | 30.5 | 35.0 | 39.7 | 44.3 | | 50.08 | 4 / 5 | | | |
| reaction time | | interval | | 4.00 | 4.00 | 4.00 | 4.15 | | 4.05 | 4.50 | 4.50 | 4.70 | 4.60 | 5.78 | | | 12.00 | 12.70 | 13.80 |
| | | velocity | 7.76 | 8.75 | 8.75 | 8.75 | 8.43 | | 8.64 | 7.78 | 7.78 | 7.45 | 7.61 | 6.92 | 7.99 | | 8.75 | 8.27 | 7.61 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **FINAL** - 1971 European Championships (Helsinki, FIN) | | | | | | | | | | | | | | | | *Behm (1995) - la tactique du 400 haies* | | | |
| date | 12-Aug-71 | time | 6.0 | 10.0 | 13.8 | 17.6 | 21.6 | | 25.7 | 29.9 | 34.4 | 38.9 | 43.5 | | 49.2 | / 1 | | | |
| reaction time | | interval | | 4.00 | 3.80 | 3.80 | 4.00 | | 4.10 | 4.20 | 4.50 | 4.50 | 4.60 | 5.70 | CR | | 11.60 | 12.30 | 13.60 |
| | | velocity | 7.50 | 8.75 | 9.21 | 9.21 | 8.75 | | 8.54 | 8.33 | 7.78 | 7.78 | 7.61 | 7.02 | 8.13 | | 9.05 | 8.54 | 7.72 |
| H1 lead leg | | strides | 19 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | | 142 | | | | |
| **FINAL** - 1970 France vs. USA (Colombes, FRA) | | | | | | | | | | | | | | | | | | | *Behm (1988) - 45-39* |
| date | 08-Jul-70 | time | 5.9 | 9.9 | 13.7 | 17.4 | 21.7 | | 25.6 | 29.8 | 34.3 | 38.9 | 43.4 | | 48.6 | / 1 | | | |
| reaction time | | interval | | 4.00 | 3.80 | 3.70 | 4.30 | | 3.90 | 4.20 | 4.50 | 4.60 | 4.50 | 5.20 | PB | | 11.50 | 12.40 | 13.60 |
| | | velocity | 7.63 | 8.75 | 9.21 | 9.46 | 8.14 | | 8.97 | 8.33 | 7.78 | 7.61 | 7.78 | 7.69 | 8.23 | | 9.13 | 8.47 | 7.72 |
| H1 lead leg | | strides | 19 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | | 142 | | | | |

**Narisako, Kenji (JPN) (1984)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2010 Japanese National Championships (Marugume, JPN) | | | | | | | | | | | | | | | | *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11* | | | |
| date | 05-Jun-10 | time | 6.07 | 9.86 | 13.71 | 17.60 | 21.59 | | 25.73 | 30.07 | 34.51 | 39.01 | 43.58 | | 49.01 | / 1 | | | |
| reaction time | 0.165 | interval | | 3.79 | 3.85 | 3.89 | 3.99 | | 4.14 | 4.34 | 4.44 | 4.50 | 4.57 | 5.43 | | | 11.53 | 12.47 | 13.51 |
| | | velocity | 7.41 | 9.23 | 9.09 | 9.00 | 8.77 | | 8.45 | 8.06 | 7.88 | 7.78 | 7.66 | 7.37 | 8.16 | | 9.11 | 8.42 | 7.77 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |
| **FINAL** - 2009 Japanese National Championships (Hiroshima, JPN) | | | | | | | | | | | | | | | | *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11* | | | |
| date | 27-Jun-09 | time | 6.02 | 9.76 | 13.53 | 17.38 | 21.33 | | 25.56 | 29.90 | 34.37 | 39.02 | 43.86 | | 49.53 | 6 / 1 | | | |
| reaction time | | interval | | 3.74 | 3.77 | 3.85 | 3.95 | | 4.23 | 4.34 | 4.47 | 4.65 | 4.84 | 5.67 | | | 11.36 | 12.52 | 13.96 |
| | | velocity | 7.48 | 9.36 | 9.28 | 9.09 | 8.86 | | 8.27 | 8.06 | 7.83 | 7.53 | 7.23 | 7.05 | 8.08 | | 9.24 | 8.39 | 7.52 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |
| **FINAL** - 2009 Osaka Grand Prix (Osaka, JPN) | | | | | | | | | | | | | | | | *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11* | | | |
| date | 09-May-09 | time | 6.04 | 9.73 | 13.50 | 17.30 | 21.19 | | 25.28 | 29.63 | 34.02 | 38.61 | 43.36 | | 48.77 | / 3 | | | |
| reaction time | | interval | | 3.69 | 3.77 | 3.80 | 3.89 | | 4.09 | 4.35 | 4.39 | 4.59 | 4.75 | 5.41 | | | 11.26 | 12.33 | 13.73 |
| | | velocity | 7.45 | 9.49 | 9.28 | 9.21 | 9.00 | | 8.56 | 8.05 | 7.97 | 7.63 | 7.37 | 7.39 | 8.20 | | 9.33 | 8.52 | 7.65 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |
| **Race A** - 2009 Shizuoka International Athletics Meeting (Fukuroi, JPN) | | | | | | | | | | | | | | | | *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11* | | | |
| date | 03-May-09 | time | 6.06 | 9.76 | 13.61 | 17.48 | 21.47 | | 25.54 | 29.81 | 34.13 | 38.68 | 43.43 | | 48.99 | / 1 | | | |
| reaction time | | interval | | 3.70 | 3.85 | 3.87 | 3.99 | | 4.07 | 4.27 | 4.32 | 4.55 | 4.75 | 5.56 | | | 11.42 | 12.33 | 13.62 |
| | | velocity | 7.43 | 9.46 | 9.09 | 9.04 | 8.77 | | 8.60 | 8.20 | 8.10 | 7.69 | 7.37 | 7.19 | 8.16 | | 9.19 | 8.52 | 7.71 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |
| **FINAL** - 2008 Japanese National Championships (Kawasaki, JPN) | | | | | | | | | | | | | | | | *Yasunori (2009) - race pattern analysis of prestigious Japanese 400m hurdlers* | | | |
| date | 27-Jun-08 | time | 6.02 | 9.77 | 13.61 | 17.46 | 21.43 | | 25.50 | 29.84 | 34.28 | 38.88 | 43.72 | | 49.47 | / 2 | | | |
| reaction time | | interval | | 3.75 | 3.84 | 3.85 | 3.97 | | 4.07 | 4.34 | 4.44 | 4.60 | 4.84 | 5.75 | | | 11.44 | 12.38 | 13.88 |
| | | velocity | 7.48 | 9.33 | 9.11 | 9.09 | 8.82 | | 8.60 | 8.06 | 7.88 | 7.61 | 7.23 | 6.96 | 8.09 | | 9.18 | 8.48 | 7.56 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |
| **FINAL** - 2008 Osaka Grand Prix (Osaka, JPN) | | | | | | | | | | | | | | | | *Yasunori (2009) - race pattern analysis of prestigious Japanese 400m hurdlers* | | | |
| date | 10-May-08 | time | 5.97 | 9.59 | 13.36 | 17.16 | 21.11 | | 25.21 | 29.56 | 33.98 | 38.58 | 43.37 | | 49.00 | 9 / 1 | | | |
| reaction time | | interval | | 3.62 | 3.77 | 3.80 | 3.95 | | 4.10 | 4.35 | 4.42 | 4.60 | 4.79 | 5.63 | | | 11.19 | 12.40 | 13.81 |
| | | velocity | 7.54 | 9.67 | 9.28 | 9.21 | 8.86 | | 8.54 | 8.05 | 7.92 | 7.61 | 7.31 | 7.10 | 8.16 | | 9.38 | 8.47 | 7.60 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |
| **FINAL** - 2008 Shizuoka International Athletics Meeting (Fukuroi, JPN) | | | | | | | | | | | | | | | | *Yasunori (2009) - race pattern analysis of prestigious Japanese 400m hurdlers* | | | |
| date | 03-May-08 | time | 6.04 | 9.74 | 13.56 | 17.40 | 21.35 | | 25.62 | 29.92 | 34.46 | 39.10 | 43.82 | | 49.44 | / 1 | | | |
| reaction time | | interval | | 3.70 | 3.82 | 3.84 | 3.95 | | 4.27 | 4.30 | 4.54 | 4.64 | 4.72 | 5.62 | | | 11.36 | 12.52 | 13.90 |
| | | velocity | 7.45 | 9.46 | 9.16 | 9.11 | 8.86 | | 8.20 | 8.14 | 7.71 | 7.54 | 7.42 | 7.12 | 8.09 | | 9.24 | 8.39 | 7.55 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |
| **Semi-Final 1** - 2007 IAAF World Championships (Osaka, JPN) | | | | | | | | | | | | | | | | *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers* | | | |
| date | 26-Aug-07 | time | 6.02 | 9.71 | 13.45 | 17.24 | 21.18 | | 25.27 | 29.58 | 33.90 | 38.42 | 43.04 | | 48.44 | 7 / 5 | | | |
| reaction time | 0.179 | interval | | 3.69 | 3.74 | 3.79 | 3.94 | | 4.09 | 4.31 | 4.32 | 4.52 | 4.62 | 5.40 | | | 11.22 | 12.34 | 13.46 |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.48 | 9.49 | 9.36 | 9.23 | 8.88 | 8.56 | 8.12 | 8.10 | 7.74 | 7.58 | 7.41 | 8.26 | | 9.36 | 8.51 | 7.80 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 19.2 | 163 | | | | |

**Heat 5** - 2007 IAAF World Championships (Osaka, JPN) *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-07 | time | 6.00 | 9.70 | 13.44 | 17.28 | 21.22 | 25.32 | 29.72 | 34.12 | 38.72 | 43.39 | | 48.92 | 2 / 3 | | | |
| reaction time | 0.172 | interval | | 3.70 | 3.74 | 3.84 | 3.94 | 4.10 | 4.40 | 4.40 | 4.60 | 4.67 | 5.53 | | | 11.28 | 12.44 | 13.67 |
| | | velocity | 7.50 | 9.46 | 9.36 | 9.11 | 8.88 | 8.54 | 7.95 | 7.95 | 7.61 | 7.49 | 7.23 | 8.18 | | 9.31 | 8.44 | 7.68 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 19.2 | 163.2 | | | | |

**FINAL** - 2007 Japanese National Championships (Osaka, JPN) *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-07 | time | 5.99 | 9.68 | 13.42 | 17.24 | 21.16 | 25.23 | 29.55 | 34.00 | 38.59 | 43.31 | | 49.01 | / 2 | | | |
| reaction time | | interval | | 3.69 | 3.74 | 3.82 | 3.92 | 4.07 | 4.32 | 4.45 | 4.59 | 4.72 | 5.70 | | | 11.25 | 12.31 | 13.76 |
| | | velocity | 7.51 | 9.49 | 9.36 | 9.16 | 8.93 | 8.60 | 8.10 | 7.87 | 7.63 | 7.42 | 7.02 | 8.16 | | 9.33 | 8.53 | 7.63 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**FINAL** - 2007 Osaka Grand Prix (Osaka, JPN) *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-07 | time | 5.97 | 9.66 | 13.38 | 17.20 | 21.14 | 25.21 | 29.46 | 34.08 | 38.85 | 43.55 | | 49.20 | / 4 | | | |
| reaction time | | interval | | 3.69 | 3.72 | 3.82 | 3.94 | 4.07 | 4.25 | 4.62 | 4.77 | 4.70 | 5.65 | | | 11.23 | 12.26 | 14.09 |
| | | velocity | 7.54 | 9.49 | 9.41 | 9.16 | 8.88 | 8.60 | 8.24 | 7.58 | 7.34 | 7.45 | 7.08 | 8.13 | | 9.35 | 8.56 | 7.45 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**FINAL** - 2006 Japanese National Championships (Kobe, JPN) *Yasunori (2007) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jul-06 | time | 6.07 | 9.82 | 13.61 | 17.51 | 21.46 | 25.60 | 30.02 | 34.52 | 39.11 | 43.75 | | 48.95 | / 1 | | | |
| reaction time | | interval | | 3.75 | 3.79 | 3.90 | 3.95 | 4.14 | 4.42 | 4.50 | 4.59 | 4.64 | 5.20 | | | 11.44 | 12.51 | 13.73 |
| | | velocity | 7.41 | 9.33 | 9.23 | 8.97 | 8.86 | 8.45 | 7.92 | 7.78 | 7.63 | 7.54 | 7.69 | 8.17 | | 9.18 | 8.39 | 7.65 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**FINAL** - 2006 Osaka Grand Prix (Osaka, JPN) *Yasunori (2007) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-May-06 | time | 5.95 | 9.63 | 13.41 | 17.23 | 21.10 | 25.12 | 29.44 | 33.77 | 38.17 | 42.72 | | 47.93 | / 3 | | | |
| reaction time | | interval | | 3.68 | 3.78 | 3.82 | 3.87 | 4.02 | 4.32 | 4.33 | 4.40 | 4.55 | 5.21 | PB | | 11.28 | 12.21 | 13.28 |
| | | velocity | 7.56 | 9.51 | 9.26 | 9.16 | 9.04 | 8.71 | 8.10 | 8.08 | 7.95 | 7.69 | 7.68 | 8.35 | | 9.31 | 8.60 | 7.91 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**FINAL** - 2005 Seiko Super Grand Prix (Yokohama, JPN) *Yasunori (2006) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Sep-05 | time | 6.08 | 9.81 | 13.68 | 17.56 | 21.51 | 25.56 | 29.88 | 34.23 | 38.67 | 43.22 | | 48.40 | / 2 | | | |
| reaction time | | interval | | 3.73 | 3.87 | 3.88 | 3.95 | 4.05 | 4.32 | 4.35 | 4.44 | 4.55 | 5.18 | | | 11.48 | 12.32 | 13.34 |
| | | velocity | 7.40 | 9.38 | 9.04 | 9.02 | 8.86 | 8.64 | 8.10 | 8.05 | 7.88 | 7.69 | 7.72 | 8.26 | | 9.15 | 8.52 | 7.87 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**Semi-Final 2** - 2005 IAAF World Championships (Helsinki, FIN) *Yasunori (2006) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Aug-05 | time | 6.08 | 9.88 | 13.77 | 17.69 | 21.66 | 25.75 | 30.07 | 34.47 | 39.02 | 43.64 | | 49.00 | 1 / 3 | | | |
| reaction time | 0.158 | interval | | 3.80 | 3.89 | 3.92 | 3.97 | 4.09 | 4.32 | 4.40 | 4.55 | 4.62 | 5.36 | | | 11.61 | 12.38 | 13.57 |
| | | velocity | 7.40 | 9.21 | 9.00 | 8.93 | 8.82 | 8.56 | 8.10 | 7.95 | 7.69 | 7.58 | 7.46 | 8.16 | | 9.04 | 8.48 | 7.74 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**FINAL** - 2005 Japanese Championships (Tokyo, JPN) *Yasunori (2006) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jun-05 | time | 6.06 | 9.86 | 13.76 | 17.73 | 21.83 | 26.15 | 30.49 | 35.06 | 39.58 | 44.18 | | 49.44 | / 2 | | | |
| reaction time | | interval | | 3.80 | 3.90 | 3.97 | 4.10 | 4.32 | 4.34 | 4.57 | 4.52 | 4.60 | 5.26 | | | 11.67 | 12.76 | 13.69 |
| | | velocity | 7.43 | 9.21 | 8.97 | 8.82 | 8.54 | 8.10 | 8.06 | 7.66 | 7.74 | 7.61 | 7.60 | 8.09 | | 9.00 | 8.23 | 7.67 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2005 Osaka Grand Prix (Osaka, JPN) *Yasunori (2006) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-May-05 | time | 5.99 | 9.68 | 13.45 | 17.25 | 21.24 | 25.39 | 29.81 | 34.25 | 38.77 | 43.37 | | 48.71 | / 3 | | | |
| reaction time | | interval | | 3.69 | 3.77 | 3.80 | 3.99 | 4.15 | 4.42 | 4.44 | 4.52 | 4.60 | 5.34 | | | 11.26 | 12.56 | 13.56 |
| | | velocity | 7.51 | 9.49 | 9.28 | 9.21 | 8.77 | 8.43 | 7.92 | 7.88 | 7.74 | 7.61 | 7.49 | 8.21 | | 9.33 | 8.36 | 7.74 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**FINAL** - 2004 Seiko Super Grand Prix (Yokohama, JPN) *Yasunori (2005) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Sep-04 | time | 5.99 | 9.63 | 13.43 | 17.37 | 21.37 | 25.52 | 29.91 | 34.36 | 38.91 | 43.58 | | 49.07 | / 4 | | | |
| reaction time | | interval | | 3.64 | 3.80 | 3.94 | 4.00 | 4.15 | 4.39 | 4.45 | 4.55 | 4.67 | 5.49 | PB | | 11.38 | 12.54 | 13.67 |
| | | velocity | 7.51 | 9.62 | 9.21 | 8.88 | 8.75 | 8.43 | 7.97 | 7.87 | 7.69 | 7.49 | 7.29 | 8.15 | | 9.23 | 8.37 | 7.68 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2004 Japanese National Championships (Tottori, JPN) *Yasunori (2005) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jun-04 | time | 6.02 | 9.79 | 13.61 | 17.61 | 21.76 | 26.20 | 30.57 | 35.06 | 39.65 | 44.34 | | 49.80 | / 4 | | | |
| reaction time | | interval | | 3.77 | 3.82 | 4.00 | 4.15 | 4.44 | 4.37 | 4.49 | 4.59 | 4.69 | 5.46 | | | 11.59 | 12.96 | 13.77 |
| | | velocity | 7.48 | 9.28 | 9.16 | 8.75 | 8.43 | 7.88 | 8.01 | 7.80 | 7.63 | 7.46 | 7.33 | 8.03 | | 9.06 | 8.10 | 7.63 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**Nataura, Yusuke (JPN)**

**FINAL** - 2016 Japanese National High School Championships (Okayama, JPN) *Kota (2016) - 69th high school championships: JAF scientific committee- biomechanics data*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-16 | time | 6.27 | 10.41 | 14.73 | 19.17 | 23.62 | | 28.06 | 32.53 | 37.12 | 41.83 | 46.88 | | 52.93 | 8 / 5 | | | |
| reaction time | 0.151 | interval | | 4.14 | 4.32 | 4.44 | 4.45 | | 4.44 | 4.47 | 4.59 | 4.71 | 5.05 | 6.05 | | | 12.90 | 13.36 | 14.35 |
| | | velocity | 7.18 | 8.45 | 8.10 | 7.88 | 7.87 | | 7.88 | 7.83 | 7.63 | 7.43 | 6.93 | 6.61 | 7.56 | | 8.14 | 7.86 | 7.32 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 16 | | 136 | | | | |

**Nathaniel, Ezekiel (NGR) (2003)**

**Semi-Final 1** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-23 | time | 6.06 | 9.97 | 13.63 | 17.33 | 21.26 | 25.40 | 29.73 | 34.23 | 43.67 | 49.22 | 9 / 6 | | | | | |
| reaction time | 0.209 | interval | | 3.91 | 3.66 | 3.70 | 3.93 | 4.14 | 4.33 | 4.50 | 9.44 | 5.55 | | 11.27 | 12.40 | 13.94 | | |
| | | velocity | 7.43 | 8.95 | 9.56 | 9.46 | 8.91 | 8.45 | 8.08 | 7.78 | 7.42 | 7.21 | 8.13 | 9.32 | 8.47 | 7.53 | | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | | 17 | 131 | | | | | |

**Heat 4** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 6.10 | 10.03 | 13.83 | 17.56 | 21.33 | 25.33 | 29.53 | 33.90 | 38.53 | 43.23 | 48.47 | 8 / 4 | | | | |
| reaction time | 0.210 | interval | | 3.93 | 3.80 | 3.73 | 3.77 | 4.00 | 4.20 | 4.37 | 4.63 | 4.70 | 5.24 | | 11.46 | 11.97 | 13.70 | |
| | | velocity | 7.38 | 8.91 | 9.21 | 9.38 | 9.28 | 8.75 | 8.33 | 8.01 | 7.56 | 7.45 | 7.63 | 8.25 | 9.16 | 8.77 | 7.66 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17 | 158 | | | | |

**FINAL** - 2023 NCAA Championships (Austin, TX) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-23 | time | 5.99 | 9.69 | 13.50 | 17.33 | 21.30 | 25.39 | 29.66 | 34.06 | 38.66 | 43.39 | 48.54 | 8 / 3 | | | | |
| reaction time | | interval | | 3.70 | 3.81 | 3.83 | 3.97 | 4.09 | 4.27 | 4.40 | 4.60 | 4.73 | 5.15 | | 11.34 | 12.33 | 13.73 | |
| | | velocity | 7.51 | 9.46 | 9.19 | 9.14 | 8.82 | 8.56 | 8.20 | 7.95 | 7.61 | 7.40 | 7.77 | 8.24 | 9.26 | 8.52 | 7.65 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17.7 | 157.7 | | | | |

**Semi-Final 3** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.97 | 10.33 | 14.36 | 18.40 | 22.60 | 24.53 | 31.80 | 36.77 | | | 54.18 | 7 / 8 | | | | |
| reaction time | 0.176 | interval | | 4.36 | 4.03 | 4.04 | 4.20 | | 9.20 | 4.97 | | | | | 12.43 | 13.40 | | |
| | | velocity | 7.54 | 8.03 | 8.68 | 8.66 | 8.33 | 8.15 | 7.61 | 7.04 | | | 7.38 | | 8.45 | 7.84 | | |
| H1 lead leg | R | strides | 21 | 15 | 14 | 13 | 13 | | 14 | 14 | | | 104 | | | | | |

**Heat 1** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 5.90 | 9.63 | 13.43 | 17.40 | 21.63 | 23.44 | 30.40 | 34.87 | 39.46 | 44.20 | 49.64 | 1 / 3 | | | | |
| reaction time | 0.135 | interval | | 3.73 | 3.80 | 3.97 | 4.23 | | 8.77 | 4.47 | 4.59 | 4.74 | 5.44 | | 11.50 | 13.00 | 13.80 | |
| | | velocity | 7.63 | 9.38 | 9.21 | 8.82 | 8.27 | 8.53 | 7.98 | 7.83 | 7.63 | 7.38 | 7.35 | 8.06 | 9.13 | 8.08 | 7.61 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 14 | 14 | | | 14 | | 15 | 17.2 | 121.2 | | | | |

**Nezir, Ismail (TUR) (2003)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2023 Doha Diamond League (Doha, QAT) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-23 | time | 6.16 | 10.10 | 14.19 | 18.37 | 22.62 | 27.08 | 31.79 | 36.37 | 41.13 | 45.91 | 51.40 | 2 / 8 | | | | |
| reaction time | 0.195 | interval | | 3.94 | 4.09 | 4.18 | 4.25 | 4.46 | 4.71 | 4.58 | 4.76 | 4.78 | 5.49 | | 12.21 | 13.42 | 14.12 | |
| | | velocity | 7.31 | 8.88 | 8.56 | 8.37 | 8.24 | 7.85 | 7.43 | 7.64 | 7.35 | 7.32 | 7.29 | 7.78 | 8.60 | 7.82 | 7.44 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | | 127 | | | | |

**FINAL** - 2022 Memorial van Damme (Brussels, BEL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Sep-22 | time | 6.14 | 10.04 | 13.98 | | 22.19 | 23.88 | 26.36 | 30.59 | 35.20 | 39.87 | 44.58 | 49.92 | 1 / ~~8~~ 7 | | | |
| reaction time | 0.170 | interval | | 3.90 | 3.94 | | 8.21 | | 2.48 | 4.23 | 4.61 | 4.67 | 4.71 | 5.34 | | | | 13.99 |
| | | velocity | 7.33 | 8.97 | 8.88 | | 8.53 | 8.38 | 14.11 | 8.27 | 7.59 | 7.49 | 7.43 | 7.49 | 8.01 | | | 7.51 |
| H1 lead leg | L | strides | 20 | 13 | 13 | | | | 13 | 13 | 14 | 14 | 14 | | 114 | | | |

**Nichols, Regan (USA) (1973)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2003 USATF National Championships (Palo Alto, CA) *USATF Women's Sprint Development (2003)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Jun-03 | time | 5.99 | 9.88 | 13.88 | 17.89 | 21.91 | 26.24 | 30.56 | 35.08 | 39.66 | 44.45 | 50.08 | 8 / ~~6~~ 5 | | | | |
| reaction time | | interval | | 3.89 | 4.00 | 4.01 | 4.02 | 4.33 | 4.32 | 4.52 | 4.58 | 4.79 | 5.63 | | 11.90 | 12.67 | 13.89 | |
| | | velocity | 7.51 | 9.00 | 8.75 | 8.73 | 8.71 | 8.08 | 8.10 | 7.74 | 7.64 | 7.31 | 7.10 | 7.99 | 8.82 | 8.29 | 7.56 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Nilsson, Anton (SWE) (1992)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2011 Poks Memorial (Hässleholm, SWE) *Blomkvist (2011) - www.elitlandslag.se/SprintHäck/LängSprintHäck.aspx*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Jun-11 | time | 6.42 | 10.52 | 14.82 | 19.14 | 23.66 | 28.24 | 33.02 | 37.88 | 42.90 | 48.24 | 54.22 | / 3 | | | | |
| reaction time | | interval | | 4.10 | 4.30 | 4.32 | 4.52 | 4.58 | 4.78 | 4.86 | 5.02 | 5.34 | 5.98 | | 12.72 | 13.88 | 15.22 | |
| | | velocity | 7.01 | 8.54 | 8.14 | 8.10 | 7.74 | 7.64 | 7.32 | 7.20 | 6.97 | 6.55 | 6.69 | 7.38 | 8.25 | 7.56 | 6.90 | |
| H1 lead leg | L | strides | | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 19 | 150 | | | | |

**FINAL** - 2011 Fridrott (Stockholm, SWE) *Blomkvist (2011) - www.elitlandslag.se/SprintHäck/LängSprintHäck.aspx*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-11 | time | 6.40 | 10.60 | 14.84 | 19.14 | 23.56 | 28.16 | 32.86 | 37.78 | 43.20 | 48.62 | 54.86 | / 2 | | | | |
| reaction time | | interval | | 4.20 | 4.24 | 4.30 | 4.42 | 4.60 | 4.70 | 4.92 | 5.42 | 5.42 | 6.24 | | 12.74 | 13.72 | 15.76 | |
| | | velocity | 7.03 | 8.33 | 8.25 | 8.14 | 7.92 | 7.61 | 7.45 | 7.11 | 6.46 | 6.46 | 6.41 | 7.29 | 8.24 | 7.65 | 6.66 | |
| H1 lead leg | L | strides | | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 16 | 16 | 19 | 151 | | | | |

**Noda, Keisuke (JPN) (1999)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 1** - 2016 Japanese National Youth Championships (Mizuho, JPN) *(2016.11.17) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Oct-16 | time | 6.49 | 10.65 | 14.85 | 19.10 | 23.43 | 27.86 | 32.49 | 37.47 | 42.48 | 47.45 | 52.99 | 8 / 1 | | | | |
| reaction time | | interval | | 4.16 | 4.20 | 4.25 | 4.33 | 4.43 | 4.63 | 4.98 | 5.01 | 4.97 | 5.54 | | 12.61 | 13.39 | 14.96 | |
| | | velocity | 6.93 | 8.41 | 8.33 | 8.24 | 8.08 | 7.90 | 7.56 | 7.03 | 6.99 | 7.04 | 7.22 | 7.55 | 8.33 | 7.84 | 7.02 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Nozawa, Keisuke (JPN) (1991)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**B FINAL** - 2021 Michitaka Kinami Memorial (Osaka, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jun-21 | time | 6.29 | 10.16 | 14.20 | 18.28 | 22.51 | 26.73 | 31.10 | 35.60 | 40.24 | 45.03 | 50.56 | 6 / 4 | | | | |
| reaction time | 0.199 | interval | | 3.87 | 4.04 | 4.08 | 4.23 | 4.22 | 4.37 | 4.50 | 4.64 | 4.79 | 5.53 | | 11.99 | 12.82 | 13.93 | |
| | | velocity | 7.15 | 9.04 | 8.66 | 8.58 | 8.27 | 8.29 | 8.01 | 7.78 | 7.54 | 7.31 | 7.23 | 7.91 | 8.76 | 8.19 | 7.54 | |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 19 | 169 | | | | |

**FINAL** - 2020 Michitaka Kinami Memorial (Osaka, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Oct-20 | time | 5.99 | 9.69 | 13.43 | 17.22 | 21.19 | 25.28 | 29.46 | 33.93 | 38.74 | 43.89 | 50.26 | 6 / 3 | | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | | interval | | 3.70 | 3.74 | 3.79 | 3.97 | 4.09 | 4.18 | 4.47 | 4.81 | 5.15 | 6.37 | | | 11.23 | 12.24 | 14.43 |
| | | velocity | 7.51 | 9.46 | 9.36 | 9.23 | 8.82 | 8.56 | 8.37 | 7.83 | 7.28 | 6.80 | 6.28 | 7.96 | | 9.35 | 8.58 | 7.28 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 16 | 20 | 167 | | | | |

**FINAL** - 2020 All Japan Corporate Championships (Kumagaya, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Sep-20 | time | 6.21 | 10.11 | 14.18 | 18.30 | 22.59 | 26.91 | 31.41 | 36.00 | 40.66 | 45.48 | | 51.03 | 3 / 6 | | | |
| reaction time | 0.225 | interval | | 3.90 | 4.07 | 4.12 | 4.29 | 4.32 | 4.50 | 4.59 | 4.66 | 4.82 | 5.55 | | | 12.09 | 13.11 | 14.07 |
| | | velocity | 7.25 | 8.97 | 8.60 | 8.50 | 8.16 | 8.10 | 7.78 | 7.63 | 7.51 | 7.26 | 7.21 | 7.84 | | 8.68 | 8.01 | 7.46 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | | 129 | | | | |

**FINAL** - 2019 Japanese National Championships (Fukuoka, JPN) *Yamanaka (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jun-19 | time | 5.99 | 9.68 | 13.53 | 17.52 | 21.60 | 25.76 | 30.10 | 34.53 | 39.21 | 43.98 | | 49.51 | 4 / 4 | | | |
| reaction time | 0.179 | interval | | 3.69 | 3.85 | 3.99 | 4.08 | 4.16 | 4.34 | 4.43 | 4.68 | 4.77 | 5.53 | | | 11.53 | 12.58 | 13.88 |
| | | velocity | 7.51 | 9.49 | 9.09 | 8.77 | 8.58 | 8.41 | 8.06 | 7.90 | 7.48 | 7.34 | 7.23 | 8.08 | | 9.11 | 8.35 | 7.56 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 19 | 166 | | | | |

**FINAL** - 2019 Seiko Golden Grand Prix (Osaka, JPN) *Hirokawa (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-May-19 | time | 6.14 | 9.91 | 13.88 | 17.87 | 21.99 | 26.14 | 30.46 | 35.02 | 39.98 | 44.94 | | 50.65 | 6 / 2 | | | |
| reaction time | 0.254 | interval | | 3.77 | 3.97 | 3.99 | 4.12 | 4.15 | 4.32 | 4.56 | 4.96 | 4.96 | 5.71 | | | 11.73 | 12.59 | 14.48 |
| | | velocity | 7.33 | 9.28 | 8.82 | 8.77 | 8.50 | 8.43 | 8.10 | 7.68 | 7.06 | 7.06 | 7.01 | 7.90 | | 8.95 | 8.34 | 7.25 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 16 | 15 | 19 | 169 | | | | |

**A FINAL** - 2019 Kinami Memorial (Osaka, JPN) *Matsubayashi (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-May-19 | time | 6.04 | 9.79 | 13.61 | 17.45 | 21.47 | 25.53 | 29.76 | 34.18 | 38.84 | 43.76 | | 49.52 | 8 / 1 | | | |
| reaction time | | interval | | 3.75 | 3.82 | 3.84 | 4.02 | 4.06 | 4.23 | 4.42 | 4.66 | 4.92 | 5.76 | | | 11.41 | 12.31 | 14.00 |
| | | velocity | 7.45 | 9.33 | 9.16 | 9.11 | 8.71 | 8.62 | 8.27 | 7.92 | 7.51 | 7.11 | 6.94 | 8.08 | | 9.20 | 8.53 | 7.50 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 19 | 169 | | | | |

**A FINAL** - 2019 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Kobayashi (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-19 | time | 6.12 | 9.88 | 13.81 | 17.78 | 21.86 | 25.94 | 30.15 | 34.48 | 39.21 | 44.13 | | 49.84 | 9 / 1 | | | |
| reaction time | | interval | | 3.76 | 3.93 | 3.97 | 4.08 | 4.08 | 4.21 | 4.33 | 4.73 | 4.92 | 5.71 | | | 11.66 | 12.37 | 13.98 |
| | | velocity | 7.35 | 9.31 | 8.91 | 8.82 | 8.58 | 8.58 | 8.31 | 8.08 | 7.40 | 7.11 | 7.01 | 8.03 | | 9.01 | 8.49 | 7.51 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 19.2 | 168.2 | | | | |

**FINAL** - 2017 Nambu Memorial (Sapporo, JPN) *(2017) - tfdata-store.com/2017/07/11/post-1019/*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-17 | time | 5.99 | 9.69 | 13.47 | 17.32 | 21.34 | 25.50 | 29.77 | 34.25 | 39.04 | 44.30 | | 50.68 | 8 / 6 | | | |
| reaction time | | interval | | 3.70 | 3.78 | 3.85 | 4.02 | 4.16 | 4.27 | 4.48 | 4.79 | 5.26 | 6.38 | | | 11.33 | 12.45 | 14.53 |
| | | velocity | 7.51 | 9.46 | 9.26 | 9.09 | 8.71 | 8.41 | 8.20 | 7.81 | 7.31 | 6.65 | 6.27 | 7.89 | | 9.27 | 8.43 | 7.23 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 16 | 20 | 167 | | | | |

**FINAL** - 2016 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-16 | time | 5.88 | 9.68 | 13.52 | 17.44 | 21.48 | 25.68 | 29.96 | 34.40 | 39.12 | 43.96 | | 49.42 | 2 / 7 | | | |
| reaction time | 0.134 | interval | | 3.80 | 3.84 | 3.92 | 4.04 | 4.20 | 4.28 | 4.44 | 4.72 | 4.84 | 5.46 | | | 11.56 | 12.52 | 14.00 |
| | | velocity | 7.65 | 9.21 | 9.11 | 8.93 | 8.66 | 8.33 | 8.18 | 7.88 | 7.42 | 7.23 | 7.33 | 8.09 | | 9.08 | 8.39 | 7.50 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 17.2 | 163.2 | | | | |

**FINAL** - 2016 Japanese National Championships (Nagoya, JPN) *Morioka (2016) - race pattern of top 400m hurdlers in japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jun-16 | time | 5.98 | 9.63 | 13.43 | 17.30 | 21.27 | 25.47 | 29.71 | 34.16 | 38.73 | 43.57 | | 49.14 | 5 / 1 | | | |
| reaction time | 0.174 | interval | | 3.65 | 3.80 | 3.87 | 3.97 | 4.20 | 4.24 | 4.45 | 4.57 | 4.84 | 5.57 | | | 11.32 | 12.41 | 13.86 |
| | | velocity | 7.53 | 9.59 | 9.21 | 9.04 | 8.82 | 8.33 | 8.25 | 7.87 | 7.66 | 7.23 | 7.18 | 8.14 | | 9.28 | 8.46 | 7.58 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | | 125 | | | | |

**FINAL** - 2016 Seiko Golden Grand Prix (Kawasaki, JPN) *Morioka (2016) - race pattern of top 400m hurdlers in japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-16 | time | 5.96 | 9.58 | 13.27 | 17.06 | 21.03 | 25.05 | 29.15 | 33.45 | 38.05 | 42.89 | | 48.67 | 4 / 1 | | | |
| reaction time | 0.155 | interval | | 3.62 | 3.69 | 3.79 | 3.97 | 4.02 | 4.10 | 4.30 | 4.60 | 4.84 | 5.78 | **PB** | | 11.10 | 12.09 | 13.74 |
| | | velocity | 7.55 | 9.67 | 9.49 | 9.23 | 8.82 | 8.71 | 8.54 | 8.14 | 7.61 | 7.23 | 6.92 | 8.22 | | 9.46 | 8.68 | 7.64 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 19.2 | 167.2 | | | | |

**FINAL** - 2016 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Morioka (2016) - race pattern of top 400m hurdlers in japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-16 | time | 5.94 | 9.56 | 13.26 | 17.10 | 21.09 | 25.13 | 29.38 | 33.93 | 38.68 | 43.53 | | 49.07 | / 1 | | | |
| reaction time | | interval | | 3.62 | 3.70 | 3.84 | 3.99 | 4.04 | 4.25 | 4.55 | 4.75 | 4.85 | 5.54 | **PB** | | 11.16 | 12.28 | 14.15 |
| | | velocity | 7.58 | 9.67 | 9.46 | 9.11 | 8.77 | 8.66 | 8.24 | 7.69 | 7.37 | 7.22 | 7.22 | 8.15 | | 9.41 | 8.55 | 7.42 |
| H1 lead leg | | strides | | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | | 127 | | | | |

**B FINAL** - 2012 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Yasunori (2013) - race pattern analysis for the top Japanese 400m hurdlers in major domestic competitions*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-12 | time | 6.17 | 10.07 | 14.07 | 18.12 | 22.32 | 26.54 | 30.89 | 35.34 | 39.98 | 44.75 | | 50.00 | / 1 | | | |
| reaction time | | interval | | 3.90 | 4.00 | 4.05 | 4.20 | 4.22 | 4.35 | 4.45 | 4.64 | 4.77 | 5.25 | | | 11.95 | 12.77 | 13.86 |
| | | velocity | 7.29 | 8.97 | 8.75 | 8.64 | 8.33 | 8.29 | 8.05 | 7.87 | 7.54 | 7.34 | 7.62 | 8.00 | | 8.79 | 8.22 | 7.58 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | | 127 | | | | |

**Nylander, Sven (SWE) (1962)**

**FINAL** - 1996 Olympic Games (Atlanta, GA) *Behm (1996) - 400m haies*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Aug-96 | time | 6.0 | 9.7 | 13.5 | 17.3 | 21.3 | | 25.3 | 29.4 | 33.8 | 38.3 | 42.9 | | 47.98 | 4 / 4 | | | |
| reaction time | 0.225 | interval | | 3.70 | 3.80 | 3.80 | 4.00 | | 4.00 | 4.10 | 4.40 | 4.50 | 4.60 | 5.08 | **NR** | | 11.30 | 12.10 | 13.50 |
| | | velocity | 7.50 | 9.46 | 9.21 | 9.21 | 8.75 | | 8.75 | 8.54 | 7.95 | 7.78 | 7.61 | 7.87 | 8.34 | | 9.29 | 8.68 | 7.78 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | | 139 | | | | |

**FINAL** - 1994 European Championships (Helsinki, FIN) *Behm (1995) - la tactique du 400 haies*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-94 | time | 5.9 | 9.5 | 13.3 | 17.2 | 21.1 | 25.3 | 29.3 | 33.6 | 38.2 | 42.8 | | 48.22 | / 2 | | | |
| reaction time | | interval | | 3.60 | 3.80 | 3.90 | 3.90 | 4.20 | 4.00 | 4.30 | 4.60 | 4.60 | 5.42 | PB | | 11.30 | 12.10 | 13.50 |
| | | velocity | 7.63 | 9.72 | 9.21 | 8.97 | 8.97 | 8.33 | 8.75 | 8.14 | 7.61 | 7.61 | 7.38 | 8.30 | | 9.29 | 8.68 | 7.78 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 14 | | 142 | | | | |

**FINAL** - 1990 European Championships (Split, YUG) *Behm (1995) - la tactique du 400 haies*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Aug-90 | time | 6.1 | 9.8 | 13.6 | 17.5 | 21.5 | 25.6 | 29.9 | 34.4 | 38.8 | 43.3 | | 48.43 | 6 / 2 | | | |
| reaction time | | interval | | 3.70 | 3.80 | 3.90 | 4.00 | 4.10 | 4.30 | 4.50 | 4.40 | 4.50 | 5.13 | | | 11.40 | 12.40 | 13.40 |
| | | velocity | 7.38 | 9.46 | 9.21 | 8.97 | 8.75 | 8.54 | 8.14 | 7.78 | 7.95 | 7.78 | 7.80 | 8.26 | | 9.21 | 8.47 | 7.84 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 17.2 | 155.2 | | | | |

**FINAL** - 1986 European Championships (Stuttgart, FRG) *Behm (1995) - la tactique du 400 haies*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Aug-86 | time | 5.9 | 9.7 | 13.6 | 17.6 | 21.7 | 26.0 | 30.4 | 34.9 | 39.5 | 44.1 | | 49.38 | / 3 | | | |
| reaction time | | interval | | 3.80 | 3.90 | 4.00 | 4.10 | 4.30 | 4.40 | 4.50 | 4.60 | 4.60 | 5.28 | | | 11.70 | 12.80 | 13.70 |
| | | velocity | 7.63 | 9.21 | 8.97 | 8.75 | 8.54 | 8.14 | 7.95 | 7.78 | 7.61 | 7.61 | 7.58 | 8.10 | | 8.97 | 8.20 | 7.66 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | | 139 | | | | |

**Nylander, Viktor (SWE) (1998)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2017 European U20 Championships (Grosseto, ITA) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2017 year end hurdle report* | | | |
| date | 23-Jul-17 | time | 5.88 | 9.76 | 13.68 | 17.80 | 22.04 | | 26.52 | 31.24 | 36.08 | 41.08 | 46.24 | | 52.76 | 2 / 8 | | | |
| reaction time | 0.187 | interval | | 3.88 | 3.92 | 4.12 | 4.24 | | 4.48 | 4.72 | 4.84 | 5.00 | 5.16 | 6.52 | | | 11.92 | 13.44 | 15.00 |
| | | velocity | 7.65 | 9.02 | 8.93 | 8.50 | 8.25 | | 7.81 | 7.42 | 7.23 | 7.00 | 6.78 | 6.13 | 7.58 | | 8.81 | 7.81 | 7.00 |
| H1 lead leg | R | strides | | 13 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 19 | 148 | | | | |

**Obayashi, Masayuki (JPN) (1996)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2020 World Athletics Trials (Fuji, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |
| date | 06-Sep-20 | time | 5.96 | 9.86 | 13.85 | 18.00 | 22.12 | | 26.36 | 30.63 | 35.02 | 39.62 | 44.53 | | 50.22 | / 2 | | | |
| reaction time | | interval | | 3.90 | 3.99 | 4.15 | 4.12 | | 4.24 | 4.27 | 4.39 | 4.60 | 4.91 | 5.69 | | | 12.04 | 12.63 | 13.90 |
| | | velocity | 7.55 | 8.97 | 8.77 | 8.43 | 8.50 | | 8.25 | 8.20 | 7.97 | 7.61 | 7.13 | 7.03 | 7.96 | | 8.72 | 8.31 | 7.55 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 15 | | 15 | 15 | 15 | 15 | 15 | | 132 | | | | |

**FINAL** - 2019 Seiko Golden Grand Prix (Osaka, JPN) *Hirokawa (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-May-19 | time | 6.04 | 9.96 | 13.91 | 18.04 | 22.21 | 26.48 | 30.83 | 35.40 | 40.22 | 45.35 | | 51.45 | 4 / 6 | | | |
| reaction time | 0.157 | interval | | 3.92 | 3.95 | 4.13 | 4.17 | 4.27 | 4.35 | 4.57 | 4.82 | 5.13 | 6.10 | | | 12.00 | 12.79 | 14.52 |
| | | velocity | 7.45 | 8.93 | 8.86 | 8.47 | 8.39 | 8.20 | 8.05 | 7.66 | 7.26 | 6.82 | 6.56 | 7.77 | | 8.75 | 8.21 | 7.23 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 17 | 20.7 | 175.7 | | | | |

**A FINAL** - 2019 Kinami Memorial (Osaka, JPN) *Matsubayashi (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-May-19 | time | 6.06 | 10.08 | 14.08 | 18.17 | 22.39 | 26.63 | 30.91 | 35.30 | 39.89 | 44.64 | | 50.11 | 9 / 4 | | | |
| reaction time | | interval | | 4.02 | 4.00 | 4.09 | 4.22 | 4.24 | 4.28 | 4.39 | 4.59 | 4.75 | 5.47 | | | 12.11 | 12.74 | 13.73 |
| | | velocity | 7.43 | 8.71 | 8.75 | 8.56 | 8.29 | 8.25 | 8.18 | 7.97 | 7.63 | 7.37 | 7.31 | 7.98 | | 8.67 | 8.24 | 7.65 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 19 | 172 | | | | |

**B FINAL** - 2019 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Kobayashi (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-19 | time | 6.07 | 10.08 | 14.11 | 18.34 | 22.57 | 26.88 | 31.35 | 35.85 | 40.47 | 45.18 | | 50.48 | 6 / 1 | | | |
| reaction time | | interval | | 4.01 | 4.03 | 4.23 | 4.23 | 4.31 | 4.47 | 4.50 | 4.62 | 4.71 | 5.30 | | | 12.27 | 13.01 | 13.83 |
| | | velocity | 7.41 | 8.73 | 8.68 | 8.27 | 8.27 | 8.12 | 7.83 | 7.78 | 7.58 | 7.43 | 7.55 | 7.92 | | 8.56 | 8.07 | 7.59 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 19 | 172 | | | | |

**B FINAL** - 2018 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Morioka (2018) - race pattern analysis of Japan's top 400m hurdles - main national competitions in 2018*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-18 | time | 6.01 | 9.75 | 13.93 | 18.07 | 22.26 | 26.48 | 30.77 | 35.21 | 39.76 | 44.48 | | 49.93 | 6 / 1 | | | |
| reaction time | 0.168 | interval | | 3.74 | 4.18 | 4.14 | 4.19 | 4.22 | 4.29 | 4.44 | 4.55 | 4.72 | 5.45 | PB | | 12.06 | 12.70 | 13.71 |
| | | velocity | 7.49 | 9.36 | 8.37 | 8.45 | 8.35 | 8.29 | 8.16 | 7.88 | 7.69 | 7.42 | 7.34 | 8.01 | | 8.71 | 8.27 | 7.66 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19.7 | 176.7 | | | | |

**FINAL** - 2017 Osaka University Athletics Championships (Osaka, JPN) *(2017.04.13) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Apr-17 | time | 6.02 | 9.82 | 13.79 | 17.86 | 22.09 | 26.46 | 31.03 | 35.82 | 40.69 | 46.01 | | 51.94 | 7 / 1 | | | |
| reaction time | | interval | | 3.80 | 3.97 | 4.07 | 4.23 | 4.37 | 4.57 | 4.79 | 4.87 | 5.32 | 5.93 | | | 11.84 | 13.17 | 14.98 |
| | | velocity | 7.48 | 9.21 | 8.82 | 8.60 | 8.27 | 8.01 | 7.66 | 7.31 | 7.19 | 6.58 | 6.75 | 7.70 | | 8.87 | 7.97 | 7.01 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 2015 Japanese National Junior Championships (Nagoya, JPN) *Yasunori (2015) - race pattern analysis of the top 400m hurdlers in Japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Oct-15 | time | 6.10 | 9.94 | 14.08 | 18.28 | 22.62 | 26.89 | 31.26 | 35.76 | 40.30 | 44.94 | | 50.18 | 6 / 3 | | | |
| reaction time | | interval | | 3.84 | 4.14 | 4.20 | 4.34 | 4.27 | 4.37 | 4.50 | 4.54 | 4.64 | 5.24 | PB | | 12.18 | 12.98 | 13.68 |
| | | velocity | 7.38 | 9.11 | 8.45 | 8.33 | 8.06 | 8.20 | 8.01 | 7.78 | 7.71 | 7.54 | 7.63 | 7.97 | | 8.62 | 8.09 | 7.68 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**Oda, Atuya (JPN) (2003)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Japanese High School National Championships (Fukui, JPN) | | | | | | | | | | | | | | | | *Shibayama (2021) - national high school and U20 national championhsips* | | | |
| date | 30-Jul-21 | time | 6.26 | 10.39 | 14.76 | 19.20 | 23.77 | | 28.48 | 33.25 | 38.19 | 43.13 | 48.01 | | 53.18 | 5 / 5 | | | |
| reaction time | 0.173 | interval | | 4.13 | 4.37 | 4.44 | 4.57 | | 4.71 | 4.77 | 4.94 | 4.94 | 4.88 | 5.17 | | | 12.94 | 14.05 | 14.76 |
| | | velocity | 7.19 | 8.47 | 8.01 | 7.88 | 7.66 | | 7.43 | 7.34 | 7.09 | 7.09 | 7.17 | 7.74 | 7.52 | | 8.11 | 7.47 | 7.11 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**FINAL** - 2021 Japanese U20 National Championships (Osaka, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.31 | 10.26 | 14.23 | 18.28 | 22.57 | 27.08 | 31.72 | 36.55 | 41.57 | 46.91 | | 52.76 | 8 / 8 | | | |
| reaction time | 0.166 | interval | | 3.95 | 3.97 | 4.05 | 4.29 | 4.51 | 4.64 | 4.83 | 5.02 | 5.34 | 5.85 | | | 11.97 | 13.44 | 15.19 |
| | | velocity | 7.13 | 8.86 | 8.82 | 8.64 | 8.16 | 7.76 | 7.54 | 7.25 | 6.97 | 6.55 | 6.84 | 7.58 | | 8.77 | 7.81 | 6.91 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 17 | | 159 | | | | |

**Oda, Masaya (JPN) (1995)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2020 Michitaka Kinami Memorial (Osaka, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |
| date | 24-Oct-20 | time | 5.99 | 9.82 | 13.75 | 17.68 | 21.72 | | 25.98 | 30.35 | 34.88 | 39.56 | 44.33 | | 49.79 | 2 / 1 | | | |
| reaction time | | interval | | 3.83 | 3.93 | 3.93 | 4.04 | | 4.26 | 4.37 | 4.53 | 4.68 | 4.77 | 5.46 | | | 11.69 | 12.67 | 13.98 |
| | | velocity | 7.51 | 9.14 | 8.91 | 8.91 | 8.66 | | 8.22 | 8.01 | 7.73 | 7.48 | 7.34 | 7.33 | 8.03 | | 8.98 | 8.29 | 7.51 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 19.2 | 171.2 | | | | |
| **FINAL** - 2020 Japanese National Championships (Niigata, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |
| date | 02-Oct-20 | time | 6.04 | 9.81 | 13.66 | 17.60 | 21.72 | | 26.09 | 30.58 | 35.12 | 39.84 | 44.71 | | 50.44 | 3 / 4 | | | |
| reaction time | 0.178 | interval | | 3.77 | 3.85 | 3.94 | 4.12 | | 4.37 | 4.49 | 4.54 | 4.72 | 4.87 | 5.73 | | | 11.56 | 12.98 | 14.13 |
| | | velocity | 7.45 | 9.28 | 9.09 | 8.88 | 8.50 | | 8.01 | 7.80 | 7.71 | 7.42 | 7.19 | 6.98 | 7.93 | | 9.08 | 8.09 | 7.43 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 19.7 | 171.7 | | | | |
| **FINAL** - 2020 All Japan Corporate Championships (Kumagaya, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |
| date | 20-Sep-20 | time | 6.12 | 9.94 | 13.78 | 17.81 | 21.94 | | 26.31 | 30.71 | 35.24 | 39.86 | 44.63 | | 50.18 | 5 / 2 | | | |
| reaction time | 0.222 | interval | | 3.82 | 3.84 | 4.03 | 4.13 | | 4.37 | 4.40 | 4.53 | 4.62 | 4.77 | 5.55 | | | 11.69 | 12.90 | 13.92 |
| | | velocity | 7.35 | 9.16 | 9.11 | 8.68 | 8.47 | | 8.01 | 7.95 | 7.73 | 7.58 | 7.34 | 7.21 | 7.97 | | 8.98 | 8.14 | 7.54 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |
| **FINAL** - 2020 Seiko Golden Grand Prix (Tokyo, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |
| date | 23-Aug-20 | time | 6.01 | 9.76 | 13.56 | 17.57 | 21.77 | | 26.08 | 30.51 | 35.14 | 39.92 | 45.05 | | 50.73 | 9 / 6 | | | |
| reaction time | 0.159 | interval | | 3.75 | 3.80 | 4.01 | 4.20 | | 4.31 | 4.43 | 4.63 | 4.78 | 5.13 | 5.68 | | | 11.56 | 12.94 | 14.54 |
| | | velocity | 7.49 | 9.33 | 9.21 | 8.73 | 8.33 | | 8.12 | 7.90 | 7.56 | 7.32 | 6.82 | 7.04 | 7.88 | | 9.08 | 8.11 | 7.22 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 16 | | 130 | | | | |
| **FINAL** - 2019 National Sports Festival (Hitachinaka, JPN) | | | | | | | | | | | | | | | | *Enomoto (2019) - research on athlete performance and technique- 2019 data book* | | | |
| date | 05-Oct-19 | time | 5.96 | 9.68 | 13.46 | 17.40 | 21.52 | | 25.89 | 30.26 | 34.65 | 39.17 | 43.91 | | 49.42 | 6 / 1 | | | |
| reaction time | 0.179 | interval | | 3.72 | 3.78 | 3.94 | 4.12 | | 4.37 | 4.37 | 4.39 | 4.52 | 4.74 | 5.51 | **PB** | | 11.44 | 12.86 | 13.65 |
| | | velocity | 7.55 | 9.41 | 9.26 | 8.88 | 8.50 | | 8.01 | 8.01 | 7.97 | 7.74 | 7.38 | 7.26 | 8.09 | | 9.18 | 8.16 | 7.69 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |
| **FINAL** - 2019 Japanese National Championships (Fukuoka, JPN) | | | | | | | | | | | | | | | | *Yamanaka (2019) - research on athlete performance and technique- 2019 data book* | | | |
| date | 29-Jun-19 | time | 5.91 | 9.66 | 13.58 | 17.53 | 21.59 | | 25.84 | 30.25 | 34.72 | 39.34 | 44.13 | | 49.60 | 3 / 5 | | | |
| reaction time | 0.201 | interval | | 3.75 | 3.92 | 3.95 | 4.06 | | 4.25 | 4.41 | 4.47 | 4.62 | 4.79 | 5.47 | **PB** | | 11.62 | 12.72 | 13.88 |
| | | velocity | 7.61 | 9.33 | 8.93 | 8.86 | 8.62 | | 8.24 | 7.94 | 7.83 | 7.58 | 7.31 | 7.31 | 8.06 | | 9.04 | 8.25 | 7.56 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 19.2 | 171.2 | | | | |

**Odate, Yuya (JPN) (2000)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2018 Japanese National High School Championships (Nagoya, JPN) | | | | | | | | | | | | | | | | *Kota (2018) - 71st high school championships: JAF scientific committee - biomechanics data collection* | | | |
| date | 04-Aug-18 | time | 6.46 | 10.56 | 14.81 | 19.12 | 23.57 | | 28.16 | 32.87 | 37.69 | 42.78 | 47.88 | | 53.37 | 2 / 7 | | | |
| reaction time | | interval | | 4.10 | 4.25 | 4.31 | 4.45 | | 4.59 | 4.71 | 4.82 | 5.09 | 5.10 | 5.49 | | | 12.66 | 13.75 | 15.01 |
| | | velocity | 6.97 | 8.54 | 8.24 | 8.12 | 7.87 | | 7.63 | 7.43 | 7.26 | 6.88 | 6.86 | 7.29 | 7.49 | | 8.29 | 7.64 | 7.00 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 16 | | 137 | | | | |

**Ogawa, Daiki (JPN) (2003)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Japanese U20 National Championsips (Osaka, JPN) | | | | | | | | | | | | | | | | *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season* | | | |
| date | 11-Jun-22 | time | 6.12 | 10.14 | 14.18 | 18.26 | 22.46 | | 26.76 | 31.11 | 35.74 | 40.57 | 45.41 | | 50.72 | 7 / 3 | | | |
| reaction time | 0.173 | interval | | 4.02 | 4.04 | 4.08 | 4.20 | | 4.30 | 4.35 | 4.63 | 4.83 | 4.84 | 5.31 | | | 12.14 | 12.85 | 14.30 |
| | | velocity | 7.35 | 8.71 | 8.66 | 8.58 | 8.33 | | 8.14 | 8.05 | 7.56 | 7.25 | 7.23 | 7.53 | 7.89 | | 8.65 | 8.17 | 7.34 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 15 | 15 | | 15 | 15 | 15 | 17 | 17 | 20.2 | 179.2 | | | | |
| **FINAL** - 2021 Japanese High School National Championships (Fukui, JPN) | | | | | | | | | | | | | | | | *Shibayama (2021) - national high school and U20 national championhsips* | | | |
| date | 30-Jul-21 | time | 6.29 | 10.51 | 14.88 | 19.30 | 23.86 | | 28.53 | 33.23 | 38.04 | 42.98 | 47.96 | | 53.22 | 2 / 6 | | | |
| reaction time | 0.154 | interval | | 4.22 | 4.37 | 4.42 | 4.56 | | 4.67 | 4.70 | 4.81 | 4.94 | 4.98 | 5.26 | | | 13.01 | 13.93 | 14.73 |
| | | velocity | 7.15 | 8.29 | 8.01 | 7.92 | 7.68 | | 7.49 | 7.45 | 7.28 | 7.09 | 7.03 | 7.60 | 7.52 | | 8.07 | 7.54 | 7.13 |
| H1 lead leg | | strides | | 14 | 14 | 15 | 15 | | 15 | 15 | 15 | 17 | 17 | | 137 | | | | |

**Okada, Sohei (JPN) (1993)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2011 Japanese National High School Championships (Kitakami, JPN) | | | | | | | | | | | | | | | | *Abe (2011) - 64th high school championships: JAF scientific committee - biomechanics* | | | |
| date | 05-Aug-11 | time | 6.15 | 10.17 | 14.27 | 18.44 | 22.60 | | 26.86 | 31.44 | 36.26 | 41.26 | 46.26 | | 51.72 | 7 / 1 | | | |
| reaction time | | interval | | 4.02 | 4.10 | 4.17 | 4.16 | | 4.26 | 4.58 | 4.82 | 5.00 | 5.00 | 5.46 | | | 12.29 | 13.00 | 14.82 |
| | | velocity | 7.32 | 8.71 | 8.54 | 8.39 | 8.41 | | 8.22 | 7.64 | 7.26 | 7.00 | 7.00 | 7.33 | 7.73 | | 8.54 | 8.08 | 7.09 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Okamura, Kunihiro (JPN) (2000)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Japanese National Championsips (Osaka, JPN) | | | | | | | | | | | | | | | | *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season* | | | |
| date | 11-Jun-22 | time | 6.16 | 9.91 | 13.78 | 17.77 | 21.87 | | 26.26 | 30.70 | 35.37 | 40.21 | 45.10 | | 50.70 | 2 / 8 | | | |
| reaction time | 0.212 | interval | | 3.75 | 3.87 | 3.99 | 4.10 | | 4.39 | 4.44 | 4.67 | 4.84 | 4.89 | 5.60 | | | 11.61 | 12.93 | 14.40 |
| | | velocity | 7.31 | 9.33 | 9.04 | 8.77 | 8.54 | | 7.97 | 7.88 | 7.49 | 7.23 | 7.16 | 7.14 | 7.89 | | 9.04 | 8.12 | 7.29 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 146 | | | | |

**Omodiale, Sylvester (NGR) (1977)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 3** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 24-Sep-00 | time | 5.98 | 9.78 | 13.70 | 17.78 | 22.06 | | 26.30 | 30.62 | 35.30 | 40.10 | 45.14 | | 51.06 | 2 / 7 | | | |
| reaction time | 0.189 | interval | | 3.80 | 3.92 | 4.08 | 4.28 | | 4.24 | 4.32 | 4.68 | 4.80 | 5.04 | 5.92 | | | 11.80 | 12.84 | 14.52 |
| | | velocity | 7.53 | 9.21 | 8.93 | 8.58 | 8.18 | | 8.25 | 8.10 | 7.48 | 7.29 | 6.94 | 6.76 | 7.83 | | 8.90 | 8.18 | 7.23 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 16 | 16 | 17 | | 161 | | | | |

**Omura, Haruki (JPN) (2002)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Japanese U20 National Championships (Osaka, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | |
| date | 26-Jun-21 | time | 6.29 | 10.18 | 14.15 | 18.18 | 22.39 | | 26.68 | 31.08 | 35.62 | 40.24 | 44.93 | | 50.27 | 5 / 1 | | | |
| reaction time | 0.214 | interval | | 3.89 | 3.97 | 4.03 | 4.21 | | 4.29 | 4.40 | 4.54 | 4.62 | 4.69 | 5.34 | PB | | 11.89 | 12.90 | 13.85 |
| | | velocity | 7.15 | 9.00 | 8.82 | 8.68 | 8.31 | | 8.16 | 7.95 | 7.71 | 7.58 | 7.46 | 7.49 | 7.96 | | 8.83 | 8.14 | 7.58 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 19 | 165 | | | | |

**Onodera, Shota (JPN) (1999)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Japanese National Championsips (Osaka, JPN) | | | | | | | | | | | | | | | | *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season* | | | |
| date | 11-Jun-22 | time | 6.32 | 10.24 | 14.30 | 18.42 | 22.56 | | 26.74 | 30.96 | 35.42 | 40.11 | 45.03 | | 50.49 | 7 / 6 | | | |
| reaction time | 0.192 | interval | | 3.92 | 4.06 | 4.12 | 4.14 | | 4.18 | 4.22 | 4.46 | 4.69 | 4.92 | 5.46 | | | 12.10 | 12.54 | 14.07 |
| | | velocity | 7.12 | 8.93 | 8.62 | 8.50 | 8.45 | | 8.37 | 8.29 | 7.85 | 7.46 | 7.11 | 7.33 | 7.92 | | 8.68 | 8.37 | 7.46 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 17 | | 159 | | | | |
| **FINAL** - 2022 Seiko Golden Grand Prix (Tokyo, JPN) | | | | | | | | | | | | | | | | *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season* | | | |
| date | 08-May-22 | time | 6.39 | 10.44 | 14.55 | 18.64 | 22.81 | | 26.99 | 31.31 | 35.77 | 40.24 | 44.88 | | 50.25 | 1 / 7 | | | |
| reaction time | 0.243 | interval | | 4.05 | 4.11 | 4.09 | 4.17 | | 4.18 | 4.32 | 4.46 | 4.47 | 4.64 | 5.37 | PB | | 12.25 | 12.67 | 13.57 |
| | | velocity | 7.04 | 8.64 | 8.52 | 8.56 | 8.39 | | 8.37 | 8.10 | 7.85 | 7.83 | 7.54 | 7.45 | 7.96 | | 8.57 | 8.29 | 7.74 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 20 | 177 | | | | |
| **FINAL** - 2022 Michitaka Kinami Memorial (Osaka, JPN) | | | | | | | | | | | | | | | | *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season* | | | |
| date | 01-May-22 | time | 6.31 | 10.28 | 14.35 | 18.47 | 22.62 | | 26.79 | 31.03 | 35.57 | 40.24 | 45.10 | | 50.52 | 3 / 7 | | | |
| reaction time | 0.210 | interval | | 3.97 | 4.07 | 4.12 | 4.15 | | 4.17 | 4.24 | 4.54 | 4.67 | 4.86 | 5.42 | | | 12.16 | 12.56 | 14.07 |
| | | velocity | 7.13 | 8.82 | 8.60 | 8.50 | 8.43 | | 8.39 | 8.25 | 7.71 | 7.49 | 7.20 | 7.38 | 7.92 | | 8.63 | 8.36 | 7.46 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 17 | | 137 | | | | |
| **FINAL** - 2017 Japanese National High School Championships (Yamagata, JPN) | | | | | | | | | | | | | | | | *Kota (2017) - 70th high school championships: JAF scientific committee - biomechanics data collection* | | | |
| date | 31-Jul-17 | time | 6.42 | 10.51 | 14.66 | 19.04 | 23.59 | | 28.13 | 32.68 | 37.34 | 42.28 | 47.30 | | 52.56 | 7 / 4 | | | |
| reaction time | 0.183 | interval | | 4.09 | 4.15 | 4.38 | 4.55 | | 4.54 | 4.55 | 4.66 | 4.94 | 5.02 | 5.26 | | | 12.62 | 13.64 | 14.62 |
| | | velocity | 7.01 | 8.56 | 8.43 | 7.99 | 7.69 | | 7.71 | 7.69 | 7.51 | 7.09 | 6.97 | 7.60 | 7.61 | | 8.32 | 7.70 | 7.18 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 16 | | 15 | 15 | 15 | 17 | 17 | | 137 | | | | |

**Ören, Sinan (TUR) (1998)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2017 European U20 Championships (Grosseto, ITA) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2017 year end hurdle report* | | | |
| date | 23-Jul-17 | time | 5.92 | 9.68 | 13.56 | 17.52 | 21.68 | | 25.96 | 30.60 | 35.28 | 40.00 | 44.92 | | 50.84 | 7 / 4 | | | |
| reaction time | 0.258 | interval | | 3.76 | 3.88 | 3.96 | 4.16 | | 4.28 | 4.64 | 4.68 | 4.72 | 4.92 | 5.92 | NJR PB | | 11.60 | 13.08 | 14.32 |
| | | velocity | 7.60 | 9.31 | 9.02 | 8.84 | 8.41 | | 8.18 | 7.54 | 7.48 | 7.42 | 7.11 | 6.76 | 7.87 | | 9.05 | 8.03 | 7.33 |
| H1 lead leg | R | strides | | 14 | 14 | 13 | 13 | | | 14 | 15 | 15 | 15 | 18 | 131 | | | | |

**Othman, Ashraf Hussen (QAT) (2001**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B FINAL** - 2021 Doha Diamond League (Doha, QAT) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 28-May-21 | time | 6.16 | 10.20 | 14.33 | 18.50 | 22.67 | 24.5 | 26.77 | | 35.30 | 39.67 | 44.17 | | 49.58 | 5 / 1 | | | |
| reaction time | 0.171 | interval | | 4.04 | 4.13 | 4.17 | 4.17 | | 4.10 | | 8.53 | 4.37 | 4.50 | 5.41 | PB | | 12.34 | | |
| | | velocity | 7.31 | 8.66 | 8.47 | 8.39 | 8.39 | 8.16 | 8.54 | | 8.21 | 8.01 | 7.78 | 7.39 | 8.07 | | 8.51 | | |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | | | 15 | 15 | 18 | 140 | | | | |

**Ottoz, Laurent (ITA) (1970)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1998 European Championships (Budapest, HUN) | | | | | | | | | | | | | | | | *Sanchez (1998) - Budapest '98: análisis de la carreras con villas* | | | |
| date | 20-Aug-98 | time | 6.11 | | | | 21.69 | | | | | | 43.62 | | 49.15 | 2 / 6 | | | |
| reaction time | | interval | | | | | 15.58 | | | | | | 21.93 | 5.53 | | | | | |
| | | velocity | 7.36 | | | | 8.99 | | | | | | 7.98 | 7.23 | 8.14 | | | | |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |

**Oyama, Takumi (JPN) (1991)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2009 Japanese National High School Championships (Nara, JPN) | | | | | | | | | | | | | | | | *Matsuo (2009) - 62nd high school championships: JAF scientific committee- biomechanics* | | | |
| date | 31-Jul-09 | time | 6.39 | 10.51 | 14.83 | 19.23 | 23.64 | | 28.24 | 32.88 | 37.52 | 42.26 | 47.01 | | 52.26 | / 2 | | | |
| reaction time | | interval | | 4.12 | 4.32 | 4.40 | 4.41 | | 4.60 | 4.64 | 4.64 | 4.74 | 4.75 | 5.25 | | | 12.84 | 13.65 | 14.13 |
| | | velocity | 7.04 | 8.50 | 8.10 | 7.95 | 7.94 | | 7.61 | 7.54 | 7.54 | 7.38 | 7.37 | 7.62 | 7.65 | | 8.18 | 7.69 | 7.43 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Ozaki, Yusuke (JPN) (1994)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B FINAL** - 2020 Michitaka Kinami Memorial (Osaka, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |
| date | 24-Oct-20 | time | 6.26 | 10.11 | 14.01 | 18.00 | 22.16 | | 26.38 | 30.83 | 35.37 | 40.14 | 44.98 | | 50.63 | 2 / 2 | | | |
| reaction time | | interval | | 3.85 | 3.90 | 3.99 | 4.16 | | 4.22 | 4.45 | 4.54 | 4.77 | 4.84 | 5.65 | | | 11.74 | 12.83 | 14.15 |
| | | velocity | 7.19 | 9.09 | 8.97 | 8.77 | 8.41 | | 8.29 | 7.87 | 7.71 | 7.34 | 7.23 | 7.08 | 7.90 | | 8.94 | 8.18 | 7.42 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 17 | 17 | 21 | 182 | | | | |

**Pan Feng (CHN) (2002)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **U18 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) (84cm) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.52 | 10.74 | 15.02 | 19.38 | 23.82 | | 28.38 | 32.98 | 37.68 | 42.48 | 47.48 | | 53.17 | 6 / 2 | | | |
| reaction time | 0.183 | interval | | 4.22 | 4.28 | 4.36 | 4.44 | | 4.56 | 4.60 | 4.70 | 4.80 | 5.00 | 5.69 | | | 12.86 | 13.60 | 14.50 |
| | | velocity | 6.90 | 8.29 | 8.18 | 8.03 | 7.88 | | 7.68 | 7.61 | 7.45 | 7.29 | 7.00 | 7.03 | 7.52 | | 8.16 | 7.72 | 7.24 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 16 | 19.5 | 176.5 | | | | |

**Patrick, David (USA) (1960)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1982 TAC Naitonal Championships (Knoxville, TN) | | | | | | | | | | | | | | *Mann (1987) - the elite athlete program biomechanical analysis of the long hurdles: tac championship meet* | | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Jun-82 | time | 6.22 | 10.16 | 14.08 | 17.98 | 21.94 | | 25.88 | 30.12 | 34.52 | 38.96 | 43.66 | | 48.57 | / 1 | | | |
| reaction time | | interval | | 3.94 | 3.92 | 3.90 | 3.96 | | 3.94 | 4.24 | 4.40 | 4.44 | 4.70 | 4.91 | | | 11.76 | 12.14 | 13.54 |
| | | velocity | 7.23 | 8.88 | 8.93 | 8.97 | 8.84 | | 8.88 | 8.25 | 7.95 | 7.88 | 7.45 | 8.15 | 8.24 | | 8.93 | 8.65 | 7.75 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Paul, Jacob (GBR) (1995)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2019 Müller Grand Prix (Birmingham, GBR) (TV Analysis) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2019 year end hurdle report* | | | |
| date 18-Aug-19 | time | 6.04 | 9.92 | 13.88 | 17.88 | 22.04 | 23.9 | 26.20 | | 35.20 | 40.00 | 44.92 | | 50.71 | 1 / 7 | | | |
| reaction time 0.156 | interval | | 3.88 | 3.96 | 4.00 | 4.16 | | 4.16 | | 9.00 | 4.80 | 4.92 | 5.79 | | | 11.84 | | |
| | velocity | 7.45 | 9.02 | 8.84 | 8.75 | 8.41 | 8.37 | 8.41 | | 7.78 | 7.29 | 7.11 | 6.91 | 7.89 | | 8.87 | | |
| H1 lead leg L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | | 15 | 15 | | 135 | | | | |
| **FINAL** - 2019 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2019 year end hurdle report* | | | |
| date 30-May-19 | time | 6.06 | 9.96 | 14.20 | 18.33 | 22.56 | 24.3 | 26.97 | 31.50 | 36.10 | 40.96 | 45.80 | | 51.29 | 1 / 6 | | | |
| reaction time 0.185 | interval | | 3.90 | 4.24 | 4.13 | 4.23 | | 4.41 | 4.53 | 4.60 | 4.86 | 4.84 | 5.49 | | | 12.27 | 13.17 | 14.30 |
| | velocity | 7.43 | 8.97 | 8.25 | 8.47 | 8.27 | 8.23 | 7.94 | 7.73 | 7.61 | 7.20 | 7.23 | 7.29 | 7.80 | | 8.56 | 7.97 | 7.34 |
| H1 lead leg L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | | | 15 | 15 | | 121 | | | | |
| **FINAL** - 2017 Müller's Anniversary Games (London, GBR) (TV Analysis) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2017 year end hurdle report* | | | |
| date 09-Jul-17 | time | 6.00 | 9.72 | 13.56 | 17.48 | 21.56 | | 25.72 | 30.04 | 34.48 | 39.08 | 43.76 | | 49.49 | 1 / 8 | | | |
| reaction time 0.156 | interval | | 3.72 | 3.84 | 3.92 | 4.08 | | 4.16 | 4.32 | 4.44 | 4.60 | 4.68 | 5.73 | PB | | 11.48 | 12.56 | 13.72 |
| | velocity | 7.50 | 9.41 | 9.11 | 8.93 | 8.58 | | 8.41 | 8.10 | 7.88 | 7.61 | 7.48 | 6.98 | 8.08 | | 9.15 | 8.36 | 7.65 |
| H1 lead leg L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | | 150 | | | | |
| **FINAL** - 2016 London Anniversary Games (London, GBR) (TV Analysis) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2016 year end hurdle report* | | | |
| date 23-Jul-16 | time | 6.04 | 9.84 | 13.76 | 17.76 | 21.92 | | 26.24 | 30.68 | 35.36 | 40.16 | 45.12 | | 50.84 | 1 / 9 | | | |
| reaction time 0.136 | interval | | 3.80 | 3.92 | 4.00 | 4.16 | | 4.32 | 4.44 | 4.68 | 4.80 | 4.96 | 5.72 | | | 11.72 | 12.92 | 14.44 |
| | velocity | 7.45 | 9.21 | 8.93 | 8.75 | 8.41 | | 8.10 | 7.88 | 7.48 | 7.29 | 7.06 | 6.99 | 7.87 | | 8.96 | 8.13 | 7.27 |
| H1 lead leg L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 146 | | | | |

**Peng Ming-Yang (TPE) (1998)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Michitaka Kinami Memorial (Osaka, JPN) | | | | | | | | | | | | | | *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season* | | | |
| date 01-May-22 | time | 6.01 | 9.71 | 13.51 | 17.42 | 21.42 | | 25.64 | 29.93 | 34.55 | 39.29 | 44.08 | | 49.32 | 5 / 3 | | | |
| reaction time 0.172 | interval | | 3.70 | 3.80 | 3.91 | 4.00 | | 4.22 | 4.29 | 4.62 | 4.74 | 4.79 | 5.24 | PB | | 11.41 | 12.51 | 14.15 |
| | velocity | 7.49 | 9.46 | 9.21 | 8.95 | 8.75 | | 8.29 | 8.16 | 7.58 | 7.38 | 7.31 | 7.63 | 8.11 | | 9.20 | 8.39 | 7.42 |
| H1 lead leg | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**Peresta, Andrew (USA) (1985)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 3** - 2007 USATF National Championships (Indianapolis, IN) | | | | | | | | | | | | | | *USATF Men's Hurdle Development (2007)* | | | |
| date 21-Jun-07 | time | 5.97 | 9.91 | 13.93 | 18.00 | 22.21 | | 26.53 | 30.96 | 35.39 | 40.12 | 44.94 | | 50.22 | 2 / 4 | | | |
| reaction time | interval | | 3.94 | 4.02 | 4.07 | 4.21 | | 4.32 | 4.43 | 4.43 | 4.73 | 4.82 | 5.28 | | | 12.03 | 12.96 | 13.98 |
| | velocity | 7.54 | 8.88 | 8.71 | 8.60 | 8.31 | | 8.10 | 7.90 | 7.90 | 7.40 | 7.26 | 7.58 | 7.96 | | 8.73 | 8.10 | 7.51 |
| H1 lead leg R | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 15 | | 158 | | | | |

**Pesa, Sinisa (YUG) (1973)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 8** - 2000 Olympic Games (Sydney, AUS) | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | | | | | | | | |
| date 24-Sep-00 | time | 6.06 | 9.82 | 13.70 | 17.62 | 21.74 | | 25.98 | 30.38 | 35.18 | 40.26 | | | 52.14 | 7 / 5 | | | |
| reaction time 0.165 | interval | | 3.76 | 3.88 | 3.92 | 4.12 | | 4.24 | 4.40 | 4.80 | 5.08 | | | | | 11.56 | 12.76 | |
| | velocity | 7.43 | 9.31 | 9.02 | 8.93 | 8.50 | | 8.25 | 7.95 | 7.29 | 6.89 | | | 7.67 | | 9.08 | 8.23 | |
| H1 lead leg | strides | 20 | 13 | 13 | 13 | 14 | | 14 | 14 | 14 | 16 | 16 | | 147 | | | | |

**Phillips, Andre (USA) (1959)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1988 Olympic Games (Seoul, KOR) | | | | | | | | *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988* | | | | | | | | | |
| date 25-Sep-88 | time | 5.80 | 9.36 | 13.13 | 16.97 | 20.93 | | 24.98 | 29.14 | 33.18 | 37.45 | 41.99 | | 47.19 | 6 / 1 | | | |
| reaction time 0.150 | interval | | 3.56 | 3.77 | 3.84 | 3.96 | | 4.05 | 4.16 | 4.04 | 4.27 | 4.54 | 5.20 | OR / PB | | 11.17 | 12.17 | 12.85 |
| | velocity | 7.76 | 9.83 | 9.28 | 9.11 | 8.84 | | 8.64 | 8.41 | 8.66 | 8.20 | 7.71 | 7.69 | 8.48 | | 9.40 | 8.63 | 8.17 |
| H1 lead leg L | strides | 19 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 17.9 | 153.9 | | | | |
| **Semi-Final 2** - 1988 Olympic Games (Seoul, KOR) | | | | | | | | *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988* | | | | | | | | | |
| date 24-Sep-88 | time | 5.92 | 9.61 | 13.44 | 17.37 | 21.34 | | 25.42 | 29.63 | 33.86 | 38.22 | 42.91 | | 48.19 | 5 / 1 | | | |
| reaction time | interval | | 3.69 | 3.83 | 3.93 | 3.97 | | 4.08 | 4.21 | 4.23 | 4.36 | 4.69 | 5.28 | | | 11.45 | 12.26 | 13.28 |
| | velocity | 7.60 | 9.49 | 9.14 | 8.91 | 8.82 | | 8.58 | 8.31 | 8.27 | 8.03 | 7.46 | 7.58 | 8.30 | | 9.17 | 8.56 | 7.91 |
| H1 lead leg | strides | 19 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 18 | 155 | | | | |
| **FINAL** - 1982 TAC Naitonal Championships (Knoxville, TN) | | | | | | | | *Mann (1987) - the elite athlete program biomechanical analysis of the long hurdles: tac championship meet* | | | | | | | | | |
| date 20-Jun-82 | time | 6.02 | 9.88 | 13.82 | 17.74 | 21.70 | | 25.64 | 29.66 | 34.04 | 38.66 | 43.52 | | 48.62 | / 2 | | | |
| reaction time | interval | | 3.86 | 3.94 | 3.92 | 3.96 | | 3.94 | 4.02 | 4.38 | 4.62 | 4.86 | 5.10 | | | 11.72 | 11.92 | 13.86 |
| | velocity | 7.48 | 9.07 | 8.88 | 8.93 | 8.84 | | 8.88 | 8.71 | 7.99 | 7.58 | 7.20 | 7.84 | 8.23 | | 8.96 | 8.81 | 7.58 |
| H1 lead leg | strides | | | | | | | | | | | | | | | | | |

**Phillips, Isa (JAM) (1984)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 2** - 2009 IAAF World Championships (Berlin, GER) | | | | | | | | | | | | | | *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships* | | | |
| date 16-Aug-09 | time | 5.98 | 9.52 | 13.19 | 17.02 | 20.93 | | 25.04 | 29.38 | 33.78 | 38.48 | 43.19 | | 48.93 | 6 / 4 | | | |
| reaction time 0.238 | interval | | 3.54 | 3.67 | 3.83 | 3.91 | | 4.11 | 4.34 | 4.40 | 4.70 | 4.71 | 5.74 | | | 11.04 | 12.36 | 13.81 |
| | velocity | 7.53 | 9.89 | 9.54 | 9.14 | 8.95 | | 8.52 | 8.06 | 7.95 | 7.45 | 7.43 | 6.97 | 8.17 | | 9.51 | 8.50 | 7.60 |
| H1 lead leg L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 14 | 18.7 | 161.7 | | | | |
| **Heat 1** - 2009 IAAF World Championships (Berlin, GER) | | | | | | | | | | | | | | *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships* | | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-09 | time | 6.05 | 9.66 | 13.33 | 17.18 | 21.19 | 25.38 | 29.79 | 34.23 | 38.85 | 43.55 | | 48.99 | 8 / 1 | | | | |
| reaction time | 0.224 | interval | | 3.61 | 3.67 | 3.85 | 4.01 | 4.19 | 4.41 | 4.44 | 4.62 | 4.70 | 5.44 | | | 11.13 | 12.61 | 13.76 | |
| | | velocity | 7.44 | 9.70 | 9.54 | 9.09 | 8.73 | 8.35 | 7.94 | 7.88 | 7.58 | 7.45 | 7.35 | 8.16 | | 9.43 | 8.33 | 7.63 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2008 IAAF World Athletics Final (Stuttgart, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Sep-08 | time | 6.09 | 9.79 | 13.63 | 17.63 | 21.80 | 26.11 | 30.35 | 34.80 | 39.34 | 44.00 | | 49.22 | 2 / 3 | | | | |
| reaction time | 0.185 | interval | | 3.70 | 3.84 | 4.00 | 4.17 | 4.31 | 4.24 | 4.45 | 4.54 | 4.66 | 5.22 | | | 11.54 | 12.72 | 13.65 | |
| | | velocity | 7.39 | 9.46 | 9.11 | 8.75 | 8.39 | 8.12 | 8.25 | 7.87 | 7.71 | 7.51 | 7.66 | 8.13 | | 9.10 | 8.25 | 7.69 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Pineda, David José (ESP) (1998)**

**FINAL** - 2017 European U20 Championships (Grosseto, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jul-17 | time | 5.84 | 9.60 | 13.44 | 17.40 | 21.52 | | 25.80 | 30.40 | 34.96 | 39.68 | 44.52 | | 50.41 | 3 / 3 | | | |
| reaction time | 0.283 | interval | | 3.76 | 3.84 | 3.96 | 4.12 | | 4.28 | 4.60 | 4.56 | 4.72 | 4.84 | 5.89 | NJR PB | | 11.56 | 13.00 | 14.12 |
| | | velocity | 7.71 | 9.31 | 9.11 | 8.84 | 8.50 | | 8.18 | 7.61 | 7.68 | 7.42 | 7.23 | 6.79 | 7.93 | | 9.08 | 8.08 | 7.44 |
| H1 lead leg | L | strides | | 15 | 15 | 15 | 15 | | 15 | 17 | 17 | 17 | 17 | 21 | 164 | | | | |

**Pirjahan, Mahdi (IRI) (1999)**

**B FINAL** - 2021 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-21 | time | 5.97 | 9.93 | 13.93 | 17.97 | 22.17 | 24.1 | 26.50 | 30.90 | 35.30 | 39.90 | | | dnf | 7 / -- | | | |
| reaction time | 0.138 | interval | | 3.96 | 4.00 | 4.04 | 4.20 | | 4.33 | 4.40 | 4.40 | 4.60 | | | | | 12.00 | 12.93 | |
| | | velocity | 7.54 | 8.84 | 8.75 | 8.66 | 8.33 | 8.30 | 8.08 | 7.95 | 7.95 | 7.61 | | | | | 8.75 | 8.12 | |
| H1 lead leg | L | strides | 20 | 14 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | | | 125 | | | | |

**Pitillas, Oscar (ESP) (1971)**

**FINAL** - 1998 Spanish National Championships (San Sebastián, ESP) *Ruiz (1998) - campeonato des españa absoluto: análisis de la carreras con villas*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Aug-98 | time | 5.97 | 9.96 | 13.89 | 17.95 | 22.15 | | 26.58 | 31.26 | 35.91 | 40.79 | 45.78 | | 51.79 | 5 / 4 | | | |
| reaction time | | interval | | 3.99 | 3.93 | 4.06 | 4.20 | | 4.43 | 4.68 | 4.65 | 4.88 | 4.99 | 6.01 | | | 11.98 | 13.31 | 14.52 |
| | | velocity | 7.54 | 8.77 | 8.91 | 8.62 | 8.33 | | 7.90 | 7.48 | 7.53 | 7.17 | 7.01 | 6.66 | 7.72 | | 8.76 | 7.89 | 7.23 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 161 | | | | |

**FINAL** - 1997 European Cup (Munich, GER) *Jung (2003) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-97 | time | 6.28 | 10.21 | 14.18 | 18.24 | 22.35 | 26.66 | 31.20 | 35.98 | 40.54 | 45.46 | | 51.05 | / 4 | | | | |
| reaction time | | interval | | 3.93 | 3.97 | 4.06 | 4.11 | 4.31 | 4.54 | 4.78 | 4.56 | 4.92 | 5.59 | | | 11.96 | 12.96 | 14.26 | |
| | | velocity | 7.17 | 8.91 | 8.82 | 8.62 | 8.52 | 8.12 | 7.71 | 7.32 | 7.68 | 7.11 | 7.16 | 7.84 | | 8.78 | 8.10 | 7.36 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Plawgo, Marek (POL) (1981)**

**FINAL** - 2008 Olympic Games (Beijing, CHN) *Behm (2008)- Pekin 2008: Le quatrache masculin - féminin*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-08 | time | 5.9 | 9.7 | 13.4 | 17.3 | 21.3 | | 25.4 | 29.8 | 34.1 | 38.6 | 43.3 | | 48.52 | 3 / 6 | | | |
| reaction time | 0.226 | interval | | 3.80 | 3.70 | 3.90 | 4.00 | | 4.10 | 4.40 | 4.30 | 4.50 | 4.70 | 5.22 | | | 11.40 | 12.50 | 13.50 |
| | | velocity | 7.63 | 9.21 | 9.46 | 8.97 | 8.75 | | 8.54 | 7.95 | 8.14 | 7.78 | 7.45 | 7.66 | 8.24 | | 9.21 | 8.40 | 7.78 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 14 | 17 | 159 | | | | |

**FINAL** - 2007 IAAF World Athletics Final (Stuttgart, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Sep-07 | time | 5.88 | 9.62 | 13.44 | 17.26 | 21.36 | 25.56 | 30.00 | 34.43 | 38.88 | 43.36 | | 48.35 | 4 / 1 | | | | |
| reaction time | 0.130 | interval | | 3.74 | 3.82 | 3.82 | 4.10 | 4.20 | 4.44 | 4.43 | 4.45 | 4.48 | 4.99 | | | 11.38 | 12.74 | 13.36 | |
| | | velocity | 7.65 | 9.36 | 9.16 | 9.16 | 8.54 | 8.33 | 7.88 | 7.90 | 7.87 | 7.81 | 8.02 | 8.27 | | 9.23 | 8.24 | 7.86 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2007 IAAF World Championships (Osaka, JPN) *Ae (2008) - IAAF biomechanics team - a booklet of biomechanics data*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Aug-07 | time | 5.87 | 9.52 | 13.28 | 17.06 | 20.97 | 25.15 | 29.48 | 33.76 | 38.22 | 42.80 | | 48.12 | 7 / 3 | | | | |
| reaction time | 0.157 | interval | | 3.65 | 3.76 | 3.78 | 3.91 | 4.18 | 4.33 | 4.28 | 4.46 | 4.58 | 5.32 | NR | | 11.19 | 12.42 | 13.32 | |
| | | velocity | 7.67 | 9.59 | 9.31 | 9.26 | 8.95 | 8.37 | 8.08 | 8.18 | 7.85 | 7.64 | 7.52 | 8.31 | | 9.38 | 8.45 | 7.88 | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17 | 159 | | | | | |

**FINAL** - 2007 European Cup (Munich, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jun-07 | time | 6.04 | 9.94 | 13.82 | 17.78 | 21.83 | 25.84 | 30.34 | 34.70 | 39.20 | 43.84 | | 48.90 | / 2 | | | | |
| reaction time | 0.151 | interval | | 3.90 | 3.88 | 3.96 | 4.05 | 4.01 | 4.50 | 4.36 | 4.50 | 4.64 | 5.06 | | | 11.74 | 12.56 | 13.50 | |
| | | velocity | 7.45 | 8.97 | 9.02 | 8.84 | 8.64 | 8.73 | 7.78 | 8.03 | 7.78 | 7.54 | 7.91 | 8.18 | | 8.94 | 8.36 | 7.78 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2006 European Championships (Göteborg, SWE) *Behm (2006) - Göteborg 2006: Le quatrache*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-06 | time | 5.8 | 9.5 | 13.4 | 17.4 | 21.5 | 25.7 | 30.0 | 34.5 | 39.0 | 43.6 | | 48.71 | / 2 | | | | |
| reaction time | | interval | | 3.70 | 3.90 | 4.00 | 4.10 | 4.20 | 4.30 | 4.50 | 4.50 | 4.60 | 5.11 | | | 11.60 | 12.60 | 13.60 | |
| | | velocity | 7.76 | 9.46 | 8.97 | 8.75 | 8.54 | 8.33 | 8.14 | 7.78 | 7.78 | 7.61 | 7.83 | 8.21 | | 9.05 | 8.33 | 7.72 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 18 | 159 | | | | | |

**FINAL** - 2004 Olympic Games (Athîna, GRE) *Behm (2005) - Athènes 2004: Les Haies Basses*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Aug-04 | time | 6.0 | 9.6 | 13.3 | 17.2 | 21.2 | 25.3 | 29.8 | 34.3 | 38.9 | 43.7 | | 49.00 | 3 / 6 | | | | |
| reaction time | 0.242 | interval | | 3.60 | 3.70 | 3.90 | 4.00 | 4.10 | 4.50 | 4.50 | 4.60 | 4.80 | 5.30 | | | 11.20 | 12.60 | 13.90 | |
| | | velocity | 7.50 | 9.72 | 9.46 | 8.97 | 8.75 | 8.54 | 7.78 | 7.78 | 7.61 | 7.29 | 7.55 | 8.16 | | 9.38 | 8.33 | 7.55 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | | 143 | | | | | |

**FINAL** - 2001 European Cup (Bremen, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jun-01 | time | 5.94 | 9.68 | 13.54 | 17.50 | 21.52 | 25.60 | 29.46 | 34.48 | 39.10 | 43.86 | | 48.98 | / 2 | | | | |
| reaction time | | interval | | 3.74 | 3.86 | 3.96 | 4.02 | 4.08 | 3.86 | 5.02 | 4.62 | 4.76 | 5.12 | | | 11.56 | 11.96 | 14.40 | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.58 | 9.36 | 9.07 | 8.84 | 8.71 | | 8.58 | 9.07 | 6.97 | 7.58 | 7.35 | 7.81 | 8.17 | | 9.08 | 8.78 | 7.29 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Pochanis, Konstantinos (CYP) (1973)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 6** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date 24-Sep-00 | time | 6.22 | 10.02 | 13.94 | 17.94 | 21.98 | | 26.34 | 30.98 | 35.70 | 40.54 | | | 51.20 | 3 / 6 | | | |
| reaction time 0.244 | interval | | 3.80 | 3.92 | 4.00 | 4.04 | | 4.36 | 4.64 | 4.72 | 4.84 | | | | | 11.72 | 13.04 | |
| | velocity | 7.23 | 9.21 | 8.93 | 8.75 | 8.66 | | 8.03 | 7.54 | 7.42 | 7.23 | | | 7.81 | | 8.96 | 8.05 | |
| H1 lead leg | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 16 | 16 | 16 | | | 141 | | | | |

**Porras, Aleix (ESP) (1999)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2017 European U20 Championships (Grosseto, ITA) (TV Analysis) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2017 year end hurdle report* | | | |
| date 23-Jul-17 | time | 5.80 | 9.76 | 13.60 | 17.60 | 21.84 | | 26.24 | 30.92 | 35.60 | 40.40 | 45.32 | | 51.36 | 8 / 7 | | | |
| reaction time 0.231 | interval | | 3.96 | 3.84 | 4.00 | 4.24 | | 4.40 | 4.68 | 4.68 | 4.80 | 4.92 | 6.04 | | | 11.80 | 13.32 | 14.40 |
| | velocity | 7.76 | 8.84 | 9.11 | 8.75 | 8.25 | | 7.95 | 7.48 | 7.48 | 7.29 | 7.11 | 6.62 | 7.79 | | 8.90 | 7.88 | 7.29 |
| H1 lead leg R | strides | | 14 | 14 | 15 | 15 | | | 15 | 15 | 15 | 15 | 18 | 136 | | | | |

**Porter, Will (USA) (1973)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1996 USA Olympic Trials (Atlanta, GA) | | | | | | | | | | | | | | *McNichols - Hurdle technique study through video analysis* | | | |
| date 16-Jun-96 | time | 6.01 | 9.93 | 13.91 | 17.91 | 22.01 | 23.80 | 26.23 | 30.59 | 34.93 | 39.39 | 43.94 | | 49.49 | 1 / 8 | | | |
| reaction time | interval | | 3.92 | 3.98 | 4.00 | 4.10 | | 4.22 | 4.36 | 4.34 | 4.46 | 4.55 | 5.55 | | | 11.90 | 12.68 | 13.35 |
| | velocity | 7.49 | 8.93 | 8.79 | 8.75 | 8.54 | 8.40 | 8.29 | 8.03 | 8.06 | 7.85 | 7.69 | 7.21 | 8.08 | | 8.82 | 8.28 | 7.87 |
| H1 lead leg L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | | 138 | | | | |

**Preis, Constantin (GER) (1998)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Memorial van Damme (Brussels, BEL) (TV Analysis) | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date 02-Sep-22 | time | 6.04 | 9.74 | 13.48 | 17.32 | 21.29 | 22.98 | 25.42 | 29.69 | 34.20 | 38.77 | 43.44 | | 48.83 | 8 / ~~6~~ 5 | | | |
| reaction time 0.253 | interval | | 3.70 | 3.74 | 3.84 | 3.97 | | 2.44 | 4.27 | 4.51 | 4.57 | 4.67 | 5.39 | | | 11.28 | 12.37 | 13.75 |
| | velocity | 7.45 | 9.46 | 9.36 | 9.11 | 8.82 | 8.70 | 14.34 | 8.20 | 7.76 | 7.66 | 7.49 | 7.42 | 8.19 | | 9.31 | 8.49 | 7.64 |
| H1 lead leg L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 153 | | | | |
| **FINAL** - 2021 Weltklasse (Zürich, SUI) (TV Analysis) | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date 09-Sep-21 | time | 6.08 | 9.84 | 13.84 | 17.84 | 21.96 | 23.7 | 26.20 | 30.44 | 34.84 | 39.36 | 43.92 | | 49.08 | 8 / 5 | | | |
| reaction time 0.259 | interval | | 3.76 | 4.00 | 4.00 | 4.12 | | 4.24 | 4.24 | 4.40 | 4.52 | 4.56 | 5.16 | | | 11.76 | 12.60 | 13.48 |
| | velocity | 7.40 | 9.31 | 8.75 | 8.75 | 8.50 | 8.44 | 8.25 | 8.25 | 7.95 | 7.74 | 7.68 | 7.75 | 8.15 | | 8.93 | 8.33 | 7.79 |
| H1 lead leg L | strides | 21 | 13 | 14 | 14 | 14 | | 14 | 15 | 15 | | | | 120 | | | | |
| **FINAL** - 2021 Memorial van Damme (Brussels, BEL) (TV Analysis) | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date 03-Sep-21 | time | 6.20 | 10.00 | 14.00 | 18.08 | 22.28 | 24.1 | 26.60 | 31.08 | 35.60 | 40.16 | | | 50.12 | 8 / 8 | | | |
| reaction time 0.303 | interval | | 3.80 | 4.00 | 4.08 | 4.20 | | 4.32 | 4.48 | 4.52 | 4.56 | | | | | 11.88 | 13.00 | |
| | velocity | 7.26 | 9.21 | 8.75 | 8.58 | 8.33 | 8.30 | 8.10 | 7.81 | 7.74 | 7.68 | | | 7.98 | | 8.84 | 8.08 | |
| H1 lead leg L | strides | 21 | 13 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | | | 136 | | | | |
| **FINAL** - 2021 Herculis Meeting International d'Athletisme (Monaco, MON) (TV Analysis) | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date 09-Jul-21 | time | 6.00 | 9.84 | | 17.60 | 21.62 | 23.4 | 25.79 | 30.08 | 34.50 | 39.20 | 44.04 | | 49.49 | 4 / 4 | | | |
| reaction time 0.231 | interval | | 3.84 | | 7.76 | 4.02 | | 4.17 | 4.29 | 4.42 | 4.70 | 4.84 | 5.45 | | | 11.60 | 12.48 | 13.96 |
| | velocity | 7.50 | 9.11 | | 9.02 | 8.71 | 8.55 | 8.39 | 8.16 | 7.92 | 7.45 | 7.23 | 7.34 | 8.08 | | 9.05 | 8.41 | 7.52 |
| H1 lead leg L | strides | 22 | 14 | | | 14 | | 15 | 15 | | 16 | 16 | | 112 | | | | |
| **FINAL** - 2021 Bislett Games (Oslo, NOR) (TV Analysis) | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date 01-Jul-21 | time | 6.00 | 9.82 | 13.66 | 17.70 | 21.72 | | 25.88 | | 34.72 | 39.48 | 44.38 | | 49.79 | 2 / 5 | | | |
| reaction time 0.246 | interval | | 3.82 | 3.84 | 4.04 | 4.02 | | 4.16 | | 8.84 | 4.76 | 4.90 | 5.41 | | | 11.70 | | |
| | velocity | 7.50 | 9.16 | 9.11 | 8.66 | 8.71 | | 8.41 | | 7.92 | 7.35 | 7.14 | 7.39 | 8.03 | | 8.97 | | |
| H1 lead leg L | strides | 22 | 14 | 14 | | 14 | | 15 | | | 16 | 16 | | 111 | | | | |
| **FINAL** - 2020 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2020 year end hurdle report* | | | |
| date 17-Sep-20 | time | 6.24 | 10.14 | | | 22.36 | 24.2 | | 31.06 | 35.53 | 40.14 | 44.74 | | 49.91 | 1 / 7 | | | |
| reaction time 0.250 | interval | | 3.90 | | | 12.22 | | | 8.70 | 4.47 | 4.61 | 4.60 | 5.17 | | | | | 13.68 |
| | velocity | 7.21 | 8.97 | | | 8.59 | 8.26 | | 8.05 | 7.83 | 7.59 | 7.61 | 7.74 | 8.01 | | | | 7.68 |
| H1 lead leg R | strides | 22 | 14 | | | | | | | 15 | 15 | 15 | 18 | 99 | | | | |
| **FINAL** - 2020 ISTAF (Berlin, GER) (TV Analysis) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2020 year end hurdle report* | | | |
| date 13-Sep-20 | time | 6.04 | | 13.92 | 17.88 | | | 26.20 | | | | | | dnf | 5 / -- | | | |
| reaction time 0.240 | interval | | | 7.88 | 3.96 | | | 8.32 | | | | | | | | 11.84 | | |
| | velocity | 7.45 | | 8.88 | 8.84 | | | 8.41 | | | | | | | | 8.87 | | |
| H1 lead leg L | strides | 22 | | | 14 | | | | | | | | | 36 | | | | |
| **FINAL** - 2020 Bauhaus Galan (Stockholm, SWE) (TV Analysis) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2020 year end hurdle report* | | | |
| date 23-Aug-20 | time | 6.10 | | 13.96 | 18.02 | 22.12 | 23.9 | 26.32 | | 35.44 | 40.12 | 44.80 | | 50.13 | 2 / 6 | | | |
| reaction time 0.232 | interval | | | 7.86 | 4.06 | 4.10 | | 4.20 | | 9.12 | 4.68 | 4.68 | 5.33 | | | 11.92 | | |
| | velocity | 7.38 | | 8.91 | 8.62 | 8.54 | 8.37 | 8.33 | | 7.68 | 7.48 | 7.48 | 7.50 | 7.98 | | 8.81 | | |
| H1 lead leg L | strides | 21 | | | 14 | 14 | | 14 | | | 15 | 15 | 18 | 111 | | | | |
| **FINAL** - 2020 Herculis Meeting International d'Athletisme (Monaco, MON) (TV Analysis) | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2020 year end hurdle report* | | | |
| date 14-Aug-20 | time | 6.00 | 9.81 | 13.71 | 17.75 | 21.92 | | 26.26 | 30.76 | 35.27 | 39.87 | 44.44 | | 49.49 | 8 / 5 | | | |
| reaction time 0.251 | interval | | 3.81 | 3.90 | 4.04 | 4.17 | | 4.34 | 4.50 | 4.51 | 4.60 | 4.57 | 5.05 | | | 11.75 | 13.01 | 13.68 |
| | velocity | 7.50 | 9.19 | 8.97 | 8.66 | 8.39 | | 8.06 | 7.78 | 7.76 | 7.61 | 7.66 | 7.92 | 8.08 | | 8.94 | 8.07 | 7.68 |
| H1 lead leg L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | | 15 | | 138 | | | | |

**Prince, Damian (USA) (1986)**

**Heat 1** - 2007 USATF National Championships (Indianapolis, IN) — *USATF Men's Hurdle Development (2007)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-07 | time | 6.01 | 9.79 | 13.66 | 17.65 | 21.89 | | 26.38 | 30.83 | 35.48 | 40.55 | | | dnf | 8 / -- | | | |
| reaction time | | interval | | 3.78 | 3.87 | 3.99 | 4.24 | | 4.49 | 4.45 | 4.65 | 5.07 | | | | | 11.64 | 13.18 | |
| | | velocity | 7.49 | 9.26 | 9.04 | 8.77 | 8.25 | | 7.80 | 7.87 | 7.53 | 6.90 | | | | | 9.02 | 7.97 | |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 16 | | | 139 | | | | |

**Rakotoarimaindry, Yvon (MAD) (1976**

**Heat 2** - 2000 Olympic Games (Sydney, AUS) — *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.98 | 9.82 | 13.70 | 17.66 | 21.70 | | 26.06 | | 35.14 | 39.86 | 44.62 | | 50.15 | 7 / 8 | | | |
| reaction time | 0.185 | interval | | 3.84 | 3.88 | 3.96 | 4.04 | | 4.36 | | 9.08 | 4.72 | 4.76 | 5.53 | | | 11.68 | | |
| | | velocity | 7.53 | 9.11 | 9.02 | 8.84 | 8.66 | | 8.03 | | 7.71 | 7.42 | 7.35 | 7.23 | 7.98 | | 8.99 | | |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 14 | | | 15 | 15 | | 121 | | | | |

**Ratnayake, Harijan (SRI) (1974)**

**Heat 3** - 2000 Olympic Games (Sydney, AUS) — *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.54 | 10.58 | 14.58 | 18.62 | 22.74 | | 27.18 | 31.66 | 36.26 | | | | 50.43 | 7 / 4 | | | |
| reaction time | 0.346 | interval | | 4.04 | 4.00 | 4.04 | 4.12 | | 4.44 | 4.48 | 4.60 | | | | | | 12.08 | 13.04 | |
| | | velocity | 6.88 | 8.66 | 8.75 | 8.66 | 8.50 | | 7.88 | 7.81 | 7.61 | | | | 7.93 | | 8.69 | 8.05 | |
| H1 lead leg | | strides | 22 | 14 | 14 | 13 | 13 | | 14 | 14 | 14 | | | | 118 | | | | |

**Rawlinson, Christopher (GBR) (1972**

**FINAL** - 2003 IAAF World Championships (Paris, FRA) — *Behm (2003) - Paris 2003:Le quatrache masculn - féminin*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Aug-03 | time | 5.9 | 9.5 | 13.4 | 17.3 | 21.2 | | 25.3 | 29.4 | 33.9 | 38.4 | 43.0 | | 48.90 | 2 / 6 | | | |
| reaction time | 0.165 | interval | | 3.60 | 3.90 | 3.90 | 3.90 | | 4.10 | 4.10 | 4.50 | 4.50 | 4.60 | 5.90 | | | 11.40 | 12.10 | 13.60 |
| | | velocity | 7.63 | 9.72 | 8.97 | 8.97 | 8.97 | | 8.54 | 8.54 | 7.78 | 7.78 | 7.61 | 6.78 | 8.18 | | 9.21 | 8.68 | 7.72 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | 19 | 162 | | | | |

**FINAL** - 2002 IAAF World Cup (Madrid, ESP) — *Sanchez (2002) - copa del mundo de Madrid '02: análisis de la carreras con villas*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Sep-02 | time | 5.83 | 9.55 | 13.30 | 17.13 | 21.07 | | 25.07 | 29.44 | 34.01 | 38.65 | 43.46 | | 49.18 | 3 / 3 | | | |
| reaction time | 0.172 | interval | | 3.72 | 3.75 | 3.83 | 3.94 | | 4.00 | 4.37 | 4.57 | 4.64 | 4.81 | 5.72 | | | 11.30 | 12.31 | 14.02 |
| | | velocity | 7.72 | 9.41 | 9.33 | 9.14 | 8.88 | | 8.75 | 8.01 | 7.66 | 7.54 | 7.28 | 6.99 | 8.13 | | 9.29 | 8.53 | 7.49 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 19 | 170 | | | | |

**FINAL** - 2002 European Championships (Munich, GER) — *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-02 | time | 6.30 | 10.24 | 14.28 | | | | | | | | | | dnf | / -- | | | |
| reaction time | 0.160 | interval | | 3.94 | 4.04 | | | | | | | | | | | | | | |
| | | velocity | 7.14 | 8.88 | 8.66 | | | | | | | | | | | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Heat 4** - 2002 European Championships (Munich, GER) — *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Aug-02 | time | 6.02 | 9.72 | 13.44 | 17.32 | 21.34 | | 25.50 | 29.82 | 34.56 | 39.30 | 44.10 | | 49.73 | / 2 | | | |
| reaction time | | interval | | 3.70 | 3.72 | 3.88 | 4.02 | | 4.16 | 4.32 | 4.74 | 4.74 | 4.80 | 5.63 | | | 11.30 | 12.50 | 14.28 |
| | | velocity | 7.48 | 9.46 | 9.41 | 9.02 | 8.71 | | 8.41 | 8.10 | 7.38 | 7.38 | 7.29 | 7.10 | 8.04 | | 9.29 | 8.40 | 7.35 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2001 IAAF World Championships (Edmonton, CAN) — *Behm (2001) - Edmonton: Le quatrache: les finales*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-01 | time | 5.8 | 9.6 | 13.3 | 17.1 | 21.0 | | 25.0 | 29.2 | 33.6 | 38.1 | 42.7 | | 48.54 | 6 / ~~6~~ 5 | | | |
| reaction time | 0.164 | interval | | 3.80 | 3.70 | 3.80 | 3.90 | | 4.00 | 4.20 | 4.40 | 4.50 | 4.60 | 5.84 | | | 11.30 | 12.10 | 13.50 |
| | | velocity | 7.76 | 9.21 | 9.46 | 9.21 | 8.97 | | 8.75 | 8.33 | 7.95 | 7.78 | 7.61 | 6.85 | 8.24 | | 9.29 | 8.68 | 7.78 |
| H1 lead leg | R | strides | 20 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | | 149 | | | | |

**FINAL** - 2001 European Cup (Bremen, GER) — *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jun-01 | time | 6.09 | 9.81 | 13.56 | 17.48 | 21.46 | | 25.63 | 30.02 | 34.58 | 39.48 | 44.55 | | 50.11 | / 5 | | | |
| reaction time | | interval | | 3.72 | 3.75 | 3.92 | 3.98 | | 4.17 | 4.39 | 4.56 | 4.90 | 5.07 | 5.56 | | | 11.39 | 12.54 | 14.53 |
| | | velocity | 7.39 | 9.41 | 9.33 | 8.93 | 8.79 | | 8.39 | 7.97 | 7.68 | 7.14 | 6.90 | 7.19 | 7.98 | | 9.22 | 8.37 | 7.23 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Semi-Final 2** - 2000 Olympic Games (Sydney, AUS) — *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 6.00 | 9.76 | 13.56 | 17.40 | 21.36 | 22.88 | 25.48 | 29.80 | 34.24 | 38.92 | 43.76 | | 49.25 | 6 / 6 | | | |
| reaction time | 0.177 | interval | | 3.76 | 3.80 | 3.84 | 3.96 | | 4.12 | 4.32 | 4.44 | 4.68 | 4.84 | 5.49 | | | 11.40 | 12.40 | 13.96 |
| | | velocity | 7.50 | 9.31 | 9.21 | 9.11 | 8.84 | 8.74 | 8.50 | 8.10 | 7.88 | 7.48 | 7.23 | 7.29 | 8.12 | | 9.21 | 8.47 | 7.52 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 16 | 19 | 150 | | | | |

**Heat 5** - 2000 Olympic Games (Sydney, AUS) — *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.96 | 9.60 | 13.36 | 17.16 | 21.08 | | 25.16 | 29.52 | 34.36 | 39.80 | 45.16 | | 51.30 | 3 / 1 | | | |
| reaction time | 0.184 | interval | | 3.64 | 3.76 | 3.80 | 3.92 | | 4.08 | 4.36 | 4.84 | 5.44 | 5.36 | 6.14 | | | 11.20 | 12.36 | 15.64 |
| | | velocity | 7.55 | 9.62 | 9.31 | 9.21 | 8.93 | | 8.58 | 8.03 | 7.23 | 6.43 | 6.53 | 6.51 | 7.80 | | 9.38 | 8.50 | 6.71 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 17 | 17 | 20 | 175 | | | | |

**FINAL** - 1997 European Cup (Munich, GER) — *Jung (2003) - http://www.fgs.uni-halle.de*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-97 | time | 6.12 | 9.92 | 13.86 | 17.90 | 22.12 | | 26.50 | 31.07 | 35.80 | 40.62 | 45.62 | | 51.06 | / 5 | | | |
| reaction time | | interval | | 3.80 | 3.94 | 4.04 | 4.22 | | 4.38 | 4.57 | 4.73 | 4.82 | 5.00 | 5.44 | | | 11.78 | 13.17 | 14.55 |
| | | velocity | 7.35 | 9.21 | 8.88 | 8.66 | 8.29 | | 7.99 | 7.66 | 7.40 | 7.26 | 7.00 | 7.35 | 7.83 | | 8.91 | 7.97 | 7.22 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Reibert, Werner (FRG) (1948)**

| H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1975 West German National Championships (Gelsenkirchen, FRG) *Helbig (1975) - 400-m-hürdenlauf*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Jun-75 | time | 6.3 | 10.2 | 14.5 | 18.5 | 22.6 | 24.6 | 27.0 | 31.8 | 36.3 | 40.9 | 45.4 | | 51.25 | 6 / 1 | | | |
| reaction time | | interval | | 3.97 | 4.24 | 3.99 | 4.09 | | 4.44 | 4.81 | 4.50 | 4.55 | 4.58 | 5.81 | | | 12.20 | 13.34 | 13.63 |
| | | velocity | 7.18 | 8.82 | 8.25 | 8.77 | 8.56 | 8.14 | 7.88 | 7.28 | 7.78 | 7.69 | 7.64 | 6.88 | 7.80 | | 8.61 | 7.87 | 7.70 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Reinberg, Jan (GER) (1980)**

**FINAL** - 2001 European Cup (Bremen, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jun-01 | time | 6.30 | 10.21 | 14.19 | 18.32 | 22.48 | | 26.84 | 31.32 | 35.98 | 40.96 | 45.85 | | 51.66 | / 8 | | | |
| reaction time | | interval | | 3.91 | 3.98 | 4.13 | 4.16 | | 4.36 | 4.48 | 4.66 | 4.98 | 4.89 | 5.81 | | | 12.02 | 13.00 | 14.53 |
| | | velocity | 7.14 | 8.95 | 8.79 | 8.47 | 8.41 | | 8.03 | 7.81 | 7.51 | 7.03 | 7.16 | 6.88 | 7.74 | | 8.74 | 8.08 | 7.23 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Reinke, Ulrich (FRG)**

**FINAL** - 1975 West German National Championships (Gelsenkirchen, FRG) *Helbig (1975) - 400-m-hürdenlauf*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Jun-75 | time | 6.2 | 10.2 | 14.5 | 18.7 | 23.1 | 25.1 | 27.6 | 32.3 | 37.2 | 42.1 | 47.6 | | 54.54 | 8 / 8 | | | |
| reaction time | | interval | | 4.02 | 4.22 | 4.20 | 4.43 | | 4.47 | 4.70 | 4.98 | 4.81 | 5.57 | 6.92 | | | 12.44 | 13.60 | 15.36 |
| | | velocity | 7.23 | 8.71 | 8.29 | 8.33 | 7.90 | 7.97 | 7.83 | 7.45 | 7.03 | 7.28 | 6.28 | 5.78 | 7.33 | | 8.44 | 7.72 | 6.84 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Rhodes, Calvin (USA)**

**FINAL** - 2003 USATF National Junior Championships (Indianapolis, IN) *USATF Women's Sprint Development (2003)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Jun-03 | time | 6.16 | 10.41 | 14.68 | 19.10 | 23.67 | | 28.43 | 33.30 | 38.17 | 43.18 | 48.43 | | 54.53 | 1 / 9 | | | |
| reaction time | | interval | | 4.25 | 4.27 | 4.42 | 4.57 | | 4.76 | 4.87 | 4.87 | 5.01 | 5.25 | 6.10 | | | 12.94 | 14.20 | 15.13 |
| | | velocity | 7.31 | 8.24 | 8.20 | 7.92 | 7.66 | | 7.35 | 7.19 | 7.19 | 6.99 | 6.67 | 6.56 | 7.34 | | 8.11 | 7.39 | 6.94 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Robertson, Max (GBR) (1963)**

**FINAL** - 1985 Great Britian vs. USA (Birmingham, GBR) *Warden (1989) - sprinting and hurdling*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-85 | time | 5.9 | 9.7 | 13.5 | 17.3 | 21.2 | | 25.2 | 29.4 | 33.8 | 38.7 | 44.3 | | 50.09 | / 2 | | | |
| reaction time | | interval | | 3.80 | 3.80 | 3.80 | 3.90 | | 4.00 | 4.20 | 4.40 | 4.90 | 5.60 | 5.79 | | | 11.40 | 12.10 | 14.90 |
| | | velocity | 7.63 | 9.21 | 9.21 | 9.21 | 8.97 | | 8.75 | 8.33 | 7.95 | 7.14 | 6.25 | 6.91 | 7.99 | | 9.21 | 8.68 | 7.05 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 19 | 162 | | | | |

**Robinson, Byron (USA) (1995)**

**FINAL** - 2019 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Jul-19 | time | 5.84 | 9.52 | 13.32 | 17.28 | 21.36 | 23.0 | 25.52 | | 34.00 | 38.52 | 43.32 | | 49.29 | 5 / 4 | | | |
| reaction time | 0.154 | interval | | 3.68 | 3.80 | 3.96 | 4.08 | | 4.16 | | 8.48 | 4.52 | 4.80 | 5.97 | | | 11.44 | | |
| | | velocity | 7.71 | 9.51 | 9.21 | 8.84 | 8.58 | 8.70 | 8.41 | | 8.25 | 7.74 | 7.29 | 6.70 | 8.12 | | 9.18 | | |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | | | 15 | 15 | 20 | 147 | | | | |

**FINAL** - 2017 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jul-17 | time | 5.84 | 9.64 | 13.68 | 17.80 | 21.88 | | 26.00 | 30.12 | 34.40 | 38.80 | 43.36 | | 48.88 | 4 / 2 | | | |
| reaction time | 0.151 | interval | | 3.80 | 4.04 | 4.12 | 4.08 | | 4.12 | 4.12 | 4.28 | 4.40 | 4.56 | 5.52 | | | 11.96 | 12.32 | 13.24 |
| | | velocity | 7.71 | 9.21 | 8.66 | 8.50 | 8.58 | | 8.50 | 8.50 | 8.18 | 7.95 | 7.68 | 7.25 | 8.18 | | 8.78 | 8.52 | 7.93 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 20 | 177 | | | | |

**FINAL** - 2017 USATF Championships (Sacramento, CA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jun-17 | time | 5.79 | 9.55 | 13.51 | 17.58 | 21.68 | | 25.69 | 29.87 | 34.07 | 38.42 | 42.86 | | 48.50 | 6 / 4 | | | |
| reaction time | | interval | | 3.76 | 3.96 | 4.07 | 4.10 | | 4.01 | 4.18 | 4.20 | 4.35 | 4.44 | 5.64 | PB | | 11.79 | 12.29 | 12.99 |
| | | velocity | 7.77 | 9.31 | 8.84 | 8.60 | 8.54 | | 8.73 | 8.37 | 8.33 | 8.05 | 7.88 | 7.09 | 8.25 | | 8.91 | 8.54 | 8.08 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 19.5 | 176.5 | | | | |

**FINAL** - 2016 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-16 | time | 5.90 | 9.67 | 13.68 | 17.75 | 21.75 | | 25.79 | 30.00 | 34.33 | 38.84 | 43.44 | | 48.79 | 2 / 2 | | | |
| reaction time | 0.185 | interval | | 3.77 | 4.01 | 4.07 | 4.00 | | 4.04 | 4.21 | 4.33 | 4.51 | 4.60 | 5.35 | PB | | 11.85 | 12.25 | 13.44 |
| | | velocity | 7.63 | 9.28 | 8.73 | 8.60 | 8.75 | | 8.66 | 8.31 | 8.08 | 7.76 | 7.61 | 7.48 | 8.20 | | 8.86 | 8.57 | 7.81 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 19.2 | 176.2 | | | | |

**Robinson, Chris (USA) (2001)**

**FINAL** - 2023 NCAA Championships (Austin, TX) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-23 | time | 5.89 | 9.53 | 13.25 | 17.20 | 21.20 | | 25.36 | 29.66 | 34.06 | 38.42 | 42.89 | | 48.12 | 6 / 1 | | | |
| reaction time | | interval | | 3.64 | 3.72 | 3.95 | 4.00 | | 4.16 | 4.30 | 4.40 | 4.36 | 4.47 | 5.23 | PB | | 11.31 | 12.46 | 13.23 |
| | | velocity | 7.64 | 9.62 | 9.41 | 8.86 | 8.75 | | 8.41 | 8.14 | 7.95 | 8.03 | 7.83 | 7.65 | 8.31 | | 9.28 | 8.43 | 7.94 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.2 | 166.2 | | | | |

**Robinson, Rohan (AUS) (1971)**

**Heat 1** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.02 | 9.82 | 13.62 | 17.54 | 21.54 | | 25.70 | 30.10 | 34.70 | 39.74 | 44.82 | | 50.80 | 4 / 4 | | | |
| reaction time | 0.173 | interval | | 3.80 | 3.80 | 3.92 | 4.00 | | 4.16 | 4.40 | 4.60 | 5.04 | 5.08 | 5.98 | | | 11.52 | 12.56 | 14.72 |
| | | velocity | 7.48 | 9.21 | 9.21 | 8.93 | 8.75 | | 8.41 | 7.95 | 7.61 | 6.94 | 6.89 | 6.69 | 7.87 | | 9.11 | 8.36 | 7.13 |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 16 | 16 | | 152 | | | | |

**FINAL** - 1996 Olympic Games (Atlanta, GA) *Behm (1996) - 400m haies*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Aug-96 | time | 6.0 | 9.7 | 13.5 | 17.3 | 21.3 | | 25.3 | 29.5 | 33.8 | 38.3 | 43.0 | | 48.30 | 8 / 5 | | | |
| reaction time | 0.283 | interval | | 3.70 | 3.80 | 3.80 | 4.00 | | 4.00 | 4.20 | 4.30 | 4.50 | 4.70 | 5.30 | | | 11.30 | 12.20 | 13.50 |
| | | velocity | 7.50 | 9.46 | 9.21 | 9.21 | 8.75 | | 8.75 | 8.33 | 8.14 | 7.78 | 7.45 | 7.55 | 8.28 | | 9.29 | 8.61 | 7.78 |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | | 150 | | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

**Rodger, Sebastian (GBR) (1991)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2019 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2019 year end hurdle report* | | | |
| date | 30-May-19 | time | 6.16 | 10.06 | 14.13 | 18.20 | 22.30 | 24.0 | 26.63 | 31.06 | 35.50 | 40.13 | 44.93 | | 50.50 | 2 / 4 | | | |
| reaction time | 0.139 | interval | | 3.90 | 4.07 | 4.07 | 4.10 | | 4.33 | 4.43 | 4.44 | 4.63 | 4.80 | 5.57 | | | 12.04 | 12.86 | 13.87 |
| | | velocity | 7.31 | 8.97 | 8.60 | 8.60 | 8.54 | 8.33 | 8.08 | 7.90 | 7.88 | 7.56 | 7.29 | 7.18 | 7.92 | | 8.72 | 8.16 | 7.57 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | | 15 | 15 | 19 | 155 | | | | |
| **FINAL** - 2018 Müller Anniversary Games (London, GBR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2018 year end hurdle report* | | | |
| date | 21-Jul-18 | time | 6.08 | 10.00 | | 18.16 | 22.36 | | 26.56 | 31.00 | 35.56 | 40.20 | 45.08 | | 50.84 | 1 / 8 | | | |
| reaction time | 0.161 | interval | | 3.92 | | 8.16 | 4.20 | | 4.20 | 4.44 | 4.56 | 4.64 | 4.88 | 5.76 | | | 12.08 | 12.84 | 14.08 |
| | | velocity | 7.40 | 8.93 | | 8.58 | 8.33 | | 8.33 | 7.88 | 7.68 | 7.54 | 7.17 | 6.94 | 7.87 | | 8.69 | 8.18 | 7.46 |
| H1 lead leg | R | strides | 22 | 14 | | | 14 | | 14 | 14 | 15 | 15 | 15 | | 123 | | | | |
| **FINAL** - 2018 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2018 year end hurdle report* | | | |
| date | 10-Jun-18 | time | 6.12 | 10.00 | 14.12 | 18.24 | 22.40 | | 26.64 | 30.84 | 35.12 | 39.60 | 44.24 | | 49.87 | 1 / 6 | | | |
| reaction time | 0.163 | interval | | 3.88 | 4.12 | 4.12 | 4.16 | | 4.24 | 4.20 | 4.28 | 4.48 | 4.64 | 5.63 | | | 12.12 | 12.60 | 13.40 |
| | | velocity | 7.35 | 9.02 | 8.50 | 8.50 | 8.41 | | 8.25 | 8.33 | 8.18 | 7.81 | 7.54 | 7.10 | 8.02 | | 8.66 | 8.33 | 7.84 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 19 | 170 | | | | |
| **FINAL** - 2016 London Anniversary Games (London, GBR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2016 year end hurdle report* | | | |
| date | 23-Jul-16 | time | 6.16 | 10.04 | 13.92 | 17.96 | 22.08 | | 26.28 | 30.60 | 35.04 | 39.52 | 44.04 | | 49.35 | 8 / 6 | | | |
| reaction time | 0.155 | interval | | 3.88 | 3.88 | 4.04 | 4.12 | | 4.20 | 4.32 | 4.44 | 4.48 | 4.52 | 5.31 | | | 11.80 | 12.64 | 13.44 |
| | | velocity | 7.31 | 9.02 | 9.02 | 8.66 | 8.50 | | 8.33 | 8.10 | 7.88 | 7.81 | 7.74 | 7.53 | 8.11 | | 8.90 | 8.31 | 7.81 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |

**Rodríguez, Eduardo Iván (ESP) (1978**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2001 European Cup (Bremen, GER) | | | | | | | | | | | | | | | | *Graubner (2007) - http://www.fgs.uni-halle.de* | | | |
| date | 23-Jun-01 | time | 6.26 | 10.22 | 14.17 | 18.16 | 22.22 | | 26.40 | 30.78 | 35.40 | 40.06 | 44.89 | | 50.44 | / 7 | | | |
| reaction time | | interval | | 3.96 | 3.95 | 3.99 | 4.06 | | 4.18 | 4.38 | 4.62 | 4.66 | 4.83 | 5.55 | | | 11.90 | 12.62 | 14.11 |
| | | velocity | 7.19 | 8.84 | 8.86 | 8.77 | 8.62 | | 8.37 | 7.99 | 7.58 | 7.51 | 7.25 | 7.21 | 7.93 | | 8.82 | 8.32 | 7.44 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **FINAL** - 1998 Spanish National Championships (San Sebastián, ESP) | | | | | | | | | | | | | | | | *Ruiz (1998) - campeonato des españa absoluto: análisis de la carreras con villas* | | | |
| date | 02-Aug-98 | time | 6.10 | 10.22 | 14.34 | 18.52 | 22.90 | | 27.32 | 31.89 | 36.58 | 41.41 | 46.24 | | 51.65 | 7 / 3 | | | |
| reaction time | | interval | | 4.12 | 4.12 | 4.18 | 4.38 | | 4.42 | 4.57 | 4.69 | 4.83 | 4.83 | 5.41 | | | 12.42 | 13.37 | 14.35 |
| | | velocity | 7.38 | 8.50 | 8.50 | 8.37 | 7.99 | | 7.92 | 7.66 | 7.46 | 7.25 | 7.25 | 7.39 | 7.74 | | 8.45 | 7.85 | 7.32 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 16 | 15 | 18.5 | 171.5 | | | | |

**Rodrigues, Pedro (POR) (1971)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 1** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 25-Sep-00 | time | 6.06 | 9.98 | 13.98 | 17.98 | 21.98 | 23.50 | 26.02 | 30.38 | 34.86 | 39.42 | 44.10 | | 49.48 | 1 / 7 | | | |
| reaction time | 0.162 | interval | | 3.92 | 4.00 | 4.00 | 4.00 | | 4.04 | 4.36 | 4.48 | 4.56 | 4.68 | 5.38 | | | 11.92 | 12.40 | 13.72 |
| | | velocity | 7.43 | 8.93 | 8.75 | 8.75 | 8.75 | 8.51 | 8.66 | 8.03 | 7.81 | 7.68 | 7.48 | 7.43 | 8.08 | | 8.81 | 8.47 | 7.65 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 144 | | | | |
| **Heat 6** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 24-Sep-00 | time | 6.06 | 9.64 | 14.10 | 18.02 | 22.02 | | 26.30 | 30.58 | 35.02 | 39.58 | 44.46 | | 49.90 | 5 / 4 | | | |
| reaction time | 0.162 | interval | | 3.58 | 4.46 | 3.92 | 4.00 | | 4.28 | 4.28 | 4.44 | 4.56 | 4.88 | 5.44 | | | 11.96 | 12.56 | 13.88 |
| | | velocity | 7.43 | 9.78 | 7.85 | 8.93 | 8.75 | | 8.18 | 8.18 | 7.88 | 7.68 | 7.17 | 7.35 | 8.02 | | 8.78 | 8.36 | 7.56 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.4 | 164.4 | | | | |

**Romera, José María (ESP) (1980)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2002 IAAF World Cup (Madrid, ESP) | | | | | | | | | | | | | | | | *Sanchez (2002) - copa del mundo de Madrid '02: análisis de la carreras con villas* | | | |
| date | 20-Sep-02 | time | 5.85 | 9.62 | 13.39 | 17.23 | 21.21 | | 25.32 | 29.69 | 34.15 | 38.91 | 43.85 | | 49.68 | 8 / 6 | | | |
| reaction time | 0.147 | interval | | 3.77 | 3.77 | 3.84 | 3.98 | | 4.11 | 4.37 | 4.46 | 4.76 | 4.94 | 5.83 | | | 11.38 | 12.46 | 14.16 |
| | | velocity | 7.69 | 9.28 | 9.28 | 9.11 | 8.79 | | 8.52 | 8.01 | 7.85 | 7.35 | 7.09 | 6.86 | 8.05 | | 9.23 | 8.43 | 7.42 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 15 | 18.5 | 163.5 | | | | |

**Rosser, Khallifah (USA) (1995)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2023 Herculis Meeting International d'Athlétisme (Monaco, MON) | | | | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | |
| date | 21-Jul-23 | time | 5.73 | 9.31 | 12.98 | 16.73 | 20.59 | | 24.65 | 28.93 | 33.46 | 38.13 | 43.00 | | 48.71 | 1 / 7 | | | |
| reaction time | 0.172 | interval | | 3.58 | 3.67 | 3.75 | 3.86 | | 4.06 | 4.28 | 4.53 | 4.67 | 4.87 | 5.71 | | | 11.00 | 12.20 | 14.07 |
| | | velocity | 7.85 | 9.78 | 9.54 | 9.33 | 9.07 | | 8.62 | 8.18 | 7.73 | 7.49 | 7.19 | 7.01 | 8.21 | | 9.55 | 8.61 | 7.46 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | | | | 14 | 14 | 14 | 14 | | 116 | | | | |
| **FINAL** - 2023 USATF National Championships (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | |
| date | 09-Jul-23 | time | 5.94 | 9.61 | 13.28 | 17.08 | 21.05 | | 25.09 | 29.29 | 33.66 | 38.27 | 43.11 | | 48.77 | 7 / 4 | | | |
| reaction time | | interval | | 3.67 | 3.67 | 3.80 | 3.97 | | 4.04 | 4.20 | 4.37 | 4.61 | 4.84 | 5.66 | | | 11.14 | 12.21 | 13.82 |
| | | velocity | 7.58 | 9.54 | 9.54 | 9.21 | 8.82 | | 8.66 | 8.33 | 8.01 | 7.59 | 7.23 | 7.07 | 8.20 | | 9.43 | 8.60 | 7.60 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 15 | 18 | 160 | | | | |
| **FINAL** - 2023 Bislett Games (Oslo, NOR) | | | | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | |
| date | 15-Jun-23 | time | 5.71 | 9.31 | 12.97 | 16.74 | 20.67 | | 24.79 | 29.09 | 33.54 | 38.25 | 43.09 | | 48.87 | 3 / 6 | | | |
| reaction time | 0.172 | interval | | 3.60 | 3.66 | 3.77 | 3.93 | | 4.12 | 4.30 | 4.45 | 4.71 | 4.84 | 5.78 | | | 11.03 | 12.35 | 14.00 |
| | | velocity | 7.88 | 9.72 | 9.56 | 9.28 | 8.91 | | 8.50 | 8.14 | 7.87 | 7.43 | 7.23 | 6.92 | 8.18 | | 9.52 | 8.50 | 7.50 |
| H1 lead leg | R | strides | 21 | | | 13 | 13 | | 13 | | | 15 | 15 | | 90 | | | | |

**FINAL** - 2023 Meeting de Paris (Paris, FRA) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-23 | time | 5.74 | 9.36 | 13.06 | 16.85 | 20.80 | 24.88 | 29.09 | 33.61 | 38.26 | 43.09 | 48.96 | 3 / 6 | | | | | |
| reaction time | 0.143 | interval | | 3.62 | 3.70 | 3.79 | 3.95 | 4.08 | 4.21 | 4.52 | 4.65 | 4.83 | 5.87 | | 11.11 | 12.24 | 14.00 | | |
| | | velocity | 7.84 | 9.67 | 9.46 | 9.23 | 8.86 | 8.58 | 8.31 | 7.74 | 7.53 | 7.25 | 6.81 | 8.17 | 9.45 | 8.58 | 7.50 | | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 18 | 160 | | | | | |

**FINAL** - 2023 Doha Diamond League (Doha, QAT) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-23 | time | 5.84 | 9.50 | 13.29 | 17.14 | 21.14 | 25.32 | 29.69 | 34.20 | 38.85 | 43.66 | 49.25 | 4 / 4 | | | | | |
| reaction time | 0.161 | interval | | 3.66 | 3.79 | 3.85 | 4.00 | 4.18 | 4.37 | 4.51 | 4.65 | 4.81 | 5.59 | | 11.30 | 12.55 | 13.97 | | |
| | | velocity | 7.71 | 9.56 | 9.23 | 9.09 | 8.75 | 8.37 | 8.01 | 7.76 | 7.53 | 7.28 | 7.16 | 8.12 | 9.29 | 8.37 | 7.52 | | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.5 | 159.5 | | | | | |

**FINAL** - 2022 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-22 | time | 5.74 | 9.27 | | | 20.69 | 22.22 | 24.66 | 28.73 | 32.93 | 37.47 | 42.17 | 47.76 | 5 / 2 | | | | |
| reaction time | 0.169 | interval | | 3.53 | | | 11.42 | | 3.97 | 4.07 | 4.20 | 4.54 | 4.70 | 5.59 | | | | 13.44 | |
| | | velocity | 7.84 | 9.92 | | | 9.19 | 9.00 | 8.82 | 8.60 | 8.33 | 7.71 | 7.45 | 7.16 | 8.38 | | | 7.81 | |
| H1 lead leg | R | strides | 21 | 13 | | | | | 13 | 13 | 13 | 14 | 14 | 18 | 119 | | | | |

**FINAL** - 2022 Memorial van Damme (Brussels, BEL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Sep-22 | time | 5.87 | 9.51 | 13.21 | | 20.89 | 22.60 | 24.96 | 29.09 | 33.43 | 37.97 | 42.57 | 47.88 | 4 / 2 | | | | |
| reaction time | 0.232 | interval | | 3.64 | 3.70 | | 7.68 | | 2.36 | 4.13 | 4.34 | 4.54 | 4.60 | 5.31 | | | | 13.48 | |
| | | velocity | 7.67 | 9.62 | 9.46 | | 9.11 | 8.85 | 14.83 | 8.47 | 8.06 | 7.71 | 7.61 | 7.53 | 8.35 | | | 7.79 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | | | | 13 | 13 | 14 | 14 | 14 | 17.7 | 132.7 | | | | |

**FINAL** - 2022 NACAC Championships (Freeport, BAH) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-22 | time | 5.73 | 9.46 | 13.26 | 17.03 | 20.96 | 25.00 | 29.00 | 33.16 | 37.53 | | 47.59 | 4 / 2 | | | | | |
| reaction time | | interval | | 3.73 | 3.80 | 3.77 | 3.93 | 4.04 | 4.00 | 4.16 | 4.37 | | PB | | 11.30 | 11.97 | | | |
| | | velocity | 7.85 | 9.38 | 9.21 | 9.28 | 8.91 | 8.66 | 8.75 | 8.41 | 8.01 | | 8.41 | | 9.29 | 8.77 | | | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | | 126 | | | | | | |

**FINAL** - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-22 | time | 5.87 | 9.53 | 13.33 | 17.17 | 21.16 | 22.84 | 29.36 | 33.73 | 38.23 | 42.86 | 48.30 | 4 / 2 | | | | | |
| reaction time | 0.177 | interval | | 3.66 | 3.80 | 3.84 | 3.99 | | 8.20 | 4.37 | 4.50 | 4.63 | 5.44 | | 11.30 | 12.19 | 13.50 | | |
| | | velocity | 7.67 | 9.56 | 9.21 | 9.11 | 8.77 | 8.76 | 8.54 | 8.01 | 7.78 | 7.56 | 7.35 | 8.28 | 9.29 | 8.61 | 7.78 | | |
| H1 lead leg | R | strides | 21 | 13 | 13 | | 13 | | | 14 | 14 | 14 | 18 | 120 | | | | | |

**FINAL** - 2022 World Athletics Championships (Eugene, OR) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Jul-22 | time | 5.89 | 9.59 | 13.38 | 17.15 | 21.02 | 22.60 | 24.99 | 29.16 | 33.48 | 38.00 | 42.59 | 47.88 | 1 / 5 | | | | |
| reaction time | 0.176 | interval | | 3.70 | 3.79 | 3.77 | 3.87 | | 3.97 | 4.17 | 4.32 | 4.52 | 4.59 | 5.29 | | | 12.01 | 13.43 | |
| | | velocity | 7.64 | 9.46 | 9.23 | 9.28 | 9.04 | 8.85 | 8.82 | 8.39 | 8.10 | 7.74 | 7.63 | 7.56 | 8.35 | | 8.74 | 7.82 | |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17.5 | 137.5 | | | | |

**Semi-Final 3** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.73 | 9.36 | 13.17 | 16.87 | 20.70 | 22.41 | 28.93 | 33.47 | 38.00 | 42.73 | 48.34 | 3 / 3 | | | | | |
| reaction time | 0.141 | interval | | 3.63 | 3.81 | 3.70 | 3.83 | | 8.23 | 4.54 | 4.53 | 4.73 | 5.61 | | 11.14 | 12.06 | 13.80 | | |
| | | velocity | 7.85 | 9.64 | 9.19 | 9.46 | 9.14 | 8.92 | 8.51 | 7.71 | 7.73 | 7.40 | 7.13 | 8.27 | 9.43 | 8.71 | 7.61 | | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | | 14 | 14 | 14 | 18 | 133 | | | | | |

**Heat 5** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 5.84 | 9.63 | 13.46 | 17.27 | 21.26 | 22.98 | 25.33 | 29.52 | 33.86 | 38.40 | 43.03 | 48.62 | 2 / 1 | | | | |
| reaction time | 0.168 | interval | | 3.79 | 3.83 | 3.81 | 3.99 | | 4.07 | 4.19 | 4.34 | 4.54 | 4.63 | 5.59 | | 11.43 | 12.25 | 13.51 | |
| | | velocity | 7.71 | 9.23 | 9.14 | 9.19 | 8.77 | 8.70 | 8.60 | 8.35 | 8.06 | 7.71 | 7.56 | 7.16 | 8.23 | 9.19 | 8.57 | 7.77 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17.2 | 156.2 | | | | |

**FINAL** - 2022 USATF National Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-22 | time | 5.97 | 9.57 | 13.24 | 17.01 | 20.92 | 22.49 | 24.86 | 28.93 | 33.30 | 37.73 | 42.37 | 47.65 | 4 / 3 | | | | |
| reaction time | | interval | | 3.60 | 3.67 | 3.77 | 3.91 | | 3.94 | 4.07 | 4.37 | 4.43 | 4.64 | 5.28 | PB | 11.04 | 11.92 | 13.44 | |
| | | velocity | 7.54 | 9.72 | 9.54 | 9.28 | 8.95 | 8.89 | 8.88 | 8.60 | 8.01 | 7.90 | 7.54 | 7.58 | 8.39 | 9.51 | 8.81 | 7.81 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.7 | 159.7 | | | | |

**FINAL** - FINAL - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jun-22 | time | 5.67 | 9.23 | 12.97 | 16.77 | 20.67 | 22.38 | 24.73 | 28.93 | 33.40 | 37.97 | 42.70 | 48.25 | 6 / 1 | | | | |
| reaction time | 0.166 | interval | | 3.56 | 3.74 | 3.80 | 3.90 | | 4.06 | 4.20 | 4.47 | 4.57 | 4.73 | 5.55 | | 11.10 | 12.16 | 13.77 | |
| | | velocity | 7.94 | 9.83 | 9.36 | 9.21 | 8.97 | 8.94 | 8.62 | 8.33 | 7.83 | 7.66 | 7.40 | 7.21 | 8.29 | 9.46 | 8.63 | 7.63 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | | 143 | | | | |

**FINAL** - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-22 | time | 5.70 | 9.33 | 13.06 | 16.90 | 20.87 | 22.62 | 24.90 | 29.06 | 33.33 | 37.90 | 42.56 | 48.10 | 4 / 2 | | | | |
| reaction time | 0.158 | interval | | 3.63 | 3.73 | 3.84 | 3.97 | | 4.03 | 4.16 | 4.27 | 4.57 | 4.66 | 5.54 | PB | 11.20 | 12.16 | 13.50 | |
| | | velocity | 7.89 | 9.64 | 9.38 | 9.11 | 8.82 | 8.84 | 8.68 | 8.41 | 8.20 | 7.66 | 7.51 | 7.22 | 8.32 | 9.38 | 8.63 | 7.78 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |

**FINAL** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 5.77 | 9.37 | 13.10 | 16.96 | 20.99 | 25.16 | 29.48 | 33.83 | 38.33 | 43.06 | 48.81 | 8 / 5 | | | | | |
| reaction time | 0.279 | interval | | 3.60 | 3.73 | 3.86 | 4.03 | 4.17 | 4.32 | 4.35 | 4.50 | 4.73 | 5.75 | | 11.19 | 12.52 | 13.58 | | |
| | | velocity | 7.80 | 9.72 | 9.38 | 9.07 | 8.68 | 8.39 | 8.10 | 8.05 | 7.78 | 7.40 | 6.96 | 8.20 | 9.38 | 8.39 | 7.73 | | |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 18 | 141 | | | | | |

**Semi-Final 1** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jun-21 | time | 5.93 | 9.63 | 13.37 | 17.17 | 21.13 | | 29.63 | 33.97 | 38.58 | 43.43 | | 49.04 | 4 / 2 | | | |
| reaction time | 0.209 | interval | | 3.70 | 3.74 | 3.80 | 3.96 | | 8.50 | 4.34 | 4.61 | 4.85 | 5.61 | | | 11.24 | 12.46 | 13.80 |
| | | velocity | 7.59 | 9.46 | 9.36 | 9.21 | 8.84 | | 8.24 | 8.06 | 7.59 | 7.22 | 7.13 | 8.16 | | 9.34 | 8.43 | 7.61 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | 14 | | 14 | 15 | 15 | 18.5 | 128.5 | | | | |

**Heat 2** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jun-21 | time | 5.77 | 9.44 | 13.18 | 17.08 | 21.19 | 25.42 | 29.79 | 34.16 | 38.77 | 43.61 | | 49.28 | 5 / 3 | | | |
| reaction time | 0.246 | interval | | 3.67 | 3.74 | 3.90 | 4.11 | 4.23 | 4.37 | 4.37 | 4.61 | 4.84 | 5.67 | | | 11.31 | 12.71 | 13.82 |
| | | velocity | 7.80 | 9.54 | 9.36 | 8.97 | 8.52 | 8.27 | 8.01 | 8.01 | 7.59 | 7.23 | 7.05 | 8.12 | | 9.28 | 8.26 | 7.60 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 14 | 18 | 140 | | | | |

**FINAL** - 2019 Prefontaine Classic (Stanford, CA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-19 | time | 5.93 | 9.53 | 13.36 | 17.26 | | 25.43 | 29.80 | 34.36 | 39.10 | 43.96 | | 49.87 | 9 / 6 | | | |
| reaction time | 0.361 | interval | | 3.60 | 3.83 | 3.90 | | 8.17 | 4.37 | 4.56 | 4.74 | 4.86 | 5.91 | | | 11.33 | 12.54 | 14.16 |
| | | velocity | 7.59 | 9.72 | 9.14 | 8.97 | | 8.57 | 8.01 | 7.68 | 7.38 | 7.20 | 6.77 | 8.02 | | 9.27 | 8.37 | 7.42 |
| H1 lead leg | R | strides | 21 | 13 | | 13 | | | 14 | 15 | | 15 | | 91 | | | | |

**Rowe, Shawn (JAM) (1992)**

**Semi-Final 2** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.86 | 9.57 | 13.47 | 17.30 | 21.33 | 23.08 | 25.50 | 30.03 | 34.53 | 39.33 | 44.13 | | 49.80 | 2 / 8 | | | |
| reaction time | 0.158 | interval | | 3.71 | 3.90 | 3.83 | 4.03 | | 4.17 | 4.53 | 4.50 | 4.80 | 4.80 | 5.67 | | | 11.44 | 12.73 | 14.10 |
| | | velocity | 7.68 | 9.43 | 8.97 | 9.14 | 8.68 | 8.67 | 8.39 | 7.73 | 7.78 | 7.29 | 7.29 | 7.05 | 8.03 | | 9.18 | 8.25 | 7.45 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17 | 158 | | | | |

**Rudolph, Christian (GDR) (1949)**

**FINAL** - 1971 European Championships (Helsinki, FIN) *Behm (1995) - la tactique du 400 haies*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Aug-71 | time | 6.0 | 10.0 | 13.9 | 17.7 | 21.7 | | 25.7 | 29.9 | 34.4 | 38.9 | 43.5 | | 49.3 | / 2 | | | |
| reaction time | | interval | | 4.00 | 3.90 | 3.80 | 4.00 | | 4.00 | 4.20 | 4.50 | 4.50 | 4.60 | 5.80 | NR | | 11.70 | 12.20 | 13.60 |
| | | velocity | 7.50 | 8.75 | 8.97 | 9.21 | 8.75 | | 8.75 | 8.33 | 7.78 | 7.78 | 7.61 | 6.90 | 8.11 | | 8.97 | 8.61 | 7.72 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**Saddler, Craig (USA)**

**FINAL** - 2023 NCAA Championships (Austin, TX) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-23 | time | 5.96 | 9.54 | 13.38 | 17.31 | 21.40 | | | 30.25 | 34.85 | 39.46 | 44.27 | | 49.70 | 1 / 9 | | | |
| reaction time | | interval | | 3.58 | 3.84 | 3.93 | 4.09 | | | 8.85 | 4.60 | 4.61 | 4.81 | 5.43 | | | 11.35 | 12.94 | 14.02 |
| | | velocity | 7.55 | 9.78 | 9.11 | 8.91 | 8.56 | | | 7.91 | 7.61 | 7.59 | 7.28 | 7.37 | 8.05 | | 9.25 | 8.11 | 7.49 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | | | 15 | 15 | 15 | 17 | 135 | | | | |

**Saifeldin, Muhand Khamis (QAT) (19**

**B FINAL** - 2021 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-21 | time | 6.10 | 10.13 | 14.27 | 18.60 | 23.07 | 25.1 | 27.73 | 32.47 | 37.33 | 42.17 | 47.27 | | 53.06 | 4 / 5 | | | |
| reaction time | 0.127 | interval | | 4.03 | 4.14 | 4.33 | 4.47 | | 4.66 | 4.74 | 4.86 | 4.84 | 5.10 | 5.79 | | | 12.50 | 13.87 | 14.80 |
| | | velocity | 7.38 | 8.68 | 8.45 | 8.08 | 7.83 | 7.97 | 7.51 | 7.38 | 7.20 | 7.23 | 6.86 | 6.91 | 7.54 | | 8.40 | 7.57 | 7.09 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | | 14 | 14 | 15 | | 135 | | | | |

**Salmerón, Fernando (ESP) (1978)**

**FINAL** - 1998 Spanish National Championships (San Sebastián, ESP) *Ruiz (1998) - campeonato des españa absoluto: análisis de la carreras con villas*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Aug-98 | time | 6.18 | 10.27 | 14.57 | 18.74 | 23.20 | | 27.72 | 32.28 | 36.79 | 41.74 | 46.72 | | 52.75 | 2 / 8 | | | |
| reaction time | | interval | | 4.09 | 4.30 | 4.17 | 4.46 | | 4.52 | 4.56 | 4.51 | 4.95 | 4.98 | 6.03 | | | 12.56 | 13.54 | 14.44 |
| | | velocity | 7.28 | 8.56 | 8.14 | 8.39 | 7.85 | | 7.74 | 7.68 | 7.76 | 7.07 | 7.03 | 6.63 | 7.58 | | 8.36 | 7.75 | 7.27 |
| H1 lead leg | L | strides | 22 | 14 | 15 | 14 | 15 | | 15 | 15 | 15 | 17 | 16 | 20 | 178 | | | | |

**Semi-Final 2** - 1998 Spanish National Championships (San Sebastián, ESP) *Ruiz (1998) - campeonato des españa absoluto: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Aug-98 | time | 6.20 | 10.25 | 14.38 | 18.62 | 22.92 | | 27.37 | 31.92 | 36.94 | 42.01 | 47.14 | | 53.24 | 3 / ?? | | |
| reaction time | | interval | | 4.05 | 4.13 | 4.24 | 4.30 | | 4.45 | 4.55 | 5.02 | 5.07 | 5.13 | 6.10 | | | 12.42 | 13.30 | 15.22 |
| | | velocity | 7.26 | 8.64 | 8.47 | 8.25 | 8.14 | | 7.87 | 7.69 | 6.97 | 6.90 | 6.82 | 6.56 | 7.51 | | 8.45 | 7.89 | 6.90 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 16 | 16 | 16 | 20 | 176 | | | | |

**Samba, Abderrahmane (QAT) (1995)**

**FINAL** - 2020 Olympic Games (Tokyo, JPN) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-21 | time | 5.84 | 9.48 | 13.12 | 16.88 | 20.72 | | 24.80 | 28.92 | 33.16 | 37.48 | 41.90 | | 47.12 | 8 / 5 | | | |
| reaction time | 0.186 | interval | | 3.64 | 3.64 | 3.76 | 3.84 | | 4.08 | 4.12 | 4.24 | 4.32 | 4.42 | 5.22 | | | 11.04 | 12.04 | 12.98 |
| | | velocity | 7.71 | 9.62 | 9.62 | 9.31 | 9.11 | | 8.58 | 8.50 | 8.25 | 8.10 | 7.92 | 7.66 | 8.49 | | 9.51 | 8.72 | 8.09 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17 | 157 | | | | |

**FINAL** - 2021 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-21 | time | 5.87 | 9.71 | 13.61 | 17.58 | 21.59 | 23.3 | 25.66 | 29.99 | 34.27 | 38.60 | 42.91 | | 48.26 | 4 / 4 | | |
| reaction time | 0.153 | interval | | 3.84 | 3.90 | 3.97 | 4.01 | | 4.07 | 4.33 | 4.28 | 4.33 | 4.31 | 5.35 | | | 11.71 | 12.41 | 12.92 |
| | | velocity | 7.67 | 9.11 | 8.97 | 8.82 | 8.73 | 8.58 | 8.60 | 8.08 | 8.18 | 8.08 | 8.12 | 7.48 | 8.29 | | 8.97 | 8.46 | 8.13 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | | | 13 | 13 | 13 | 14 | 14 | 17 | 144 | | | | |

**FINAL** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Sep-19 | time | 5.97 | 9.65 | 13.40 | 17.27 | 21.22 | | 25.29 | 29.52 | 33.85 | 38.30 | 42.80 | | 48.03 | 9 / 3 | | |
| reaction time | 0.198 | interval | | 3.68 | 3.75 | 3.87 | 3.95 | | 4.07 | 4.23 | 4.33 | 4.45 | 4.50 | 5.23 | | | 11.30 | 12.25 | 13.28 |
| | | velocity | 7.54 | 9.51 | 9.33 | 9.04 | 8.86 | | 8.60 | 8.27 | 8.08 | 7.87 | 7.78 | 7.65 | 8.33 | | 9.29 | 8.57 | 7.91 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17.5 | 156.5 | | | | |

**Semi-Final 3** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 6.00 | 9.78 | 13.51 | 17.41 | 21.40 | 25.57 | 29.84 | 34.31 | 38.76 | 43.33 | | 48.72 | 5 / 2 | | | | |
| reaction time | 0.220 | interval | | 3.78 | 3.73 | 3.90 | 3.99 | 4.17 | 4.27 | 4.47 | 4.45 | 4.57 | 5.39 | | | 11.41 | 12.43 | 13.49 | |
| | | velocity | 7.50 | 9.26 | 9.38 | 8.97 | 8.77 | 8.39 | 8.20 | 7.83 | 7.87 | 7.66 | 7.42 | 8.21 | | 9.20 | 8.45 | 7.78 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17.2 | 158.2 | | | | | |

**Heat 3** - 2019 IAAF World Championships (Doha, QAT) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Sep-19 | time | 6.04 | 9.92 | 13.84 | 17.84 | 21.96 | 26.16 | 30.36 | 34.76 | 39.20 | 43.76 | | 49.08 | 8 / 1 | | | | |
| reaction time | 0.183 | interval | | 3.88 | 3.92 | 4.00 | 4.12 | 4.20 | 4.20 | 4.40 | 4.44 | 4.56 | 5.32 | | | 11.80 | 12.52 | 13.40 | |
| | | velocity | 7.45 | 9.02 | 8.93 | 8.75 | 8.50 | 8.33 | 8.33 | 7.95 | 7.88 | 7.68 | 7.52 | 8.15 | | 8.90 | 8.39 | 7.84 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 17 | 156 | | | | | |

**FINAL** - 2019 Shanghai Diamond League (Shanghai, CHN) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-May-19 | time | 5.80 | 9.60 | 13.36 | 17.20 | 21.13 | 23.0 | 25.26 | 29.40 | 33.58 | 37.83 | 42.13 | | 47.27 | 4 / 1 | | | |
| reaction time | 0.201 | interval | | 3.80 | 3.76 | 3.84 | 3.93 | | 4.13 | 4.14 | 4.18 | 4.25 | 4.30 | 5.14 | | | 11.40 | 12.20 | 12.73 |
| | | velocity | 7.76 | 9.21 | 9.31 | 9.11 | 8.91 | 8.70 | 8.47 | 8.45 | 8.37 | 8.24 | 8.14 | 7.78 | 8.46 | | 9.21 | 8.61 | 8.25 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 17 | 155 | | | | |

**FINAL** - 2019 Asian Athletics Championships (Doha, QAT) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Apr-19 | time | 5.82 | 9.40 | 13.04 | 16.80 | 20.68 | 24.84 | 29.09 | 33.48 | 37.97 | 42.40 | | 47.51 | 5 / 1 | | | | |
| reaction time | 0.179 | interval | | 3.58 | 3.64 | 3.76 | 3.88 | 4.16 | 4.25 | 4.39 | 4.49 | 4.43 | 5.11 | CR | | 10.98 | 12.29 | 13.31 | |
| | | velocity | 7.73 | 9.78 | 9.62 | 9.31 | 9.02 | 8.41 | 8.24 | 7.97 | 7.80 | 7.90 | 7.83 | 8.42 | | 9.56 | 8.54 | 7.89 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17.2 | 158.2 | | | | | |

**FINAL** - 2018 IAAF Continental Cup (Ostrava, CZE) (TV Analysis) *Henson (2021) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-18 | time | 5.84 | 9.52 | 13.28 | 17.04 | 20.96 | 24.96 | 29.16 | 33.48 | 37.96 | 42.32 | | 47.37 | 3 / 1 | | | | |
| reaction time | 0.219 | interval | | 3.68 | 3.76 | 3.76 | 3.92 | 4.00 | 4.20 | 4.32 | 4.48 | 4.36 | 5.05 | | | 11.20 | 12.12 | 13.16 | |
| | | velocity | 7.71 | 9.51 | 9.31 | 9.31 | 8.93 | 8.75 | 8.33 | 8.10 | 7.81 | 8.03 | 7.92 | 8.44 | | 9.38 | 8.66 | 7.98 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17.5 | 158.5 | | | | | |

**FINAL** - 2018 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jul-18 | time | 5.76 | 9.40 | 13.12 | 16.84 | 20.72 | 24.80 | 28.92 | 33.24 | 37.72 | 42.24 | | 47.42 | 5 / 1 | | | | |
| reaction time | 0.183 | interval | | 3.64 | 3.72 | 3.72 | 3.88 | 4.08 | 4.12 | 4.32 | 4.48 | 4.52 | 5.18 | | | 11.08 | 12.08 | 13.32 | |
| | | velocity | 7.81 | 9.62 | 9.41 | 9.41 | 9.02 | 8.58 | 8.50 | 8.10 | 7.81 | 7.74 | 7.72 | 8.44 | | 9.48 | 8.69 | 7.88 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17.2 | 157.2 | | | | | |

**FINAL** - 2018 Meeting de Paris (Paris, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-18 | time | 5.88 | 9.48 | 13.12 | 16.84 | 20.60 | 22.3 | 24.52 | 28.68 | 32.88 | 37.36 | 41.84 | | 46.98 | 5 / 1 | | | |
| reaction time | 0.209 | interval | | 3.60 | 3.64 | 3.72 | 3.76 | | 3.92 | 4.16 | 4.20 | 4.48 | 4.48 | 5.14 | AR PB | | 10.96 | 11.84 | 13.16 |
| | | velocity | 7.65 | 9.72 | 9.62 | 9.41 | 9.31 | 8.97 | 8.93 | 8.41 | 8.33 | 7.81 | 7.81 | 7.78 | 8.51 | | 9.58 | 8.87 | 7.98 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17.2 | 158.2 | | | | |

**FINAL** - 2018 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jun-18 | time | 5.88 | 9.60 | 13.40 | 17.24 | 21.20 | 25.28 | 29.40 | 33.76 | 37.96 | 42.28 | | 47.41 | 5 / 1 | | | | |
| reaction time | 0.194 | interval | | 3.72 | 3.80 | 3.84 | 3.96 | 4.08 | 4.12 | 4.36 | 4.20 | 4.32 | 5.13 | AR PB | | 11.36 | 12.16 | 12.88 | |
| | | velocity | 7.65 | 9.41 | 9.21 | 9.11 | 8.84 | 8.58 | 8.50 | 8.03 | 8.33 | 8.10 | 7.80 | 8.44 | | 9.24 | 8.63 | 8.15 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17.5 | 158.5 | | | | | |

**FINAL** - 2018 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-18 | time | 5.76 | 9.36 | 13.08 | 16.92 | 20.88 | 22.7 | 25.04 | 29.28 | 33.72 | 38.00 | 42.40 | | 47.60 | 5 / 1 | | | |
| reaction time | 0.189 | interval | | 3.60 | 3.72 | 3.84 | 3.96 | | 4.16 | 4.24 | 4.44 | 4.28 | 4.40 | 5.20 | | | 11.16 | 12.36 | 13.12 |
| | | velocity | 7.81 | 9.72 | 9.41 | 9.11 | 8.84 | 8.81 | 8.41 | 8.25 | 7.88 | 8.18 | 7.95 | 7.69 | 8.40 | | 9.41 | 8.50 | 8.00 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.2 | 159.2 | | | | |

**FINAL** - 2018 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-May-18 | time | 5.76 | 9.44 | 13.20 | 17.04 | 20.92 | 25.04 | 29.24 | 33.56 | 37.96 | 42.36 | | 47.48 | 4 / 1 | | | | |
| reaction time | 0.158 | interval | | 3.68 | 3.76 | 3.84 | 3.88 | 4.12 | 4.20 | 4.32 | 4.40 | 4.40 | 5.12 | AR PB | | 11.28 | 12.20 | 13.12 | |
| | | velocity | 7.81 | 9.51 | 9.31 | 9.11 | 9.02 | 8.50 | 8.33 | 8.10 | 7.95 | 7.95 | 7.81 | 8.42 | | 9.31 | 8.61 | 8.00 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17 | 157 | | | | | |

**FINAL** - 2018 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-May-18 | time | 5.80 | 9.44 | 13.16 | 16.96 | 20.92 | 24.96 | 29.16 | 33.48 | 37.88 | 42.36 | | 47.57 | 4 / 1 | | | | |
| reaction time | 0.192 | interval | | 3.64 | 3.72 | 3.80 | 3.96 | 4.04 | 4.20 | 4.32 | 4.40 | 4.48 | 5.21 | NR PB | | 11.16 | 12.20 | 13.20 | |
| | | velocity | 7.76 | 9.62 | 9.41 | 9.21 | 8.84 | 8.66 | 8.33 | 8.10 | 7.95 | 7.81 | 7.68 | 8.41 | | 9.41 | 8.61 | 7.95 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | | 14 | 17.5 | 142.5 | | | | | |

**FINAL** - 2017 IAAF World Championships (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-17 | time | 5.80 | 9.56 | 13.36 | 17.16 | 21.08 | 25.24 | 29.48 | 33.88 | 38.44 | 43.04 | | 49.74 | 6 / 7 | | | | |
| reaction time | 0.206 | interval | | 3.76 | 3.80 | 3.80 | 3.92 | 4.16 | 4.24 | 4.40 | 4.56 | 4.60 | 6.70 | | | 11.36 | 12.32 | 13.56 | |
| | | velocity | 7.76 | 9.31 | 9.21 | 9.21 | 8.93 | 8.41 | 8.25 | 7.95 | 7.68 | 7.61 | 5.97 | 8.04 | | 9.24 | 8.52 | 7.74 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 19 | 160 | | | | | |

**FINAL** - 2017 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-17 | time | 5.80 | 9.43 | 13.03 | 16.66 | 20.43 | 24.40 | 28.56 | 32.96 | 37.66 | 42.60 | | 48.44 | 4 / 1 | | | | |
| reaction time | 0.185 | interval | | 3.63 | 3.60 | 3.63 | 3.77 | 3.97 | 4.16 | 4.40 | 4.70 | 4.94 | 5.84 | | | 10.86 | 11.90 | 14.04 | |
| | | velocity | 7.76 | 9.64 | 9.72 | 9.64 | 9.28 | 8.82 | 8.41 | 7.95 | 7.45 | 7.09 | 6.85 | 8.26 | | 9.67 | 8.82 | 7.48 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 18 | 159 | | | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

**FINAL** - 2017 North-West University Pukke Invitational (Sasolburg, RSA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Mar-17 | time | 5.92 | 9.60 | 13.32 | 17.12 | 21.00 | 25.08 | 29.40 | 33.84 | 38.44 | 43.00 | | 48.31 | 5 / 1 | | | |
| reaction time | | interval | | 3.68 | 3.72 | 3.80 | 3.88 | 4.08 | 4.32 | 4.44 | 4.60 | 4.56 | 5.31 | PB | | 11.20 | 12.28 | 13.60 |
| | | velocity | 7.60 | 9.51 | 9.41 | 9.21 | 9.02 | 8.58 | 8.10 | 7.88 | 7.61 | 7.68 | 7.53 | 8.28 | | 9.38 | 8.55 | 7.72 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17.5 | 137.5 | | | | |

**Samuel, Cameron (USA) (1999)**

**FINAL** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 5.84 | 9.67 | 13.48 | 17.45 | 21.59 | | 25.82 | 30.26 | 34.78 | 39.34 | 43.91 | | 49.27 | 7 / 7 | | | |
| reaction time | 0.199 | interval | | 3.83 | 3.81 | 3.97 | 4.14 | | 4.23 | 4.44 | 4.52 | 4.56 | 4.57 | 5.36 | | | 11.61 | 12.81 | 13.65 |
| | | velocity | 7.71 | 9.14 | 9.19 | 8.82 | 8.45 | | 8.27 | 7.88 | 7.74 | 7.68 | 7.66 | 7.46 | 8.12 | | 9.04 | 8.20 | 7.69 |
| H1 lead leg | R | strides | | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | | 15 | | 115 | | | | |

**Semi-Final 2** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jun-21 | time | 6.00 | 9.87 | 13.78 | 17.77 | 21.80 | 26.06 | 30.49 | 35.00 | 39.47 | 43.94 | | 49.01 | 5 / 2 | | | |
| reaction time | 0.154 | interval | | 3.87 | 3.91 | 3.99 | 4.03 | 4.26 | 4.43 | 4.51 | 4.47 | 4.47 | 5.07 | | | 11.77 | 12.72 | 13.45 |
| | | velocity | 7.50 | 9.04 | 8.95 | 8.77 | 8.68 | 8.22 | 7.90 | 7.76 | 7.83 | 7.83 | 7.89 | 8.16 | | 8.92 | 8.25 | 7.81 |
| H1 lead leg | R | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 18 | 134 | | | | |

**FINAL** - 2021 NCAA Championships (Eugene, OR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-21 | time | 5.93 | 9.60 | | 17.32 | 21.33 | | 29.65 | 34.13 | 38.73 | 43.37 | | 48.68 | 7 / 3 | | | |
| reaction time | 0.201 | interval | | 3.67 | | 7.72 | 4.01 | | 8.32 | 4.48 | 4.60 | 4.64 | 5.31 | PB | | 11.39 | 12.33 | 13.72 |
| | | velocity | 7.59 | 9.54 | | 9.07 | 8.73 | | 8.41 | 7.81 | 7.61 | 7.54 | 7.53 | 8.22 | | 9.22 | 8.52 | 7.65 |
| H1 lead leg | R | strides | 21 | 14 | | | 14 | | | 15 | 15 | 15 | 18.5 | 112.5 | | | | |

**Sánchez, Félix (DOM) (1977)**

**FINAL** - 2013 IAAF World Championships (Moscow, RUS) (TV Analysis) *Henson (2021) - Athlete First: major championships report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-13 | time | 5.80 | 9.40 | 13.26 | 17.17 | 21.23 | | 25.37 | 29.60 | 33.90 | 38.33 | 42.90 | | 48.22 | 4 / 5 | | | |
| reaction time | 0.175 | interval | | 3.60 | 3.86 | 3.91 | 4.06 | | 4.14 | 4.23 | 4.30 | 4.43 | 4.57 | 5.32 | | | 11.37 | 12.43 | 13.30 |
| | | velocity | 7.76 | 9.72 | 9.07 | 8.95 | 8.62 | | 8.45 | 8.27 | 8.14 | 7.90 | 7.66 | 7.52 | 8.30 | | 9.23 | 8.45 | 7.89 |
| H1 lead leg | L | strides | 22 | 13 | 14 | 13 | 14 | | 14 | 14 | | 15 | 15 | 18 | 152 | | | | |

**FINAL** - 2012 Olympic Games (London, GBR) *Hillier (2012) - uka 2012 olympic games report: 400m hurdles*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-12 | time | 5.76 | 9.25 | 12.94 | 16.71 | 20.68 | 22.48 | 24.86 | 29.04 | 33.28 | 37.68 | 42.27 | | 47.63 | 7 / 1 | | |
| reaction time | 0.158 | interval | | 3.49 | 3.69 | 3.77 | 3.97 | | 4.18 | 4.18 | 4.24 | 4.40 | 4.59 | 5.36 | | | 10.95 | 12.33 | 13.23 |
| | | velocity | 7.81 | 10.03 | 9.49 | 9.28 | 8.82 | 8.90 | 8.37 | 8.37 | 8.25 | 7.95 | 7.63 | 7.46 | 8.40 | | 9.59 | 8.52 | 7.94 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 165 | | | | |

**FINAL** - 2011 IAAF World Championships (Daegu, KOR) *Behm (2011) - Le quatrache: Démus enfin!*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-11 | time | 5.8 | 9.5 | 13.1 | 16.9 | 21.0 | | 25.1 | 29.3 | 33.7 | 38.3 | 43.3 | | 48.87 | 7 / 4 | | |
| reaction time | 0.179 | interval | | 3.70 | 3.60 | 3.80 | 4.10 | | 4.10 | 4.20 | 4.40 | 4.60 | 5.00 | 5.57 | | | 11.10 | 12.40 | 14.00 |
| | | velocity | 7.76 | 9.46 | 9.72 | 9.21 | 8.54 | | 8.54 | 8.33 | 7.95 | 7.61 | 7.00 | 7.18 | 8.18 | | 9.46 | 8.47 | 7.50 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 16 | 19 | 165 | | | | |

**FINAL** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-09 | time | 5.88 | 9.92 | 13.82 | 17.78 | 21.82 | | 26.13 | 30.43 | 34.97 | 39.63 | 44.35 | | 50.11 | 4 / 8 | | |
| reaction time | 0.171 | interval | | 4.04 | 3.90 | 3.96 | 4.04 | | 4.31 | 4.30 | 4.54 | 4.66 | 4.72 | 5.76 | | | 11.90 | 12.65 | 13.92 |
| | | velocity | 7.65 | 8.66 | 8.97 | 8.84 | 8.66 | | 8.12 | 8.14 | 7.71 | 7.51 | 7.42 | 6.94 | 7.98 | | 8.82 | 8.30 | 7.54 |
| H1 lead leg | L | strides | 21 | 15 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 148 | | | | |

**Semi-Final 1** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Aug-09 | time | 5.93 | 9.58 | 13.35 | 17.20 | 21.18 | | 25.29 | 29.56 | 33.94 | 38.42 | 43.02 | | 48.34 | 1 / 2 | | |
| reaction time | 0.154 | interval | | 3.65 | 3.77 | 3.85 | 3.98 | | 4.11 | 4.27 | 4.38 | 4.48 | 4.60 | 5.32 | | | 11.27 | 12.36 | 13.46 |
| | | velocity | 7.59 | 9.59 | 9.28 | 9.09 | 8.79 | | 8.52 | 8.20 | 7.99 | 7.81 | 7.61 | 7.52 | 8.27 | | 9.32 | 8.50 | 7.80 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18.5 | 141.5 | | | | |

**Heat 3** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-09 | time | 6.03 | 9.65 | 13.42 | 17.30 | 21.27 | | 25.46 | 29.81 | 34.27 | 38.89 | 43.53 | | 48.76 | 7 / 4 | | |
| reaction time | 0.172 | interval | | 3.62 | 3.77 | 3.88 | 3.97 | | 4.19 | 4.35 | 4.46 | 4.62 | 4.64 | 5.23 | | | 11.27 | 12.51 | 13.72 |
| | | velocity | 7.46 | 9.67 | 9.28 | 9.02 | 8.82 | | 8.35 | 8.05 | 7.85 | 7.58 | 7.54 | 7.65 | 8.20 | | 9.32 | 8.39 | 7.65 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2007 IAAF World Athletics Final (Stuttgart, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Sep-07 | time | 6.02 | 9.70 | 13.46 | 17.34 | 21.44 | | 25.76 | 30.24 | 34.78 | 39.38 | 44.20 | | 49.61 | 3 / 7 | | |
| reaction time | 0.151 | interval | | 3.68 | 3.76 | 3.88 | 4.10 | | 4.32 | 4.48 | 4.54 | 4.60 | 4.82 | 5.41 | | | 11.32 | 12.90 | 13.96 |
| | | velocity | 7.48 | 9.51 | 9.31 | 9.02 | 8.54 | | 8.10 | 7.81 | 7.71 | 7.61 | 7.26 | 7.39 | 8.06 | | 9.28 | 8.14 | 7.52 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2007 IAAF World Championships (Osaka, JPN) *Ae (2008) - IAAF biomechanics team - a booklet of biomechanics data*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Aug-07 | time | 5.95 | 9.65 | 13.38 | 17.18 | 21.10 | | 25.25 | 29.52 | 33.83 | 38.23 | 42.72 | | 48.01 | 5 / 2 | | |
| reaction time | 0.164 | interval | | 3.70 | 3.73 | 3.80 | 3.92 | | 4.15 | 4.27 | 4.31 | 4.40 | 4.49 | 5.29 | | | 11.23 | 12.34 | 13.20 |
| | | velocity | 7.56 | 9.46 | 9.38 | 9.21 | 8.93 | | 8.43 | 8.20 | 8.12 | 7.95 | 7.80 | 7.56 | 8.33 | | 9.35 | 8.51 | 7.95 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 15 | 15 | 15 | 15 | 18.5 | 165.5 | | | | |

**FINAL** - 2004 Olympic Games (Athîna, GRE) *Ruiz (2004) - las carreras con vallas de juegos olimpicos de atenas '04*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Aug-04 | time | 5.81 | 9.36 | 13.07 | 16.90 | 20.87 | | 24.96 | 29.15 | 33.42 | 37.74 | 42.21 | | 47.63 | 6 / 1 | | |
| reaction time | 0.219 | interval | | 3.55 | 3.71 | 3.83 | 3.97 | | 4.09 | 4.19 | 4.27 | 4.32 | 4.47 | 5.42 | | | 11.09 | 12.25 | 13.06 |
| | | velocity | 7.75 | 9.86 | 9.43 | 9.14 | 8.82 | | 8.56 | 8.35 | 8.20 | 8.10 | 7.83 | 7.38 | 8.40 | | 9.47 | 8.57 | 8.04 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18 | 164 | | | | |

**FINAL** - 2003 IAAF World Championships (Paris, FRA) *Behm (2003) - Paris 2003:Le quatrache masculn - féminin*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Aug-03 | time | 5.8 | 9.3 | 13.0 | 16.9 | 20.7 | 24.8 | 29.1 | 33.4 | 37.7 | 42.1 | | 47.25 | 5 / 1 | | | |
| reaction time | 0.176 | interval | | 3.50 | 3.70 | 3.90 | 3.80 | 4.10 | 4.30 | 4.30 | 4.30 | 4.40 | 5.15 | **AR / PB** | | 11.10 | 12.20 | 13.00 |
| | | velocity | 7.76 | 10.00 | 9.46 | 8.97 | 9.21 | 8.54 | 8.14 | 8.14 | 8.14 | 7.95 | 7.77 | 8.47 | | 9.46 | 8.61 | 8.08 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |

**FINAL** - 2001 IAAF World Championships (Edmonton, CAN) *Behm (2001) - Edmonton: Le quatrache: les finales*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-01 | time | 5.7 | 9.3 | 13.1 | 16.9 | 20.8 | 24.8 | 29.1 | 33.5 | 37.9 | 42.3 | | 47.49 | 5 / 1 | | | |
| reaction time | 0.158 | interval | | 3.60 | 3.80 | 3.80 | 3.90 | 4.00 | 4.30 | 4.40 | 4.40 | 4.40 | 5.19 | | | 11.20 | 12.20 | 13.20 |
| | | velocity | 7.89 | 9.72 | 9.21 | 9.21 | 8.97 | 8.75 | 8.14 | 7.95 | 7.95 | 7.95 | 7.71 | 8.42 | | 9.38 | 8.61 | 7.95 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |

**Semi-Final 2** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 6.00 | 9.68 | 13.48 | 17.44 | 21.52 | 23.12 | 25.80 | 30.20 | 34.76 | 39.44 | 44.16 | | 49.69 | 1 / 7 | | |
| reaction time | 0.178 | interval | | 3.68 | 3.80 | 3.96 | 4.08 | | 4.28 | 4.40 | 4.56 | 4.68 | 4.72 | 5.53 | | | 11.44 | 12.76 | 13.96 |
| | | velocity | 7.50 | 9.51 | 9.21 | 8.84 | 8.58 | 8.65 | 8.18 | 7.95 | 7.68 | 7.48 | 7.42 | 7.23 | 8.05 | | 9.18 | 8.23 | 7.52 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 123 | | | | |

**Heat 2** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.86 | 9.58 | 13.38 | 17.18 | 21.14 | | 25.34 | | 35.54 | 39.34 | 44.22 | | 49.70 | 4 / 3 | | |
| reaction time | 0.142 | interval | | 3.72 | 3.80 | 3.80 | 3.96 | | 4.20 | | 10.20 | 3.80 | 4.88 | 5.48 | | | 11.32 | |
| | | velocity | 7.68 | 9.41 | 9.21 | 9.21 | 8.84 | | 8.33 | | 6.86 | 9.21 | 7.17 | 7.30 | 8.05 | | 9.28 | |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 15 | 15 | 15 | 18.2 | 163.2 | | | |

**Santos, Juander (DOM) (1995)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2018 Meeting de Paris (Paris, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jul-18 | time | 5.92 | 9.72 | 13.60 | 17.64 | 21.72 | 23.5 | 25.92 | 30.36 | 34.96 | 39.84 | 44.80 | | 50.71 | 1 / 8 | | |
| reaction time | 0.168 | interval | | 3.80 | 3.88 | 4.04 | 4.08 | | 4.20 | 4.44 | 4.60 | 4.88 | 4.96 | 5.91 | | | 11.72 | 12.72 | 14.44 |
| | | velocity | 7.60 | 9.21 | 9.02 | 8.66 | 8.58 | 8.51 | 8.33 | 7.88 | 7.61 | 7.17 | 7.06 | 6.77 | 7.89 | | 8.96 | 8.25 | 7.27 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 16 | 16 | 19 | 173 | | | | |

**FINAL** - 2017 IAAF World Championships (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-17 | time | 5.84 | 9.64 | 13.52 | 17.40 | 21.32 | | 25.44 | 29.76 | 34.28 | 38.84 | 43.52 | | 49.04 | 2 / 6 | | |
| reaction time | 0.158 | interval | | 3.80 | 3.88 | 3.88 | 3.92 | | 4.12 | 4.32 | 4.52 | 4.56 | 4.68 | 5.52 | | | 11.56 | 12.36 | 13.76 |
| | | velocity | 7.71 | 9.21 | 9.02 | 9.02 | 8.93 | | 8.50 | 8.10 | 7.74 | 7.68 | 7.48 | 7.25 | 8.16 | | 9.08 | 8.50 | 7.63 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 19 | 171 | | | | |

**Sato, Shoki (JPN)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 1** - 2016 Japanese National Youth Championships (Mizuho, JPN) *(2016.11.17) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Oct-16 | time | | | | | 24.74 | | | | 39.51 | | | | 56.15 | 2 / 4 | | |
| reaction time | | interval | | | | | | | | | 14.77 | | | | | | | |
| | | velocity | | | | | 7.48 | | | | 7.11 | | | | 7.12 | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Sato, Shunma (JPN) (1998)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2016 Japanese National High School Championships (Okayama, JPN) *Kota (2016) - 69th high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-16 | time | 6.47 | 10.58 | 14.90 | 19.25 | 23.79 | | 28.29 | 32.88 | 37.69 | 42.66 | 47.71 | | 53.19 | 9 / 6 | | |
| reaction time | 0.197 | interval | | 4.11 | 4.32 | 4.35 | 4.54 | | 4.50 | 4.59 | 4.81 | 4.97 | 5.05 | 5.48 | | | 12.78 | 13.63 | 14.83 |
| | | velocity | 6.96 | 8.52 | 8.10 | 8.05 | 7.71 | | 7.78 | 7.63 | 7.28 | 7.04 | 6.93 | 7.30 | 7.52 | | 8.22 | 7.70 | 7.08 |
| H1 lead leg | | strides | | 14 | 15 | 15 | 16 | | 15 | 15 | 15 | 16 | 16 | | 137 | | | | |

**Sato, Yota (JPN) (1992)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2011 Japanese National High School Championships (Kitakami, JPN) *Abe (2011) - 64th high school championships: JAF scientific committee - biomechanics*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Aug-11 | time | 6.22 | 10.24 | 14.40 | 18.62 | 22.85 | | 27.24 | 31.79 | 36.64 | 41.84 | 47.06 | | 52.48 | 8 / 3 | | |
| reaction time | | interval | | 4.02 | 4.16 | 4.22 | 4.23 | | 4.39 | 4.55 | 4.85 | 5.20 | 5.22 | 5.42 | | | 12.40 | 13.17 | 15.27 |
| | | velocity | 7.23 | 8.71 | 8.41 | 8.29 | 8.27 | | 7.97 | 7.69 | 7.22 | 6.73 | 6.70 | 7.38 | 7.62 | | 8.47 | 7.97 | 6.88 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Schelbert, Marcel (SUI) (1976)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Aug-99 | time | 5.66 | 9.42 | 13.18 | 17.02 | 21.17 | | 25.14 | 29.32 | 33.70 | 38.19 | 42.70 | | 48.13 | 7 / 3 | | |
| reaction time | 0.125 | interval | | 3.76 | 3.76 | 3.84 | 4.15 | | 3.97 | 4.18 | 4.38 | 4.49 | 4.51 | 5.43 | **NR PB** | | 11.36 | 12.30 | 13.38 |
| | | velocity | 7.95 | 9.31 | 9.31 | 9.11 | 8.43 | | 8.82 | 8.37 | 7.99 | 7.80 | 7.76 | 7.37 | 8.31 | | 9.24 | 8.54 | 7.85 |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 14 | | 14 | 14 | 14 | 15 | 15 | 18.5 | 166 | | | | |

**Semi-Final 1** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-99 | time | 5.78 | 9.59 | 13.39 | 17.33 | 21.29 | | 25.60 | 29.86 | 34.32 | 38.83 | 43.33 | | 48.80 | 6 / 3 | | |
| reaction time | 0.139 | interval | | 3.81 | 3.80 | 3.94 | 3.96 | | 4.31 | 4.26 | 4.46 | 4.51 | 4.50 | 5.47 | | | 11.55 | 12.53 | 13.47 |
| | | velocity | 7.79 | 9.19 | 9.21 | 8.88 | 8.84 | | 8.12 | 8.22 | 7.85 | 7.76 | 7.78 | 7.31 | 8.20 | | 9.09 | 8.38 | 7.80 |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 19 | 166 | | | | |

**Heat 6** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-99 | time | 5.78 | 9.52 | 13.30 | 17.16 | 21.05 | | 25.28 | 29.56 | 34.00 | 38.50 | 43.14 | | 48.66 | 6 / 1 | | |
| reaction time | 0.143 | interval | | 3.74 | 3.78 | 3.86 | 3.89 | | 4.23 | 4.28 | 4.44 | 4.50 | 4.64 | 5.52 | | | 11.38 | 12.40 | 13.58 |
| | | velocity | 7.79 | 9.36 | 9.26 | 9.07 | 9.00 | | 8.27 | 8.18 | 7.88 | 7.78 | 7.54 | 7.25 | 8.22 | | 9.23 | 8.47 | 7.73 |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 19 | 166 | | | | |

**Schiller, Udo (GER) (1967)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1991 European Cup (Frankfurt, GER) | | | | | | | | | | | | | | | | *Federle (2003) - http://www.fgs.uni-halle.de* | | | |
| date | 29-Jun-91 | time | 6.27 | 10.19 | 14.15 | 18.11 | 22.23 | | 26.53 | 31.04 | 35.62 | 40.26 | 45.02 | | 50.67 | / 6 | | | |
| reaction time | | interval | | 3.92 | 3.96 | 3.96 | 4.12 | | 4.30 | 4.51 | 4.58 | 4.64 | 4.76 | 5.65 | | | 11.84 | 12.93 | 13.98 |
| | | velocity | 7.18 | 8.93 | 8.84 | 8.84 | 8.50 | | 8.14 | 7.76 | 7.64 | 7.54 | 7.35 | 7.08 | 7.89 | | 8.87 | 8.12 | 7.51 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Schmid, Harald (FRG) (1957)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1988 Olympic Games (Seoul, KOR) | | | | | | | | | | *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988* | | | | | | | | | |
| date | 25-Sep-88 | time | 6.03 | 9.68 | 13.58 | 17.58 | 21.69 | | 25.93 | 30.25 | 34.74 | 39.26 | 43.83 | | 48.76 | 1 / 7 | | | |
| reaction time | 0.205 | interval | | 3.65 | 3.90 | 4.00 | 4.11 | | 4.24 | 4.32 | 4.49 | 4.52 | 4.57 | 4.93 | | | 11.55 | 12.67 | 13.58 |
| | | velocity | 7.46 | 9.59 | 8.97 | 8.75 | 8.52 | | 8.25 | 8.10 | 7.80 | 7.74 | 7.66 | 8.11 | 8.20 | | 9.09 | 8.29 | 7.73 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17 | 158 | | | | |
| **Semi-Final 1** - 1988 Olympic Games (Seoul, KOR) | | | | | | | | | | *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988* | | | | | | | | | |
| date | 24-Sep-88 | time | 6.05 | 9.64 | 13.56 | 17.57 | 21.73 | | 25.93 | 30.20 | 34.62 | 39.18 | 43.79 | | 48.93 | 1 / 3 | | | |
| reaction time | | interval | | 3.59 | 3.92 | 4.01 | 4.16 | | 4.20 | 4.27 | 4.42 | 4.56 | 4.61 | 5.14 | | | 11.52 | 12.63 | 13.59 |
| | | velocity | 7.44 | 9.75 | 8.93 | 8.73 | 8.41 | | 8.33 | 8.20 | 7.92 | 7.68 | 7.59 | 7.78 | 8.17 | | 9.11 | 8.31 | 7.73 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17 | 157 | | | | |
| **FINAL** - 1987 IAAF World Championships (Rome, ITA) | | | | | | | | | | *Sušanka (1990) - time analyis of the 400m hurdles - Rome 1987 Scientific Report (2nd ed)* | | | | | | | | | |
| date | 01-Sep-87 | time | 6.00 | 9.69 | 13.45 | 17.29 | 21.17 | | 25.06 | 29.02 | 33.22 | 37.73 | 42.32 | | 47.48 | 5 / 3 | | | |
| reaction time | | interval | | 3.69 | 3.76 | 3.84 | 3.88 | | 3.89 | 3.96 | 4.20 | 4.51 | 4.59 | 5.16 | **AR** | | 11.29 | 11.73 | 13.30 |
| | | velocity | 7.50 | 9.49 | 9.31 | 9.11 | 9.02 | | 9.00 | 8.84 | 8.33 | 7.76 | 7.63 | 7.75 | 8.42 | | 9.30 | 8.95 | 7.89 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17.7 | 158 | | | | |
| **Semi-Final 1** - 1987 IAAF World Championships (Rome, ITA) | | | | | | | | | | *Sušanka (1990) - time analyis of the 400m hurdles - Rome 1987 Scientific Report (2nd ed)* | | | | | | | | | |
| date | 31-Aug-87 | time | 6.09 | 9.73 | 13.53 | 17.44 | 21.48 | | 25.50 | 29.66 | 33.99 | 38.51 | 43.07 | | 48.23 | 6 / 1 | | | |
| reaction time | | interval | | 3.64 | 3.80 | 3.91 | 4.04 | | 4.02 | 4.16 | 4.33 | 4.52 | 4.56 | 5.16 | | | 11.35 | 12.22 | 13.41 |
| | | velocity | 7.39 | 9.62 | 9.21 | 8.95 | 8.66 | | 8.71 | 8.41 | 8.08 | 7.74 | 7.68 | 7.75 | 8.29 | | 9.25 | 8.59 | 7.83 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17 | 157 | | | | |
| **Heat 3** - 1987 IAAF World Championships (Rome, ITA) | | | | | | | | | | *Sušanka (1990) - time analyis of the 400m hurdles - Rome 1987 Scientific Report (2nd ed)* | | | | | | | | | |
| date | 30-Aug-87 | time | 6.10 | 9.89 | 13.82 | 17.79 | 21.95 | | 26.23 | 30.65 | 35.08 | 39.68 | 44.28 | | 49.28 | 5 / 1 | | | |
| reaction time | | interval | | 3.79 | 3.93 | 3.97 | 4.16 | | 4.28 | 4.42 | 4.43 | 4.60 | 4.60 | 5.00 | | | 11.69 | 12.86 | 13.63 |
| | | velocity | 7.38 | 9.23 | 8.91 | 8.82 | 8.41 | | 8.18 | 7.92 | 7.90 | 7.61 | 7.61 | 8.00 | 8.12 | | 8.98 | 8.16 | 7.70 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 16.9 | 156.9 | | | | |
| **FINAL** - 1986 European Championships (Stuttgart, FRG) | | | | | | | | | | | | | | | | *Behm (1995) - la tactique du 400 haies* | | | |
| date | 28-Aug-86 | time | 5.8 | 9.4 | 13.3 | 17.2 | 21.3 | | 25.5 | 29.8 | 34.3 | 38.7 | 43.3 | | 48.65 | / 1 | | | |
| reaction time | | interval | | 3.60 | 3.90 | 3.90 | 4.10 | | 4.20 | 4.30 | 4.50 | 4.40 | 4.60 | 5.35 | | | 11.40 | 12.60 | 13.50 |
| | | velocity | 7.76 | 9.72 | 8.97 | 8.97 | 8.54 | | 8.33 | 8.14 | 7.78 | 7.95 | 7.61 | 7.48 | 8.22 | | 9.21 | 8.33 | 7.78 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | | 140 | | | | |
| **FINAL** - 1984 Olympic Games (Los Angeles, CA) | | | | | | | | | | | | | | | | *Behm (1995) - la tactique du 400 haies* | | | |
| date | 05-Aug-84 | time | 6.0 | 9.8 | 13.7 | 17.6 | 21.6 | | 25.7 | 29.8 | 34.0 | 38.5 | 43.0 | | 48.19 | 5 / 3 | | | |
| reaction time | 0.180 | interval | | 3.80 | 3.90 | 3.90 | 4.00 | | 4.10 | 4.10 | 4.20 | 4.50 | 4.50 | 5.19 | | | 11.60 | 12.20 | 13.20 |
| | | velocity | 7.50 | 9.21 | 8.97 | 8.97 | 8.75 | | 8.54 | 8.54 | 8.33 | 7.78 | 7.78 | 7.71 | 8.30 | | 9.05 | 8.61 | 7.95 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17.2 | 157.2 | | | | |
| **FINAL** - 1983 IAAF World Championships (Helsinki, FIN) | | | | | | | | | | | | | | | | *McFarlane (1988) - The Science of Hurdling* | | | |
| date | 09-Aug-83 | time | 5.75 | 9.24 | 13.24 | | 20.93 | | 24.93 | 28.81 | 33.48 | 38.31 | 43.02 | | 48.61 | 7 / 2 | | | |
| reaction time | | interval | | 3.49 | 4.00 | | 7.69 | | 4.00 | 3.88 | 4.67 | 4.83 | 4.71 | 5.59 | | | | | 14.21 |
| | | velocity | 7.83 | 10.03 | 8.75 | | 9.10 | | 8.75 | 9.02 | 7.49 | 7.25 | 7.43 | 7.16 | 8.23 | | | | 7.39 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 15 | 14 | 17 | 159 | | | | |
| **Semi-Final 2** - 1983 IAAF World Championships (Helsinki, FIN) | | | | | | | | | | | | | | | | *Lyle - miscellaneous coaching notes* | | | |
| date | 08-Aug-83 | time | 5.46 | 9.14 | 12.76 | 16.70 | 20.54 | | 24.41 | 28.69 | 32.98 | 37.69 | 42.45 | | 48.57 | 2 / 1 | | | |
| reaction time | | interval | | 3.68 | 3.62 | 3.94 | 3.84 | | 3.87 | 4.28 | 4.29 | 4.71 | 4.76 | 6.12 | | | 11.24 | 11.99 | 13.76 |
| | | velocity | 8.24 | 9.51 | 9.67 | 8.88 | 9.11 | | 9.04 | 8.18 | 8.16 | 7.43 | 7.35 | 6.54 | 8.24 | | 9.34 | 8.76 | 7.63 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | | 14 | 17 | 143 | | | | |
| **FINAL** - 1982 European Championships (Athens, GRE) | | | | | | | | | | | | | | *(1982) - XIII championnats d'Europe d'Atletisma, Athens 1982* | | | | | |
| date | 08-Sep-82 | time | 5.8 | 9.5 | 13.3 | 17.1 | 21.1 | | 25.1 | 29.3 | 33.5 | 37.9 | 42.4 | | 47.48 | 4 / 1 | | | |
| reaction time | | interval | | 3.70 | 3.80 | 3.80 | 4.00 | | 4.00 | 4.20 | 4.20 | 4.40 | 4.50 | 5.08 | **AR / CR** | | 11.30 | 12.20 | 13.10 |
| | | velocity | 7.76 | 9.46 | 9.21 | 9.21 | 8.75 | | 8.75 | 8.33 | 8.33 | 7.95 | 7.78 | 7.87 | 8.42 | | 9.29 | 8.61 | 8.02 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17 | 157 | | | | |
| **FINAL** -1978 European Championships (Prague, TCH) | | | | | | | | | | | | | | | | *Lamare (1978) - championnats d'Europa 1978* | | | |
| date | 31-Aug-78 | time | 6.04 | 9.77 | 13.63 | 17.54 | 21.47 | | 25.69 | 29.88 | 34.25 | 38.78 | 43.29 | | 48.51 | / 1 | | | |
| reaction time | | interval | | 3.73 | 3.86 | 3.91 | 3.93 | | 4.22 | 4.19 | 4.37 | 4.53 | 4.51 | 5.22 | **CR** | | 11.50 | 12.34 | 13.41 |
| | | velocity | 7.45 | 9.38 | 9.07 | 8.95 | 8.91 | | 8.29 | 8.35 | 8.01 | 7.73 | 7.76 | 7.66 | 8.25 | | 9.13 | 8.51 | 7.83 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Schneider, Drake (USA) (1999)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 1** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 25-Jun-21 | time | 6.13 | 9.97 | 13.80 | 17.80 | 21.97 | | 26.27 | 30.77 | 35.43 | 40.27 | 45.20 | | 50.89 | 9 / 6 | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.283 | interval | | 3.84 | 3.83 | 4.00 | 4.17 | | 4.30 | 4.50 | 4.66 | 4.84 | 4.93 | 5.69 | | | 11.67 | 12.97 | 14.43 |
| | | velocity | 7.34 | 9.11 | 9.14 | 8.75 | 8.39 | | 8.14 | 7.78 | 7.51 | 7.23 | 7.10 | 7.03 | 7.86 | | 9.00 | 8.10 | 7.28 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**Schubert, Rainer (FRG) (1941)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1972 Olympic Games (Munich, FRG) | | | | | | | | | | | | | | | | *Le Masurier (1977) - die olympischen 400-m-hürdenlauf vom Mexico City, München und Montreal* | | | |
| date | 03-Sep-72 | time | 6.1 | 9.9 | 13.7 | 17.6 | 21.6 | 23.3 | 25.8 | 30.2 | 34.6 | 39.3 | 44.2 | | 49.65 | 7 / 5 | | | |
| reaction time | | interval | | 3.80 | 3.80 | 3.90 | 4.00 | | 4.20 | 4.40 | 4.40 | 4.70 | 4.90 | 5.45 | | | 11.50 | 12.60 | 14.00 |
| | | velocity | 7.38 | 9.21 | 9.21 | 8.97 | 8.75 | 8.58 | 8.33 | 7.95 | 7.95 | 7.45 | 7.14 | 7.34 | 8.06 | | 9.13 | 8.33 | 7.50 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 15 | | 146 | | | | |
| **FINAL** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) | | | | | | | | | | | | | | | | *Dessons (1982) - traite d'athletisme - volume 1: les courses* | | | |
| date | 15-Oct-68 | time | 6.0 | 9.8 | 13.7 | 17.7 | 21.8 | 23.7 | 25.9 | 30.3 | 34.8 | 39.3 | 44.0 | | 49.2 | 1 / 7 | | | |
| reaction time | | interval | | 3.80 | 3.90 | 4.00 | 4.10 | | 4.10 | 4.40 | 4.50 | 4.50 | 4.70 | 5.20 | *(49.30)* | | 11.70 | 12.60 | 13.70 |
| | | velocity | 7.50 | 9.21 | 8.97 | 8.75 | 8.54 | 8.44 | 8.54 | 7.95 | 7.78 | 7.78 | 7.45 | 7.69 | 8.13 | | 8.97 | 8.33 | 7.66 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 15 | 17.2 | 163 | | | | |
| **Semi-Final 1** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) | | | | | | | | | | | | | | | | *Jonath (1969) - wie gerhard hennige trainiert* | | | |
| date | 14-Oct-68 | time | 6.0 | 9.9 | 13.8 | 17.7 | 21.8 | 23.5 | 26.0 | 30.3 | 34.8 | 39.2 | 43.7 | | 49.3 | / 4 | | | |
| reaction time | | interval | | 3.90 | 3.90 | 3.90 | 4.10 | | 4.20 | 4.30 | 4.50 | 4.40 | 4.50 | 5.60 | *(49.38)* | | 11.70 | 12.60 | 13.40 |
| | | velocity | 7.50 | 8.97 | 8.97 | 8.97 | 8.54 | 8.51 | 8.33 | 8.14 | 7.78 | 7.95 | 7.78 | 7.14 | 8.11 | | 8.97 | 8.33 | 7.84 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **Heat 3** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) | | | | | | | | | | | | | | | | *Jonath (1969) - wie gerhard hennige trainiert* | | | |
| date | 13-Oct-68 | time | 6.1 | 9.9 | 13.7 | 17.7 | 21.7 | 23.4 | 26.0 | 30.4 | 34.8 | 39.1 | 43.6 | | 49.1 | / 2 | | | |
| reaction time | | interval | | 3.80 | 3.80 | 4.00 | 4.00 | | 4.30 | 4.40 | 4.40 | 4.30 | 4.50 | 5.50 | PB | | 11.60 | 12.70 | 13.20 |
| | | velocity | 7.38 | 9.21 | 9.21 | 8.75 | 8.75 | 8.55 | 8.14 | 7.95 | 7.95 | 8.14 | 7.78 | 7.27 | 8.15 | *(49.15)* | 9.05 | 8.27 | 7.95 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Scott, Bryan (USA) (1985)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 1** - 2007 USATF National Championships (Indianapolis, IN) | | | | | | | | | | | | | | | | *USATF Men's Hurdle Development (2007)* | | | |
| date | 21-Jun-07 | time | 6.17 | 10.13 | 14.05 | 18.27 | 22.47 | | 26.79 | 31.10 | 35.74 | 40.31 | 45.05 | | 50.39 | 7 / 4 | | | |
| reaction time | | interval | | 3.96 | 3.92 | 4.22 | 4.20 | | 4.32 | 4.31 | 4.64 | 4.57 | 4.74 | 5.34 | | | 12.10 | 12.83 | 13.95 |
| | | velocity | 7.29 | 8.84 | 8.93 | 8.29 | 8.33 | | 8.10 | 8.12 | 7.54 | 7.66 | 7.38 | 7.49 | 7.94 | | 8.68 | 8.18 | 7.53 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | | 151 | | | | |

**Sdad, Mustapha (MAR) (1970)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 4** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 24-Sep-00 | time | 6.04 | 10.16 | 14.20 | 18.36 | 22.56 | | 26.88 | 31.36 | 36.04 | 40.96 | 45.92 | | 51.39 | 2 / 6 | | | |
| reaction time | 0.216 | interval | | 4.12 | 4.04 | 4.16 | 4.20 | | 4.32 | 4.48 | 4.68 | 4.92 | 4.96 | 5.47 | | | 12.32 | 13.00 | 14.56 |
| | | velocity | 7.45 | 8.50 | 8.66 | 8.41 | 8.33 | | 8.10 | 7.81 | 7.48 | 7.11 | 7.06 | 7.31 | 7.78 | | 8.52 | 8.08 | 7.21 |
| H1 lead leg | | strides | 21 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 17 | 17 | | 160 | | | | |

**Selmon, Kenny (USA) (1996)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 26-Jun-21 | time | 5.90 | 9.61 | 13.35 | 17.20 | 21.12 | | 25.19 | 29.36 | 33.63 | 38.10 | 42.74 | | 48.08 | 6 / 2 | | | |
| reaction time | 0.212 | interval | | 3.71 | 3.74 | 3.85 | 3.92 | | 4.07 | 4.17 | 4.27 | 4.47 | 4.64 | 5.34 | PB | | 11.30 | 12.16 | 13.38 |
| | | velocity | 7.63 | 9.43 | 9.36 | 9.09 | 8.93 | | 8.60 | 8.39 | 8.20 | 7.83 | 7.54 | 7.49 | 8.32 | | 9.29 | 8.63 | 7.85 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17 | 157 | | | | |
| **Semi-Final 1** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 25-Jun-21 | time | 6.10 | 9.83 | 13.63 | 17.53 | 21.47 | | 25.60 | 29.80 | 34.13 | 38.70 | 43.30 | | 48.51 | 6 / 1 | | | |
| reaction time | 0.242 | interval | | 3.73 | 3.80 | 3.90 | 3.94 | | 4.13 | 4.20 | 4.33 | 4.57 | 4.60 | 5.21 | | | 11.43 | 12.27 | 13.50 |
| | | velocity | 7.38 | 9.38 | 9.21 | 8.97 | 8.88 | | 8.47 | 8.33 | 8.08 | 7.66 | 7.61 | 7.68 | 8.25 | | 9.19 | 8.56 | 7.78 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17 | 156 | | | | |
| **Heat 1** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 24-Jun-21 | time | 6.00 | 9.78 | 13.68 | 17.65 | 21.72 | | | 30.13 | 34.50 | 39.10 | 43.71 | | 49.03 | 3 / 1 | | | |
| reaction time | 0.190 | interval | | 3.78 | 3.90 | 3.97 | 4.07 | | | 8.41 | 4.37 | 4.60 | 4.61 | 5.32 | | | 11.65 | 12.48 | 13.58 |
| | | velocity | 7.50 | 9.26 | 8.97 | 8.82 | 8.60 | | | 8.32 | 8.01 | 7.61 | 7.59 | 7.52 | 8.16 | | 9.01 | 8.41 | 7.73 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | | | 13 | 14 | 14 | 16.7 | 109.7 | | | | |
| **FINAL** - 2021 Doha Diamond League (Doha, QAT) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 28-May-21 | time | 6.17 | 9.91 | 13.85 | 17.78 | 21.85 | 23.5 | 25.96 | 30.23 | 34.57 | 39.07 | 43.71 | | 49.03 | 7 / 5 | | | |
| reaction time | 0.314 | interval | | 3.74 | 3.94 | 3.93 | 4.07 | | 4.11 | 4.27 | 4.34 | 4.50 | 4.64 | 5.32 | | | 11.61 | 12.45 | 13.48 |
| | | velocity | 7.29 | 9.36 | 8.88 | 8.91 | 8.60 | 8.51 | 8.52 | 8.20 | 8.06 | 7.78 | 7.54 | 7.52 | 8.16 | | 9.04 | 8.43 | 7.79 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | | | 13 | 13 | 13 | 14 | 14 | | 127 | | | | |
| **FINAL** - 2019 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2019 year end hurdle report* | | | |
| date | 06-Jun-19 | time | 6.00 | 9.78 | 13.63 | 17.56 | 21.60 | | 25.72 | 30.03 | 34.55 | 39.37 | 44.25 | | 49.83 | 8 / 5 | | | |
| reaction time | 0.228 | interval | | 3.78 | 3.85 | 3.93 | 4.04 | | 4.12 | 4.31 | 4.52 | 4.82 | 4.88 | 5.58 | | | 11.56 | 12.47 | 14.22 |
| | | velocity | 7.50 | 9.26 | 9.09 | 8.91 | 8.66 | | 8.50 | 8.12 | 7.74 | 7.26 | 7.17 | 7.17 | 8.03 | | 9.08 | 8.42 | 7.38 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 15 | 15 | 17.7 | 160.7 | | | | |
| **FINAL** - 2019 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2019 year end hurdle report* | | | |
| date | 30-May-19 | time | 6.13 | 10.10 | 14.10 | 18.06 | 22.16 | 23.8 | 26.46 | 30.90 | 35.40 | 40.40 | 45.43 | | 51.15 | 4 / 5 | | | |
| reaction time | 0.185 | interval | | 3.97 | 4.00 | 3.96 | 4.10 | | 4.30 | 4.44 | 4.50 | 5.00 | 5.03 | 5.72 | | | 11.93 | 12.84 | 14.53 |
| | | velocity | 7.34 | 8.82 | 8.75 | 8.84 | 8.54 | 8.40 | 8.14 | 7.88 | 7.78 | 7.00 | 6.96 | 6.99 | 7.82 | | 8.80 | 8.18 | 7.23 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 15 | | 145 | | | | |

**FINAL** - 2018 NCAA Championships (Eugene, OR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Jun-18 | time | 5.96 | | 13.53 | 17.30 | 21.13 | | 25.16 | | 33.60 | 38.13 | 42.80 | | 48.12 | 4 / 2 | | | |
| reaction time | | interval | | | 7.57 | 3.77 | 3.83 | | 4.03 | | 8.44 | 4.53 | 4.67 | 5.32 | PB | | 11.34 | | |
| | | velocity | 7.55 | | 9.25 | 9.28 | 9.14 | | 8.68 | | 8.29 | 7.73 | 7.49 | 7.52 | 8.31 | | 9.26 | | |
| H1 lead leg | R | strides | | | | 13 | 13 | | 13 | | | 14 | 15 | 17.5 | 85.5 | | | | |

**Serres, Jean-Michel (FRA) (1961)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1986 French National Championships (Aix les Bains, FRA) | | | | | | | | | | | | | | | | | | | *Veney - split times from PJ* |
| date | 10-Aug-86 | time | 6.00 | 10.10 | 14.26 | 18.33 | 22.50 | | 26.72 | 30.98 | 35.60 | 40.25 | 44.97 | | 51.03 | / 6 | | | |
| reaction time | | interval | | 4.10 | 4.16 | 4.07 | 4.17 | | 4.22 | 4.26 | 4.62 | 4.65 | 4.72 | 6.06 | PB | | 12.33 | 12.65 | 13.99 |
| | | velocity | 7.50 | 8.54 | 8.41 | 8.60 | 8.39 | | 8.29 | 8.22 | 7.58 | 7.53 | 7.42 | 6.60 | 7.84 | | 8.52 | 8.30 | 7.51 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Seymour, Jim (USA) (1949)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1972 Olympic Games (Munich, FRG) | | | | | | | | | | | | | | | | | | | *Le Masurier (1977) - die olympischen 400-m-hürdenlauf vom Mexico City, München und Montreal* |
| date | 03-Sep-72 | time | 6.1 | 9.9 | 13.8 | 17.7 | 21.7 | 23.4 | 25.9 | 30.2 | 34.5 | 39.1 | 43.5 | | 48.64 | 4 / 4 | | | |
| reaction time | | interval | | 3.80 | 3.90 | 3.90 | 4.00 | | 4.20 | 4.30 | 4.30 | 4.60 | 4.40 | 5.14 | | | 11.60 | 12.50 | 13.30 |
| | | velocity | 7.38 | 9.21 | 8.97 | 8.97 | 8.75 | 8.55 | 8.33 | 8.14 | 8.14 | 7.61 | 7.95 | 7.78 | 8.22 | | 9.05 | 8.40 | 7.89 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 17.2 | 163.2 | | | | |

**Shang Shou (CHN) (1995)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Chinese National Championships (Chongqing, CHN) | | | | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* |
| date | 26-Jun-21 | time | 6.46 | 10.53 | 14.63 | 18.83 | 23.08 | | 27.47 | 31.82 | 36.28 | 40.82 | 45.38 | | 50.38 | 5 / 1 | | | |
| reaction time | 0.212 | interval | | 4.07 | 4.10 | 4.20 | 4.25 | | 4.39 | 4.35 | 4.46 | 4.54 | 4.56 | 5.00 | | | 12.37 | 12.99 | 13.56 |
| | | velocity | 6.97 | 8.60 | 8.54 | 8.33 | 8.24 | | 7.97 | 8.05 | 7.85 | 7.71 | 7.68 | 8.00 | 7.94 | | 8.49 | 8.08 | 7.74 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |
| **Heat 1** - 2021 Chinese National Championships (Chongqing, CHN) | | | | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* |
| date | 26-Jun-21 | time | 6.42 | 10.65 | 14.88 | 19.19 | 23.54 | | 28.02 | 32.51 | 37.07 | 41.66 | 46.27 | | 51.31 | 6 / 2 | | | |
| reaction time | 0.236 | interval | | 4.23 | 4.23 | 4.31 | 4.35 | | 4.48 | 4.49 | 4.56 | 4.59 | 4.61 | 5.04 | | | 12.77 | 13.32 | 13.76 |
| | | velocity | 7.01 | 8.27 | 8.27 | 8.12 | 8.05 | | 7.81 | 7.80 | 7.68 | 7.63 | 7.59 | 7.94 | 7.80 | | 8.22 | 7.88 | 7.63 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |
| **FINAL** - 2020 Chinese Olympic Trials (Shaoxing, CHN) | | | | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* |
| date | 13-Jun-21 | time | 6.41 | 10.53 | 14.73 | 19.02 | 23.29 | | 27.74 | 32.26 | 36.79 | 41.41 | 46.06 | | 51.40 | 7 / 5 | | | |
| reaction time | 0.185 | interval | | 4.12 | 4.20 | 4.29 | 4.27 | | 4.45 | 4.52 | 4.53 | 4.62 | 4.65 | 5.34 | | | 12.61 | 13.24 | 13.80 |
| | | velocity | 7.02 | 8.50 | 8.33 | 8.16 | 8.20 | | 7.87 | 7.74 | 7.73 | 7.58 | 7.53 | 7.49 | 7.78 | | 8.33 | 7.93 | 7.61 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |
| **FINAL** - 2020 Chinese National Championships (Shaoxing, CHN) | | | | | | | | | | | | | | | | | | | *CAA Hurdle Development (2020)* |
| date | 17-Sep-20 | time | 6.21 | 10.17 | 14.29 | 18.46 | 22.75 | | 27.21 | 31.58 | 36.08 | 40.67 | 45.25 | | 50.65 | 4 / 2 | | | |
| reaction time | | interval | | 3.96 | 4.12 | 4.17 | 4.29 | | 4.46 | 4.37 | 4.50 | 4.59 | 4.58 | 5.40 | | | 12.25 | 13.12 | 13.67 |
| | | velocity | 7.25 | 8.84 | 8.50 | 8.39 | 8.16 | | 7.85 | 8.01 | 7.78 | 7.63 | 7.64 | 7.41 | 7.90 | | 8.57 | 8.00 | 7.68 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |
| **FINAL** - 2019 Chinese National Grand Prix Final (Daqing, CHN) | | | | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* |
| date | 23-Aug-19 | time | 6.55 | 10.56 | 14.78 | 19.05 | 23.41 | | 27.89 | 32.33 | 36.88 | 41.44 | 46.01 | | 51.02 | 5 / 3 | | | |
| reaction time | 0.320 | interval | | 4.01 | 4.22 | 4.27 | 4.36 | | 4.48 | 4.44 | 4.55 | 4.56 | 4.57 | 5.01 | | | 12.50 | 13.28 | 13.68 |
| | | velocity | 6.87 | 8.73 | 8.29 | 8.20 | 8.03 | | 7.81 | 7.88 | 7.69 | 7.68 | 7.66 | 7.98 | 7.84 | | 8.40 | 7.91 | 7.68 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |
| **Heat 2** - 2019 Chinese National Grand Prix Final (Daqing, CHN) | | | | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* |
| date | 22-Aug-19 | time | 6.49 | 10.63 | 14.80 | 19.05 | 23.36 | | 27.83 | 32.30 | 36.84 | 41.42 | 46.16 | | 51.62 | 6 / 1 | | | |
| reaction time | 0.275 | interval | | 4.14 | 4.17 | 4.25 | 4.31 | | 4.47 | 4.47 | 4.54 | 4.58 | 4.74 | 5.46 | | | 12.56 | 13.25 | 13.86 |
| | | velocity | 6.93 | 8.45 | 8.39 | 8.24 | 8.12 | | 7.83 | 7.83 | 7.71 | 7.64 | 7.38 | 7.33 | 7.75 | | 8.36 | 7.92 | 7.58 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |
| **Heat 1** - 2019 Chinese National Championships (Shenyang, CHN) | | | | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* |
| date | 09-Jul-19 | time | 6.54 | 10.71 | 14.92 | 19.04 | 23.11 | | 27.54 | 32.06 | 36.75 | 41.49 | 46.46 | | 52.22 | 8 / 7 | | | |
| reaction time | 0.225 | interval | | 4.17 | 4.21 | 4.12 | 4.07 | | 4.43 | 4.52 | 4.69 | 4.74 | 4.97 | 5.76 | | | 12.50 | 13.02 | 14.40 |
| | | velocity | 6.88 | 8.39 | 8.31 | 8.50 | 8.60 | | 7.90 | 7.74 | 7.46 | 7.38 | 7.04 | 6.94 | 7.66 | | 8.40 | 8.06 | 7.29 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 14 | | 15 | 14 | 15 | 15 | 15 | 18 | 173 | | | | |
| **FINAL** - 2019 Chinese National Grand Prix 4 (Luoyang, CHN) | | | | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* |
| date | 29-May-19 | time | 6.50 | 10.61 | 14.68 | 18.88 | 23.25 | | 27.71 | 32.16 | 36.67 | 41.22 | 45.77 | | 50.82 | 4 / 1 | | | |
| reaction time | 0.267 | interval | | 4.11 | 4.07 | 4.20 | 4.37 | | 4.46 | 4.45 | 4.51 | 4.55 | 4.55 | 5.05 | | | 12.38 | 13.28 | 13.61 |
| | | velocity | 6.92 | 8.52 | 8.60 | 8.33 | 8.01 | | 7.85 | 7.87 | 7.76 | 7.69 | 7.69 | 7.92 | 7.87 | | 8.48 | 7.91 | 7.71 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 17.7 | 168.7 | | | | |
| **FINAL** - 2019 Chinese National Grand Prix 1 (Zhaoqing, CHN) | | | | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* |
| date | 08-Apr-19 | time | 6.35 | 10.47 | 14.53 | 18.68 | 22.97 | | 27.41 | 31.84 | 36.47 | 41.06 | 45.68 | | 50.75 | 7 / 2 | | | |
| reaction time | 0.213 | interval | | 4.12 | 4.06 | 4.15 | 4.29 | | 4.44 | 4.43 | 4.63 | 4.59 | 4.62 | 5.07 | | | 12.33 | 13.16 | 13.84 |
| | | velocity | 7.09 | 8.50 | 8.62 | 8.43 | 8.16 | | 7.88 | 7.90 | 7.56 | 7.63 | 7.58 | 7.89 | 7.88 | | 8.52 | 7.98 | 7.59 |
| H1 lead leg | L | strides | 22 | 15 | 16 | 16 | 16 | | 16 | 16 | 15 | 15 | 15 | 18 | 180 | | | | |

**Shao Yi (CHN) (1979)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2003 Chinese National Championships (Shanghai, CHN) *Zhou (2003) - training of Shao Yi, national champion of men's 400m hurdles*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-Sep-03 | time | 6.14 | 9.94 | 13.84 | 17.90 | 22.02 | 26.30 | 30.64 | 35.12 | 39.68 | 44.40 | 49.75 | / 1 | | | | |
| reaction time | | interval | | 3.80 | 3.90 | 4.06 | 4.12 | 4.28 | 4.34 | 4.48 | 4.56 | 4.72 | 5.35 | PB | 11.76 | 12.74 | 13.76 | |
| | | velocity | 7.33 | 9.21 | 8.97 | 8.62 | 8.50 | 8.18 | 8.06 | 7.81 | 7.68 | 7.42 | 7.48 | 8.04 | 8.93 | 8.24 | 7.63 | |
| H1 lead leg | | strides | | 13 | 13 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | | 125 | | | | |

**Heat 1** - 2003 ??? (Shanghai, CHN) *Zhou (2003) - training of Shao Yi, national champion of men's 400m hurdles*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Jun-03 | time | 6.12 | 9.88 | 13.72 | 17.76 | 21.84 | 26.08 | 30.51 | 35.08 | 39.70 | 44.64 | 50.23 | / 1 | | | | |
| reaction time | | interval | | 3.76 | 3.84 | 4.04 | 4.08 | 4.24 | 4.43 | 4.57 | 4.62 | 4.94 | 5.59 | PB | 11.64 | 12.75 | 14.13 | |
| | | velocity | 7.35 | 9.31 | 9.11 | 8.66 | 8.58 | 8.25 | 7.90 | 7.66 | 7.58 | 7.09 | 7.16 | 7.96 | 9.02 | 8.24 | 7.43 | |
| H1 lead leg | | strides | | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | | 127 | | | | |

**FINAL** - 2002 Chinese National Grand Prix Final (Tiantai, CHN) *Zhou (2003) - training of Shao Yi, national champion of men's 400m hurdles*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Oct-02 | time | 6.19 | 10.15 | 14.05 | 18.12 | 22.31 | 26.56 | 30.94 | 35.60 | 40.41 | 45.37 | 51.21 | / 2 | | | | |
| reaction time | | interval | | 3.96 | 3.90 | 4.07 | 4.19 | 4.25 | 4.38 | 4.66 | 4.81 | 4.96 | 5.84 | PB | 11.93 | 12.82 | 14.43 | |
| | | velocity | 7.27 | 8.84 | 8.97 | 8.60 | 8.35 | 8.24 | 7.99 | 7.51 | 7.28 | 7.06 | 6.85 | 7.81 | 8.80 | 8.19 | 7.28 | |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | | 129 | | | | |

**Sharpe, Fred (USA) (1978)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 3** - 2007 USATF National Championships (Indianapolis, IN) | | | | | | | | | | | | | | | | *USATF Men's Hurdle Development (2007)* | | | |
| date | 21-Jun-07 | time | 6.20 | 10.09 | 14.19 | 18.30 | 22.54 | | 26.91 | 31.48 | 36.08 | 40.79 | 45.51 | | 51.00 | 3 / 6 | | | |
| reaction time | | interval | | 3.89 | 4.10 | 4.11 | 4.24 | | 4.37 | 4.57 | 4.60 | 4.71 | 4.72 | 5.49 | | | 12.10 | 13.18 | 14.03 |
| | | velocity | 7.26 | 9.00 | 8.54 | 8.52 | 8.25 | | 8.01 | 7.66 | 7.61 | 7.43 | 7.42 | 7.29 | 7.84 | | 8.68 | 7.97 | 7.48 |
| H1 lead leg | R | strides | 23 | 15 | 15 | 15 | 15 | | 15 | 16 | 16 | 16 | 16 | | 162 | | | | |

**FINAL** - 2003 USATF National Championships (Palo Alto, CA) *USATF Women's Sprint Development (2003)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Jun-03 | time | 6.09 | 10.13 | 14.26 | 18.30 | 22.67 | 27.03 | 31.50 | 36.02 | 40.61 | 45.20 | 50.41 | 2 / ~~7~~ 6 | | | | |
| reaction time | | interval | | 4.04 | 4.13 | 4.04 | 4.37 | 4.36 | 4.47 | 4.52 | 4.59 | 4.59 | 5.21 | | 12.21 | 13.20 | 13.70 | |
| | | velocity | 7.39 | 8.66 | 8.47 | 8.66 | 8.01 | 8.03 | 7.83 | 7.74 | 7.63 | 7.63 | 7.68 | 7.93 | 8.60 | 7.95 | 7.66 | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Shen Kunhao (CHN) (2004)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 1** - 2021 East China District Meeting (Zhaoqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 25-Apr-21 | time | 6.42 | 10.54 | 14.72 | 19.05 | 23.54 | | 28.26 | 33.05 | 37.85 | 42.83 | 47.78 | | 53.19 | 5 / 4 | | | |
| reaction time | 0.198 | interval | | 4.12 | 4.18 | 4.33 | 4.49 | | 4.72 | 4.79 | 4.80 | 4.98 | 4.95 | 5.41 | | | 12.63 | 14.00 | 14.73 |
| | | velocity | 7.01 | 8.50 | 8.37 | 8.08 | 7.80 | | 7.42 | 7.31 | 7.29 | 7.03 | 7.07 | 7.39 | 7.52 | | 8.31 | 7.50 | 7.13 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18 | 170 | | | | |

**Sherwood, John (GBR) (1945)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) | | | | | | | | | | | | | | | | *Dessons (1982) - traite d'athletisme - volume 1: les courses* | | | |
| date | 15-Oct-68 | time | 6.0 | 9.8 | 13.7 | 17.7 | 21.8 | 23.7 | 26.0 | 30.2 | 34.7 | 39.4 | 43.9 | | 49.0 | 8 / 3 | | | |
| reaction time | | interval | | 3.80 | 3.90 | 4.00 | 4.10 | | 4.20 | 4.20 | 4.50 | 4.70 | 4.50 | 5.10 | *(49.03)* | | 11.70 | 12.50 | 13.70 |
| | | velocity | 7.50 | 9.21 | 8.97 | 8.75 | 8.54 | 8.44 | 8.33 | 8.33 | 7.78 | 7.45 | 7.78 | 7.84 | 8.16 | | 8.97 | 8.40 | 7.66 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 15 | | 146 | | | | |

**Shikota, Ryomi (JPN)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 2** - 2016 Japanese National Youth Championships (Mizuho, JPN) | | | | | | | | | | | | | | | | *(2016.11.17) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en* | | | |
| date | 23-Oct-16 | time | | | | | 23.93 | | | | 38.96 | | | | 55.84 | 3 / 3 | | | |
| reaction time | | interval | | | | | | | | | 15.03 | | | | | | | | |
| | | velocity | | | | | 7.73 | | | | 6.99 | | | | 7.16 | | | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Shimura, Takeshi (JPN) (2005)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Japanese National High School Championships (Naruto, JPN) | | | | | | | | | | | | | | | | *Kishima (2022) - national high school championships biomechanics data collection* | | | |
| date | 05-Aug-22 | time | 6.17 | 10.12 | 14.40 | 18.80 | 23.33 | | 28.10 | 32.93 | 37.88 | 42.85 | 47.88 | | 53.35 | 2 / 7 | | | |
| reaction time | 0.138 | interval | | 3.95 | 4.28 | 4.40 | 4.53 | | 4.77 | 4.83 | 4.95 | 4.97 | 5.03 | 5.47 | | | 12.63 | 14.13 | 14.95 |
| | | velocity | 7.29 | 8.86 | 8.18 | 7.95 | 7.73 | | 7.34 | 7.25 | 7.07 | 7.04 | 6.96 | 7.31 | 7.50 | | 8.31 | 7.43 | 7.02 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 157 | | | | |

**Shine, Mike (USA) (1953)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1976 Olympic Games (Montreal, CAN) | | | | | | | | | | | | | | | | *Le Masurier (1977) - die olympischen 400-m-hürdenlauf vom Mexico City, München und Montreal* | | | |
| date | 25-Jul-76 | time | 6.1 | 9.9 | 13.8 | 17.7 | 21.7 | 23.4 | 25.9 | 30.2 | 34.5 | 38.9 | 43.4 | | 48.69 | 1 / 2 | | | |
| reaction time | | interval | | 3.80 | 3.90 | 3.90 | 4.00 | | 4.20 | 4.30 | 4.30 | 4.40 | 4.50 | 5.29 | | | 11.60 | 12.50 | 13.20 |
| | | velocity | 7.38 | 9.21 | 8.97 | 8.97 | 8.75 | 8.55 | 8.33 | 8.14 | 8.14 | 7.95 | 7.78 | 7.56 | 8.22 | | 9.05 | 8.40 | 7.95 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 18.7 | 175.7 | | | | |

**Shirao, Yusuke (JPN) (1999)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2017 Japanese National High School Chamionships (Yamagata, JPN) | | | | | | | | | | | | | | | | *Kota (2017) - 70th high school championships: JAF scientific committee- biomechanics data* | | | |
| date | 31-Jul-17 | time | 6.26 | 10.11 | 14.13 | 18.25 | 22.64 | | 27.08 | 31.55 | 36.12 | 40.89 | 45.78 | | 51.44 | 6 / 1 | | | |
| reaction time | 0.172 | interval | | 3.85 | 4.02 | 4.12 | 4.39 | | 4.44 | 4.47 | 4.57 | 4.77 | 4.89 | 5.66 | | | 11.99 | 13.30 | 14.23 |
| | | velocity | 7.19 | 9.09 | 8.71 | 8.50 | 7.97 | | 7.88 | 7.83 | 7.66 | 7.34 | 7.16 | 7.07 | 7.78 | | 8.76 | 7.89 | 7.38 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 14 | | 14 | 15 | 15 | 15 | 15 | | 127 | | | | |

**FINAL** - 2017 Gunma High School Athletics Meeting (Maebashi, JPN) *(2017) - tfdata-store.com/2017/05/20/post-584/*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-May-17 | time | 6.15 | 9.89 | 13.73 | 17.72 | 21.85 | 26.07 | 30.42 | 34.99 | 39.74 | 44.70 | 50.42 | 5 / 1 | | | | |
| reaction time | | interval | | 3.74 | 3.84 | 3.99 | 4.13 | 4.22 | 4.35 | 4.57 | 4.75 | 4.96 | 5.72 | PB | 11.57 | 12.70 | 14.28 | |
| | | velocity | 7.32 | 9.36 | 9.11 | 8.77 | 8.47 | 8.29 | 8.05 | 7.66 | 7.37 | 7.06 | 6.99 | 7.93 | 9.08 | 8.27 | 7.35 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 18.5 | 166.5 | | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

**FINAL** - 2016 Japanese National High School Championships (Okayama, JPN) *Kota (2016) - 69th high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-16 | time | 6.31 | 10.28 | 14.45 | 18.77 | 23.21 | 27.71 | 32.23 | 36.79 | 41.42 | 46.11 | | 51.40 | 7 / 1 | | | |
| reaction time | 0.192 | interval | | 3.97 | 4.17 | 4.32 | 4.44 | 4.50 | 4.52 | 4.56 | 4.63 | 4.69 | 5.29 | | | 12.46 | 13.46 | 13.88 |
| | | velocity | 7.13 | 8.82 | 8.39 | 8.10 | 7.88 | 7.78 | 7.74 | 7.68 | 7.56 | 7.46 | 7.56 | 7.78 | | 8.43 | 7.80 | 7.56 |
| H1 lead leg | | strides | | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 129 | | | | |

**Shiryayev, Vladislav (RUS) (1973)**

**Heat 8** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.26 | 10.18 | 14.10 | 18.10 | 22.14 | | 26.26 | 30.62 | 35.26 | 40.06 | 44.70 | | 50.39 | 4 / 3 | | | |
| reaction time | 0.179 | interval | | 3.92 | 3.92 | 4.00 | 4.04 | | 4.12 | 4.36 | 4.64 | 4.80 | 4.64 | 5.69 | | | 11.84 | 12.52 | 14.08 |
| | | velocity | 7.19 | 8.93 | 8.93 | 8.75 | 8.66 | | 8.50 | 8.03 | 7.54 | 7.29 | 7.54 | 7.03 | 7.94 | | 8.87 | 8.39 | 7.46 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18.2 | 161.2 | | | | |

**FINAL** - 1998 European Championships (Budapest, HUN) *Sanchez (1998) - Budapest '98: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-98 | time | 5.95 | | | | 21.50 | | | | | | 44.89 | | 50.94 | 1 / 8 | | |
| reaction time | | interval | | | | | 15.55 | | | | | | 23.39 | 6.05 | | | | |
| | | velocity | 7.56 | | | | 9.00 | | | | | | 7.48 | 6.61 | 7.85 | | | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 19 | 162 | | | |

**Shoaib, Mohamed (SUD) (1998)**

**B FINAL** - 2021 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-21 | time | 6.10 | 10.10 | 14.27 | 18.57 | 23.10 | 25.1 | 27.53 | 31.97 | 36.40 | 41.00 | 45.70 | | 51.16 | 8 / 2 | | | |
| reaction time | 0.191 | interval | | 4.00 | 4.17 | 4.30 | 4.53 | | 4.43 | 4.44 | 4.43 | 4.60 | 4.70 | 5.46 | | | 12.47 | 13.40 | 13.73 |
| | | velocity | 7.38 | 8.75 | 8.39 | 8.14 | 7.73 | 7.97 | 7.90 | 7.88 | 7.90 | 7.61 | 7.45 | 7.33 | 7.82 | | 8.42 | 7.84 | 7.65 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 14 | 14 | | 14 | | 14 | 14 | 14 | 17.2 | 148.2 | | | | |

**FINAL** - 2017 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-17 | time | 6.03 | 9.86 | 13.80 | 17.70 | 21.70 | | 25.86 | 30.16 | 34.66 | 39.26 | 44.16 | | 50.37 | 2 / 6 | | |
| reaction time | 0.206 | interval | | 3.83 | 3.94 | 3.90 | 4.00 | | 4.16 | 4.30 | 4.50 | 4.60 | 4.90 | 6.21 | | | 11.67 | 12.46 | 14.00 |
| | | velocity | 7.46 | 9.14 | 8.88 | 8.97 | 8.75 | | 8.41 | 8.14 | 7.78 | 7.61 | 7.14 | 6.44 | 7.94 | | 9.00 | 8.43 | 7.50 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 18 | 158 | | | | |

**FINAL** - 2017 North-West University Pukke Invitational (Sasolburg, RSA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Mar-17 | time | 5.96 | 9.72 | 13.52 | 17.36 | 21.28 | | 25.40 | 29.68 | 34.12 | 38.76 | 43.60 | | 49.93 | 1 / 2 | | |
| reaction time | | interval | | 3.76 | 3.80 | 3.84 | 3.92 | | 4.12 | 4.28 | 4.44 | 4.64 | 4.84 | 6.33 | NJR PB | | 11.40 | 12.32 | 13.92 |
| | | velocity | 7.55 | 9.31 | 9.21 | 9.11 | 8.93 | | 8.50 | 8.18 | 7.88 | 7.54 | 7.23 | 6.32 | 8.01 | | 9.21 | 8.52 | 7.54 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 18.5 | 137.5 | | | | |

**Shogata, Kazuya (JPN) (1983)**

**FINAL** - 2005 Seiko Super Grand Prix (Yokohama, JPN) *Yasunori (2006) - race pattern analysis of top Japanese 400m hurdlers*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Sep-05 | time | 5.94 | 9.81 | 13.80 | 17.82 | 21.89 | | 26.03 | 30.30 | 34.69 | 39.18 | 43.75 | | 48.95 | / 5 | | | |
| reaction time | | interval | | 3.87 | 3.99 | 4.02 | 4.07 | | 4.14 | 4.27 | 4.39 | 4.49 | 4.57 | 5.20 | PB | | 11.88 | 12.48 | 13.45 |
| | | velocity | 7.58 | 9.04 | 8.77 | 8.71 | 8.60 | | 8.45 | 8.20 | 7.97 | 7.80 | 7.66 | 7.69 | 8.17 | | 8.84 | 8.41 | 7.81 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Skomorokhov, Vyacheslav (URS) (19**

**Heat ??** - 1967 (Leninakan, URS) (Altitude) *Jonath (1969) - wie gerhard hennige trainiert*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Oct-67 | time | 5.8 | 10.0 | 13.9 | 18.1 | 22.2 | | 26.6 | 31.1 | 35.6 | 40.1 | 44.7 | | 50.1 | / 1 | | | |
| reaction time | | interval | | 4.2 | 3.9 | 4.2 | 4.1 | | 4.4 | 4.5 | 4.5 | 4.5 | 4.6 | 5.4 | | | 12.3 | 13.0 | 13.6 |
| | | velocity | 7.76 | 8.33 | 8.97 | 8.33 | 8.54 | | 7.95 | 7.78 | 7.78 | 7.78 | 7.61 | 7.41 | 7.98 | | 8.54 | 8.08 | 7.72 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Sibilio, Alessandro (ITA) (1999)**

**Semi-Final 3** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-23 | time | 5.99 | 9.94 | | 17.55 | 21.45 | | | 29.83 | 34.30 | | 43.79 | | 48.43 | 2 / 5 | | | |
| reaction time | 0.152 | interval | | 3.95 | | 7.61 | 3.90 | | | 8.38 | 4.47 | | 9.49 | 4.64 | | | 11.56 | 12.28 | 13.96 |
| | | velocity | 7.51 | 8.86 | | 9.20 | 8.97 | | | 8.35 | 7.83 | | 7.38 | 8.62 | 8.26 | | 9.08 | 8.55 | 7.52 |
| H1 lead leg | R | strides | 21 | 13 | | | 13 | | | | 15 | | | 18 | 80 | | | | |

**Heat 3** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 6.10 | 10.06 | 13.93 | 17.86 | 21.74 | | 25.86 | 30.30 | 34.83 | 39.39 | 44.06 | | 49.50 | 5 / 4 | | |
| reaction time | 0.178 | interval | | 3.96 | 3.87 | 3.93 | 3.88 | | 4.12 | 4.44 | 4.53 | 4.56 | 4.67 | 5.44 | | | 11.76 | 12.44 | 13.76 |
| | | velocity | 7.38 | 8.84 | 9.04 | 8.91 | 9.02 | | 8.50 | 7.88 | 7.73 | 7.68 | 7.49 | 7.35 | 8.08 | | 8.93 | 8.44 | 7.63 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 15 | 18 | 164 | | | | |

**FINAL** - 2023 Herculis Meeting International d'Athlétisme (Monaco, MON) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jul-23 | time | 5.76 | 9.43 | 13.21 | 17.00 | | | | | | | | | dnf | 3 / -- | | |
| reaction time | 0.126 | interval | | 3.67 | 3.78 | 3.79 | | | | | | | | | | | 11.24 | |
| | | velocity | 7.81 | 9.54 | 9.26 | 9.23 | | | | | | | | | | | 9.34 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | | | | | | | | | 60 | | | |

**FINAL** - 2023 Bauhaus Galan (Stockholm, SWE) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Jul-23 | time | 5.90 | 9.71 | 13.60 | 17.45 | 21.41 | | 25.44 | 29.81 | 34.33 | 38.88 | 43.38 | | 49.11 | 5 / 4 | | |
| reaction time | 0.150 | interval | | 3.81 | 3.89 | 3.85 | 3.96 | | 4.03 | 4.37 | 4.52 | 4.55 | 4.50 | 5.73 | | | 11.55 | 12.36 | 13.57 |
| | | velocity | 7.63 | 9.19 | 9.00 | 9.09 | 8.84 | | 8.68 | 8.01 | 7.74 | 7.69 | 7.78 | 6.98 | 8.14 | | 9.09 | 8.50 | 7.74 |
| H1 lead leg | R | strides | 21 | 13 | | 13 | 13 | | 13 | 15 | | 15 | 15 | 18.7 | 136.7 | | | | |

**FINAL** - 2020 Olympic Games (Tokyo, JPN) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-21 | time | 6.04 | 9.84 | 13.76 | 17.68 | 21.64 | 25.84 | | 34.84 | 39.24 | 43.68 | | 48.77 | 2 / 8 | | | |
| reaction time | 0.144 | interval | | 3.80 | 3.92 | 3.92 | 3.96 | 4.20 | | 9.00 | 4.40 | 4.44 | 5.09 | | | 11.64 | | |
| | | velocity | 7.45 | 9.21 | 8.93 | 8.93 | 8.84 | 8.33 | | 7.78 | 7.95 | 7.88 | 7.86 | 8.20 | | 9.02 | | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17 | 157 | | | | |

**FINAL** - 2017 European U20 Championships (Grosseto, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jul-17 | time | 6.16 | 10.20 | 14.24 | 18.44 | 22.72 | 27.00 | 31.48 | 35.96 | 40.44 | 45.04 | | 50.34 | 5 / 2 | | | |
| reaction time | 0.191 | interval | | 4.04 | 4.04 | 4.20 | 4.28 | 4.28 | 4.48 | 4.48 | 4.48 | 4.60 | 5.30 | PB | | 12.28 | 13.04 | 13.56 |
| | | velocity | 7.31 | 8.66 | 8.66 | 8.33 | 8.18 | 8.18 | 7.81 | 7.81 | 7.81 | 7.61 | 7.55 | 7.95 | | 8.55 | 8.05 | 7.74 |
| H1 lead leg | R | strides | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18 | 153 | | | | |

**Silva, Carlos (POR) (1974)**

**Semi-Final 2** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-99 | time | 5.66 | 9.35 | 13.11 | 17.25 | 21.28 | 25.44 | 29.67 | 34.02 | 38.54 | 43.31 | | 49.45 | 2 / 7 | | | |
| reaction time | 0.165 | interval | | 3.69 | 3.76 | 4.14 | 4.03 | 4.16 | 4.23 | 4.35 | 4.52 | 4.77 | 6.14 | | | 11.59 | 12.42 | 13.64 |
| | | velocity | 7.95 | 9.49 | 9.31 | 8.45 | 8.68 | 8.41 | 8.27 | 8.05 | 7.74 | 7.34 | 6.51 | 8.09 | | 9.06 | 8.45 | 7.70 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 15 | 14 | 14 | 15 | 15 | 15 | 15 | 20 | 169 | | | | |

**FINAL** - 1998 European Championships (Budapest, HUN) *Behm (1998) - analyse et commentaries: le 400m haies: Pavel la surprise!*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-98 | time | 6.1 | 9.8 | 13.6 | 17.5 | 21.5 | 25.6 | 29.7 | 34.0 | 38.5 | 43.3 | | 49.02 | 6 / 4 | | | |
| reaction time | | interval | | 3.7 | 3.8 | 3.9 | 4.0 | 4.1 | 4.1 | 4.3 | 4.5 | 4.8 | 5.72 | | | 11.40 | 12.20 | 13.60 |
| | | velocity | 7.38 | 9.46 | 9.21 | 8.97 | 8.75 | 8.54 | 8.54 | 8.14 | 7.78 | 7.29 | 6.99 | 8.16 | | 9.21 | 8.61 | 7.72 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | 19.5 | 166.5 | | | | |

**Sinčukovs, Maksims (LAT) (1998)**

**FINAL** - 2017 European U20 Championships (Grosseto, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jul-17 | time | 5.84 | 9.56 | 13.40 | 17.28 | 21.48 | 25.84 | 30.36 | 34.92 | 39.84 | 44.80 | | 50.98 | 4 / 6 | | | |
| reaction time | 0.178 | interval | | 3.72 | 3.84 | 3.88 | 4.20 | 4.36 | 4.52 | 4.56 | 4.92 | 4.96 | 6.18 | NJR PB | | 11.44 | 13.08 | 14.44 |
| | | velocity | 7.71 | 9.41 | 9.11 | 9.02 | 8.33 | 8.03 | 7.74 | 7.68 | 7.11 | 7.06 | 6.47 | 7.85 | | 9.18 | 8.03 | 7.27 |
| H1 lead leg | L | strides | | 14 | 14 | 13 | 15 | 15 | 15 | 15 | 16 | 16 | 20 | 153 | | | | |

**Siwemuke, Marcus (USA) (1984)**

**FINAL** - 2003 USATF National Junior Championships (Palo Alto, CA) *USATF Women's Sprint Development (2003)*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Jun-03 | time | 6.17 | 10.12 | 14.21 | 18.42 | 22.87 | 27.41 | 32.20 | 37.15 | 42.22 | 47.48 | | 53.44 | 9 / 7 | | | |
| reaction time | | interval | | 3.95 | 4.09 | 4.21 | 4.45 | 4.54 | 4.79 | 4.95 | 5.07 | 5.26 | 5.96 | | | 12.25 | 13.78 | 15.28 |
| | | velocity | 7.29 | 8.86 | 8.56 | 8.31 | 7.87 | 7.71 | 7.31 | 7.07 | 6.90 | 6.65 | 6.71 | 7.49 | | 8.57 | 7.62 | 6.87 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Sjöstedt, Carl (SWE) (1994)**

**FINAL** - 2011 Fridrott (Stockholm, SWE) (84cm) *Blomkvist (2011) - www.elitlandslag.se/SprintHäck/LängSprintHäck.aspx*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-11 | time | 6.80 | 11.20 | 15.58 | 20.10 | 24.74 | 29.54 | 34.54 | 39.58 | 44.86 | 50.08 | | 55.82 | / 3 | | | |
| reaction time | | interval | | 4.40 | 4.38 | 4.52 | 4.64 | 4.80 | 5.00 | 5.04 | 5.28 | 5.22 | 5.74 | | | 13.30 | 14.44 | 15.54 |
| | | velocity | 6.62 | 7.95 | 7.99 | 7.74 | 7.54 | 7.29 | 7.00 | 6.94 | 6.63 | 6.70 | 6.97 | 7.17 | | 7.89 | 7.27 | 6.76 |
| H1 lead leg | L | strides | | 15 | 15 | 15 | 15 | 15 | 16 | 16 | 17 | 17 | 19 | 160 | | | | |

**Skomorokhov, Vyacheslav (URS) (19**

**FINAL** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) *Dessons (1982) - traite d'athletisme - volume 1: les courses*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Oct-68 | time | 6.1 | 9.9 | 13.7 | 17.5 | 21.5 | 23.4 | 25.6 | 30.0 | 34.6 | 39.2 | 43.8 | | 49.1 | 5 / 5 | | |
| reaction time | | interval | | 3.80 | 3.80 | 3.80 | 4.00 | | 4.10 | 4.40 | 4.60 | 4.60 | 4.60 | 5.30 | *(49.12)* | | 11.40 | 12.50 | 13.80 |
| | | velocity | 7.38 | 9.21 | 9.21 | 9.21 | 8.75 | 8.55 | 8.54 | 7.95 | 7.61 | 7.61 | 7.61 | 7.55 | 8.15 | | 9.21 | 8.40 | 7.61 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 15 | 18 | 164 | | | | |

**Heat ??** - 1967 (Leninakan, URS) (Altitude) *Jonath (1969) - wie gerhard hennige trainiert*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Oct-67 | time | 5.8 | 10.0 | 13.9 | 18.1 | 22.2 | 26.6 | 31.1 | 35.6 | 40.1 | 44.7 | | 50.1 | / 1 | | | |
| reaction time | | interval | | 4.2 | 3.9 | 4.2 | 4.1 | 4.4 | 4.5 | 4.5 | 4.5 | 4.6 | 5.4 | | | 12.3 | 13.0 | 13.6 |
| | | velocity | 7.76 | 8.33 | 8.97 | 8.33 | 8.54 | 7.95 | 7.78 | 7.78 | 7.78 | 7.61 | 7.41 | 7.98 | | 8.54 | 8.08 | 7.72 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Small, Javonie (USA) (1982)**

**Heat 3** - 2007 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2007)*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-07 | time | 5.96 | 9.83 | 13.84 | 17.91 | 22.07 | 26.66 | 31.28 | 35.85 | 40.47 | 45.30 | | 50.96 | 7 / 5 | | | |
| reaction time | | interval | | 3.87 | 4.01 | 4.07 | 4.16 | 4.59 | 4.62 | 4.57 | 4.62 | 4.83 | 5.66 | | | 11.95 | 13.37 | 14.02 |
| | | velocity | 7.55 | 9.04 | 8.73 | 8.60 | 8.41 | 7.63 | 7.58 | 7.66 | 7.58 | 7.25 | 7.07 | 7.85 | | 8.79 | 7.85 | 7.49 |
| H1 lead leg | R | strides | 22 | 15 | 14 | 14 | 14 | 15 | 14 | 15 | 15 | 15 | | 153 | | | | |

**Smidt, Nick (NED) (1997)**

**FINAL** - 2023 Herculis Meeting International d'Athlétisme (Monaco, MON) *Omega Timing (2023) - diamond league race analysis*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jul-23 | time | 5.83 | 9.53 | 13.26 | 17.07 | 21.03 | 25.16 | 29.40 | 33.80 | 38.34 | 43.04 | | 48.57 | 8 / 6 | | | |
| reaction time | 0.167 | interval | | 3.70 | 3.73 | 3.81 | 3.96 | 4.13 | 4.24 | 4.40 | 4.54 | 4.70 | 5.53 | | | 11.24 | 12.33 | 13.64 |
| | | velocity | 7.72 | 9.46 | 9.38 | 9.19 | 8.84 | 8.47 | 8.25 | 7.95 | 7.71 | 7.45 | 7.23 | 8.24 | | 9.34 | 8.52 | 7.70 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 14 | | 143 | | | | |

**FINAL** - 2023 FBK Games (Hengelo, NED) *Omega Timing (2023) - continental tour race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jun-23 | time | 5.83 | 9.55 | 13.35 | 17.17 | 21.08 | 25.11 | 29.38 | 33.82 | 38.49 | 43.40 | | 49.17 | 5 / 2 | | | |
| reaction time | 0.186 | interval | | 3.72 | 3.80 | 3.82 | 3.91 | 4.03 | 4.27 | 4.44 | 4.67 | 4.91 | 5.77 | | | 11.34 | 12.21 | 14.02 |
| | | velocity | 7.72 | 9.41 | 9.21 | 9.16 | 8.95 | 8.68 | 8.20 | 7.88 | 7.49 | 7.13 | 6.93 | 8.14 | | 9.26 | 8.60 | 7.49 |
| H1 lead leg | L | strides | 21 | 13 | | | | 13 | 14 | 14 | 14 | 15 | 18 | 122 | | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

**FINAL** - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-22 | time | 5.93 | 9.70 | 13.53 | 17.53 | 21.56 | 23.28 | 25.73 | 30.03 | | 38.90 | 43.56 | | 49.07 | 9 / 7 | | | |
| reaction time | 0.154 | interval | | 3.77 | 3.83 | 4.00 | 4.03 | | 4.17 | 4.30 | | 8.87 | 4.66 | 5.51 | PB | | 11.60 | 12.50 | 13.53 |
| | | velocity | 7.59 | 9.28 | 9.14 | 8.75 | 8.68 | 8.59 | 8.39 | 8.14 | | 7.89 | 7.51 | 7.26 | 8.15 | | 9.05 | 8.40 | 7.76 |
| H1 lead leg | L | strides | 20 | 13 | 13 | | 13 | | 14 | 14 | | | 14 | | 101 | | | | |

**Semi-Final 3** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.86 | 9.57 | 13.50 | 17.30 | 21.40 | 23.25 | 25.70 | 30.00 | 34.47 | 39.13 | 43.93 | | 49.56 | 8 / 5 | | | |
| reaction time | 0.145 | interval | | 3.71 | 3.93 | 3.80 | 4.10 | | 4.30 | 4.30 | 4.47 | 4.66 | 4.80 | 5.63 | | | 11.44 | 12.70 | 13.93 |
| | | velocity | 7.68 | 9.43 | 8.91 | 9.21 | 8.54 | 8.60 | 8.14 | 8.14 | 7.83 | 7.51 | 7.29 | 7.10 | 8.07 | | 9.18 | 8.27 | 7.54 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 14 | | 14 | 14 | 14 | 14 | 15 | 18 | 162 | | | | |

**Heat 2** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 5.93 | 9.73 | 13.70 | 17.77 | 21.93 | 23.78 | 26.13 | 30.50 | 35.00 | 39.60 | 44.33 | | 49.80 | 8 / 4 | | | |
| reaction time | 0.180 | interval | | 3.80 | 3.97 | 4.07 | 4.16 | | 4.20 | 4.37 | 4.50 | 4.60 | 4.73 | 5.47 | | | 11.84 | 12.73 | 13.83 |
| | | velocity | 7.59 | 9.21 | 8.82 | 8.60 | 8.41 | 8.41 | 8.33 | 8.01 | 7.78 | 7.61 | 7.40 | 7.31 | 8.03 | | 8.87 | 8.25 | 7.59 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 14 | 17.7 | 159.7 | | | | |

**FINAL** - 2022 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jun-22 | time | 5.92 | 9.72 | 13.64 | 17.68 | | 23.70 | 26.28 | 30.62 | 34.92 | 39.56 | 44.28 | | 49.77 | 1 / 6 | | | |
| reaction time | 0.172 | interval | | 3.80 | 3.92 | 4.04 | | | 8.60 | 4.34 | 4.30 | 4.64 | 4.72 | 5.49 | | | 11.76 | 12.94 | 13.66 |
| | | velocity | 7.60 | 9.21 | 8.93 | 8.66 | | 8.44 | 8.14 | 8.06 | 8.14 | 7.54 | 7.42 | 7.29 | 8.04 | | 8.93 | 8.11 | 7.69 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 14 | 14 | | | | 14 | 15 | 15 | 18 | 137 | | | | |

**FINAL** - 2020 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Sep-20 | time | 5.91 | 9.81 | | | 22.05 | 24.0 | | 31.06 | 35.67 | 40.34 | 45.11 | | 50.67 | 3 / 8 | | | |
| reaction time | 0.144 | interval | | 3.90 | | | 12.24 | | | 9.01 | 4.61 | 4.67 | 4.77 | 5.56 | | | | | 14.05 |
| | | velocity | 7.61 | 8.97 | | | 8.58 | 8.33 | | 7.77 | 7.59 | 7.49 | 7.34 | 7.19 | 7.89 | | | | 7.47 |
| H1 lead leg | L | strides | 20 | 13 | | | | | | | 14 | 14 | 14 | 17.2 | 92.2 | | | | |

**Smith, James (USA) (2000)**

**FINAL** - 2023 USATF National Championships (Eugene, OR) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-23 | time | 6.17 | 10.01 | 13.91 | 17.85 | 21.89 | | 26.09 | | 34.90 | 39.50 | 44.18 | | 49.56 | 3 / 6 | | | |
| reaction time | | interval | | 3.84 | 3.90 | 3.94 | 4.04 | | 4.20 | | 8.81 | 4.60 | 4.68 | 5.38 | | | 11.68 | | |
| | | velocity | 7.29 | 9.11 | 8.97 | 8.88 | 8.66 | | 8.33 | | 7.95 | 7.61 | 7.48 | 7.43 | 8.07 | | 8.99 | | |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | | | | 15 | 15 | | 103 | | | | |

**FINAL** - 2023 NCAA Championships (Austin, TX) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-23 | time | 5.99 | 9.76 | 13.60 | 17.48 | 21.50 | | 25.74 | 30.03 | 34.47 | 39.00 | 43.76 | | 49.21 | 4 / 8 | | | |
| reaction time | | interval | | 3.77 | 3.84 | 3.88 | 4.02 | | 4.24 | 4.29 | 4.44 | 4.53 | 4.76 | 5.45 | PB | | 11.49 | 12.55 | 13.73 |
| | | velocity | 7.51 | 9.28 | 9.11 | 9.02 | 8.71 | | 8.25 | 8.16 | 7.88 | 7.73 | 7.35 | 7.34 | 8.13 | | 9.14 | 8.37 | 7.65 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.2 | 164.2 | | | | |

**Smith, Willie (NAM) (1977)**

**Heat 1** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.06 | 9.78 | 13.66 | 17.62 | 21.66 | | 25.82 | 30.34 | 35.02 | 39.90 | | | 50.89 | 5 / 5 | | | |
| reaction time | 0.156 | interval | | 3.72 | 3.88 | 3.96 | 4.04 | | 4.16 | 4.52 | 4.68 | 4.88 | | | | | 11.56 | 12.72 | |
| | | velocity | 7.43 | 9.41 | 9.02 | 8.84 | 8.66 | | 8.41 | 7.74 | 7.48 | 7.17 | | | 7.86 | | 9.08 | 8.25 | |
| H1 lead leg | | strides | 22 | 15 | 15 | 15 | 15 | | 17 | 17 | 17 | 17 | | | 150 | | | | |

**Song Haotian (CHN) (1999)**

**Heat 4** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.31 | 10.37 | 14.43 | 18.67 | 23.12 | | 27.73 | 32.34 | 37.18 | 42.05 | 47.12 | | 52.72 | 7 / 4 | | | |
| reaction time | 0.209 | interval | | 4.06 | 4.06 | 4.24 | 4.45 | | 4.61 | 4.61 | 4.84 | 4.87 | 5.07 | 5.60 | | | 12.36 | 13.67 | 14.78 |
| | | velocity | 7.13 | 8.62 | 8.62 | 8.25 | 7.87 | | 7.59 | 7.59 | 7.23 | 7.19 | 6.90 | 7.14 | 7.59 | | 8.50 | 7.68 | 7.10 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 15 | | 15 | 15 | 15 | 15 | 16 | 19 | 174 | | | | |

**FINAL** - 2021 Philippe Cup Athletics Invitational (Wuhan, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-May-21 | time | 6.29 | 10.29 | 14.31 | 18.42 | 22.62 | | 27.04 | 31.68 | 36.32 | 41.11 | 46.18 | | 51.66 | 5 / 2 | | | |
| reaction time | 0.242 | interval | | 4.00 | 4.02 | 4.11 | 4.20 | | 4.42 | 4.64 | 4.64 | 4.79 | 5.07 | 5.48 | PB | | 12.13 | 13.26 | 14.50 |
| | | velocity | 7.15 | 8.75 | 8.71 | 8.52 | 8.33 | | 7.92 | 7.54 | 7.54 | 7.31 | 6.90 | 7.30 | 7.74 | | 8.66 | 7.92 | 7.24 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 19.5 | 172.5 | | | | |

**FINAL** - 2021 National Grand Prix (Chengdu, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Apr-21 | time | 6.31 | 10.38 | 14.38 | 18.58 | 22.91 | | 27.46 | 32.22 | 37.00 | 42.10 | 47.17 | | 52.54 | 8 / 3 | | | |
| reaction time | 0.250 | interval | | 4.07 | 4.00 | 4.20 | 4.33 | | 4.55 | 4.76 | 4.78 | 5.10 | 5.07 | 5.37 | PB | | 12.27 | 13.64 | 14.95 |
| | | velocity | 7.13 | 8.60 | 8.75 | 8.33 | 8.08 | | 7.69 | 7.35 | 7.32 | 6.86 | 6.90 | 7.45 | 7.61 | | 8.56 | 7.70 | 7.02 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 16 | 16 | 19 | 174 | | | | |

**Heat 1** - 2021 National Grand Prix (Chengdu, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Apr-21 | time | 6.40 | 10.60 | 14.88 | 19.20 | 23.70 | | 28.30 | 33.00 | 37.76 | 42.62 | 47.48 | | 52.85 | 7 / 3 | | | |
| reaction time | 0.192 | interval | | 4.20 | 4.28 | 4.32 | 4.50 | | 4.60 | 4.70 | 4.76 | 4.86 | 4.86 | 5.37 | PB | | 12.80 | 13.80 | 14.48 |
| | | velocity | 7.03 | 8.33 | 8.18 | 8.10 | 7.78 | | 7.61 | 7.45 | 7.35 | 7.20 | 7.20 | 7.45 | 7.57 | | 8.20 | 7.61 | 7.25 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 18.5 | 175.5 | | | | |

**Song Jiahui (CHN) (2002)**

**FINAL** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.31 | 10.33 | 14.44 | 18.66 | 22.91 | 27.23 | 31.61 | 36.23 | 40.99 | 45.82 | | 51.32 | 7 / ~~3~~ 2 | | | |
| reaction time | 0.191 | interval | | 4.02 | 4.11 | 4.22 | 4.25 | 4.32 | 4.38 | 4.62 | 4.76 | 4.83 | 5.50 | PB | | 12.35 | 12.95 | 14.21 |
| | | velocity | 7.13 | 8.71 | 8.52 | 8.29 | 8.24 | 8.10 | 7.99 | 7.58 | 7.35 | 7.25 | 7.27 | 7.79 | | 8.50 | 8.11 | 7.39 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 18 | 159 | | | | |

**Heat 3** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.36 | 10.36 | 14.45 | 18.62 | 22.83 | 27.10 | 31.68 | 36.26 | 41.01 | 45.87 | | 51.44 | 8 / 1 | | | |
| reaction time | 0.234 | interval | | 4.00 | 4.09 | 4.17 | 4.21 | 4.27 | 4.58 | 4.58 | 4.75 | 4.86 | 5.57 | PB | | 12.26 | 13.06 | 14.19 |
| | | velocity | 7.08 | 8.75 | 8.56 | 8.39 | 8.31 | 8.20 | 7.64 | 7.64 | 7.37 | 7.20 | 7.18 | 7.78 | | 8.56 | 8.04 | 7.40 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 18.5 | 161.5 | | | | |

**FINAL** - 2020 Chinese Olympic Trials (Shaoxing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Jun-21 | time | 6.24 | 10.34 | 14.46 | 18.55 | 22.77 | 27.08 | 31.53 | 36.07 | 40.89 | 45.83 | | 51.57 | 8 / 6 | | | |
| reaction time | 0.198 | interval | | 4.10 | 4.12 | 4.09 | 4.22 | 4.31 | 4.45 | 4.54 | 4.82 | 4.94 | 5.74 | | | 12.31 | 12.98 | 14.30 |
| | | velocity | 7.21 | 8.54 | 8.50 | 8.56 | 8.29 | 8.12 | 7.87 | 7.71 | 7.26 | 7.09 | 6.97 | 7.76 | | 8.53 | 8.09 | 7.34 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 18 | 157 | | | | |

**Song Weiwei (CHN) (2002)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **U18 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) (84cm) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.63 | 10.82 | 15.18 | 19.54 | 24.20 | | 29.28 | 34.48 | 39.80 | 45.12 | 50.68 | | 56.87 | 3 / 8 | | | |
| reaction time | 0.186 | interval | | 4.19 | 4.36 | 4.36 | 4.66 | | 5.08 | 5.20 | 5.32 | 5.32 | 5.56 | 6.19 | | | 12.91 | 14.94 | 16.20 |
| | | velocity | 6.79 | 8.35 | 8.03 | 8.03 | 7.51 | | 6.89 | 6.73 | 6.58 | 6.58 | 6.29 | 6.46 | 7.03 | | 8.13 | 7.03 | 6.48 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 17 | 17 | 17 | 17 | 17 | 21 | 188 | | | | |

**Southern, Eddie (USA) (1938)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1956 Olympic Games (Melbourne, AUS) | | | | | | | | | | | | | | | | *Quercentani (2000). Athletics: A history of modern track and field athletics (1860-2000)* | | | |
| date | 24-Nov-56 | time | | | | | 22.5 | | | | | | | | 50.8 | 2 / 2 | | | |
| reaction time | | interval | | | | | | | | | | | | | *(50.94)* | | | | |
| | | velocity | | | | | 8.22 | | | | | | | | 7.87 | | | | |
| H1 lead leg | R | strides | 22 | 15 | 15 | 13 | 15 | | 15 | 15 | 15 | 15 | 15 | 18 | 173 | | | | |

**Spencer, William (USA) (2001)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 2** - 2020 USA Olympic Trials (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2021) - Athlete First: 2021 year end hurdle report* | | | |
| date | 25-Jun-21 | time | 6.03 | 9.81 | 13.64 | 17.62 | 21.79 | | 26.19 | 30.76 | 35.40 | 40.07 | 44.81 | | 50.53 | 4 / 8 | | | |
| reaction time | 0.174 | interval | | 3.78 | 3.83 | 3.98 | 4.17 | | 4.40 | 4.57 | 4.64 | 4.67 | 4.74 | 5.72 | | | 11.59 | 13.14 | 14.05 |
| | | velocity | 7.46 | 9.26 | 9.14 | 8.79 | 8.39 | | 7.95 | 7.66 | 7.54 | 7.49 | 7.38 | 6.99 | 7.92 | | 9.06 | 7.99 | 7.47 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | | 14 | 14 | 14 | 14 | 17.2 | 125.2 | | | | |

**Stigler, Michael (USA) (1992)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2017 Müller's Anniversary Games (London, GBR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2020) - Athlete First: 2017 year end hurdle report* | | | |
| date | 09-Jul-17 | time | 6.04 | 9.72 | 13.56 | 17.40 | 21.40 | | 25.64 | 29.96 | 34.36 | 38.72 | 43.16 | | 48.32 | 4 / 4 | | | |
| reaction time | 0.199 | interval | | 3.68 | 3.84 | 3.84 | 4.00 | | 4.24 | 4.32 | 4.40 | 4.36 | 4.44 | 5.16 | | | 11.36 | 12.56 | 13.20 |
| | | velocity | 7.45 | 9.51 | 9.11 | 9.11 | 8.75 | | 8.25 | 8.10 | 7.95 | 8.03 | 7.88 | 7.75 | 8.28 | | 9.24 | 8.36 | 7.95 |
| H1 lead leg | R | strides | 22 | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 15 | 18 | 165 | | | | |

**FINAL** - 2017 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jul-17 | time | 6.00 | 9.80 | 13.72 | 17.68 | 21.76 | | 26.04 | 30.36 | 34.72 | 39.32 | 44.12 | | 49.86 | 6 / 6 | | | |
| reaction time | 0.224 | interval | | 3.80 | 3.92 | 3.96 | 4.08 | | 4.28 | 4.32 | 4.36 | 4.60 | 4.80 | 5.74 | | | 11.68 | 12.68 | 13.76 |
| | | velocity | 7.50 | 9.21 | 8.93 | 8.84 | 8.58 | | 8.18 | 8.10 | 8.03 | 7.61 | 7.29 | 6.97 | 8.02 | | 8.99 | 8.28 | 7.63 |
| H1 lead leg | R | strides | 22 | 13 | 13 | 13 | 13 | | 15 | 15 | 15 | 15 | 15 | 18 | 167 | | | | |

**FINAL** - 2017 USATF Championships (Sacramento, CA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Jun-17 | time | 6.10 | 9.79 | 13.58 | 17.38 | 21.31 | | | 29.89 | 34.20 | 38.55 | 43.07 | | 48.26 | 8 / 2 | | | |
| reaction time | | interval | | 3.69 | 3.79 | 3.80 | 3.93 | | | 8.58 | 4.31 | 4.35 | 4.52 | 5.19 | PB | | 11.28 | 12.51 | 13.18 |
| | | velocity | 7.38 | 9.49 | 9.23 | 9.21 | 8.91 | | | 8.16 | 8.12 | 8.05 | 7.74 | 7.71 | 8.29 | | 9.31 | 8.39 | 7.97 |
| H1 lead leg | R | strides | 22 | 13 | 13 | 13 | 13 | | | | 15 | 15 | 15 | 18.2 | 137.2 | | | | |

**Stukalov, Dmitriy (URS) (1951)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1971 European Championships (Helsinki, FIN) | | | | | | | | | | | | | | | | *Behm (1995) - la tactique du 400 haies* | | | |
| date | 12-Aug-71 | time | 6.0 | 10.2 | 14.3 | 18.3 | 22.4 | | 26.6 | 31.0 | 35.5 | 40.2 | 44.8 | | 50.0 | / 3 | | | |
| reaction time | | interval | | 4.20 | 4.10 | 4.00 | 4.10 | | 4.20 | 4.40 | 4.50 | 4.70 | 4.60 | 5.20 | PB | | 12.30 | 12.70 | 13.80 |
| | | velocity | 7.50 | 8.33 | 8.54 | 8.75 | 8.54 | | 8.33 | 7.95 | 7.78 | 7.45 | 7.61 | 7.69 | 8.00 | | 8.54 | 8.27 | 7.61 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 15 | 15 | 15 | 15 | 15 | | 127 | | | | |

**Sugai, Mitsuru (JPN) (1994)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B FINAL** - 2020 Michitaka Kinami Memorial (Osaka, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |
| date | 24-Oct-20 | time | 6.07 | 9.94 | 13.86 | 17.83 | 21.99 | | 26.36 | 30.81 | 35.39 | 40.12 | 44.99 | | 50.86 | 6 / 3 | | | |
| reaction time | | interval | | 3.87 | 3.92 | 3.97 | 4.16 | | 4.37 | 4.45 | 4.58 | 4.73 | 4.87 | 5.87 | | | 11.76 | 12.98 | 14.18 |
| | | velocity | 7.41 | 9.04 | 8.93 | 8.82 | 8.41 | | 8.01 | 7.87 | 7.64 | 7.40 | 7.19 | 6.81 | 7.86 | | 8.93 | 8.09 | 7.40 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 19 | 165 | | | | |

**FINAL** - 2019 Japanese National Championships (Fukuoka, JPN) *Yamanaka (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jun-19 | time | 6.06 | 9.76 | 13.66 | 17.58 | 20.60 | | 25.86 | 30.23 | 34.80 | 39.46 | 44.43 | | 50.27 | 5 / 7 | | | |
| reaction time | 0.168 | interval | | 3.70 | 3.90 | 3.92 | 3.02 | | 5.26 | 4.37 | 4.57 | 4.66 | 4.97 | 5.84 | | | 11.52 | 12.65 | 14.20 |
| | | velocity | 7.43 | 9.46 | 8.97 | 8.93 | 11.59 | | 6.65 | 8.01 | 7.66 | 7.51 | 7.04 | 6.85 | 7.96 | | 9.11 | 8.30 | 7.39 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 146 | | | | |

**B FINAL** - 2019 Kinami Memorial (Osaka, JPN) *Matsubayashi (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-May-19 | time | 6.09 | 9.91 | 13.90 | 17.85 | 21.94 | 26.23 | 30.50 | 35.07 | 39.72 | 44.54 | | 50.16 | 3 / 1 | | | | |
| reaction time | | interval | | 3.82 | 3.99 | 3.95 | 4.09 | 4.29 | 4.27 | 4.57 | 4.65 | 4.82 | 5.62 | | | 11.76 | 12.65 | 14.04 | |
| | | velocity | 7.39 | 9.16 | 8.77 | 8.86 | 8.56 | 8.16 | 8.20 | 7.66 | 7.53 | 7.26 | 7.12 | 7.97 | | 8.93 | 8.30 | 7.48 | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 19 | 165 | | | | | |

**C FINAL** - 2019 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Kobayashi (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-19 | time | 6.09 | 9.83 | 13.73 | 17.77 | 21.89 | 26.28 | 30.75 | 35.44 | 40.19 | 45.08 | | 50.56 | 7 / 2 | | | | |
| reaction time | | interval | | 3.74 | 3.90 | 4.04 | 4.12 | 4.39 | 4.47 | 4.69 | 4.75 | 4.89 | 5.48 | | | 11.68 | 12.98 | 14.33 | |
| | | velocity | 7.39 | 9.36 | 8.97 | 8.66 | 8.50 | 7.97 | 7.83 | 7.46 | 7.37 | 7.16 | 7.30 | 7.91 | | 8.99 | 8.09 | 7.33 | |
| H1 lead leg | R | strides | 22 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18.5 | 165.5 | | | | | |

**Suguimati, Mahau (BRA) (1984)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Ready Steady Tokyo (Tokyo, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | |
| date | 09-May-21 | time | 6.09 | 9.86 | 13.76 | 17.82 | 21.99 | 26.38 | 30.78 | 35.26 | 39.87 | 44.64 | | 50.11 | 3 / 8 | | | | |
| reaction time | 0.130 | interval | | 3.77 | 3.90 | 4.06 | 4.17 | 4.39 | 4.40 | 4.48 | 4.61 | 4.77 | 5.47 | | | 11.73 | 12.96 | 13.86 | |
| | | velocity | 7.39 | 9.28 | 8.97 | 8.62 | 8.39 | 7.97 | 7.95 | 7.81 | 7.59 | 7.34 | 7.31 | 7.98 | | 8.95 | 8.10 | 7.58 | |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | | 118 | | | | | |

**FINAL** - 2020 Seiko Golden Grand Prix (Tokyo, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-20 | time | 6.16 | 9.96 | 13.86 | 17.83 | 21.91 | 26.16 | 30.51 | 35.15 | 40.04 | 45.08 | | 50.99 | 8 / 7 | | | | |
| reaction time | 0.152 | interval | | 3.80 | 3.90 | 3.97 | 4.08 | 4.25 | 4.35 | 4.64 | 4.89 | 5.04 | 5.91 | | | 11.67 | 12.68 | 14.57 | |
| | | velocity | 7.31 | 9.21 | 8.97 | 8.82 | 8.58 | 8.24 | 8.05 | 7.54 | 7.16 | 6.94 | 6.77 | 7.84 | | 9.00 | 8.28 | 7.21 | |
| H1 lead leg | | strides | | 12 | 12 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | | 117 | | | | | |

**FINAL** - 2019 Seiko Golden Grand Prix (Osaka, JPN) *Hirokawa (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-May-19 | time | 6.06 | 9.84 | 13.73 | 17.76 | 21.92 | 26.28 | 30.78 | 35.60 | 40.44 | 45.33 | | 50.87 | 2 / 3 | | | | |
| reaction time | 0.160 | interval | | 3.78 | 3.89 | 4.03 | 4.16 | 4.36 | 4.50 | 4.82 | 4.84 | 4.89 | 5.54 | | | 11.70 | 13.02 | 14.55 | |
| | | velocity | 7.43 | 9.26 | 9.00 | 8.68 | 8.41 | 8.03 | 7.78 | 7.26 | 7.23 | 7.16 | 7.22 | 7.86 | | 8.97 | 8.06 | 7.22 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 17.5 | 157.5 | | | | | |

**D FINAL** - 2019 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Kobayashi (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-19 | time | 6.09 | 9.86 | 13.68 | 17.58 | 21.60 | 25.83 | 30.20 | 34.72 | 39.57 | 44.63 | | 50.19 | 5 / 1 | | | | |
| reaction time | | interval | | 3.77 | 3.82 | 3.90 | 4.02 | 4.23 | 4.37 | 4.52 | 4.85 | 5.06 | 5.56 | | | 11.49 | 12.62 | 14.43 | |
| | | velocity | 7.39 | 9.28 | 9.16 | 8.97 | 8.71 | 8.27 | 8.01 | 7.74 | 7.22 | 6.92 | 7.19 | 7.97 | | 9.14 | 8.32 | 7.28 | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 17.2 | 158.2 | | | | | |

*Suguimati, Mahau (JPN) (1984)*

**FINAL** - 2006 Japanese National Championships (Kobe, JPN) *Yasunori (2007) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jul-06 | time | 6.25 | 10.12 | 13.96 | 17.95 | 22.00 | 26.27 | 30.62 | 35.12 | 39.71 | 44.31 | | 49.63 | / 2 | | | | |
| reaction time | | interval | | 3.87 | 3.84 | 3.99 | 4.05 | 4.27 | 4.35 | 4.50 | 4.59 | 4.60 | 5.32 | PB | | 11.70 | 12.67 | 13.69 | |
| | | velocity | 7.20 | 9.04 | 9.11 | 8.77 | 8.64 | 8.20 | 8.05 | 7.78 | 7.63 | 7.61 | 7.52 | 8.06 | | 8.97 | 8.29 | 7.67 | |
| H1 lead leg | | strides | | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 13 | | 113 | | | | | |

**Sun Ke (CHN) (2001)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **U20 Heat 1** - 2019 Chinese National Youth Games (Taiyuan, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.14 | 10.18 | 14.28 | 18.44 | 22.80 | 27.26 | 31.90 | 36.82 | 42.16 | 47.68 | | 54.20 | 4 / 5 | | | | |
| reaction time | 0.176 | interval | | 4.04 | 4.10 | 4.16 | 4.36 | 4.46 | 4.64 | 4.92 | 5.34 | 5.52 | 6.52 | | | 12.30 | 13.46 | 15.78 | |
| | | velocity | 7.33 | 8.66 | 8.54 | 8.41 | 8.03 | 7.85 | 7.54 | 7.11 | 6.55 | 6.34 | 6.13 | 7.38 | | 8.54 | 7.80 | 6.65 | |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 20 | 177 | | | | | |

**Sun Wanhao (CHN) (2001)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **U20 Heat 1** - 2019 Chinese National Youth Games (Taiyuan, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.54 | 10.76 | 15.08 | 19.42 | 23.85 | 28.50 | 33.38 | 38.40 | 43.62 | 49.12 | | 55.04 | 8 / 6 | | | | |
| reaction time | 0.216 | interval | | 4.22 | 4.32 | 4.34 | 4.43 | 4.65 | 4.88 | 5.02 | 5.22 | 5.50 | 5.92 | PB | | 12.88 | 13.96 | 15.74 | |
| | | velocity | 6.88 | 8.29 | 8.10 | 8.06 | 7.90 | 7.53 | 7.17 | 6.97 | 6.70 | 6.36 | 6.76 | 7.27 | | 8.15 | 7.52 | 6.67 | |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 20 | 182 | | | | | |

**Sun Yao (CHN) (2002)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **U18 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) (84cm) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.11 | 10.04 | 14.18 | 18.30 | 22.47 | 26.83 | 31.36 | 36.14 | 41.24 | 46.45 | | 52.20 | 4 / 2 | | | | |
| reaction time | 0.223 | interval | | 3.93 | 4.14 | 4.12 | 4.17 | 4.36 | 4.53 | 4.78 | 5.10 | 5.21 | 5.75 | | | 12.19 | 13.06 | 15.09 | |
| | | velocity | 7.36 | 8.91 | 8.45 | 8.50 | 8.39 | 8.03 | 7.73 | 7.32 | 6.86 | 6.72 | 6.96 | 7.66 | | 8.61 | 8.04 | 6.96 | |
| H1 lead leg | L | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 17 | 17 | | 135 | | | | | |

**Suzuki, Taiga (JPN) (2002)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Japanese U20 National Championships (Osaka, JPN) | | | | | | | | | | | | | | | | *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season* | | | |
| date | 26-Jun-21 | time | 6.12 | 10.03 | 13.95 | 17.93 | 22.02 | 26.28 | 30.71 | 35.35 | 40.37 | 45.66 | | 51.95 | 3 / 6 | | | | |
| reaction time | 0.190 | interval | | 3.91 | 3.92 | 3.98 | 4.09 | 4.26 | 4.43 | 4.64 | 5.02 | 5.29 | 6.29 | | | 11.81 | 12.78 | 14.95 | |
| | | velocity | 7.35 | 8.95 | 8.93 | 8.79 | 8.56 | 8.22 | 7.90 | 7.54 | 6.97 | 6.62 | 6.36 | 7.70 | | 8.89 | 8.22 | 7.02 | |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | 16 | | 155 | | | | | |

**FINAL** - 2020 Japanese High School National Championships (Hiroshima, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Oct-20 | time | 6.11 | 10.04 | 14.18 | 18.30 | 22.47 | 26.83 | 31.36 | 36.14 | 41.24 | 46.45 | | 52.20 | 4 / 2 | | | | |
| reaction time | 0.173 | interval | | 3.93 | 4.14 | 4.12 | 4.17 | 4.36 | 4.53 | 4.78 | 5.10 | 5.21 | 5.75 | | | 12.19 | 13.06 | 15.09 | |
| | | velocity | 7.36 | 8.91 | 8.45 | 8.50 | 8.39 | 8.03 | 7.73 | 7.32 | 6.86 | 6.72 | 6.96 | 7.66 | | 8.61 | 8.04 | 6.96 | |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 17 | 17 | 19.2 | 175.2 | | | | | |

**FINAL** - 2020 Seiko Golden Grand Prix (Tokyo, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-20 | time | 6.01 | 9.86 | 13.78 | 17.85 | 22.02 | 26.44 | 31.05 | 35.79 | 40.74 | 45.90 | | 52.19 | 1 / 9 | | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.152 | interval | | 3.85 | 3.92 | 4.07 | 4.17 | 4.42 | 4.61 | 4.74 | 4.95 | 5.16 | 6.29 | | 11.84 | 13.20 | 14.85 |
| | | velocity | 7.49 | 9.09 | 8.93 | 8.60 | 8.39 | 7.92 | 7.59 | 7.38 | 7.07 | 6.78 | 6.36 | 7.66 | 8.87 | 7.95 | 7.07 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | |

**Takada, Kazunari (JPN) (1997)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2020 World Athletics Trials (Fuji, JPN) | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |
| date 06-Sep-20 time | 6.04 | 9.81 | 13.71 | 17.77 | 21.92 | | 26.16 | 30.56 | 35.14 | 39.94 | 45.10 | | 51.11 | / 3 | | | |
| reaction time interval | | 3.77 | 3.90 | 4.06 | 4.15 | | 4.24 | 4.40 | 4.58 | 4.80 | 5.16 | 6.01 | | | 11.73 | 12.79 | 14.54 |
| velocity | 7.45 | 9.28 | 8.97 | 8.62 | 8.43 | | 8.25 | 7.95 | 7.64 | 7.29 | 6.78 | 6.66 | 7.83 | | 8.95 | 8.21 | 7.22 |
| H1 lead leg strides | | 13 | 13 | 14 | 14 | | 14 | 14 | 15 | 15 | 16 | | 128 | | | | |
| **FINAL** - 2020 Seiko Golden Grand Prix (Tokyo, JPN) | | | | | | | | | | | | | | *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season* | | | |
| date 23-Aug-20 time | 6.04 | 9.84 | 13.71 | 17.67 | 21.86 | | 26.13 | 30.53 | 35.07 | 39.87 | 44.84 | | 50.53 | 2 / 4 | | | |
| reaction time 0.191 interval | | 3.80 | 3.87 | 3.96 | 4.19 | | 4.27 | 4.40 | 4.54 | 4.80 | 4.97 | 5.69 | | | 11.63 | 12.86 | 14.31 |
| velocity | 7.45 | 9.21 | 9.04 | 8.84 | 8.35 | | 8.20 | 7.95 | 7.71 | 7.29 | 7.04 | 7.03 | 7.92 | | 9.03 | 8.16 | 7.34 |
| H1 lead leg strides | | 13 | 13 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | | 127 | | | | |
| **B FINAL** - 2019 Kinami Memorial (Osaka, JPN) | | | | | | | | | | | | | | *Matsubayashi (2019) - research on athlete performance and technique- 2019 data book* | | | |
| date 06-May-19 time | 5.89 | 9.79 | 13.66 | 17.48 | 21.60 | | 25.88 | 30.21 | 34.80 | 39.56 | 44.63 | | 50.50 | 7 / 3 | | | |
| reaction time interval | | 3.90 | 3.87 | 3.82 | 4.12 | | 4.28 | 4.33 | 4.59 | 4.76 | 5.07 | 5.87 | | | 11.59 | 12.73 | 14.42 |
| velocity | 7.64 | 8.97 | 9.04 | 9.16 | 8.50 | | 8.18 | 8.08 | 7.63 | 7.35 | 6.90 | 6.81 | 7.92 | | 9.06 | 8.25 | 7.28 |
| H1 lead leg L strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 20 | 172 | | | | |
| **FINAL** - 2015 Japanese National High School Championships (Wakayama, JPN) | | | | | | | | | | | | | | *Enomoto (2015) - 68th high school championships: JAF scientific committee- biomechanics data* | | | |
| date 31-Jul-15 time | 6.12 | 10.03 | 14.08 | 18.13 | 22.34 | | 26.66 | 31.10 | 35.69 | 40.27 | 44.91 | | 50.27 | 6 / 1 | | | |
| reaction time interval | | 3.91 | 4.05 | 4.05 | 4.21 | | 4.32 | 4.44 | 4.59 | 4.58 | 4.64 | 5.36 | PB | | 12.01 | 12.97 | 13.81 |
| velocity | 7.35 | 8.95 | 8.64 | 8.64 | 8.31 | | 8.10 | 7.88 | 7.63 | 7.64 | 7.54 | 7.46 | 7.96 | | 8.74 | 8.10 | 7.60 |
| H1 lead leg strides | | 14 | 14 | 14 | 15 | | 14 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Takahashi, Rui (JPN) (1997)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2015 Japanese National High School Championships (Wakayama, JPN) | | | | | | | | | | | | | | *Enomoto (2015) - 68th high school championships: JAF scientific committee- biomechanics data* | | | |
| date 31-Jul-15 time | 6.32 | 10.44 | 14.75 | 19.04 | 23.34 | | 27.64 | 32.12 | 36.60 | 41.21 | 46.33 | | 53.24 | 5 / 7 | | | |
| reaction time interval | | 4.12 | 4.31 | 4.29 | 4.30 | | 4.30 | 4.48 | 4.48 | 4.61 | 5.12 | 6.91 | | | 12.72 | 13.08 | 14.21 |
| velocity | 7.12 | 8.50 | 8.12 | 8.16 | 8.14 | | 8.14 | 7.81 | 7.81 | 7.59 | 6.84 | 5.79 | 7.51 | | 8.25 | 8.03 | 7.39 |
| H1 lead leg strides | | 15 | 15 | 15 | 15 | | 15 | 17 | 15 | 17 | 16 | | 140 | | | | |

**Takahashi, Ryosuke (JPN) (2003)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Japanese High School National Championships (Fukui, JPN) | | | | | | | | | | | | | | *Shibayama (2021) - national high school and U20 national championhsips* | | | |
| date 30-Jul-21 time | 6.17 | 10.14 | 14.41 | 18.64 | 22.97 | | 27.46 | 32.02 | 36.72 | 41.57 | 46.46 | | 51.69 | 6 / 1 | | | |
| reaction time 0.161 interval | | 3.97 | 4.27 | 4.23 | 4.33 | | 4.49 | 4.56 | 4.70 | 4.85 | 4.89 | 5.23 | | | 12.47 | 13.38 | 14.44 |
| velocity | 7.29 | 8.82 | 8.20 | 8.27 | 8.08 | | 7.80 | 7.68 | 7.45 | 7.22 | 7.16 | 7.65 | 7.74 | | 8.42 | 7.85 | 7.27 |
| H1 lead leg strides | | 14 | 15 | 14 | 14 | | 15 | 15 | 16 | 16 | 16 | | 135 | | | | |
| **FINAL** - 2019 Japanese National High School Championships (Okinawa, JPN) | | | | | | | | | | | | | | *Kota (2019) - 72nd high school championships: JAF scientific committee - biomechanics data* | | | |
| date 06-Aug-19 time | 6.25 | 10.43 | 14.70 | 19.06 | 23.65 | | 28.43 | 33.22 | 38.12 | 43.20 | 48.56 | | 55.14 | 7 / 7 | | | |
| reaction time interval | | 4.18 | 4.27 | 4.36 | 4.59 | | 4.78 | 4.79 | 4.90 | 5.08 | 5.36 | 6.58 | | | 12.81 | 14.16 | 15.34 |
| velocity | 7.20 | 8.37 | 8.20 | 8.03 | 7.63 | | 7.32 | 7.31 | 7.14 | 6.89 | 6.53 | 6.08 | 7.25 | | 8.20 | 7.42 | 6.84 |
| H1 lead leg strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Takahashi, Yuma (JPN) (1995)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2022 Japanese National Championsips (Osaka, JPN) | | | | | | | | | | | | | | *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season* | | | |
| date 11-Jun-22 time | 6.12 | 10.04 | 14.06 | 18.15 | 22.36 | | 26.63 | 31.04 | 35.62 | 40.22 | 44.91 | | 50.35 | 8 / 5 | | | |
| reaction time 0.197 interval | | 3.92 | 4.02 | 4.09 | 4.21 | | 4.27 | 4.41 | 4.58 | 4.60 | 4.69 | 5.44 | | | 12.03 | 12.89 | 13.87 |
| velocity | 7.35 | 8.93 | 8.71 | 8.56 | 8.31 | | 8.20 | 7.94 | 7.64 | 7.61 | 7.46 | 7.35 | 7.94 | | 8.73 | 8.15 | 7.57 |
| H1 lead leg L strides | 21 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | | 151 | | | | |

**Takeda, Kai (JPN)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 1** - 2016 Japanese National Youth Championships (Mizuho, JPN) | | | | | | | | | | | | | | *(2016.11.17) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en* | | | |
| date 23-Oct-16 time | | | | | 24.21 | | | | 38.17 | | | | 55.10 | 7 / 2 | | | |
| reaction time interval | | | | | | | | | 13.96 | | | | | | | | |
| velocity | | | | | 7.64 | | | | 7.52 | | | | 7.26 | | | | |
| H1 lead leg strides | | | | | | | | | | | | | | | | | |

**Tamesue, Dai (JPN) (1978)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Race B** - 2011 Shizuoka International Athletics Meeting (Fukuroi, JPN) | | | | | | | | | | | | | | *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11* | | | |
| date 03-May-11 time | 6.03 | 9.77 | 13.71 | 17.75 | 21.84 | | 26.06 | 30.40 | 34.94 | 39.63 | 44.40 | | 49.89 | / 1 | | | |
| reaction time interval | | 3.74 | 3.94 | 4.04 | 4.09 | | 4.22 | 4.34 | 4.54 | 4.69 | 4.77 | 5.49 | | | 11.72 | 12.65 | 14.00 |
| velocity | 7.46 | 9.36 | 8.88 | 8.66 | 8.56 | | 8.29 | 8.06 | 7.71 | 7.46 | 7.34 | 7.29 | 8.02 | | 8.96 | 8.30 | 7.50 |
| H1 lead leg strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |
| **FINAL** - 2008 Japanese National Championships (Kawasaki, JPN) | | | | | | | | | | | | | | *Yasunori (2009) - race pattern analysis of prestigious Japanese 400m hurdlers* | | | |
| date 27-Jun-08 time | 5.82 | 9.49 | 13.38 | 17.32 | 21.31 | | 25.45 | 29.69 | 34.13 | 38.78 | 43.65 | | 49.17 | / 1 | | | |
| reaction time interval | | 3.67 | 3.89 | 3.94 | 3.99 | | 4.14 | 4.24 | 4.44 | 4.65 | 4.87 | 5.52 | | | 11.50 | 12.37 | 13.96 |
| velocity | 7.73 | 9.54 | 9.00 | 8.88 | 8.77 | | 8.45 | 8.25 | 7.88 | 7.53 | 7.19 | 7.25 | 8.14 | | 9.13 | 8.49 | 7.52 |
| H1 lead leg strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |
| **Heat 3** - 2007 IAAF World Championships (Osaka, JPN) | | | | | | | | | | | | | | *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers* | | | |
| date 25-Aug-07 time | 5.87 | 9.59 | 13.44 | 17.43 | 21.48 | | 25.68 | 29.98 | 34.53 | 39.23 | 44.08 | | 49.67 | 7 / 6 | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.197 | interval | | 3.72 | 3.85 | 3.99 | 4.05 | 4.20 | 4.30 | 4.55 | 4.70 | 4.85 | 5.59 | | | 11.56 | 12.55 | 14.10 |
| | | velocity | 7.67 | 9.41 | 9.09 | 8.77 | 8.64 | 8.33 | 8.14 | 7.69 | 7.45 | 7.22 | 7.16 | 8.05 | | 9.08 | 8.37 | 7.45 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2007 Japanese National Championships (Osaka, JPN) *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-07 | time | 5.86 | 9.53 | 13.32 | 17.22 | 21.16 | 25.26 | 29.51 | 34.00 | 38.62 | 43.36 | | 48.87 | / 1 | | | |
| reaction time | | interval | | 3.67 | 3.79 | 3.90 | 3.94 | 4.10 | 4.25 | 4.49 | 4.62 | 4.74 | 5.51 | | | 11.36 | 12.29 | 13.85 |
| | | velocity | 7.68 | 9.54 | 9.23 | 8.97 | 8.88 | 8.54 | 8.24 | 7.80 | 7.58 | 7.38 | 7.26 | 8.18 | | 9.24 | 8.54 | 7.58 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2007 Osaka Grand Prix (Osaka, JPN) *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-07 | time | 5.82 | 9.52 | 13.31 | 17.18 | 21.17 | 25.26 | 29.45 | 33.85 | 38.44 | 43.23 | | 48.73 | / 3 | | | |
| reaction time | | interval | | 3.70 | 3.79 | 3.87 | 3.99 | 4.09 | 4.19 | 4.40 | 4.59 | 4.79 | 5.50 | | | 11.36 | 12.27 | 13.78 |
| | | velocity | 7.73 | 9.46 | 9.23 | 9.04 | 8.77 | 8.56 | 8.35 | 7.95 | 7.63 | 7.31 | 7.27 | 8.21 | | 9.24 | 8.56 | 7.62 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2005 IAAF World Championships (Helsinki, FIN) *Yasunori (2006) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-05 | time | 5.79 | 9.38 | 13.08 | 16.92 | 20.82 | 24.87 | 29.01 | 33.35 | 37.94 | 42.68 | | 48.10 | 7 / 3 | | | |
| reaction time | 0.189 | interval | | 3.59 | 3.70 | 3.84 | 3.90 | 4.05 | 4.14 | 4.34 | 4.59 | 4.74 | 5.42 | | | 11.13 | 12.09 | 13.67 |
| | | velocity | 7.77 | 9.75 | 9.46 | 9.11 | 8.97 | 8.64 | 8.45 | 8.06 | 7.63 | 7.38 | 7.38 | 8.32 | | 9.43 | 8.68 | 7.68 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 17.5 | 143 | | | | |

**FINAL** - 2005 Japanese Championships (Tokyo, JPN) *Yasunori (2006) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jun-05 | time | 5.83 | 9.53 | 13.40 | 17.34 | 21.43 | 25.58 | 29.87 | 34.39 | 39.04 | 43.83 | | 49.27 | / 1 | | | |
| reaction time | | interval | | 3.70 | 3.87 | 3.94 | 4.09 | 4.15 | 4.29 | 4.52 | 4.65 | 4.79 | 5.44 | | | 11.51 | 12.53 | 13.96 |
| | | velocity | 7.72 | 9.46 | 9.04 | 8.88 | 8.56 | 8.43 | 8.16 | 7.74 | 7.53 | 7.31 | 7.35 | 8.12 | | 9.12 | 8.38 | 7.52 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2005 Osaka Grand Prix (Osaka, JPN) *Yasunori (2006) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-May-05 | time | 5.84 | 9.51 | 13.25 | 17.09 | 21.01 | 25.11 | 29.33 | 33.78 | 38.38 | 43.17 | | 48.72 | / 4 | | | |
| reaction time | | interval | | 3.67 | 3.74 | 3.84 | 3.92 | 4.10 | 4.22 | 4.45 | 4.60 | 4.79 | 5.55 | | | 11.25 | 12.24 | 13.84 |
| | | velocity | 7.71 | 9.54 | 9.36 | 9.11 | 8.93 | 8.54 | 8.29 | 7.87 | 7.61 | 7.31 | 7.21 | 8.21 | | 9.33 | 8.58 | 7.59 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2004 Seiko Super Grand Prix (Yokohama, JPN) *Yasunori (2005) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Sep-04 | time | 5.86 | 9.48 | 13.27 | 17.16 | 21.16 | 25.31 | 29.51 | 33.93 | 38.50 | 43.15 | | 48.59 | / 1 | | | |
| reaction time | | interval | | 3.62 | 3.79 | 3.89 | 4.00 | 4.15 | 4.20 | 4.42 | 4.57 | 4.65 | 5.44 | | | 11.30 | 12.35 | 13.64 |
| | | velocity | 7.68 | 9.67 | 9.23 | 9.00 | 8.75 | 8.43 | 8.33 | 7.92 | 7.66 | 7.53 | 7.35 | 8.23 | | 9.29 | 8.50 | 7.70 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2004 Japanese National Championships (Tottori, JPN) *Yasunori (2005) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jun-04 | time | 5.82 | 9.49 | 13.19 | 17.04 | 21.04 | 25.21 | 29.46 | 33.88 | 38.50 | 43.22 | | 48.74 | / 1 | | | |
| reaction time | | interval | | 3.67 | 3.70 | 3.85 | 4.00 | 4.17 | 4.25 | 4.42 | 4.62 | 4.72 | 5.52 | | | 11.22 | 12.42 | 13.76 |
| | | velocity | 7.73 | 9.54 | 9.46 | 9.09 | 8.75 | 8.39 | 8.24 | 7.92 | 7.58 | 7.42 | 7.25 | 8.21 | | 9.36 | 8.45 | 7.63 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2004 Osaka Grand Prix (Osaka, JPN) *Yasunori (2005) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-04 | time | 5.77 | 9.41 | 13.20 | 17.07 | 21.06 | 25.25 | 29.45 | 33.87 | 38.51 | 43.31 | | 48.87 | / 1 | | | |
| reaction time | | interval | | 3.64 | 3.79 | 3.87 | 3.99 | 4.19 | 4.20 | 4.42 | 4.64 | 4.80 | 5.56 | | | 11.30 | 12.38 | 13.86 |
| | | velocity | 7.80 | 9.62 | 9.23 | 9.04 | 8.77 | 8.35 | 8.33 | 7.92 | 7.54 | 7.29 | 7.19 | 8.18 | | 9.29 | 8.48 | 7.58 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2001 IAAF World Championships (Edmonton, CAN) *Kota (2016) - 69th high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-01 | time | 5.85 | 9.50 | 13.22 | 17.04 | 20.94 | 24.94 | 29.09 | 33.42 | 37.89 | 42.56 | | 47.89 | 3 / 3 | | | |
| reaction time | 0.222 | interval | | 3.65 | 3.72 | 3.82 | 3.90 | 4.00 | 4.15 | 4.33 | 4.47 | 4.67 | 5.33 | **NR / PB** | | 11.19 | 12.05 | 13.47 |
| | | velocity | 7.69 | 9.59 | 9.41 | 9.16 | 8.97 | 8.75 | 8.43 | 8.08 | 7.83 | 7.49 | 7.50 | 8.35 | | 9.38 | 8.71 | 7.80 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 19 | 164 | | | | |

**Heat 8** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.78 | 9.38 | 13.14 | 16.98 | 20.98 | 25.18 | 29.66 | 34.30 | fell down | | | 61.81 | 1 / 8 | | | |
| reaction time | 0.256 | interval | | 3.60 | 3.76 | 3.84 | 4.00 | 4.20 | 4.48 | 4.64 | | | | | | 11.20 | 12.68 | |
| | | velocity | 7.79 | 9.72 | 9.31 | 9.11 | 8.75 | 8.33 | 7.81 | 7.54 | | | | 6.47 | | 9.38 | 8.28 | |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 17 | | | 112 | | | | |

**Tan Chunhua (CHN) (1977)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2001 Chinese National Games (Guangzhou, CHN) *Gong (2003) - discussion on technique of gold and silver medallist of men's 400m hurdles of the 9th National Games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Nov-01 | time | 6.08 | 10.05 | 14.10 | 18.16 | 22.27 | 26.52 | 30.89 | 35.36 | 39.86 | 44.50 | | 49.85 | / 1 | | | |
| reaction time | | interval | | 3.97 | 4.05 | 4.06 | 4.11 | 4.25 | 4.37 | 4.47 | 4.50 | 4.64 | 5.35 | | | 12.08 | 12.73 | 13.61 |
| | | velocity | 7.40 | 8.82 | 8.64 | 8.62 | 8.52 | 8.24 | 8.01 | 7.83 | 7.78 | 7.54 | 7.48 | 8.02 | | 8.69 | 8.25 | 7.71 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 19 | 147 | | | | |

**Tanabe, Jo (JPN) (1999)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2017 Japanese National High School Championships (Yamagata, JPN) *Kota (2017) - 70th high school championships: JAF scientific committee - biomechanics data collection*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-17 | time | 6.41 | 10.43 | 14.53 | 18.75 | 23.14 | 27.64 | 32.25 | 37.05 | 41.89 | 46.88 | | 52.41 | 8 / 3 | | | |
| reaction time | 0.187 | interval | | 4.02 | 4.10 | 4.22 | 4.39 | 4.50 | 4.61 | 4.80 | 4.84 | 4.99 | 5.53 | | | 12.34 | 13.50 | 14.63 |
| | | velocity | 7.02 | 8.71 | 8.54 | 8.29 | 7.97 | 7.78 | 7.59 | 7.29 | 7.23 | 7.01 | 7.23 | 7.63 | | 8.51 | 7.78 | 7.18 |
| H1 lead leg | | strides | | 15 | 14 | 15 | 14 | 15 | 15 | 15 | 15 | 15 | | 133 | | | | |

**Tanabe, Shotaro (JPN) (1994)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2016 Kinan Memorial (Osaka, JPN) | | | | | | | | | | *(2016.05.24) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en* | | | | | | | | | |
| date | 08-May-16 | time | 5.99 | 9.78 | 13.71 | 17.68 | 21.75 | | 25.97 | 30.42 | 34.97 | 39.61 | 44.39 | | 49.64 | 8 / 1 | | | |
| reaction time | | interval | | 3.79 | 3.93 | 3.97 | 4.07 | | 4.22 | 4.45 | 4.55 | 4.64 | 4.78 | 5.25 | PB | | 11.69 | 12.74 | 13.97 |
| | | velocity | 7.51 | 9.23 | 8.91 | 8.82 | 8.60 | | 8.29 | 7.87 | 7.69 | 7.54 | 7.32 | 7.62 | 8.06 | | 8.98 | 8.24 | 7.52 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Tashiro, Masahito (JPN) (1997)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2015 Japanese National High School Championships (Wakayama, JPN) | | | | | | | | | | *Enomoto (2015) - 68th high school championships: JAF scientific committee- biomechanics data* | | | | | | | | | |
| date | 31-Jul-15 | time | 6.12 | 10.01 | 14.03 | 18.13 | 22.37 | | 26.74 | 31.21 | 35.85 | 40.76 | 46.15 | | 51.92 | 8 / 5 | | | |
| reaction time | | interval | | 3.89 | 4.02 | 4.10 | 4.24 | | 4.37 | 4.47 | 4.64 | 4.91 | 5.39 | 5.77 | | | 12.01 | 13.08 | 14.94 |
| | | velocity | 7.35 | 9.00 | 8.71 | 8.54 | 8.25 | | 8.01 | 7.83 | 7.54 | 7.13 | 6.49 | 6.93 | 7.70 | | 8.74 | 8.03 | 7.03 |
| H1 lead leg | | strides | | 14 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 17 | | 136 | | | | |

**Tateno, Tetsuya (JPN) (1991)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2014 Japanese National Championships (Fukushima, JPN) | | | | | | | | | | *Yasunori (2014) - race pattern analysis of Japanese top 400m hurdlers for major domestic competitions* | | | | | | | | | |
| date | 08-Jun-14 | time | 6.04 | 9.81 | 13.63 | 17.55 | 21.59 | | 25.79 | 30.23 | 34.77 | 39.57 | 44.47 | | 49.98 | 6 / 4 | | | |
| reaction time | | interval | | 3.77 | 3.82 | 3.92 | 4.04 | | 4.20 | 4.44 | 4.54 | 4.80 | 4.90 | 5.51 | | | 11.51 | 12.68 | 14.24 |
| | | velocity | 7.45 | 9.28 | 9.16 | 8.93 | 8.66 | | 8.33 | 7.88 | 7.71 | 7.29 | 7.14 | 7.26 | 8.00 | | 9.12 | 8.28 | 7.37 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 16 | 16 | 19.2 | 174 | | | | |
| **FINAL** - 2012 Japanese National Championships (Osaka, JPN) | | | | | | | | | | *Yasunori (2013) - race pattern analysis for the top Japanese 400m hurdlers in major domestic competitions* | | | | | | | | | |
| date | 09-Jun-12 | time | 6.12 | 9.96 | 13.81 | 17.80 | 21.85 | | 26.09 | 30.43 | 34.83 | 39.48 | 44.20 | | 49.49 | 7 / 3 | | | |
| reaction time | | interval | | 3.84 | 3.85 | 3.99 | 4.05 | | 4.24 | 4.34 | 4.40 | 4.65 | 4.72 | 5.29 | =PB | | 11.68 | 12.63 | 13.77 |
| | | velocity | 7.35 | 9.11 | 9.09 | 8.77 | 8.64 | | 8.25 | 8.06 | 7.95 | 7.53 | 7.42 | 7.56 | 8.08 | | 8.99 | 8.31 | 7.63 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 16 | 16 | 19.5 | 175 | | | | |
| **B FINAL** - 2012 Shizuoka International Athletics Meeting (Fukuroi, JPN) | | | | | | | | | | *Yasunori (2013) - race pattern analysis for the top Japanese 400m hurdlers in major domestic competitions* | | | | | | | | | |
| date | 03-May-12 | time | 6.14 | 10.04 | 13.96 | 17.95 | 21.99 | | 26.24 | 30.64 | 35.13 | 39.78 | 44.62 | | 50.15 | / 2 | | | |
| reaction time | | interval | | 3.90 | 3.92 | 3.99 | 4.04 | | 4.25 | 4.40 | 4.49 | 4.65 | 4.84 | 5.53 | | | 11.81 | 12.69 | 13.98 |
| | | velocity | 7.33 | 8.97 | 8.93 | 8.77 | 8.66 | | 8.24 | 7.95 | 7.80 | 7.53 | 7.23 | 7.23 | 7.98 | | 8.89 | 8.27 | 7.51 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Taylor, Angelo (USA) (1978)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2012 Olympic Games (London, GBR) | | | | | | | | | | *Hillier (2012) - uka 2012 olympic games report: 400m hurdles* | | | | | | | | | |
| date | 06-Aug-12 | time | 5.79 | 9.27 | 12.85 | 16.56 | 20.39 | 22.19 | 24.49 | 28.67 | 33.13 | 37.80 | 42.59 | | 48.25 | 4 / 5 | | | |
| reaction time | 0.158 | interval | | 3.48 | 3.58 | 3.71 | 3.83 | | 4.10 | 4.18 | 4.46 | 4.67 | 4.79 | 5.66 | | | 10.77 | 12.11 | 13.92 |
| | | velocity | 7.77 | 10.06 | 9.78 | 9.43 | 9.14 | 9.01 | 8.54 | 8.37 | 7.85 | 7.49 | 7.31 | 7.07 | 8.29 | | 9.75 | 8.67 | 7.54 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 15 | 18.2 | 163 | | | | |
| **Heat 5** - 2012 Olympic Games (London, GBR) | | | | | | | | | | *Haines (2012) - mikehainesperformance.wordpress.com/2012/08/05/broadening-my-horizons-400m-hurdles-analysis* | | | | | | | | | |
| date | 03-Aug-12 | time | 5.92 | 9.44 | 13.26 | 17.06 | 21.02 | 22.62 | 25.24 | 29.66 | 34.08 | 38.68 | 43.64 | | 49.29 | 3 / 1 | | | |
| reaction time | 0.187 | interval | | 3.52 | 3.82 | 3.80 | 3.96 | | 4.22 | 4.42 | 4.42 | 4.60 | 4.96 | 5.65 | | | 11.14 | 12.60 | 13.98 |
| | | velocity | 7.60 | 9.94 | 9.16 | 9.21 | 8.84 | | 8.29 | 7.92 | 7.92 | 7.61 | 7.06 | 7.08 | 8.12 | | 9.43 | 8.33 | 7.51 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 14 | 18 | 161 | | | | |
| **FINAL** - 2011 IAAF World Championships (Daegu, KOR) | | | | | | | | | | *Behm (2011) - Le quatrache: Démus enfin!* | | | | | | | | | |
| date | 01-Sep-11 | time | 5.8 | 9.4 | 13.0 | 16.7 | 20.7 | | 24.8 | 29.1 | 33.6 | 38.3 | 43.2 | | 49.31 | 1 / 7 | | | |
| reaction time | 0.150 | interval | | 3.60 | 3.60 | 3.70 | 4.00 | | 4.10 | 4.30 | 4.50 | 4.70 | 4.90 | 6.11 | | | 10.90 | 12.40 | 14.10 |
| | | velocity | 7.76 | 9.72 | 9.72 | 9.46 | 8.75 | | 8.54 | 8.14 | 7.78 | 7.45 | 7.14 | 6.55 | 8.11 | | 9.63 | 8.47 | 7.45 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 16 | 19 | 166 | | | | |
| **Heat 4** - 2009 IAAF World Championships (Berlin, GER) | | | | | | | | | | *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships* | | | | | | | | | |
| date | 15-Aug-09 | time | 6.04 | 9.75 | 13.48 | 17.39 | 21.46 | | 25.87 | 30.36 | 34.88 | 39.48 | 44.42 | | 49.64 | 5 / 4 | | | |
| reaction time | 0.171 | interval | | 3.71 | 3.73 | 3.91 | 4.07 | | 4.41 | 4.49 | 4.52 | 4.60 | 4.94 | 5.22 | | | 11.35 | 12.97 | 14.06 |
| | | velocity | 7.45 | 9.43 | 9.38 | 8.95 | 8.60 | | 7.94 | 7.80 | 7.74 | 7.61 | 7.09 | 7.66 | 8.06 | | 9.25 | 8.10 | 7.47 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **FINAL** - 2008 Olympic Games (Beijing, CHN) | | | | | | | | | | *Behm (2008)- Pekin 2008: Le quatrache masculin - féminin* | | | | | | | | | |
| date | 18-Aug-08 | time | 5.7 | 9.4 | 13.1 | 16.7 | 20.6 | | 24.6 | 28.8 | 33.1 | 37.5 | 42.0 | | 47.25 | 6 / 1 | | | |
| reaction time | 0.164 | interval | | 3.70 | 3.70 | 3.60 | 3.90 | | 4.00 | 4.20 | 4.30 | 4.40 | 4.50 | 5.25 | PB | | 11.00 | 12.10 | 13.20 |
| | | velocity | 7.89 | 9.46 | 9.46 | 9.72 | 8.97 | | 8.75 | 8.33 | 8.14 | 7.95 | 7.78 | 7.62 | 8.47 | | 9.55 | 8.68 | 7.95 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 14 | 17.5 | 160.5 | | | | |
| **FINAL** - 2008 USA Olympic Trials (Eugene, OR) | | | | | | | | | | *USATF Hurdle Development (2008)* | | | | | | | | | |
| date | 29-Jun-08 | time | 6.07 | 9.71 | 13.43 | 17.40 | 21.67 | | 25.96 | 30.28 | 34.64 | 39.02 | 43.47 | | 48.42 | 3 / 3 | | | |
| reaction time | | interval | | 3.64 | 3.72 | 3.97 | 4.27 | | 4.29 | 4.32 | 4.36 | 4.38 | 4.45 | 4.95 | | | 11.33 | 12.88 | 13.19 |
| | | velocity | 7.41 | 9.62 | 9.41 | 8.82 | 8.20 | | 8.16 | 8.10 | 8.03 | 7.99 | 7.87 | 8.08 | 8.26 | | 9.27 | 8.15 | 7.96 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 14 | 14 | 14 | 14 | | 144 | | | | |
| **FINAL** - 2007 IAAF World Athletics Final (Stuttgart, GER) | | | | | | | | | | *Graubner (2007) - http://www.fgs.uni-halle.de* | | | | | | | | | |
| date | 22-Sep-07 | time | 6.34 | 9.94 | 13.72 | 17.54 | 21.52 | | 25.80 | 30.44 | 35.09 | 39.64 | 44.18 | | 49.27 | 8 / 5 | | | |
| reaction time | 0.152 | interval | | 3.60 | 3.78 | 3.82 | 3.98 | | 4.28 | 4.64 | 4.65 | 4.55 | 4.54 | 5.09 | | | 11.20 | 12.90 | 13.74 |
| | | velocity | 7.10 | 9.72 | 9.26 | 9.16 | 8.79 | | 8.18 | 7.54 | 7.53 | 7.69 | 7.71 | 7.86 | 8.12 | | 9.38 | 8.14 | 7.64 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **FINAL** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | | | | | | | |
| date | 27-Sep-00 | time | 5.90 | 9.62 | 13.38 | 17.22 | 21.14 | 22.66 | 25.10 | 29.22 | 33.58 | 38.02 | 42.46 | | 47.50 | 1 / 1 | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.179 | interval | | 3.72 | 3.76 | 3.84 | 3.92 | | 3.96 | 4.12 | 4.36 | 4.44 | 4.44 | 5.04 | PB | 11.32 | 12.00 | 13.24 |
| | | velocity | 7.63 | 9.41 | 9.31 | 9.11 | 8.93 | 8.83 | 8.84 | 8.50 | 8.03 | 7.88 | 7.88 | 7.94 | 8.42 | 9.28 | 8.75 | 7.93 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17.1 | 158.1 | | | |

**Semi-Final 2** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 5.84 | 9.60 | 13.48 | 17.36 | 21.28 | 22.80 | 25.32 | 29.60 | 34.04 | 38.52 | 43.12 | | 48.49 | 3 / 2 | | |
| reaction time | 0.250 | interval | | 3.76 | 3.88 | 3.88 | 3.92 | | 4.04 | 4.28 | 4.44 | 4.48 | 4.60 | 5.37 | | 11.52 | 12.24 | 13.52 |
| | | velocity | 7.71 | 9.31 | 9.02 | 9.02 | 8.93 | 8.77 | 8.66 | 8.18 | 7.88 | 7.81 | 7.61 | 7.45 | 8.25 | 9.11 | 8.58 | 7.77 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.4 | 138.4 | | | |

**Heat 3** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.06 | 9.90 | 13.74 | 17.58 | 21.58 | | 25.66 | 29.94 | 34.50 | 39.18 | 43.82 | | 49.48 | 8 / 1 | | |
| reaction time | 0.185 | interval | | 3.84 | 3.84 | 3.84 | 4.00 | | 4.08 | 4.28 | 4.56 | 4.68 | 4.64 | 5.66 | | 11.52 | 12.36 | 13.88 |
| | | velocity | 7.43 | 9.11 | 9.11 | 9.11 | 8.75 | | 8.58 | 8.18 | 7.68 | 7.48 | 7.54 | 7.07 | 8.08 | 9.11 | 8.50 | 7.56 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 14 | 17.5 | 158.5 | | | |

**FINAL** - 2000 ISTAF (Berlin, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-00 | time | 6.03 | 9.84 | 13.67 | 17.53 | 21.55 | | 25.72 | 30.06 | 34.34 | 38.72 | 43.27 | | 48.26 | / 1 | | |
| reaction time | | interval | | 3.81 | 3.83 | 3.86 | 4.02 | | 4.17 | 4.34 | 4.28 | 4.38 | 4.55 | 4.99 | | 11.50 | 12.53 | 13.21 |
| | | velocity | 7.46 | 9.19 | 9.14 | 9.07 | 8.71 | | 8.39 | 8.06 | 8.18 | 7.99 | 7.69 | 8.02 | 8.29 | 9.13 | 8.38 | 7.95 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Teixeira, Everson (BRA) (1974)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1996 Olympic Games (Atlanta, GA) *Behm (1996) - 400m haies*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Aug-96 | time | 6.0 | 10.0 | 13.8 | 17.6 | 21.6 | | 25.8 | 30.2 | 34.4 | 38.8 | 43.5 | | 48.57 | 3 / 7 | | |
| reaction time | 0.201 | interval | | 4.00 | 3.80 | 3.80 | 4.00 | | 4.20 | 4.40 | 4.20 | 4.40 | 4.70 | 5.07 | | 11.60 | 12.60 | 13.30 |
| | | velocity | 7.50 | 8.75 | 9.21 | 9.21 | 8.75 | | 8.33 | 7.95 | 8.33 | 7.95 | 7.45 | 7.89 | 8.24 | 9.05 | 8.33 | 7.89 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | | 137 | | | |

**Teles, Marcio (BRA) (1994)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2020 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Sep-20 | time | 6.04 | 9.91 | 13.81 | 17.75 | 21.95 | 23.8 | | 30.73 | 35.27 | 40.00 | 44.95 | | 51.04 | 8 / 9 | | |
| reaction time | 0.150 | interval | | 3.87 | 3.90 | 3.94 | 4.20 | | | 8.78 | 4.54 | 4.73 | 4.95 | 6.09 | | 11.71 | 12.98 | 14.22 |
| | | velocity | 7.45 | 9.04 | 8.97 | 8.88 | 8.33 | 8.40 | | 7.97 | 7.71 | 7.40 | 7.07 | 6.57 | 7.84 | 8.97 | 8.09 | 7.38 |
| H1 lead leg | L | strides | 23 | 14 | 14 | 14 | 14 | | | | 15 | 15 | 15 | 18.5 | 142.5 | | | |

**Tesarík, Štepán (CZE) (1978)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2002 European Championships (Munich, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-02 | time | 6.20 | 10.02 | 13.84 | 17.74 | 21.70 | | 25.80 | 30.08 | 34.58 | 39.14 | 43.87 | | 49.41 | / 6 | | |
| reaction time | 0.175 | interval | | 3.82 | 3.82 | 3.90 | 3.96 | | 4.10 | 4.28 | 4.50 | 4.56 | 4.73 | 5.54 | | 11.54 | 12.34 | 13.79 |
| | | velocity | 7.26 | 9.16 | 9.16 | 8.97 | 8.84 | | 8.54 | 8.18 | 7.78 | 7.68 | 7.40 | 7.22 | 8.10 | 9.10 | 8.51 | 7.61 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Thomas, Eric (USA) (1973)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2003 USATF National Championships (Palo Alto, CA) *USATF Women's Sprint Development (2003)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Jun-03 | time | 6.01 | 9.83 | 13.66 | 17.53 | 21.54 | | 25.66 | 29.93 | 34.28 | 38.76 | 43.33 | | 48.76 | 5 / ~~4~~ | | |
| reaction time | | interval | | 3.82 | 3.83 | 3.87 | 4.01 | | 4.12 | 4.27 | 4.35 | 4.48 | 4.57 | 5.43 | DV | 11.52 | 12.40 | 13.40 |
| | | velocity | 7.49 | 9.16 | 9.14 | 9.04 | 8.73 | | 8.50 | 8.20 | 8.05 | 7.81 | 7.66 | 7.37 | 8.20 | 9.11 | 8.47 | 7.84 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Semi-Final 1** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 6.02 | 9.86 | 13.74 | 17.62 | 21.58 | 23.14 | 25.66 | 30.04 | 34.42 | 39.02 | 43.74 | | 49.25 | 2 / 5 | | |
| reaction time | 0.188 | interval | | 3.84 | 3.88 | 3.88 | 3.96 | | 4.08 | 4.38 | 4.38 | 4.60 | 4.72 | 5.51 | | 11.60 | 12.42 | 13.70 |
| | | velocity | 7.48 | 9.11 | 9.02 | 9.02 | 8.84 | 8.64 | 8.58 | 7.99 | 7.99 | 7.61 | 7.42 | 7.26 | 8.12 | 9.05 | 8.45 | 7.66 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 17.8 | 161.8 | | | |

**Heat 4** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.08 | 9.88 | 13.72 | 17.64 | 21.60 | | 25.72 | 30.20 | 34.76 | 39.64 | 44.60 | | 50.16 | 6 / 2 | | |
| reaction time | 0.170 | interval | | 3.80 | 3.84 | 3.92 | 3.96 | | 4.12 | 4.48 | 4.56 | 4.88 | 4.96 | 5.56 | | 11.56 | 12.56 | 14.40 |
| | | velocity | 7.40 | 9.21 | 9.11 | 8.93 | 8.84 | | 8.50 | 7.81 | 7.68 | 7.17 | 7.06 | 7.19 | 7.97 | 9.08 | 8.36 | 7.29 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 17.4 | 161.4 | | | |

**FINAL** - 2000 ISTAF (Berlin, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-00 | time | 6.09 | 9.86 | 13.66 | 17.48 | 21.44 | | 25.47 | 29.76 | 34.04 | 38.60 | 43.23 | | 48.55 | / 4 | | |
| reaction time | | interval | | 3.77 | 3.80 | 3.82 | 3.96 | | 4.03 | 4.29 | 4.28 | 4.56 | 4.63 | 5.32 | | 11.39 | 12.28 | 13.47 |
| | | velocity | 7.39 | 9.28 | 9.21 | 9.16 | 8.84 | | 8.68 | 8.16 | 8.18 | 7.68 | 7.56 | 7.52 | 8.24 | 9.22 | 8.55 | 7.80 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 1996 USA Olympic Trials (Atlanta, GA) *McNichols - Hurdle technique study through video analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jun-96 | time | 5.98 | 9.83 | 13.67 | 17.53 | 21.47 | 22.18 | 25.41 | 29.59 | 33.90 | 38.39 | 43.09 | | 48.54 | 4 / 4 | | |
| reaction time | | interval | | 3.85 | 3.84 | 3.86 | 3.94 | | 3.94 | 4.18 | 4.31 | 4.49 | 4.70 | 5.45 | =PB | 11.55 | 12.06 | 13.50 |
| | | velocity | 7.53 | 9.09 | 9.11 | 9.07 | 8.88 | 9.02 | 8.88 | 8.37 | 8.12 | 7.80 | 7.45 | 7.34 | 8.24 | 9.09 | 8.71 | 7.78 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 14 | 13 | | 13 | 14 | 14 | 15 | 15 | | 144 | | | |

**Thompson, Kemel (JAM) (1974)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2003 IAAF World Championships (Paris, FRA) *Behm (2003) - Paris 2003:Le quatrache masculn - féminin*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Aug-03 | time | 5.8 | 9.5 | 13.4 | 17.3 | 21.4 | | 25.4 | 29.6 | 33.9 | 38.4 | 43.0 | | 48.51 | 3 / 5 | | |
| reaction time | 0.168 | interval | | 3.70 | 3.90 | 3.90 | 4.10 | | 4.00 | 4.20 | 4.30 | 4.50 | 4.60 | 5.51 | | 11.50 | 12.30 | 13.40 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.76 | 9.46 | 8.97 | 8.97 | 8.54 | 8.75 | 8.33 | 8.14 | 7.78 | 7.61 | 7.26 | 8.25 | | 9.13 | 8.54 | 7.84 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 18 | 169 | | | | |

**Heat 7** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.08 | 9.88 | 13.96 | 18.04 | 22.28 | 26.52 | 30.98 | 35.32 | 39.80 | 44.52 | | 50.40 | 7 / 4 | | | |
| reaction time | 0.241 | interval | | 3.80 | 4.08 | 4.08 | 4.24 | 4.24 | 4.46 | 4.34 | 4.48 | 4.72 | 5.88 | | | 11.96 | 12.94 | 13.54 |
| | | velocity | 7.40 | 9.21 | 8.58 | 8.58 | 8.25 | 8.25 | 7.85 | 8.06 | 7.81 | 7.42 | 6.80 | 7.94 | | 8.78 | 8.11 | 7.75 |
| H1 lead leg | | strides | 22 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 16 | | 152 | | | | |

**Semi-Final 1** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-99 | time | 5.62 | 9.40 | 13.27 | 17.19 | 21.30 | 25.44 | 29.68 | 33.99 | 38.36 | 42.99 | | 48.95 | 5 / 4 | | | |
| reaction time | 0.153 | interval | | 3.78 | 3.87 | 3.92 | 4.11 | 4.14 | 4.24 | 4.31 | 4.37 | 4.63 | 5.96 | | | 11.57 | 12.49 | 13.31 |
| | | velocity | 8.01 | 9.26 | 9.04 | 8.93 | 8.52 | 8.45 | 8.25 | 8.12 | 8.01 | 7.56 | 6.71 | 8.17 | | 9.08 | 8.41 | 7.89 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 19.5 | 171.5 | | | | |

**Tille, Fritz (FRG) (1951)**

**FINAL** - 1975 West German National Championships (Gelsenkirchen, FRG) *Helbig (1975) - 400-m-hürdenlauf*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Jun-75 | time | 6.2 | 10.2 | 14.4 | 18.5 | 22.7 | 24.7 | 27.0 | 31.7 | 36.5 | 41.1 | 46.1 | | 51.96 | 1 / 5 | | | |
| reaction time | | interval | | 4.03 | 4.13 | 4.12 | 4.19 | | 4.36 | 4.65 | 4.78 | 4.66 | 5.00 | 5.84 | | | 12.28 | 13.20 | 14.44 |
| | | velocity | 7.26 | 8.68 | 8.47 | 8.50 | 8.35 | 8.11 | 8.03 | 7.53 | 7.32 | 7.51 | 7.00 | 6.85 | 7.70 | | 8.55 | 7.95 | 7.27 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Tinsley, Michael (USA) (1984)**

**FINAL** - 2016 London Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jul-16 | time | 5.80 | 9.60 | 13.28 | 17.16 | 21.32 | | 25.68 | 30.12 | 34.60 | 39.32 | 44.28 | | 50.72 | 4 / 8 | | | |
| reaction time | 0.188 | interval | | 3.80 | 3.68 | 3.88 | 4.16 | | 4.36 | 4.44 | 4.48 | 4.72 | 4.96 | 6.44 | | | 11.36 | 12.96 | 14.16 |
| | | velocity | 7.76 | 9.21 | 9.51 | 9.02 | 8.41 | | 8.03 | 7.88 | 7.81 | 7.42 | 7.06 | 6.21 | 7.89 | | 9.24 | 8.10 | 7.42 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 14 | 14 | 14 | 15 | | 145 | | | | |

**FINAL** - 2016 USA Olympic Trials (Eugene, OR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-16 | time | 5.84 | 9.47 | 13.18 | 16.98 | 20.99 | | 25.12 | 29.36 | 33.77 | 38.40 | 43.28 | | 48.82 | 6 / 3 | | | |
| reaction time | 0.180 | interval | | 3.63 | 3.71 | 3.80 | 4.01 | | 4.13 | 4.24 | 4.41 | 4.63 | 4.88 | 5.54 | | | 11.14 | 12.38 | 13.92 |
| | | velocity | 7.71 | 9.64 | 9.43 | 9.21 | 8.73 | | 8.47 | 8.25 | 7.94 | 7.56 | 7.17 | 7.22 | 8.19 | | 9.43 | 8.48 | 7.54 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 14 | 14 | 15 | 16 | 18.7 | 165.7 | | | | |

**FINAL** - 2016 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2021) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-16 | time | 5.84 | 9.52 | 13.28 | 17.20 | 21.32 | | 25.64 | 29.96 | 34.40 | 38.92 | 43.60 | | 49.02 | 5 / 3 | | | |
| reaction time | 0.121 | interval | | 3.68 | 3.76 | 3.92 | 4.12 | | 4.32 | 4.32 | 4.44 | 4.52 | 4.68 | 5.42 | | | 11.36 | 12.76 | 13.64 |
| | | velocity | 7.71 | 9.51 | 9.31 | 8.93 | 8.50 | | 8.10 | 8.10 | 7.88 | 7.74 | 7.48 | 7.38 | 8.16 | | 9.24 | 8.23 | 7.70 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 14 | 14 | 15 | 15 | 18 | 164 | | | | |

**FINAL** - 2016 Prefontaine Classic (Eugene, OR) (TV Analysis) *(H8 5m short)* *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-16 | time | 5.92 | 9.56 | 13.44 | 17.44 | 21.64 | | 25.88 | 30.12 | 33.88 | 39.00 | 43.60 | | 48.74 | 3 / 1 | | | |
| reaction time | | interval | | 3.64 | 3.88 | 4.00 | 4.20 | | 4.24 | 4.24 | 3.76 | 5.12 | 4.60 | 5.14 | | | 11.52 | 12.68 | 13.48 |
| | | velocity | 7.60 | 9.62 | 9.02 | 8.75 | 8.33 | | 8.25 | 8.25 | 7.98 | 7.81 | 7.61 | 7.78 | 8.21 | | 9.11 | 8.28 | 7.79 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | | 14 | | | 17 | 15 | 18 | 138 | | | | |

**FINAL** - 2016 Shanghai Golden Grand Prix (Shanghai, CHN) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-May-16 | time | 5.84 | 9.52 | 13.28 | 17.20 | 21.24 | | 25.48 | 29.88 | 34.36 | 38.92 | 43.52 | | 48.90 | / 1 | | | |
| reaction time | 0.198 | interval | | 3.68 | 3.76 | 3.92 | 4.04 | | 4.24 | 4.40 | 4.48 | 4.56 | 4.60 | 5.38 | | | 11.36 | 12.68 | 13.64 |
| | | velocity | 7.71 | 9.51 | 9.31 | 8.93 | 8.66 | | 8.25 | 7.95 | 7.81 | 7.68 | 7.61 | 7.43 | 8.18 | | 9.24 | 8.28 | 7.70 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 15 | 15 | 18.2 | | | | | |

**FINAL** - 2015 IAAF World Championships (Beijing, CHN) (TV Analysis) *Henson (2021) - Athlete First: major championships report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-15 | time | 5.72 | 9.32 | 13.08 | 16.88 | 20.88 | | 25.04 | 29.16 | 33.48 | 38.20 | 43.04 | | 50.02 | 5 / 8 | | | |
| reaction time | 0.134 | interval | | 3.60 | 3.76 | 3.80 | 4.00 | | 4.16 | 4.12 | 4.32 | 4.72 | 4.84 | 6.98 | | | 11.16 | 12.28 | 13.88 |
| | | velocity | 7.87 | 9.72 | 9.31 | 9.21 | 8.75 | | 8.41 | 8.50 | 8.10 | 7.42 | 7.23 | 5.73 | 8.00 | | 9.41 | 8.55 | 7.56 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | | | 14 | 14 | 16 | 15 | | 133 | | | | |

**FINAL** - 2013 IAAF World Championships (Moscow, RUS) (TV Analysis) *Henson (2021) - Athlete First: major championships report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-13 | time | 5.63 | 9.13 | 12.80 | 16.57 | 20.43 | | 24.50 | 28.67 | 33.03 | 37.57 | 42.20 | | 47.70 | 3 / 2 | | | |
| reaction time | 0.133 | interval | | 3.50 | 3.67 | 3.77 | 3.86 | | 4.07 | 4.17 | 4.36 | 4.54 | 4.63 | 5.50 | PB | | 10.94 | 12.10 | 13.53 |
| | | velocity | 7.99 | 10.00 | 9.54 | 9.28 | 9.07 | | 8.60 | 8.39 | 8.03 | 7.71 | 7.56 | 7.27 | 8.39 | | 9.60 | 8.68 | 7.76 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 164.5 | | | | |

**FINAL** - 2012 Olympic Games (London, GBR) *Hillier (2012) - uka 2012 olympic games report: 400m hurdles*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-12 | time | 5.79 | 9.39 | 13.06 | 16.87 | 20.87 | 22.67 | 25.08 | 29.26 | 33.49 | 37.97 | 42.43 | | 47.91 | 6 / 2 | | | |
| reaction time | 0.184 | interval | | 3.60 | 3.67 | 3.81 | 4.00 | | 4.21 | 4.18 | 4.23 | 4.48 | 4.46 | 5.48 | PB | | 11.08 | 12.39 | 13.17 |
| | | velocity | 7.77 | 9.72 | 9.54 | 9.19 | 8.75 | 8.82 | 8.31 | 8.37 | 8.27 | 7.81 | 7.85 | 7.30 | 8.35 | | 9.48 | 8.47 | 7.97 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 14 | 14 | 15 | 15 | 18 | 164 | | | | |

**Heat 4** - 2007 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2007)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jun-07 | time | 6.11 | 9.89 | 13.78 | 17.78 | 22.02 | | 26.46 | 30.90 | 35.29 | 39.72 | 44.24 | | 49.32 | 6 / 2 | | | |
| reaction time | | interval | | 3.78 | 3.89 | 4.00 | 4.24 | | 4.44 | 4.44 | 4.39 | 4.43 | 4.52 | 5.08 | | | 11.67 | 13.12 | 13.34 |
| | | velocity | 7.36 | 9.26 | 9.00 | 8.75 | 8.25 | | 7.88 | 7.88 | 7.97 | 7.90 | 7.74 | 7.87 | 8.11 | | 9.00 | 8.00 | 7.87 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 14 | 14 | 14 | 15 | | 145 | | | | |

**FINAL** - 2006 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2006)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jun-06 | time | 6.01 | 9.76 | 12.48 | 17.42 | 21.49 | | 25.79 | 30.18 | 34.75 | 39.34 | 44.06 | | 49.68 | 8 / 6 | | | |
| reaction time | | interval | | 3.75 | 2.72 | 4.94 | 4.07 | | 4.30 | 4.39 | 4.57 | 4.59 | 4.72 | 5.62 | | | 11.41 | 12.76 | 13.88 |
| | | velocity | 7.49 | 9.33 | 12.87 | 7.09 | 8.60 | | 8.14 | 7.97 | 7.66 | 7.63 | 7.42 | 7.12 | 8.05 | | 9.20 | 8.23 | 7.56 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | | 151 | | | | |

**Tomov, Toma (BUL) (1958)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Semi-Final 2** - 1988 Olympic Games (Seoul, KOR) *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-88 | time | 5.96 | 9.77 | 13.65 | 17.64 | 21.70 | | 25.90 | 30.14 | 34.61 | 39.23 | 43.84 | | 48.90 | 3 / 5 | | | |
| reaction time | | interval | | 3.81 | 3.88 | 3.99 | 4.06 | | 4.20 | 4.24 | 4.47 | 4.62 | 4.61 | 5.06 | | | 11.68 | 12.50 | 13.70 |
| | | velocity | 7.55 | 9.19 | 9.02 | 8.77 | 8.62 | | 8.33 | 8.25 | 7.83 | 7.58 | 7.59 | 7.91 | 8.18 | | 8.99 | 8.40 | 7.66 |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 17.8 | 167.8 | | | | |

**Tonoyama, Ryohei (JPN) (2003)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2021 Japanese High School National Championships (Fukui, JPN) *Shibayama (2021) - national high school and U20 national championhsips*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jul-21 | time | 6.07 | 10.09 | 14.38 | 18.75 | 23.22 | | 27.86 | 32.55 | 37.29 | 42.03 | 46.86 | | 52.36 | 3 / 3 | | | |
| reaction time | 0.190 | interval | | 4.02 | 4.29 | 4.37 | 4.47 | | 4.64 | 4.69 | 4.74 | 4.74 | 4.83 | 5.50 | | | 12.68 | 13.80 | 14.31 |
| | | velocity | 7.41 | 8.71 | 8.16 | 8.01 | 7.83 | | 7.54 | 7.46 | 7.38 | 7.38 | 7.25 | 7.27 | 7.64 | | 8.28 | 7.61 | 7.34 |
| H1 lead leg | | strides | | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | | 135 | | | | |

**FINAL** - 2021 Japanese U20 National Championships (Osaka, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.26 | 10.23 | 14.25 | 18.45 | 22.77 | | 27.28 | 31.90 | 36.65 | 41.47 | 46.61 | | 52.55 | 2 / 7 | | | |
| reaction time | 0.202 | interval | | 3.97 | 4.02 | 4.20 | 4.32 | | 4.51 | 4.62 | 4.75 | 4.82 | 5.14 | 5.94 | | | 12.19 | 13.45 | 14.71 |
| | | velocity | 7.19 | 8.82 | 8.71 | 8.33 | 8.10 | | 7.76 | 7.58 | 7.37 | 7.26 | 6.81 | 6.73 | 7.61 | | 8.61 | 7.81 | 7.14 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 17 | | 159 | | | | |

**Touati, Mohamed Amin (TUN) (1998)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**B FINAL** - 2021 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-May-21 | time | 5.93 | 9.73 | 13.60 | 17.67 | 21.77 | 23.7 | 26.13 | 30.60 | 35.17 | 39.77 | 45.67 | | 52.11 | 6 / 4 | | | |
| reaction time | 0.155 | interval | | 3.80 | 3.87 | 4.07 | 4.10 | | 4.36 | 4.47 | 4.57 | 4.60 | 5.90 | 6.44 | | | 11.74 | 12.93 | 15.07 |
| | | velocity | 7.59 | 9.21 | 9.04 | 8.60 | 8.54 | 8.44 | 8.03 | 7.83 | 7.66 | 7.61 | 5.93 | 6.21 | 7.68 | | 8.94 | 8.12 | 6.97 |
| H1 lead leg | L | strides | 21 | 14 | 13 | 14 | 14 | | 14 | 14 | 14 | 14 | 16 | 18 | 166 | | | | |

**Semi-Final 1** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 6.20 | 10.04 | 13.92 | 17.80 | 21.88 | | 26.06 | 30.28 | 34.63 | 39.11 | 43.76 | | 49.14 | 4 / 5 | | | |
| reaction time | 0.179 | interval | | 3.84 | 3.88 | 3.88 | 4.08 | | 4.18 | 4.22 | 4.35 | 4.48 | 4.65 | 5.38 | PB | | 11.60 | 12.48 | 13.48 |
| | | velocity | 7.26 | 9.11 | 9.02 | 9.02 | 8.58 | | 8.37 | 8.29 | 8.05 | 7.81 | 7.53 | 7.43 | 8.14 | | 9.05 | 8.41 | 7.79 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 13 | 14 | | 14 | 14 | 14 | 15 | 15 | 17.7 | 166.7 | | | | |

**Toyoda, Ken (JPN) (2002)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2020 Japanese High School National Championships (Hiroshima, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Oct-20 | time | 6.12 | 10.06 | 14.13 | 18.23 | 22.46 | | 26.94 | 31.68 | 36.64 | 41.71 | 46.91 | | 52.96 | 3 / 5 | | | |
| reaction time | 0.175 | interval | | 3.94 | 4.07 | 4.10 | 4.23 | | 4.48 | 4.74 | 4.96 | 5.07 | 5.20 | 6.05 | | | 12.11 | 13.45 | 15.23 |
| | | velocity | 7.35 | 8.88 | 8.60 | 8.54 | 8.27 | | 7.81 | 7.38 | 7.06 | 6.90 | 6.73 | 6.61 | 7.55 | | 8.67 | 7.81 | 6.89 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.7 | 163.7 | | | | |

**Toyoda, Masaki (JPN) (1998)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2022 Japanese National Championsips (Osaka, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-22 | time | 6.14 | 10.06 | 14.08 | 18.23 | 22.46 | | 26.64 | 30.88 | 35.25 | 39.77 | 44.48 | | 49.85 | 9 / 3 | | | |
| reaction time | 0.211 | interval | | 3.92 | 4.02 | 4.15 | 4.23 | | 4.18 | 4.24 | 4.37 | 4.52 | 4.71 | 5.37 | | | 12.09 | 12.65 | 13.60 |
| | | velocity | 7.33 | 8.93 | 8.71 | 8.43 | 8.27 | | 8.37 | 8.25 | 8.01 | 7.74 | 7.43 | 7.45 | 8.02 | | 8.68 | 8.30 | 7.72 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.7 | 168.7 | | | | |

**FINAL** - 2022 Seiko Golden Grand Prix (Tokyo, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-22 | time | 6.09 | 10.09 | 14.21 | 18.37 | 22.56 | | 26.78 | 31.03 | 35.42 | 39.89 | 44.49 | | 49.76 | 4 / 4 | | | |
| reaction time | 0.183 | interval | | 4.00 | 4.12 | 4.16 | 4.19 | | 4.22 | 4.25 | 4.39 | 4.47 | 4.60 | 5.27 | | | 12.28 | 12.66 | 13.46 |
| | | velocity | 7.39 | 8.75 | 8.50 | 8.41 | 8.35 | | 8.29 | 8.24 | 7.97 | 7.83 | 7.61 | 7.59 | 8.04 | | 8.55 | 8.29 | 7.80 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 168 | | | | |

**FINAL** - 2022 Michitaka Kinami Memorial (Osaka, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-May-22 | time | 6.11 | 9.98 | 13.95 | 18.05 | 22.12 | | 26.24 | 30.46 | 34.87 | 39.49 | 44.34 | | 49.87 | 4 / 5 | | | |
| reaction time | 0.183 | interval | | 3.87 | 3.97 | 4.10 | 4.07 | | 4.12 | 4.22 | 4.41 | 4.62 | 4.85 | 5.53 | | | 11.94 | 12.41 | 13.88 |
| | | velocity | 7.36 | 9.04 | 8.82 | 8.54 | 8.60 | | 8.50 | 8.29 | 7.94 | 7.58 | 7.22 | 7.23 | 8.02 | | 8.79 | 8.46 | 7.56 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | | 129 | | | | |

**FINAL** - 2021 Japanese National Championships (Osaka, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.01 | 9.81 | 13.63 | 17.60 | 21.60 | | 25.73 | 29.96 | 34.48 | 39.17 | 44.11 | | 49.89 | 4 / 5 | | | |
| reaction time | 0.227 | interval | | 3.80 | 3.82 | 3.97 | 4.00 | | 4.13 | 4.23 | 4.52 | 4.69 | 4.94 | 5.78 | | | 11.59 | 12.36 | 14.15 |
| | | velocity | 7.49 | 9.21 | 9.16 | 8.82 | 8.75 | | 8.47 | 8.27 | 7.74 | 7.46 | 7.09 | 6.92 | 8.02 | | 9.06 | 8.50 | 7.42 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 16 | 19 | 170 | | | | |

**B FINAL** - 2021 Michitaka Kinami Memorial (Osaka, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jun-21 | time | 6.14 | 10.09 | 14.13 | 18.28 | 22.49 | | 26.76 | 31.01 | 35.42 | 40.02 | 44.69 | | 49.94 | 8 / 1 | | | |
| reaction time | 0.214 | interval | | 3.95 | 4.04 | 4.15 | 4.21 | | 4.27 | 4.25 | 4.41 | 4.60 | 4.67 | 5.25 | | | 12.14 | 12.73 | 13.68 |
| | | velocity | 7.33 | 8.86 | 8.66 | 8.43 | 8.31 | | 8.20 | 8.24 | 7.94 | 7.61 | 7.49 | 7.62 | 8.01 | | 8.65 | 8.25 | 7.68 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 168.5 | | | | |

**FINAL** - 2021 Ready Steady Tokyo (Tokyo, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-May-21 | time | 5.92 | 9.74 | 13.66 | 17.75 | 21.82 | | 26.03 | 30.31 | 34.67 | 39.14 | 43.69 | | 48.87 | 4 / 3 | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.158 | interval | | 3.82 | 3.92 | 4.09 | 4.07 | 4.21 | 4.28 | 4.36 | 4.47 | 4.55 | 5.18 | PB | | 11.83 | 12.56 | 13.38 |
| | | velocity | 7.60 | 9.16 | 8.93 | 8.56 | 8.60 | 8.31 | 8.18 | 8.03 | 7.83 | 7.69 | 7.72 | 8.18 | | 8.88 | 8.36 | 7.85 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 18.5 | 147.5 | | | | |

**FINAL** - 2021 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-21 | time | 5.97 | 9.83 | 13.86 | 17.97 | 22.19 | 26.53 | 30.85 | 35.35 | 40.06 | 44.99 | | 50.82 | 8 / 4 | | | |
| reaction time | 0.197 | interval | | 3.86 | 4.03 | 4.11 | 4.22 | 4.34 | 4.32 | 4.50 | 4.71 | 4.93 | 5.83 | | | 12.00 | 12.88 | 14.14 |
| | | velocity | 7.54 | 9.07 | 8.68 | 8.52 | 8.29 | 8.06 | 8.10 | 7.78 | 7.43 | 7.10 | 6.86 | 7.87 | | 8.75 | 8.15 | 7.43 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 19 | 169 | | | | |

**FINAL** - 2020 Japanese National Championships (Niigata, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Oct-20 | time | 6.09 | 9.94 | 13.85 | 17.92 | 22.06 | 26.36 | 30.63 | 35.09 | 39.72 | 44.48 | | 49.96 | 9 / 3 | | | |
| reaction time | 0.203 | interval | | 3.85 | 3.91 | 4.07 | 4.14 | 4.30 | 4.27 | 4.46 | 4.63 | 4.76 | 5.48 | | | 11.83 | 12.71 | 13.85 |
| | | velocity | 7.39 | 9.09 | 8.95 | 8.60 | 8.45 | 8.14 | 8.20 | 7.85 | 7.56 | 7.35 | 7.30 | 8.01 | | 8.88 | 8.26 | 7.58 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 18.7 | 168.7 | | | | |

**FINAL** - 2020 All Japan Corporate Championships (Kumagaya, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Sep-20 | time | 6.22 | 10.16 | 14.18 | 18.42 | 22.66 | 26.91 | 31.10 | 35.64 | 40.34 | 45.05 | | 50.63 | 7 / 3 | | | |
| reaction time | 0.242 | interval | | 3.94 | 4.02 | 4.24 | 4.24 | 4.25 | 4.19 | 4.54 | 4.70 | 4.71 | 5.58 | | | 12.20 | 12.68 | 13.95 |
| | | velocity | 7.23 | 8.88 | 8.71 | 8.25 | 8.25 | 8.24 | 8.35 | 7.71 | 7.45 | 7.43 | 7.17 | 7.90 | | 8.61 | 8.28 | 7.53 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | | 129 | | | | |

**FINAL** - 2020 World Athletics Trials (Fuji, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Sep-20 | time | 6.09 | 9.96 | 13.91 | 18.07 | 22.17 | 26.38 | 30.56 | 34.93 | 39.52 | 44.23 | | 49.63 | / 1 | | | |
| reaction time | | interval | | 3.87 | 3.95 | 4.16 | 4.10 | 4.21 | 4.18 | 4.37 | 4.59 | 4.71 | 5.40 | | | 11.98 | 12.49 | 13.67 |
| | | velocity | 7.39 | 9.04 | 8.86 | 8.41 | 8.54 | 8.31 | 8.37 | 8.01 | 7.63 | 7.43 | 7.41 | 8.06 | | 8.76 | 8.41 | 7.68 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | | 129 | | | | |

**FINAL** - 2020 Seiko Golden Grand Prix (Tokyo, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-20 | time | 6.01 | 9.91 | 13.85 | 17.90 | 21.97 | 26.21 | 30.46 | 34.83 | 39.52 | 44.29 | | 49.82 | 5 / 2 | | | |
| reaction time | 0.146 | interval | | 3.90 | 3.94 | 4.05 | 4.07 | 4.24 | 4.25 | 4.37 | 4.69 | 4.77 | 5.53 | | | 11.89 | 12.56 | 13.83 |
| | | velocity | 7.49 | 8.97 | 8.88 | 8.64 | 8.60 | 8.25 | 8.24 | 8.01 | 7.46 | 7.34 | 7.23 | 8.03 | | 8.83 | 8.36 | 7.59 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | | 129 | | | | |

**Semi-Final 2** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 6.00 | 9.80 | 13.60 | 17.57 | 21.70 | 26.03 | 30.44 | 35.05 | 39.84 | 44.69 | | 50.30 | 2 / 8 | | | |
| reaction time | 0.207 | interval | | 3.80 | 3.80 | 3.97 | 4.13 | 4.33 | 4.41 | 4.61 | 4.79 | 4.85 | 5.61 | | | 11.57 | 12.87 | 14.25 |
| | | velocity | 7.50 | 9.21 | 9.21 | 8.82 | 8.47 | 8.08 | 7.94 | 7.59 | 7.31 | 7.22 | 7.13 | 7.95 | | 9.08 | 8.16 | 7.37 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 18 | 168 | | | | |

**FINAL** - 2019 Japanese National Championships (Fukuoka, JPN) *Yamanaka (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jun-19 | time | 5.92 | 9.74 | 13.61 | 17.65 | 21.69 | 25.88 | 30.16 | 34.53 | 38.99 | 43.68 | | 49.05 | 7 / 2 | | | |
| reaction time | 0.172 | interval | | 3.82 | 3.87 | 4.04 | 4.04 | 4.19 | 4.28 | 4.37 | 4.46 | 4.69 | 5.37 | PB | | 11.73 | 12.51 | 13.52 |
| | | velocity | 7.60 | 9.16 | 9.04 | 8.66 | 8.66 | 8.35 | 8.18 | 8.01 | 7.85 | 7.46 | 7.45 | 8.15 | | 8.95 | 8.39 | 7.77 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 18.5 | 168.5 | | | | |

**FINAL** - 2019 Seiko Golden Grand Prix (Osaka, JPN) *Hirokawa (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-May-19 | time | 6.14 | 9.94 | 13.81 | 17.85 | 22.02 | 26.39 | 30.86 | 35.50 | 40.22 | 44.98 | | 50.38 | 3 / 1 | | | |
| reaction time | 0.349 | interval | | 3.80 | 3.87 | 4.04 | 4.17 | 4.37 | 4.47 | 4.64 | 4.72 | 4.76 | 5.40 | | | 11.71 | 13.01 | 14.12 |
| | | velocity | 7.33 | 9.21 | 9.04 | 8.66 | 8.39 | 8.01 | 7.83 | 7.54 | 7.42 | 7.35 | 7.41 | 7.94 | | 8.97 | 8.07 | 7.44 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 18.5 | 168.5 | | | | |

**C FINAL** - 2019 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Kobayashi (2019) - research on athlete performance and technique- 2019 data book*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-19 | time | 5.94 | 9.69 | 13.45 | 17.42 | 21.42 | 25.58 | 29.90 | 34.42 | 39.32 | 44.34 | | 49.94 | 3 / 1 | | | |
| reaction time | | interval | | 3.75 | 3.76 | 3.97 | 4.00 | 4.16 | 4.32 | 4.52 | 4.90 | 5.02 | 5.60 | PB | | 11.48 | 12.48 | 14.44 |
| | | velocity | 7.58 | 9.33 | 9.31 | 8.82 | 8.75 | 8.41 | 8.10 | 7.74 | 7.14 | 6.97 | 7.14 | 8.01 | | 9.15 | 8.41 | 7.27 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 19 | 152 | | | | |

**FINAL** - 2015 Japanese National Junior Championships (Nagoya, JPN) *Yasunori (2015) - race pattern analysis of the top 400m hurdlers in Japan*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Oct-15 | time | 6.28 | 10.32 | 14.42 | 18.76 | 23.10 | 27.40 | 31.58 | 35.98 | 40.45 | 45.02 | | 50.16 | 4 / 2 | | | |
| reaction time | | interval | | 4.04 | 4.10 | 4.34 | 4.34 | 4.30 | 4.18 | 4.40 | 4.47 | 4.57 | 5.14 | PB | | 12.48 | 12.82 | 13.44 |
| | | velocity | 7.17 | 8.66 | 8.54 | 8.06 | 8.06 | 8.14 | 8.37 | 7.95 | 7.83 | 7.66 | 7.78 | 7.97 | | 8.41 | 8.19 | 7.81 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**FINAL** - 2015 Japanese National High School Championships (Wakayama, JPN) *Enomoto (2015) - 68th high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-15 | time | 6.12 | 10.04 | 14.01 | 18.15 | 22.32 | 26.74 | 31.30 | 35.82 | 40.52 | 45.28 | | 50.85 | 9 / 2 | | | |
| reaction time | | interval | | 3.92 | 3.97 | 4.14 | 4.17 | 4.42 | 4.56 | 4.52 | 4.70 | 4.76 | 5.57 | | | 12.03 | 13.15 | 13.98 |
| | | velocity | 7.35 | 8.93 | 8.82 | 8.45 | 8.39 | 7.92 | 7.68 | 7.74 | 7.45 | 7.35 | 7.18 | 7.87 | | 8.73 | 7.98 | 7.51 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 15 | | 132 | | | | |

| **Traversini, Stéphane (FRA) (1969)** | | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1992 French National Championships (Narbonne, FRA) *Veney - split times from PJ*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Jun-92 | time | 6.48 | 10.48 | 14.64 | 18.84 | 23.06 | 27.44 | 31.82 | 36.26 | 40.80 | 45.50 | | 50.96 | / 2 | | | |
| reaction time | | interval | | 4.00 | 4.16 | 4.20 | 4.22 | 4.38 | 4.38 | 4.44 | 4.54 | 4.70 | 5.46 | | | 12.36 | 12.98 | 13.68 |
| | | velocity | 6.94 | 8.75 | 8.41 | 8.33 | 8.29 | 7.99 | 7.99 | 7.88 | 7.71 | 7.45 | 7.33 | 7.85 | | 8.50 | 8.09 | 7.68 |
| H1 lead leg | | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 17.8 | 169.8 | | | | |

| **Tsutsue, Kaito (JPN) (1998)** | | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2021 Japanese National Championships (Osaka, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.04 | 9.84 | 13.73 | 17.68 | 21.81 | 26.11 | 30.41 | 35.00 | 39.77 | 44.83 | | 50.69 | 2 / 6 | | | |
| reaction time | 0.195 | interval | | 3.80 | 3.89 | 3.95 | 4.13 | 4.30 | 4.30 | 4.59 | 4.77 | 5.06 | 5.86 | | | 11.64 | 12.73 | 14.42 |
| | | velocity | 7.45 | 9.21 | 9.00 | 8.86 | 8.47 | 8.14 | 8.14 | 7.63 | 7.34 | 6.92 | 6.83 | 7.89 | | 9.02 | 8.25 | 7.28 |
| H1 lead leg | R | strides | 23 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | 15 | 19 | 168 | | | | |

**B FINAL** - 2021 Denka Athletics Challenge Cup (Niigata, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jun-21 | time | 6.02 | 9.74 | 13.56 | 17.43 | 21.54 | 25.78 | 30.16 | 34.68 | 39.37 | 44.26 | | 49.98 | 7 / 1 | | | |
| reaction time | | interval | | 3.72 | 3.82 | 3.87 | 4.11 | 4.24 | 4.38 | 4.52 | 4.69 | 4.89 | 5.72 | | | 11.41 | 12.73 | 14.10 |
| | | velocity | 7.48 | 9.41 | 9.16 | 9.04 | 8.52 | 8.25 | 7.99 | 7.74 | 7.46 | 7.16 | 6.99 | 8.00 | | 9.20 | 8.25 | 7.45 |
| H1 lead leg | R | strides | 22 | 13 | 13 | 13 | 14 | 14 | 14 | 15 | 15 | 15 | 19.7 | 167.7 | | | | |

**Tucker, Paul (GUY) (1976)**

**Heat 7** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 24-Sep-00 | time | 6.00 | 9.80 | 13.76 | 17.76 | 21.88 | | 26.04 | 30.48 | 35.04 | 39.92 | | | 50.92 | 6 / 6 | | | |
| reaction time 0.354 | interval | | 3.80 | 3.96 | 4.00 | 4.12 | | 4.16 | 4.44 | 4.56 | 4.88 | | | | | 11.76 | 12.72 | |
| | velocity | 7.50 | 9.21 | 8.84 | 8.75 | 8.50 | | 8.41 | 7.88 | 7.68 | 7.17 | | | 7.86 | | 8.93 | 8.25 | |
| H1 lead leg | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 16 | | | 138 | | | | |

**Tverdokhleb, Oleg (UKR) (1969)**

**FINAL** - 1994 European Championships (Helsinki, FIN) *Behm (1995) - la tactique du 400 haies*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 10-Aug-94 | time | 5.9 | 9.6 | 13.4 | 17.3 | 21.2 | | 25.3 | 29.3 | 33.6 | 38.0 | 42.6 | | 48.06 | / 1 | | | |
| reaction time | interval | | 3.70 | 3.80 | 3.90 | 3.90 | | 4.10 | 4.00 | 4.30 | 4.40 | 4.60 | 5.46 | NR | | 11.40 | 12.00 | 13.30 |
| | velocity | 7.63 | 9.46 | 9.21 | 8.97 | 8.97 | | 8.54 | 8.75 | 8.14 | 7.95 | 7.61 | 7.33 | 8.32 | | 9.21 | 8.75 | 7.89 |
| H1 lead leg | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | | 143 | | | | |

**Tziortzis, Stavros (GRE) (1949)**

**FINAL** - 1972 Olympic Games (Munich, FRG) *Le Masurier (1977) - die olympischen 400-m-hürdenlauf vom Mexico City, München und Montreal*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 03-Sep-72 | time | 6.2 | 9.9 | 13.8 | 17.7 | 21.8 | 23.5 | 26.1 | 30.3 | 34.8 | 39.4 | 44.2 | | 49.66 | 8 / =6 | | | |
| reaction time | interval | | 3.70 | 3.90 | 3.90 | 4.10 | | 4.30 | 4.20 | 4.50 | 4.60 | 4.80 | 5.46 | NR | | 11.50 | 12.60 | 13.90 |
| | velocity | 7.26 | 9.46 | 8.97 | 8.97 | 8.54 | 8.51 | 8.14 | 8.33 | 7.78 | 7.61 | 7.29 | 7.33 | 8.05 | | 9.13 | 8.33 | 7.55 |
| H1 lead leg R | strides | 22 | 15 | 15 | 15 | 15 | | 16 | 16 | 16 | 16 | 17 | | 163 | | | | |

**Urbaniak, Sebastian (POL) (2001)**

**FINAL** - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 06-Aug-22 | time | 5.96 | 9.83 | 13.70 | 17.73 | 21.73 | 23.48 | 25.96 | 30.36 | | 39.53 | | | 49.85 | 8 / 8 | | | |
| reaction time 0.160 | interval | | 3.87 | 3.87 | 4.03 | 4.00 | | 4.23 | 4.40 | | 9.17 | | | | | 11.77 | 12.63 | |
| | velocity | 7.55 | 9.04 | 9.04 | 8.68 | 8.75 | 8.52 | 8.27 | 7.95 | | 7.63 | | | 8.02 | | 8.92 | 8.31 | |
| H1 lead leg L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | | | | | 105 | | | | |

**Valentian, Jean-Pascal (FRA) (1960)**

**FINAL** - 1987 French National Championships (Annecy, FRA) *Veney - split times from PJ*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 09-Aug-87 | time | 6.25 | 10.22 | 14.27 | 18.54 | 22.81 | | 26.99 | 31.59 | 36.14 | 40.91 | 45.79 | | 51.49 | / 5 | | | |
| reaction time | interval | | 3.97 | 4.05 | 4.27 | 4.27 | | 4.18 | 4.60 | 4.55 | 4.77 | 4.88 | 5.70 | | | 12.29 | 13.05 | 14.20 |
| | velocity | 7.20 | 8.82 | 8.64 | 8.20 | 8.20 | | 8.37 | 7.61 | 7.69 | 7.34 | 7.17 | 7.02 | 7.77 | | 8.54 | 8.05 | 7.39 |
| H1 lead leg | strides | | 14 | 14 | 14 | 14 | | 14 | 14 | 14 | 14 | 14 | | 126 | | | | |

**Valle, Emilio (CUB) (1967)**

**FINAL** - 1986 IAAF World Junor Championships (Athens, GRE) *Miskos (1986) - IAAF biomechanical research - Athens 1986 - hurdle races*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 18-Jul-86 | time | 6.06 | 9.96 | 13.87 | 17.92 | 21.86 | | 26.50 | 31.12 | 35.64 | 40.22 | 44.92 | | 50.02 | / 1 | | | |
| reaction time | interval | | 3.90 | 3.91 | 4.05 | 3.94 | | 4.64 | 4.62 | 4.52 | 4.58 | 4.70 | 5.10 | CR | | 11.86 | 13.20 | 13.80 |
| | velocity | 7.43 | 8.97 | 8.95 | 8.64 | 8.88 | | 7.54 | 7.58 | 7.74 | 7.64 | 7.45 | 7.84 | 8.00 | | 8.85 | 7.95 | 7.61 |
| H1 lead leg | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 18 | 169 | | | | |

**Valliant, Ludvy (FRA) (1995)**

**FINAL** - 2023 Prefontaine Classic (Eugene, OR) *Omega Timing (2023) - diamond league race analysis*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 16-Sep-23 | time | 5.85 | 9.49 | 13.18 | 16.88 | 20.67 | | 24.61 | 28.73 | 33.04 | 37.54 | 42.26 | | 47.93 | 1 / 6 | | | |
| reaction time 0.138 | interval | | 3.64 | 3.69 | 3.70 | 3.79 | | 3.94 | 4.12 | 4.31 | 4.50 | 4.72 | 5.67 | | | 11.03 | 11.85 | 13.53 |
| | velocity | 7.69 | 9.62 | 9.49 | 9.46 | 9.23 | | 8.88 | 8.50 | 8.12 | 7.78 | 7.42 | 7.05 | 8.35 | | 9.52 | 8.86 | 7.76 |
| H1 lead leg R | strides | 21 | | | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 18 | 134 | | | | |

**Semi-Final 2** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 21-Aug-23 | time | 5.90 | 9.64 | 13.31 | 16.85 | 20.68 | | 24.69 | 28.87 | 33.35 | 37.94 | 42.88 | | 48.48 | 6 / 3 | | | |
| reaction time 0.194 | interval | | 3.74 | 3.67 | 3.54 | 3.83 | | 4.01 | 4.18 | 4.48 | 4.59 | 4.94 | 5.60 | | | 10.95 | 12.02 | 14.01 |
| | velocity | 7.63 | 9.36 | 9.54 | 9.89 | 9.14 | | 8.73 | 8.37 | 7.81 | 7.63 | 7.09 | 7.14 | 8.25 | | 9.59 | 8.74 | 7.49 |
| H1 lead leg R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 18 | 161 | | | | |

**Heat 1** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 20-Aug-23 | time | 5.83 | 9.60 | 13.23 | 16.80 | 20.63 | | 24.60 | 28.80 | 33.23 | 37.76 | 42.60 | | 48.27 | 3 / 2 | | | |
| reaction time 0.182 | interval | | 3.77 | 3.63 | 3.57 | 3.83 | | 3.97 | 4.20 | 4.43 | 4.53 | 4.84 | 5.67 | | | 10.97 | 12.00 | 13.80 |
| | velocity | 7.72 | 9.28 | 9.64 | 9.80 | 9.14 | | 8.82 | 8.33 | 7.90 | 7.73 | 7.23 | 7.05 | 8.29 | | 9.57 | 8.75 | 7.61 |
| H1 lead leg R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.7 | 159.7 | | | | |

**FINAL** - 2023 Herculis Meeting International d'Athlétisme (Monaco, MON) *Omega Timing (2023) - diamond league race analysis*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date 21-Jul-23 | time | 5.73 | 9.32 | 12.98 | 16.74 | 20.61 | | 24.63 | 28.82 | 33.23 | 37.76 | 42.39 | | 47.85 | 2 / 4 | | | |
| reaction time 0.158 | interval | | 3.59 | 3.66 | 3.76 | 3.87 | | 4.02 | 4.19 | 4.41 | 4.53 | 4.63 | 5.46 | PB | | 11.01 | 12.08 | 13.57 |
| | velocity | 7.85 | 9.75 | 9.56 | 9.31 | 9.04 | | 8.71 | 8.35 | 7.94 | 7.73 | 7.56 | 7.33 | 8.36 | | 9.54 | 8.69 | 7.74 |
| H1 lead leg R | strides | 21 | 13 | 13 | 13 | | | | 14 | 14 | 14 | 14 | 18 | 134 | | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

**FINAL** - 2023 Bauhaus Galan (Stockholm, SWE) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Jul-23 | time | 5.85 | 9.54 | 13.26 | 17.03 | 20.92 | | 25.02 | 29.34 | 34.01 | 38.83 | 43.78 | | 49.91 | 4 / 6 | | | |
| reaction time | 0.199 | interval | | 3.69 | 3.72 | 3.77 | 3.89 | | 4.10 | 4.32 | 4.67 | 4.82 | 4.95 | 6.13 | | | 11.18 | 12.31 | 14.44 |
| | | velocity | 7.69 | 9.49 | 9.41 | 9.28 | 9.00 | | 8.54 | 8.10 | 7.49 | 7.26 | 7.07 | 6.53 | 8.01 | | 9.39 | 8.53 | 7.27 |
| H1 lead leg | R | strides | 21 | 13 | | 13 | 13 | | 13 | 14 | | 14 | 15 | | 116 | | | | |

**FINAL** - 2023 Bislett Games (Oslo, NOR) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Jun-23 | time | 5.69 | 9.23 | 12.88 | 16.65 | 20.57 | | 24.66 | 28.94 | 33.43 | 38.09 | 42.89 | | 48.59 | 2 / 4 | | | |
| reaction time | 0.155 | interval | | 3.54 | 3.65 | 3.77 | 3.92 | | 4.09 | 4.28 | 4.49 | 4.66 | 4.80 | 5.70 | | | 10.96 | 12.29 | 13.95 |
| | | velocity | 7.91 | 9.89 | 9.59 | 9.28 | 8.93 | | 8.56 | 8.18 | 7.80 | 7.51 | 7.29 | 7.02 | 8.23 | | 9.58 | 8.54 | 7.53 |
| H1 lead leg | R | strides | 21 | | | 13 | 13 | | 13 | | | 14 | 14 | 17.7 | 105.7 | | | | |

**FINAL** - 2023 Meeting de Paris (Paris, FRA) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-23 | time | 5.74 | 9.33 | 12.98 | 16.76 | 20.61 | | 24.56 | 28.70 | 33.19 | 37.88 | 42.72 | | 48.60 | 2 / 4 | | | |
| reaction time | 0.153 | interval | | 3.59 | 3.65 | 3.78 | 3.85 | | 3.95 | 4.14 | 4.49 | 4.69 | 4.84 | 5.88 | | | 11.02 | 11.94 | 14.02 |
| | | velocity | 7.84 | 9.75 | 9.59 | 9.26 | 9.09 | | 8.86 | 8.45 | 7.80 | 7.46 | 7.23 | 6.80 | 8.23 | | 9.53 | 8.79 | 7.49 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 18 | 160 | | | | |

**FINAL** - 2022 ISTAF (Berlin, GER) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Sep-22 | time | 5.88 | | | | 21.04 | | 25.08 | 29.40 | 33.84 | 38.40 | 43.04 | | 48.26 | 6 / 2 | | | |
| reaction time | 0.120 | interval | | | | | 15.16 | | 4.04 | 4.32 | 4.44 | 4.56 | 4.64 | 5.22 | PB | | | | 13.64 |
| | | velocity | 7.65 | | | | 9.23 | | 8.66 | 8.10 | 7.88 | 7.68 | 7.54 | 7.66 | 8.29 | | | | 7.70 |
| H1 lead leg | R | strides | 21 | | | | | | 13 | 14 | 14 | 14 | 14 | 17 | 107 | | | | |

**FINAL** - 2022 European Athletics Championships (Munich, GER) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Aug-22 | time | 5.93 | 9.66 | 13.60 | 17.45 | 21.38 | 22.99 | 25.55 | 29.84 | 34.25 | 38.82 | 43.52 | | 48.79 | 5 / 4 | | | |
| reaction time | 0.193 | interval | | 3.73 | 3.94 | 3.85 | 3.93 | | 4.17 | 4.29 | 4.41 | 4.57 | 4.70 | 5.27 | | | 11.52 | 12.39 | 13.68 |
| | | velocity | 7.59 | 9.38 | 8.88 | 9.09 | 8.91 | 8.70 | 8.39 | 8.16 | 7.94 | 7.66 | 7.45 | 7.59 | 8.20 | | 9.11 | 8.47 | 7.68 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17 | 159 | | | | |

**FINAL** - FINAL - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jun-22 | time | 5.83 | 9.53 | 13.30 | 17.20 | 21.20 | 22.87 | 25.27 | 29.63 | 34.10 | 38.90 | 43.83 | | 49.74 | 3 / 6 | | | |
| reaction time | 0.141 | interval | | 3.70 | 3.77 | 3.90 | 4.00 | | 4.07 | 4.36 | 4.47 | 4.80 | 4.93 | 5.91 | | | 11.37 | 12.43 | 14.20 |
| | | velocity | 7.72 | 9.46 | 9.28 | 8.97 | 8.75 | 8.75 | 8.60 | 8.03 | 7.83 | 7.29 | 7.10 | 6.77 | 8.04 | | 9.23 | 8.45 | 7.39 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 144 | | | | |

**FINAL** - 2021 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jul-21 | time | 5.96 | 9.66 | 13.44 | 17.40 | 21.46 | | 25.68 | | 34.62 | | | | dnf | 8 / -- | | | |
| reaction time | 0.245 | interval | | 3.70 | 3.78 | 3.96 | 4.06 | | 4.22 | | 8.94 | | | | | | 11.44 | | |
| | | velocity | 7.55 | 9.46 | 9.26 | 8.84 | 8.62 | | 8.29 | | 7.83 | | | | | | 9.18 | | |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | | | | | | 86 | | | | |

**FINAL** - 2020 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Sep-20 | time | 5.87 | 9.58 | | | 21.15 | 22.9 | | 29.53 | 33.90 | 38.54 | 43.28 | | 48.69 | 6 / 2 | | | |
| reaction time | 0.185 | interval | | 3.71 | | | 11.57 | | | 8.38 | 4.37 | 4.64 | 4.74 | 5.41 | | | | | 13.75 |
| | | velocity | 7.67 | 9.43 | | | 9.08 | 8.73 | | 8.35 | 8.01 | 7.54 | 7.38 | 7.39 | 8.22 | | | | 7.64 |
| H1 lead leg | R | strides | 21 | 13 | | | | | | | 14 | 14 | 14 | 17.2 | 93.2 | | | | |

**FINAL** - 2020 Golden Spike (Ostrava, CZE) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-20 | time | 5.97 | 9.71 | | 17.41 | 21.35 | | 25.49 | 29.83 | | 38.94 | 43.68 | | 49.14 | 6 / 2 | | | |
| reaction time | 0.192 | interval | | 3.74 | | 7.70 | 3.94 | | 4.14 | 4.34 | | 9.11 | 4.74 | 5.46 | | | 11.44 | 12.42 | 13.85 |
| | | velocity | 7.54 | 9.36 | | 9.09 | 8.88 | | 8.45 | 8.06 | | 7.68 | 7.38 | 7.33 | 8.14 | | 9.18 | 8.45 | 7.58 |
| H1 lead leg | R | strides | 21 | 13 | | | 13 | | | 14 | | | 14 | 17.7 | 92.7 | | | | |

**FINAL** - 2020 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-20 | time | 5.86 | | 13.58 | 17.68 | 21.90 | 23.7 | 26.14 | | 34.86 | 39.36 | 43.92 | | 49.18 | 3 / 3 | | | |
| reaction time | 0.169 | interval | | | 7.72 | 4.10 | 4.22 | | 4.24 | | 8.72 | 4.50 | 4.56 | 5.26 | | | 11.82 | | |
| | | velocity | 7.68 | | 9.07 | 8.54 | 8.29 | 8.44 | 8.25 | | 8.03 | 7.78 | 7.68 | 7.60 | 8.13 | | 8.88 | | |
| H1 lead leg | R | strides | 21 | 13 | | 13 | 14 | | 14 | | 14 | 14 | 14 | 17 | 134 | | | | |

**FINAL** - 2020 Herculis Meeting International d'Athletisme (Monaco, MON) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-Aug-20 | time | 5.84 | 9.47 | 13.35 | 17.32 | 21.39 | | 25.66 | 30.06 | 34.53 | 39.20 | 43.98 | | 49.35 | 6 / 4 | | | |
| reaction time | 0.173 | interval | | 3.63 | 3.88 | 3.97 | 4.07 | | 4.27 | 4.40 | 4.47 | 4.67 | 4.78 | 5.37 | | | 11.48 | 12.74 | 13.92 |
| | | velocity | 7.71 | 9.64 | 9.02 | 8.82 | 8.60 | | 8.20 | 7.95 | 7.83 | 7.49 | 7.32 | 7.45 | 8.11 | | 9.15 | 8.24 | 7.54 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 14 | 14 | 14 | | 143 | | | | |

**Semi-Final 2** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 6.00 | 9.59 | 13.30 | 17.08 | 21.03 | | 25.17 | 29.52 | 33.98 | 38.66 | 43.45 | | 49.10 | 5 / 4 | | | |
| reaction time | 0.209 | interval | | 3.59 | 3.71 | 3.78 | 3.95 | | 4.14 | 4.35 | 4.46 | 4.68 | 4.79 | 5.65 | | | 11.08 | 12.44 | 13.93 |
| | | velocity | 7.50 | 9.75 | 9.43 | 9.26 | 8.86 | | 8.45 | 8.05 | 7.85 | 7.48 | 7.31 | 7.08 | 8.15 | | 9.48 | 8.44 | 7.54 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.7 | 159.7 | | | | |

**FINAL** - 2019 The Match - Europe v USA (Minsk, BLR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Sep-19 | time | 6.06 | 9.80 | 13.63 | 17.50 | 21.56 | | 25.70 | 30.03 | 34.53 | 39.13 | 43.73 | | 49.20 | 5 / 3 | | | |
| reaction time | 0.199 | interval | | 3.74 | 3.83 | 3.87 | 4.06 | | 4.14 | 4.33 | 4.50 | 4.60 | 4.60 | 5.47 | | | 11.44 | 12.53 | 13.70 |
| | | velocity | 7.43 | 9.36 | 9.14 | 9.04 | 8.62 | | 8.45 | 8.08 | 7.78 | 7.61 | 7.61 | 7.31 | 8.13 | | 9.18 | 8.38 | 7.66 |
| H1 lead leg | R | strides | | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 17.5 | 138.5 | | | | |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

**FINAL** - 2019 Meeting de Paris (Paris, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-19 | time | 5.86 | 9.48 | 13.18 | 16.94 | 20.80 | 22.5 | 24.88 | 29.12 | 33.52 | 38.14 | 42.86 | | 48.30 | 2 / 2 | | | |
| reaction time | 0.155 | interval | | 3.62 | 3.70 | 3.76 | 3.86 | | 4.08 | 4.24 | 4.40 | 4.62 | 4.72 | 5.44 | PB | | 11.08 | 12.18 | 13.74 |
| | | velocity | 7.68 | 9.67 | 9.46 | 9.31 | 9.07 | 8.89 | 8.58 | 8.25 | 7.95 | 7.58 | 7.42 | 7.35 | 8.28 | | 9.48 | 8.62 | 7.64 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 14 | 18 | 160 | | | | |

**FINAL** - 2019 Prefontaine Classic (Stanford, CA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-19 | time | 5.90 | 9.66 | 13.50 | 17.43 | 21.53 | | 25.76 | 30.26 | 34.86 | 39.63 | 44.46 | | 50.23 | 2 / 8 | | | |
| reaction time | 0.218 | interval | | 3.76 | 3.84 | 3.93 | 4.10 | | 4.23 | 4.50 | 4.60 | 4.77 | 4.83 | 5.77 | | | 11.53 | 12.83 | 14.20 |
| | | velocity | 7.63 | 9.31 | 9.11 | 8.91 | 8.54 | | 8.27 | 7.78 | 7.61 | 7.34 | 7.25 | 6.93 | 7.96 | | 9.11 | 8.18 | 7.39 |
| H1 lead leg | R | strides | 21 | 13 | | 13 | 13 | | 13 | 14 | 14 | | 14 | | 115 | | | | |

**van Zyl, L.J. (RSA) (1985)**

**FINAL** - 2017 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-17 | time | 5.96 | 9.68 | 13.56 | | 21.60 | | 25.80 | 30.12 | 34.60 | 39.20 | 44.24 | | 49.92 | 1 / 7 | | | |
| reaction time | 0.188 | interval | | 3.72 | 3.88 | | 8.04 | | 4.20 | 4.32 | 4.48 | 4.60 | 5.04 | 5.68 | | | | | 14.12 |
| | | velocity | 7.55 | 9.41 | 9.02 | | 8.71 | | 8.33 | 8.10 | 7.81 | 7.61 | 6.94 | 7.04 | 8.01 | | | | 7.44 |
| H1 lead leg | L | strides | 22 | 14 | 14 | | | | 14 | 15 | 15 | | 16 | 19 | 129 | | | | |

**FINAL** - 2017 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jul-17 | time | 5.92 | 9.68 | 13.64 | 17.68 | 21.80 | | 25.96 | 30.28 | 34.68 | 39.28 | 44.12 | | 50.04 | 2 / 7 | | | |
| reaction time | 0.152 | interval | | 3.76 | 3.96 | 4.04 | 4.12 | | 4.16 | 4.32 | 4.40 | 4.60 | 4.84 | 5.92 | | | 11.76 | 12.60 | 13.84 |
| | | velocity | 7.60 | 9.31 | 8.84 | 8.66 | 8.50 | | 8.41 | 8.10 | 7.95 | 7.61 | 7.23 | 6.76 | 7.99 | | 8.93 | 8.33 | 7.59 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 16 | 16 | 19.2 | 174.2 | | | | |

**FINAL** - 2017 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Jun-17 | time | 5.88 | 9.64 | | 17.40 | 21.44 | | 25.60 | 30.00 | | 39.04 | 43.88 | | 51.42 | 2 / 8 | | | |
| reaction time | 0.143 | interval | | 3.76 | | 7.76 | 4.04 | | 4.16 | 4.40 | | 9.04 | 4.84 | 7.54 | | | 11.52 | 12.60 | 13.88 |
| | | velocity | 7.65 | 9.31 | | 9.02 | 8.66 | | 8.41 | 7.95 | | 7.74 | 7.23 | 5.31 | 7.78 | | 9.11 | 8.33 | 7.56 |
| H1 lead leg | L | strides | 22 | 14 | | | 14 | | 14 | 15 | | | 16 | | 95 | | | | |

**FINAL** - 2017 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Jun-17 | time | 5.96 | 9.66 | 13.43 | 17.46 | 21.60 | | 25.86 | 30.30 | 34.73 | 39.30 | 44.06 | | 49.89 | 8 / 7 | | | |
| reaction time | 0.158 | interval | | 3.70 | 3.77 | 4.03 | 4.14 | | 4.26 | 4.44 | 4.43 | 4.57 | 4.76 | 5.83 | | | 11.50 | 12.84 | 13.76 |
| | | velocity | 7.55 | 9.46 | 9.28 | 8.68 | 8.45 | | 8.22 | 7.88 | 7.90 | 7.66 | 7.35 | 6.86 | 8.02 | | 9.13 | 8.18 | 7.63 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | | 152 | | | | |

**FINAL** - 2017 Shanghai Diamond League (Shanghai, CHN) (TV Analysis) *Henson (2021) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-May-17 | time | 5.88 | 9.64 | 13.52 | 17.52 | 21.60 | | 25.80 | 30.16 | 34.60 | 39.12 | 43.76 | | 49.35 | 7 / 2 | | | |
| reaction time | 0.155 | interval | | 3.76 | 3.88 | 4.00 | 4.08 | | 4.20 | 4.36 | 4.44 | 4.52 | 4.64 | 5.59 | | | 11.64 | 12.64 | 13.60 |
| | | velocity | 7.65 | 9.31 | 9.02 | 8.75 | 8.58 | | 8.33 | 8.03 | 7.88 | 7.74 | 7.54 | 7.16 | 8.11 | | 9.02 | 8.31 | 7.72 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 14 | 15 | 15 | 15 | 19 | 171 | | | | |

**FINAL** - 2017 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-17 | time | 5.96 | 9.83 | 13.70 | 17.80 | 21.96 | | 26.16 | 30.53 | 34.90 | 39.43 | 44.06 | | 49.49 | 8 / 3 | | | |
| reaction time | 0.156 | interval | | 3.87 | 3.87 | 4.10 | 4.16 | | 4.20 | 4.37 | 4.37 | 4.53 | 4.63 | 5.43 | | | 11.84 | 12.73 | 13.53 |
| | | velocity | 7.55 | 9.04 | 9.04 | 8.54 | 8.41 | | 8.33 | 8.01 | 8.01 | 7.73 | 7.56 | 7.37 | 8.08 | | 8.87 | 8.25 | 7.76 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 18.7 | 170.7 | | | | |

**FINAL** - 2017 North-West University Pukke Invitational (Sasolburg, RSA) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Mar-17 | time | 6.08 | 10.04 | 13.96 | 18.00 | 22.04 | | 26.24 | 30.56 | 35.00 | 39.64 | 44.56 | | 50.48 | 4 / 4 | | | |
| reaction time | | interval | | 3.96 | 3.92 | 4.04 | 4.04 | | 4.20 | 4.32 | 4.44 | 4.64 | 4.92 | 5.92 | | | 11.92 | 12.56 | 14.00 |
| | | velocity | 7.40 | 8.84 | 8.93 | 8.66 | 8.66 | | 8.33 | 8.10 | 7.88 | 7.54 | 7.11 | 6.76 | 7.92 | | 8.81 | 8.36 | 7.50 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | | 152 | | | | |

**FINAL** - 2016 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-16 | time | 5.88 | 9.56 | 13.40 | 17.40 | 21.44 | | 25.60 | 29.84 | 34.24 | 38.72 | 43.40 | | 48.80 | 1 / 3 | | | |
| reaction time | 0.147 | interval | | 3.68 | 3.84 | 4.00 | 4.04 | | 4.16 | 4.24 | 4.40 | 4.48 | 4.68 | 5.40 | | | 11.52 | 12.44 | 13.56 |
| | | velocity | 7.65 | 9.51 | 9.11 | 8.75 | 8.66 | | 8.41 | 8.25 | 7.95 | 7.81 | 7.48 | 7.41 | 8.20 | | 9.11 | 8.44 | 7.74 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 19 | 171 | | | | |

**FINAL** - 2016 London Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Jul-16 | time | 5.88 | 9.60 | 13.36 | 17.28 | 21.36 | | 25.60 | 29.92 | 34.28 | 38.76 | 43.40 | | 48.92 | 2 / 4 | | | |
| reaction time | 0.153 | interval | | 3.72 | 3.76 | 3.92 | 4.08 | | 4.24 | 4.32 | 4.36 | 4.48 | 4.64 | 5.52 | | | 11.40 | 12.64 | 13.48 |
| | | velocity | 7.65 | 9.41 | 9.31 | 8.93 | 8.58 | | 8.25 | 8.10 | 8.03 | 7.81 | 7.54 | 7.25 | 8.18 | | 9.21 | 8.31 | 7.79 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 19 | 171 | | | | |

**FINAL** - 2016 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jun-16 | time | 5.93 | 9.77 | | 17.63 | 21.77 | | 26.07 | 30.33 | 34.70 | 39.37 | 44.23 | | 50.21 | 3 / 4 | | | |
| reaction time | 0.159 | interval | | 3.84 | | 7.86 | 4.14 | | 4.30 | 4.26 | 4.37 | 4.67 | 4.86 | 5.98 | | | 11.70 | 12.70 | 13.90 |
| | | velocity | 7.59 | 9.11 | | 8.91 | 8.45 | | 8.14 | 8.22 | 8.01 | 7.49 | 7.20 | 6.69 | 7.97 | | 8.97 | 8.27 | 7.55 |
| H1 lead leg | L | strides | 22 | 14 | | | 14 | | 14 | 15 | 15 | 15 | 15 | 20 | 144 | | | | |

**FINAL** - 2016 Shanghai Golden Grand Prix (Shanghai, CHN) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-May-16 | time | 5.92 | 9.60 | 13.48 | 17.52 | 21.64 | | 25.92 | 30.24 | 34.56 | 39.04 | 43.60 | | 49.13 | 8 / 4 | | | |
| reaction time | 0.168 | interval | | 3.68 | 3.88 | 4.04 | 4.12 | | 4.28 | 4.32 | 4.32 | 4.48 | 4.56 | 5.53 | | | 11.60 | 12.72 | 13.36 |
| | | velocity | 7.60 | 9.51 | 9.02 | 8.66 | 8.50 | | 8.18 | 8.10 | 8.10 | 7.81 | 7.68 | 7.23 | 8.14 | | 9.05 | 8.25 | 7.86 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 19 | 171 | | | | |

**FINAL** - 2011 IAAF World Championships (Daegu, KOR) *Behm (2011) - Le quatrache: Démus enfin!*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-11 | time | 5.8 | 9.5 | 13.1 | 17.0 | 21.0 | 24.9 | 29.1 | 33.5 | 38.1 | 43.0 | | 48.80 | 8 / 3 | | | |
| reaction time | 0.177 | interval | | 3.70 | 3.60 | 3.90 | 4.00 | 3.90 | 4.20 | 4.40 | 4.60 | 4.90 | 5.80 | | | 11.20 | 12.10 | 13.90 |
| | | velocity | 7.76 | 9.46 | 9.72 | 8.97 | 8.75 | 8.97 | 8.33 | 7.95 | 7.61 | 7.14 | 6.90 | 8.20 | | 9.38 | 8.68 | 7.55 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 16 | 16 | 20 | 173 | | | | |

**Semi-Final 1** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Aug-09 | time | 5.96 | 9.70 | 13.46 | 17.34 | 21.36 | 25.54 | 29.92 | 34.30 | 38.70 | 43.34 | | 48.80 | 6 / 6 | | | |
| reaction time | 0.168 | interval | | 3.74 | 3.76 | 3.88 | 4.02 | 4.18 | 4.38 | 4.38 | 4.40 | 4.64 | 5.46 | | | 11.38 | 12.58 | 13.42 |
| | | velocity | 7.55 | 9.36 | 9.31 | 9.02 | 8.71 | 8.37 | 7.99 | 7.99 | 7.95 | 7.54 | 7.33 | 8.20 | | 9.23 | 8.35 | 7.82 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 19.2 | 171.2 | | | | |

**Heat 4** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-09 | time | 5.98 | 9.79 | 13.67 | 17.64 | 21.66 | 25.83 | 30.26 | 34.78 | 39.43 | 44.18 | | 49.48 | 3 / 2 | | | |
| reaction time | 0.171 | interval | | 3.81 | 3.88 | 3.97 | 4.02 | 4.17 | 4.43 | 4.52 | 4.65 | 4.75 | 5.30 | | | 11.66 | 12.62 | 13.92 |
| | | velocity | 7.53 | 9.19 | 9.02 | 8.82 | 8.71 | 8.39 | 7.90 | 7.74 | 7.53 | 7.37 | 7.55 | 8.08 | | 9.01 | 8.32 | 7.54 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 2008 IAAF World Athletics Final (Stuttgart, GER) *Graubner (2009) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Sep-08 | time | 6.01 | 9.86 | 13.81 | 17.79 | 21.80 | 25.97 | 30.32 | 34.81 | 39.36 | 44.12 | | 49.95 | 3 / 5 | | | |
| reaction time | 0.158 | interval | | 3.85 | 3.95 | 3.98 | 4.01 | 4.17 | 4.35 | 4.49 | 4.55 | 4.76 | 5.83 | | | 11.78 | 12.53 | 13.80 |
| | | velocity | 7.49 | 9.09 | 8.86 | 8.79 | 8.73 | 8.39 | 8.05 | 7.80 | 7.69 | 7.35 | 6.86 | 8.01 | | 8.91 | 8.38 | 7.61 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**FINAL** - 2008 Olympic Games (Beijing, CHN) *Behm (2008)- Pekin 2008: Le quatrache masculin - féminin*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Aug-08 | time | 5.7 | 9.6 | 13.3 | 17.5 | 21.6 | 25.7 | 29.9 | 34.2 | 38.6 | 43.3 | | 48.42 | 8 / 5 | | | |
| reaction time | 0.253 | interval | | 3.90 | 3.70 | 4.20 | 4.10 | 4.10 | 4.20 | 4.30 | 4.40 | 4.70 | 5.12 | | | 11.80 | 12.40 | 13.40 |
| | | velocity | 7.89 | 8.97 | 9.46 | 8.33 | 8.54 | 8.54 | 8.33 | 8.14 | 7.95 | 7.45 | 7.81 | 8.26 | | 8.90 | 8.47 | 7.84 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18 | 170 | | | | |

**FINAL** - 2007 IAAF World Athletics Final (Stuttgart, GER) *Graubner (2007) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Sep-07 | time | 5.95 | 9.72 | 13.58 | 17.54 | 21.66 | 26.02 | 30.37 | 34.85 | 39.46 | 44.25 | | 49.62 | 1 / 8 | | | |
| reaction time | 0.189 | interval | | 3.77 | 3.86 | 3.96 | 4.12 | 4.36 | 4.35 | 4.48 | 4.61 | 4.79 | 5.37 | | | 11.59 | 12.83 | 13.88 |
| | | velocity | 7.56 | 9.28 | 9.07 | 8.84 | 8.50 | 8.03 | 8.05 | 7.81 | 7.59 | 7.31 | 7.45 | 8.06 | | 9.06 | 8.18 | 7.56 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Vanderstock, Geoff (USA) (1946)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) *Dessons (1982) - traite d'athletisme - volume 1: les courses* | | | | | | | | | | | | | | | | | | | |
| date | 15-Oct-68 | time | 5.9 | 9.7 | 13.8 | 17.8 | 21.8 | 23.7 | 25.9 | 30.2 | 34.5 | 38.9 | 43.5 | | 49.0 | 3 / 4 | | | |
| reaction time | | interval | | 3.80 | 4.10 | 4.00 | 4.00 | | 4.10 | 4.30 | 4.30 | 4.40 | 4.60 | 5.50 | *(49.07)* | | 11.90 | 12.40 | 13.30 |
| | | velocity | 7.63 | 9.21 | 8.54 | 8.75 | 8.75 | 8.44 | 8.54 | 8.14 | 8.14 | 7.95 | 7.61 | 7.27 | 8.16 | | 8.82 | 8.47 | 7.89 |
| H1 lead leg | R | strides | 21 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 18.7 | 175 | | | | |

**Vasilyev, Aleksandr (URS) (1961)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1986 European Championships (Stuttgart, FRG) *Behm (1995) - la tactique du 400 haies* | | | | | | | | | | | | | | | | | | | |
| date | 28-Aug-86 | time | 5.9 | 9.8 | 13.7 | 17.7 | 21.9 | | 26.1 | 30.3 | 34.7 | 39.0 | 43.5 | | 48.76 | / 2 | | | |
| reaction time | | interval | | 3.90 | 3.90 | 4.00 | 4.20 | | 4.20 | 4.20 | 4.40 | 4.30 | 4.50 | 5.26 | | | 11.80 | 12.60 | 13.20 |
| | | velocity | 7.63 | 8.97 | 8.97 | 8.75 | 8.33 | | 8.33 | 8.33 | 7.95 | 8.14 | 7.78 | 7.60 | 8.20 | | 8.90 | 8.33 | 7.95 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 14 | | 14 | 14 | 14 | 15 | 15 | | 125 | | | | |

**Vega, Fernando (MEX) (1998)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 3** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships* | | | | | | | | | | | | | | | | | | | |
| date | 28-Sep-19 | time | 5.93 | 9.78 | 13.64 | 17.62 | 21.62 | | 25.80 | 30.20 | 34.68 | 39.35 | 44.25 | | 49.96 | 2 / 6 | | | |
| reaction time | 0.220 | interval | | 3.85 | 3.86 | 3.98 | 4.00 | | 4.18 | 4.40 | 4.48 | 4.67 | 4.90 | 5.71 | | | 11.69 | 12.58 | 14.05 |
| | | velocity | 7.59 | 9.09 | 9.07 | 8.79 | 8.75 | | 8.37 | 7.95 | 7.81 | 7.49 | 7.14 | 7.01 | 8.01 | | 8.98 | 8.35 | 7.47 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 19 | 176 | | | | |

**Viarshynin, Leanid (BLR) (1977)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 5** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | | | | | | | | | | | | | | | | | |
| date | 24-Sep-00 | time | 6.08 | 9.92 | 13.84 | 17.80 | 21.80 | | 25.96 | 30.28 | 34.92 | 40.28 | 45.64 | | 51.84 | 4 / 5 | | | |
| reaction time | 0.151 | interval | | 3.84 | 3.92 | 3.96 | 4.00 | | 4.16 | 4.32 | 4.64 | 5.36 | 5.36 | 6.20 | | | 11.72 | 12.48 | 15.36 |
| | | velocity | 7.40 | 9.11 | 8.93 | 8.84 | 8.75 | | 8.41 | 8.10 | 7.54 | 6.53 | 6.53 | 6.45 | 7.72 | | 8.96 | 8.41 | 6.84 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 17 | 17 | 20 | 170 | | | | |

**Vimbert, Gilies (FRA) (1966)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1987 Résisprint International (La Chaux-de-Ford, FRA) *Behm (1988) - 45-39* | | | | | | | | | | | | | | | | | | | |
| date | 16-Aug-87 | time | 6.0 | 9.8 | 13.8 | 17.5 | 22.2 | | 26.6 | 30.7 | 35.3 | 39.9 | 44.6 | | 49.96 | / 1 | | | |
| reaction time | | interval | | 3.80 | 4.00 | 3.70 | 4.70 | | 4.40 | 4.10 | 4.56 | 4.64 | 4.70 | 5.36 | **PB** | | 11.50 | 13.20 | 13.90 |
| | | velocity | 7.50 | 9.21 | 8.75 | 9.46 | 7.45 | | 7.95 | 8.54 | 7.68 | 7.54 | 7.45 | 7.46 | 8.01 | | 9.13 | 7.95 | 7.55 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 1987 French National Championships (Annecy, FRA) *Veney - split times from PJ*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-87 | time | 5.98 | 9.83 | 13.76 | 17.88 | 22.18 | 26.46 | 30.70 | 35.26 | 39.87 | 44.61 | | 49.98 | / 1 | | | |
| reaction time | | interval | | 3.85 | 3.93 | 4.12 | 4.30 | 4.28 | 4.24 | 4.56 | 4.61 | 4.74 | 5.37 | | | 11.90 | 12.82 | 13.91 |
| | | velocity | 7.53 | 9.09 | 8.91 | 8.50 | 8.14 | 8.18 | 8.25 | 7.68 | 7.59 | 7.38 | 7.45 | 8.00 | | 8.82 | 8.19 | 7.55 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | | 145 | | | | |

**Walker, Adrian (USA) (1984)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2003 USATF National Junior Championships (Palo Alto, CA) | | | | | | | | | | | | | | | | *USATF Women's Sprint Development (2003)* | | | |
| date | 22-Jun-03 | time | 6.09 | 9.96 | 13.91 | 17.92 | 22.09 | | 26.39 | 31.00 | 35.70 | 40.44 | 45.56 | | 51.73 | 4 / 2 | | | |
| reaction time | | interval | | 3.87 | 3.95 | 4.01 | 4.17 | | 4.30 | 4.61 | 4.70 | 4.74 | 5.12 | 6.17 | | | 11.83 | 13.08 | 14.56 |
| | | velocity | 7.39 | 9.04 | 8.86 | 8.73 | 8.39 | | 8.14 | 7.59 | 7.45 | 7.38 | 6.84 | 6.48 | 7.73 | | 8.88 | 8.03 | 7.21 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Wallenlind, Niklas (SWE) (1968)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1990 European Championships (Split, YUG) | | | | | | | | | | | | | | | | *Behm (1995) - la tactique du 400 haies* | | | |
| date | 29-Aug-90 | time | 6.1 | 9.9 | 13.8 | 17.7 | 21.7 | | 25.8 | 30.2 | 34.6 | 39.0 | 43.4 | | 48.52 | 4 / 3 | | | |
| reaction time | | interval | | 3.80 | 3.90 | 3.90 | 4.00 | | 4.10 | 4.40 | 4.40 | 4.40 | 4.40 | 5.12 | PB | | 11.60 | 12.50 | 13.20 |
| | | velocity | 7.38 | 9.21 | 8.97 | 8.97 | 8.75 | | 8.54 | 7.95 | 7.95 | 7.95 | 7.95 | 7.81 | 8.24 | | 9.05 | 8.40 | 7.95 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 18 | 161 | | | | |

**Wang Daojun (CHN) (2000)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 2** - 2021 Chinese National Championships (Chongqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 26-Jun-21 | time | 6.18 | 10.21 | 14.31 | 18.57 | 22.91 | | 27.41 | 32.05 | 36.67 | 41.34 | 46.06 | | 51.42 | 5 / 1 | | | |
| reaction time | 0.201 | interval | | 4.03 | 4.10 | 4.26 | 4.34 | | 4.50 | 4.64 | 4.62 | 4.67 | 4.72 | 5.36 | | | 12.39 | 13.48 | 14.01 |
| | | velocity | 7.28 | 8.68 | 8.54 | 8.22 | 8.06 | | 7.78 | 7.54 | 7.58 | 7.49 | 7.42 | 7.46 | 7.78 | | 8.47 | 7.79 | 7.49 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18 | 170 | | | | |
| **FINAL** - 2020 Chinese National Championships (Shaoxing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2020)* | | | |
| date | 17-Sep-20 | time | 5.96 | 10.00 | 14.08 | 18.29 | 22.58 | | 26.92 | 31.42 | 35.96 | 40.71 | 45.54 | | 51.41 | 5 / 5 | | | |
| reaction time | | interval | | 4.04 | 4.08 | 4.21 | 4.29 | | 4.34 | 4.50 | 4.54 | 4.75 | 4.83 | 5.87 | | | 12.33 | 13.13 | 14.12 |
| | | velocity | 7.55 | 8.66 | 8.58 | 8.31 | 8.16 | | 8.06 | 7.78 | 7.71 | 7.37 | 7.25 | 6.81 | 7.78 | | 8.52 | 8.00 | 7.44 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.5 | 170.5 | | | | |
| **FINAL** - 2019 Chinese National Grand Prix Final (Daqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 23-Aug-19 | time | 6.08 | 10.12 | 14.18 | 18.40 | 22.76 | | 27.40 | 32.18 | 37.04 | 41.98 | 46.98 | | 52.58 | 8 / 8 | | | |
| reaction time | 0.178 | interval | | 4.04 | 4.06 | 4.22 | 4.36 | | 4.64 | 4.78 | 4.86 | 4.94 | 5.00 | 5.60 | | | 12.32 | 13.78 | 14.80 |
| | | velocity | 7.40 | 8.66 | 8.62 | 8.29 | 8.03 | | 7.54 | 7.32 | 7.20 | 7.09 | 7.00 | 7.14 | 7.61 | | 8.52 | 7.62 | 7.09 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.5 | 170.5 | | | | |
| **Heat 2** - 2019 Chinese National Grand Prix Final (Daqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 22-Aug-19 | time | 6.24 | 10.38 | 14.52 | 18.71 | 23.08 | | 27.52 | 32.07 | 36.69 | 41.54 | 46.66 | | 52.31 | 9 / 4 | | | |
| reaction time | 0.219 | interval | | 4.14 | 4.14 | 4.19 | 4.37 | | 4.44 | 4.55 | 4.62 | 4.85 | 5.12 | 5.66 | | | 12.47 | 13.36 | 14.59 |
| | | velocity | 7.21 | 8.45 | 8.45 | 8.35 | 8.01 | | 7.88 | 7.69 | 7.58 | 7.22 | 6.84 | 7.07 | 7.65 | | 8.42 | 7.86 | 7.20 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.5 | 170.5 | | | | |
| **U20 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.18 | 10.26 | 14.32 | 18.55 | 22.90 | | 27.46 | 32.20 | 36.92 | 41.64 | 46.35 | | 51.64 | 5 / 3 | | | |
| reaction time | 0.188 | interval | | 4.08 | 4.06 | 4.23 | 4.35 | | 4.56 | 4.74 | 4.72 | 4.72 | 4.71 | 5.29 | | | 12.37 | 13.65 | 14.15 |
| | | velocity | 7.28 | 8.58 | 8.62 | 8.27 | 8.05 | | 7.68 | 7.38 | 7.42 | 7.42 | 7.43 | 7.56 | 7.75 | | 8.49 | 7.69 | 7.42 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18 | 170 | | | | |
| **U20 Heat 1** - 2019 Chinese National Youth Games (Taiyuan, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.20 | 10.34 | 14.40 | 18.58 | 22.98 | | 27.50 | 32.14 | 36.96 | 41.85 | 46.80 | | 52.72 | 6 / 1 | | | |
| reaction time | 0.181 | interval | | 4.14 | 4.06 | 4.18 | 4.40 | | 4.52 | 4.64 | 4.82 | 4.89 | 4.95 | 5.92 | | | 12.38 | 13.56 | 14.66 |
| | | velocity | 7.26 | 8.45 | 8.62 | 8.37 | 7.95 | | 7.74 | 7.54 | 7.26 | 7.16 | 7.07 | 6.76 | 7.59 | | 8.48 | 7.74 | 7.16 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18 | 170 | | | | |
| **Heat 1** - 2019 Chinese World Championship Trials (Shenyang, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 03-Aug-19 | time | 6.28 | 10.47 | 14.61 | 18.78 | 23.00 | | 27.38 | 31.86 | 36.42 | 42.82 | 50.44 | | 58.75 | 5 / 5 | | | |
| reaction time | 0.229 | interval | | 4.19 | 4.14 | 4.17 | 4.22 | | 4.38 | 4.48 | 4.56 | 6.40 | 7.62 | 8.31 | | | 12.50 | 13.08 | 18.58 |
| | | velocity | 7.17 | 8.35 | 8.45 | 8.39 | 8.29 | | 7.99 | 7.81 | 7.68 | 5.47 | 4.59 | 4.81 | 6.81 | | 8.40 | 8.03 | 5.65 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 17 | 19 | 21.5 | 179.5 | | | | |
| **FINAL** - 2019 Chinese National Championships (Shenyang, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 10-Jul-19 | time | 6.12 | 10.17 | 14.25 | 18.40 | 22.59 | | 26.96 | 31.56 | 36.22 | 40.94 | 45.70 | | 51.23 | 2 / ~~7~~ 6 | | | |
| reaction time | 0.216 | interval | | 4.05 | 4.08 | 4.15 | 4.19 | | 4.37 | 4.60 | 4.66 | 4.72 | 4.76 | 5.53 | | | 12.28 | 13.16 | 14.14 |
| | | velocity | 7.35 | 8.64 | 8.58 | 8.43 | 8.35 | | 8.01 | 7.61 | 7.51 | 7.42 | 7.35 | 7.23 | 7.81 | | 8.55 | 7.98 | 7.43 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.3 | 173.3 | | | | |
| **Heat 1** - 2019 Chinese National Championships (Shenyang, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 09-Jul-19 | time | 6.14 | 10.18 | 14.18 | 18.30 | 22.51 | | 26.90 | 31.48 | 36.05 | 40.79 | 45.61 | | 51.20 | 2 / 5 | | | |
| reaction time | 0.218 | interval | | 4.04 | 4.00 | 4.12 | 4.21 | | 4.39 | 4.58 | 4.57 | 4.74 | 4.82 | 5.59 | PB | | 12.16 | 13.18 | 14.13 |
| | | velocity | 7.33 | 8.66 | 8.75 | 8.50 | 8.31 | | 7.97 | 7.64 | 7.66 | 7.38 | 7.26 | 7.16 | 7.81 | | 8.63 | 7.97 | 7.43 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.5 | 170.5 | | | | |

**Wang Gouzhong (CHN) (1995)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 Chinese National Championships (Chongqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 26-Jun-21 | time | 6.25 | 10.35 | 14.56 | 18.87 | 23.30 | | 27.78 | 32.35 | 37.04 | 41.84 | 46.87 | | 52.51 | 8 / ~~6~~ 5 | | | |
| reaction time | 0.217 | interval | | 4.10 | 4.21 | 4.31 | 4.43 | | 4.48 | 4.57 | 4.69 | 4.80 | 5.03 | 5.64 | | | 12.62 | 13.48 | 14.52 |
| | | velocity | 7.20 | 8.54 | 8.31 | 8.12 | 7.90 | | 7.81 | 7.66 | 7.46 | 7.29 | 6.96 | 7.09 | 7.62 | | 8.32 | 7.79 | 7.23 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 17.5 | 173.5 | | | | |
| **Heat 1** - 2021 Chinese National Championships (Chongqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.10 | 10.11 | 14.26 | 18.52 | 22.90 | 27.37 | 31.96 | 36.58 | 41.28 | 46.05 | | 51.43 | 7 / 3 | | | |
| reaction time | 0.152 | interval | | 4.01 | 4.15 | 4.26 | 4.38 | 4.47 | 4.59 | 4.62 | 4.70 | 4.77 | 5.38 | | | 12.42 | 13.44 | 14.09 |
| | | velocity | 7.38 | 8.73 | 8.43 | 8.22 | 7.99 | 7.83 | 7.63 | 7.58 | 7.45 | 7.34 | 7.43 | 7.78 | | 8.45 | 7.81 | 7.45 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18.5 | 174.5 | | | | |

**FINAL** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 5.96 | 9.98 | 14.11 | 18.35 | 22.71 | 27.14 | 31.83 | 36.64 | 41.53 | 46.53 | | 52.22 | 2 / 4 | | | |
| reaction time | 0.177 | interval | | 4.02 | 4.13 | 4.24 | 4.36 | 4.43 | 4.69 | 4.81 | 4.89 | 5.00 | 5.69 | | | 12.39 | 13.48 | 14.70 |
| | | velocity | 7.55 | 8.71 | 8.47 | 8.25 | 8.03 | 7.90 | 7.46 | 7.28 | 7.16 | 7.00 | 7.03 | 7.66 | | 8.47 | 7.79 | 7.14 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18 | 174 | | | | |

**Heat 1** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 5.99 | 9.96 | 14.20 | 18.62 | 23.16 | 27.76 | 32.45 | 37.17 | 42.01 | 47.00 | | 52.63 | 3 / 3 | | | |
| reaction time | 0.185 | interval | | 3.97 | 4.24 | 4.42 | 4.54 | 4.60 | 4.69 | 4.72 | 4.84 | 4.99 | 5.63 | | | 12.63 | 13.83 | 14.55 |
| | | velocity | 7.51 | 8.82 | 8.25 | 7.92 | 7.71 | 7.61 | 7.46 | 7.42 | 7.23 | 7.01 | 7.10 | 7.60 | | 8.31 | 7.59 | 7.22 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 18 | 174 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 2 (Huangshi, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Apr-19 | time | 6.24 | 10.38 | 14.71 | 19.19 | 23.77 | 28.31 | 33.00 | 37.70 | 42.43 | 47.26 | | 52.79 | 8 / 2 | | | |
| reaction time | 0.208 | interval | | 4.14 | 4.33 | 4.48 | 4.58 | 4.54 | 4.69 | 4.70 | 4.73 | 4.83 | 5.53 | | | 12.95 | 13.81 | 14.26 |
| | | velocity | 7.21 | 8.45 | 8.08 | 7.81 | 7.64 | 7.71 | 7.46 | 7.45 | 7.40 | 7.25 | 7.23 | 7.58 | | 8.11 | 7.60 | 7.36 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 19.5 | 175.5 | | | | |

**Wang Hongwen (CHN) (2000)**

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 3** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.27 | 10.25 | 14.26 | 18.40 | 22.61 | 27.03 | 31.49 | 36.15 | 40.99 | 45.97 | | 51.56 | 6 / 3 | | | |
| reaction time | 0.242 | interval | | 3.98 | 4.01 | 4.14 | 4.21 | 4.42 | 4.46 | 4.66 | 4.84 | 4.98 | 5.59 | | | 12.13 | 13.09 | 14.48 |
| | | velocity | 7.18 | 8.79 | 8.73 | 8.45 | 8.31 | 7.92 | 7.85 | 7.51 | 7.23 | 7.03 | 7.16 | 7.76 | | 8.66 | 8.02 | 7.25 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 18 | 168 | | | | |

**FINAL** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.29 | 10.37 | 14.50 | 18.76 | 23.18 | 27.70 | 32.46 | 37.25 | 42.15 | 47.10 | | 52.41 | 9 / 6 | | | |
| reaction time | 0.202 | interval | | 4.08 | 4.13 | 4.26 | 4.42 | 4.52 | 4.76 | 4.79 | 4.90 | 4.95 | 5.31 | | | 12.47 | 13.70 | 14.64 |
| | | velocity | 7.15 | 8.58 | 8.47 | 8.22 | 7.92 | 7.74 | 7.35 | 7.31 | 7.14 | 7.07 | 7.53 | 7.63 | | 8.42 | 7.66 | 7.17 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 17.5 | 168.5 | | | | |

**Heat 1** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.22 | 10.19 | 14.23 | 18.50 | 22.87 | 27.36 | 31.95 | 36.69 | 41.53 | 46.55 | | 52.39 | 4 / 2 | | | |
| reaction time | 0.242 | interval | | 3.97 | 4.04 | 4.27 | 4.37 | 4.49 | 4.59 | 4.74 | 4.84 | 5.02 | 5.84 | | | 12.28 | 13.45 | 14.60 |
| | | velocity | 7.23 | 8.82 | 8.66 | 8.20 | 8.01 | 7.80 | 7.63 | 7.38 | 7.23 | 6.97 | 6.85 | 7.64 | | 8.55 | 7.81 | 7.19 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 18 | 168 | | | | |

**FINAL** - 2020 Chinese National Championships (Shaoxing, CHN) *CAA Hurdle Development (2020)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Sep-20 | time | 6.08 | 10.08 | 14.08 | 18.25 | 22.54 | 26.96 | 31.42 | 36.00 | 40.75 | 45.58 | | 51.15 | 7 / 3 | | | |
| reaction time | | interval | | 4.00 | 4.00 | 4.17 | 4.29 | 4.42 | 4.46 | 4.58 | 4.75 | 4.83 | 5.57 | | | 12.17 | 13.17 | 14.16 |
| | | velocity | 7.40 | 8.75 | 8.75 | 8.39 | 8.16 | 7.92 | 7.85 | 7.64 | 7.37 | 7.25 | 7.18 | 7.82 | | 8.63 | 7.97 | 7.42 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 18 | 168 | | | | |

**FINAL** - 2019 Chinese National Grand Prix Final (Daqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-19 | time | 6.34 | 10.33 | 14.27 | 18.40 | 22.69 | 27.07 | 31.58 | 36.27 | 41.01 | 45.80 | | 51.18 | 2 / 4 | | | |
| reaction time | 0.270 | interval | | 3.99 | 3.94 | 4.13 | 4.29 | 4.38 | 4.51 | 4.69 | 4.74 | 4.79 | 5.38 | | | 12.06 | 13.18 | 14.22 |
| | | velocity | 7.10 | 8.77 | 8.88 | 8.47 | 8.16 | 7.99 | 7.76 | 7.46 | 7.38 | 7.31 | 7.43 | 7.82 | | 8.71 | 7.97 | 7.38 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 18 | 169 | | | | |

**Heat 2** - 2019 Chinese National Grand Prix Final (Daqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Aug-19 | time | 6.39 | 10.44 | 14.58 | 18.85 | 23.27 | 27.79 | 32.40 | 37.12 | 41.96 | 46.90 | | 52.37 | 5 / 5 | | | |
| reaction time | 0.246 | interval | | 4.05 | 4.14 | 4.27 | 4.42 | 4.52 | 4.61 | 4.72 | 4.84 | 4.94 | 5.47 | | | 12.46 | 13.55 | 14.50 |
| | | velocity | 7.04 | 8.64 | 8.45 | 8.20 | 7.92 | 7.74 | 7.59 | 7.42 | 7.23 | 7.09 | 7.31 | 7.64 | | 8.43 | 7.75 | 7.24 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 17.5 | 168.5 | | | | |

**U20 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.30 | 10.22 | 14.20 | 18.28 | 22.46 | 26.76 | 31.20 | 35.76 | 40.44 | 45.28 | | 50.80 | 7 / 2 | | | |
| reaction time | 0.252 | interval | | 3.92 | 3.98 | 4.08 | 4.18 | 4.30 | 4.44 | 4.56 | 4.68 | 4.84 | 5.52 | PB | | 11.98 | 12.92 | 14.08 |
| | | velocity | 7.14 | 8.93 | 8.79 | 8.58 | 8.37 | 8.14 | 7.88 | 7.68 | 7.48 | 7.23 | 7.25 | 7.87 | | 8.76 | 8.13 | 7.46 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 17.3 | 168.3 | | | | |

**U20 Heat 3** - 2019 Chinese National Youth Games (Taiyuan, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.40 | 10.32 | 14.42 | 18.62 | 22.95 | 27.39 | 31.99 | 36.67 | 41.49 | 46.50 | | 52.86 | 6 / 1 | | | |
| reaction time | | interval | | 3.92 | 4.10 | 4.20 | 4.33 | 4.44 | 4.60 | 4.68 | 4.82 | 5.01 | 6.36 | | | 12.22 | 13.37 | 14.51 |
| | | velocity | 7.03 | 8.93 | 8.54 | 8.33 | 8.08 | 7.88 | 7.61 | 7.48 | 7.26 | 6.99 | 6.29 | 7.57 | | 8.59 | 7.85 | 7.24 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 18.3 | 169.3 | | | | |

**FINAL** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.27 | 10.22 | 14.21 | 18.27 | 22.42 | 26.82 | 31.36 | 36.00 | 40.74 | 45.63 | | 51.31 | 2 / 4 | | | |
| reaction time | 0.217 | interval | | 3.95 | 3.99 | 4.06 | 4.15 | 4.40 | 4.54 | 4.64 | 4.74 | 4.89 | 5.68 | PB | | 12.00 | 13.09 | 14.27 |
| | | velocity | 7.18 | 8.86 | 8.77 | 8.62 | 8.43 | 7.95 | 7.71 | 7.54 | 7.38 | 7.16 | 7.04 | 7.80 | | 8.75 | 8.02 | 7.36 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 18 | 169 | | | | |

**Heat 2** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.71 | 11.06 | 15.48 | 19.96 | 24.50 | 29.11 | 33.98 | 38.87 | 43.70 | 48.54 | | 53.92 | 6 / 4 | | | |
| reaction time | 0.268 | interval | | 4.35 | 4.42 | 4.48 | 4.54 | 4.61 | 4.87 | 4.89 | 4.83 | 4.84 | 5.38 | | | 13.25 | 14.02 | 14.56 |
| | | velocity | 6.71 | 8.05 | 7.92 | 7.81 | 7.71 | 7.59 | 7.19 | 7.16 | 7.25 | 7.23 | 7.43 | 7.42 | | 7.92 | 7.49 | 7.21 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 18 | 169 | | | | |

**Heat 2** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-19 | time | 6.47 | 10.41 | 14.43 | 18.55 | 22.76 | 27.09 | 31.78 | 36.50 | 41.36 | 46.33 | | 52.00 | 1 / ~~5~~ 4 | | | |
| reaction time | 0.256 | interval | | 3.94 | 4.02 | 4.12 | 4.21 | 4.33 | 4.69 | 4.72 | 4.86 | 4.97 | 5.67 | | | 12.08 | 13.23 | 14.55 |
| | | velocity | 6.96 | 8.88 | 8.71 | 8.50 | 8.31 | 8.08 | 7.46 | 7.42 | 7.20 | 7.04 | 7.05 | 7.69 | | 8.69 | 7.94 | 7.22 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 18 | 169 | | | | |

**Wang Siqing (CHN) (1999)**

**FINAL** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.40 | 10.54 | 14.78 | 19.07 | 23.51 | | 28.03 | 32.56 | 37.22 | 42.09 | 47.11 | | 52.84 | 2 / ~~7~~ 6 | | | |
| reaction time | 0.214 | interval | | 4.14 | 4.24 | 4.29 | 4.44 | | 4.52 | 4.53 | 4.66 | 4.87 | 5.02 | 5.73 | | | 12.67 | 13.49 | 14.55 |
| | | velocity | 7.03 | 8.45 | 8.25 | 8.16 | 7.88 | | 7.74 | 7.73 | 7.51 | 7.19 | 6.97 | 6.98 | 7.57 | | 8.29 | 7.78 | 7.22 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 16 | 19 | 178 | | | | |

**Heat 3** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.30 | 10.35 | 14.46 | 18.65 | 22.97 | 27.33 | 31.78 | 36.31 | 41.03 | 45.87 | | 51.44 | 7 / 2 | | | |
| reaction time | 0.222 | interval | | 4.05 | 4.11 | 4.19 | 4.32 | 4.36 | 4.45 | 4.53 | 4.72 | 4.84 | 5.57 | PB | | 12.35 | 13.13 | 14.09 |
| | | velocity | 7.14 | 8.64 | 8.52 | 8.35 | 8.10 | 8.03 | 7.87 | 7.73 | 7.42 | 7.23 | 7.18 | 7.78 | | 8.50 | 8.00 | 7.45 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 16 | 16 | 19.5 | 178.5 | | | | |

**FINAL** - 2021 Philippe Cup Athletics Invitational (Wuhan, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-May-21 | time | 6.30 | 10.38 | 14.50 | 18.70 | 23.04 | 27.39 | 31.86 | | 41.32 | 46.36 | | 51.96 | 3 / 4 | | | |
| reaction time | 0.201 | interval | | 4.08 | 4.12 | 4.20 | 4.34 | 4.35 | 4.47 | | 9.46 | 5.04 | 5.60 | PB | | 12.40 | 13.16 | 14.50 |
| | | velocity | 7.14 | 8.58 | 8.50 | 8.33 | 8.06 | 8.05 | 7.83 | | 7.40 | 6.94 | 7.14 | 7.70 | | 8.47 | 7.98 | 7.24 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 16 | 16 | 20 | 179 | | | | |

**Heat 3** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.30 | 10.30 | 14.34 | 18.52 | 22.80 | 27.14 | 31.64 | 36.38 | 41.26 | 46.36 | | 52.32 | 8 / 1 | | | |
| reaction time | 0.230 | interval | | 4.00 | 4.04 | 4.18 | 4.28 | 4.34 | 4.50 | 4.74 | 4.88 | 5.10 | 5.96 | | | 12.22 | 13.12 | 14.72 |
| | | velocity | 7.14 | 8.75 | 8.66 | 8.37 | 8.18 | 8.06 | 7.78 | 7.38 | 7.17 | 6.86 | 6.71 | 7.65 | | 8.59 | 8.00 | 7.13 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 20.5 | 180.5 | | | | |

**FINAL** - 2020 Chinese National Championships (Shaoxing, CHN) *CAA Hurdle Development (2020)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Sep-20 | time | 6.25 | | 14.67 | 19.04 | 23.50 | 28.12 | 32.79 | 37.75 | 42.50 | 47.50 | | 53.38 | 1 / 7 | | | |
| reaction time | | interval | | | 8.42 | 4.37 | 4.46 | 4.62 | 4.67 | 4.96 | 4.75 | 5.00 | 5.88 | | | 12.79 | 13.75 | 14.71 |
| | | velocity | 7.20 | | 8.31 | 8.01 | 7.85 | 7.58 | 7.49 | 7.06 | 7.37 | 7.00 | 6.80 | 7.49 | | 8.21 | 7.64 | 7.14 |
| H1 lead leg | L | strides | 22 | | | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 19 | 150 | | | | |

**Heat 2** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-19 | time | 6.37 | 10.41 | 14.65 | 18.94 | 23.31 | 27.79 | 32.32 | 36.99 | 41.76 | 46.58 | | 52.12 | 4 / ~~6~~ 5 | | | |
| reaction time | 0.197 | interval | | 4.04 | 4.24 | 4.29 | 4.37 | 4.48 | 4.53 | 4.67 | 4.77 | 4.82 | 5.54 | PB | | 12.57 | 13.38 | 14.26 |
| | | velocity | 7.06 | 8.66 | 8.25 | 8.16 | 8.01 | 7.81 | 7.73 | 7.49 | 7.34 | 7.26 | 7.22 | 7.67 | | 8.35 | 7.85 | 7.36 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 16 | 19.2 | 177.2 | | | | |

**Wang Yijie (CHN) (1997)**

**Heat 4** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.48 | 11.11 | 15.79 | 20.77 | 25.86 | | | 36.19 | | | | | 59.46 | 6 / 6 | | | |
| reaction time | 0.162 | interval | | 4.63 | 4.68 | 4.98 | 5.09 | | | 10.33 | | | | | | | 14.29 | 15.42 | |
| | | velocity | 6.94 | 7.56 | 7.48 | 7.03 | 6.88 | | | 6.78 | | | | | 6.73 | | 7.35 | 6.81 | |
| H1 lead leg | L | strides | 24 | 17 | 17 | 17 | 17 | | | | | | | | 92 | | | | |

**FINAL** - 2019 Chinese National Grand Prix Final (Daqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-19 | time | 6.12 | 10.05 | 13.95 | 18.03 | 22.27 | 26.64 | 31.16 | 35.70 | 40.35 | 45.11 | | 50.70 | 4 / 1 | | | |
| reaction time | 0.218 | interval | | 3.93 | 3.90 | 4.08 | 4.24 | 4.37 | 4.52 | 4.54 | 4.65 | 4.76 | 5.59 | | | 11.91 | 13.13 | 13.95 |
| | | velocity | 7.35 | 8.91 | 8.97 | 8.58 | 8.25 | 8.01 | 7.74 | 7.71 | 7.53 | 7.35 | 7.16 | 7.89 | | 8.82 | 8.00 | 7.53 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.3 | 171.3 | | | | |

**Heat 2** - 2019 Chinese National Grand Prix Final (Daqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Aug-19 | time | 6.24 | 10.28 | 14.41 | 18.64 | 23.07 | 27.61 | 32.18 | 36.82 | 41.64 | 46.59 | | 52.26 | 4 / 3 | | | |
| reaction time | 0.222 | interval | | 4.04 | 4.13 | 4.23 | 4.43 | 4.54 | 4.57 | 4.64 | 4.82 | 4.95 | 5.67 | | | 12.40 | 13.54 | 14.41 |
| | | velocity | 7.21 | 8.66 | 8.47 | 8.27 | 7.90 | 7.71 | 7.66 | 7.54 | 7.26 | 7.07 | 7.05 | 7.65 | | 8.47 | 7.75 | 7.29 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.5 | 171.5 | | | | |

**Heat 1** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.85 | 11.40 | 16.12 | 20.75 | 25.58 | 30.50 | 35.52 | 40.58 | 45.70 | 51.28 | | 58.62 | 7 / 4 | | | |
| reaction time | 0.318 | interval | | 4.55 | 4.72 | 4.63 | 4.83 | 4.92 | 5.02 | 5.06 | 5.12 | 5.58 | 7.34 | | | 13.90 | 14.77 | 15.76 |
| | | velocity | 6.57 | 7.69 | 7.42 | 7.56 | 7.25 | 7.11 | 6.97 | 6.92 | 6.84 | 6.27 | 5.45 | 6.82 | | 7.55 | 7.11 | 6.66 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 21 | 179 | | | | |

**FINAL** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-19 | time | 6.02 | 9.93 | 13.84 | 17.92 | 22.08 | 26.44 | 30.85 | 35.39 | 39.97 | 44.69 | | 50.04 | 6 / ~~2~~ | | | |
| reaction time | 0.175 | interval | | 3.91 | 3.91 | 4.08 | 4.16 | 4.36 | 4.41 | 4.54 | 4.58 | 4.72 | 5.35 | DQ | | 11.90 | 12.93 | 13.84 |
| | | velocity | 7.48 | 8.95 | 8.95 | 8.58 | 8.41 | 8.03 | 7.94 | 7.71 | 7.64 | 7.42 | 7.48 | 7.99 | | 8.82 | 8.12 | 7.59 |

*WR=World Rec. AR=Area Rec. OR=Olympic Rec. CR=Championship Rec. NR=National Rec. PB=Personal Best DQ=Disqualified DV=Drug Violation*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 17.5 | 170.5 | | | | |

**Heat 1** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-19 | time | 6.08 | 10.05 | 13.99 | 18.07 | 22.19 | 26.54 | 30.95 | 35.50 | 40.21 | 45.06 | | 50.72 | 6 / 1 | | | |
| reaction time | 0.166 | interval | | 3.97 | 3.94 | 4.08 | 4.12 | 4.35 | 4.41 | 4.55 | 4.71 | 4.85 | 5.66 | PB | | 11.99 | 12.88 | 14.11 |
| | | velocity | 7.40 | 8.82 | 8.88 | 8.58 | 8.50 | 8.05 | 7.94 | 7.69 | 7.43 | 7.22 | 7.07 | 7.89 | | 8.76 | 8.15 | 7.44 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.8 | 171.8 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 4 (Luoyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-May-19 | time | 6.20 | 10.14 | 14.18 | 18.35 | 22.68 | 27.14 | 31.66 | 36.22 | 41.04 | 45.86 | | 51.60 | 7 / 2 | | | |
| reaction time | 0.260 | interval | | 3.94 | 4.04 | 4.17 | 4.33 | 4.46 | 4.52 | 4.56 | 4.82 | 4.82 | 5.74 | | | 12.15 | 13.31 | 14.20 |
| | | velocity | 7.26 | 8.88 | 8.66 | 8.39 | 8.08 | 7.85 | 7.74 | 7.68 | 7.26 | 7.26 | 6.97 | 7.75 | | 8.64 | 7.89 | 7.39 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.5 | 171.5 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 1 (Zhaoqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Apr-19 | time | 6.20 | 10.22 | 14.28 | 18.44 | 22.64 | 26.96 | 31.46 | 36.10 | 40.88 | 45.78 | | 51.60 | 3 / 3 | | | |
| reaction time | 0.280 | interval | | 4.02 | 4.06 | 4.16 | 4.20 | 4.32 | 4.50 | 4.64 | 4.78 | 4.90 | 5.82 | | | 12.24 | 13.02 | 14.32 |
| | | velocity | 7.26 | 8.71 | 8.62 | 8.41 | 8.33 | 8.10 | 7.78 | 7.54 | 7.32 | 7.14 | 6.87 | 7.75 | | 8.58 | 8.06 | 7.33 |
| H1 lead leg | L | strides | 21 | 16 | 16 | 16 | 16 | 15 | 15 | 15 | 15 | 15 | 18.5 | 178.5 | | | | |

**Wang Ziming (CHN) (1994)**

**FINAL** - 2019 Chinese National Grand Prix 2 (Huangshi, CHN) *CAA Hurdle Development (2019)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Apr-19 | time | 6.37 | 10.51 | 14.75 | 19.09 | 23.66 | | 28.48 | 33.44 | 38.54 | 43.81 | 49.30 | | 56.18 | 6 / 8 | | | |
| reaction time | 0.242 | interval | | 4.14 | 4.24 | 4.34 | 4.57 | | 4.82 | 4.96 | 5.10 | 5.27 | 5.49 | 6.88 | | | 12.72 | 14.35 | 15.86 |
| | | velocity | 7.06 | 8.45 | 8.25 | 8.06 | 7.66 | | 7.26 | 7.06 | 6.86 | 6.64 | 6.38 | 5.81 | 7.12 | | 8.25 | 7.32 | 6.62 |
| H1 lead leg | L | strides | 21 | 16 | 16 | 16 | 16 | | 15 | 16 | 16 | 16 | 16 | 18.7 | 182.7 | | | | |

**Warholm, Karsten (NOR) (1996)**

**FINAL** - 2023 Prefontaine Classic (Eugene, OR) *Omega Timing (2023) - diamond league race analysis*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Sep-23 | time | 5.59 | 9.17 | 12.80 | 16.46 | 20.22 | | 24.10 | 28.12 | 32.37 | 36.62 | 41.18 | | 46.53 | 7 / 2 | | | |
| reaction time | 0.135 | interval | | 3.58 | 3.63 | 3.66 | 3.76 | | 3.88 | 4.02 | 4.25 | 4.25 | 4.56 | 5.35 | | | 10.87 | 11.66 | 13.06 |
| | | velocity | 8.05 | 9.78 | 9.64 | 9.56 | 9.31 | | 9.02 | 8.71 | 8.24 | 8.24 | 7.68 | 7.48 | 8.60 | | 9.66 | 9.01 | 8.04 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 18 | 157 | | | | |

**FINAL** - 2023 Weltklasse (Zürich, SUI) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Aug-23 | time | 5.63 | 9.23 | 12.94 | 16.69 | 20.55 | 24.50 | 28.55 | 32.78 | 37.30 | 41.91 | | 47.30 | 7 / 2 | | | |
| reaction time | 0.169 | interval | | 3.60 | 3.71 | 3.75 | 3.86 | 3.95 | 4.05 | 4.23 | 4.52 | 4.61 | 5.39 | | | 11.06 | 11.86 | 13.36 |
| | | velocity | 7.99 | 9.72 | 9.43 | 9.33 | 9.07 | 8.86 | 8.64 | 8.27 | 7.74 | 7.59 | 7.42 | 8.46 | | 9.49 | 8.85 | 7.86 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 18 | 159 | | | | |

**FINAL** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-23 | time | 5.81 | 9.46 | 12.90 | 16.52 | 20.29 | 24.25 | 28.29 | 32.50 | 36.93 | 41.61 | | 46.89 | 7 / 1 | | | |
| reaction time | 0.171 | interval | | 3.65 | 3.44 | 3.62 | 3.77 | 3.96 | 4.04 | 4.21 | 4.43 | 4.68 | 5.28 | | | 10.71 | 11.77 | 13.32 |
| | | velocity | 7.75 | 9.59 | 10.17 | 9.67 | 9.28 | 8.84 | 8.66 | 8.31 | 7.90 | 7.48 | 7.58 | 8.53 | | 9.80 | 8.92 | 7.88 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 18 | 157 | | | | |

**Semi-Final 3** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-23 | time | 5.77 | 9.44 | 13.08 | 16.61 | 20.42 | 24.36 | 28.42 | 32.63 | 37.25 | 41.97 | | 47.09 | 5 / 1 | | | |
| reaction time | 0.162 | interval | | 3.67 | 3.64 | 3.53 | 3.81 | 3.94 | 4.06 | 4.21 | 4.62 | 4.72 | 5.12 | | | 10.84 | 11.81 | 13.55 |
| | | velocity | 7.80 | 9.54 | 9.62 | 9.92 | 9.19 | 8.88 | 8.62 | 8.31 | 7.58 | 7.42 | 7.81 | 8.49 | | 9.69 | 8.89 | 7.75 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 17 | 158 | | | | |

**Heat 3** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 5.86 | 9.66 | 13.40 | 17.20 | 20.93 | 24.93 | 29.13 | 33.44 | 38.20 | 43.13 | | 48.76 | 3 / 2 | | | |
| reaction time | 0.166 | interval | | 3.80 | 3.74 | 3.80 | 3.73 | 4.00 | 4.20 | 4.31 | 4.76 | 4.93 | 5.63 | | | 11.34 | 11.93 | 14.00 |
| | | velocity | 7.68 | 9.21 | 9.36 | 9.21 | 9.38 | 8.75 | 8.33 | 8.12 | 7.35 | 7.10 | 7.10 | 8.20 | | 9.26 | 8.80 | 7.50 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 17 | 158 | | | | |

**FINAL** - 2023 Herculis Meeting International d'Athlétisme (Monaco, MON) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jul-23 | time | 5.55 | 9.05 | 12.62 | 16.26 | 20.02 | 23.95 | 28.03 | 32.24 | 36.65 | 41.21 | | 46.51 | 7 / 1 | | | |
| reaction time | 0.146 | interval | | 3.50 | 3.57 | 3.64 | 3.76 | 3.93 | 4.08 | 4.21 | 4.41 | 4.56 | 5.30 | | | 10.71 | 11.77 | 13.18 |
| | | velocity | 8.11 | 10.00 | 9.80 | 9.62 | 9.31 | 8.91 | 8.58 | 8.31 | 7.94 | 7.68 | 7.55 | 8.60 | | 9.80 | 8.92 | 7.97 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 17.7 | 156.7 | | | | |

**FINAL** - 2023 Bauhaus Galan (Stockholm, SWE) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Jul-23 | time | 5.61 | 9.17 | 12.77 | 16.43 | 20.24 | 24.22 | 28.33 | 32.70 | 37.28 | 42.02 | | 47.57 | 8 / 1 | | | |
| reaction time | 0.156 | interval | | 3.56 | 3.60 | 3.66 | 3.81 | 3.98 | 4.11 | 4.37 | 4.58 | 4.74 | 5.55 | | | 10.82 | 11.90 | 13.69 |
| | | velocity | 8.02 | 9.83 | 9.72 | 9.56 | 9.19 | 8.79 | 8.52 | 8.01 | 7.64 | 7.38 | 7.21 | 8.41 | | 9.70 | 8.82 | 7.67 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 17.7 | 156.7 | | | | |

**FINAL** - 2023 Bislett Games (Oslo, NOR) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Jun-23 | time | 5.59 | 9.16 | 12.76 | 16.41 | 20.17 | 24.05 | 28.07 | 32.27 | 36.63 | 41.20 | | 46.52 | 7 / 1 | | | |
| reaction time | 0.162 | interval | | 3.57 | 3.60 | 3.65 | 3.76 | 3.88 | 4.02 | 4.20 | 4.36 | 4.57 | 5.32 | | | 10.82 | 11.66 | 13.13 |
| | | velocity | 8.05 | 9.80 | 9.72 | 9.59 | 9.31 | 9.02 | 8.71 | 8.33 | 8.03 | 7.66 | 7.52 | 8.60 | | 9.70 | 9.01 | 8.00 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 17.7 | 156.7 | | | | |

**FINAL** - 2022 ISTAF (Berlin, GER) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Sep-22 | time | 5.76 | 9.28 | 12.88 | 16.60 | 20.36 | 24.32 | 28.48 | 32.76 | 37.24 | 41.96 | | 47.24 | 7 / 1 | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.139 | interval | | 3.52 | 3.60 | 3.72 | 3.76 | | 3.96 | 4.16 | 4.28 | 4.48 | 4.72 | 5.28 | | 10.84 | 11.88 | 13.48 |
| | | velocity | 7.81 | 9.94 | 9.72 | 9.41 | 9.31 | | 8.84 | 8.41 | 8.18 | 7.81 | 7.42 | 7.58 | 8.47 | 9.69 | 8.84 | 7.79 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 18 | 157 | | | |

**FINAL** - 2022 European Athletics Championships (Munich, GER) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Aug-22 | time | 5.77 | 9.27 | 13.03 | 16.72 | 20.57 | 22.14 | 24.59 | 28.68 | 32.93 | 37.30 | 41.99 | | 47.12 | 4 / 1 | | |
| reaction time | 0.215 | interval | | 3.50 | 3.76 | 3.69 | 3.85 | | 4.02 | 4.09 | 4.25 | 4.37 | 4.69 | 5.13 | **CR** | 10.95 | 11.96 | 13.31 |
| | | velocity | 7.80 | 10.00 | 9.31 | 9.49 | 9.09 | 9.03 | 8.71 | 8.56 | 8.24 | 8.01 | 7.46 | 7.80 | 8.49 | 9.59 | 8.78 | 7.89 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 17.2 | 156.2 | | | |

**FINAL** - 2022 World Athletics Championships (Eugene, OR) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Jul-22 | time | 5.71 | 9.19 | 12.71 | 16.32 | 19.99 | 21.50 | 23.81 | 27.96 | 32.48 | 37.35 | 42.38 | | 48.42 | 4 / 7 | | |
| reaction time | 0.140 | interval | | 3.48 | 3.52 | 3.61 | 3.67 | | 3.82 | 4.15 | 4.52 | 4.87 | 5.03 | 6.04 | | 10.61 | 11.64 | 14.42 |
| | | velocity | 7.88 | 10.06 | 9.94 | 9.70 | 9.54 | 9.30 | 9.16 | 8.43 | 7.74 | 7.19 | 6.96 | 6.62 | 8.26 | 9.90 | 9.02 | 7.28 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | 18.5 | 161.5 | | | |

**Semi-Final 3** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.63 | 9.10 | 12.86 | 16.40 | 20.20 | 21.83 | 24.13 | 28.30 | 32.66 | 37.40 | 42.20 | | 48.00 | 5 / 1 | | |
| reaction time | 0.169 | interval | | 3.47 | 3.76 | 3.54 | 3.80 | | 3.93 | 4.17 | 4.36 | 4.74 | 4.80 | 5.80 | | 10.77 | 11.90 | 13.90 |
| | | velocity | 7.99 | 10.09 | 9.31 | 9.89 | 9.21 | 9.16 | 8.91 | 8.39 | 8.03 | 7.38 | 7.29 | 6.90 | 8.33 | 9.75 | 8.82 | 7.55 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 17.7 | 158.7 | | | |

**Heat 3** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 5.66 | 9.27 | 13.03 | 16.90 | 20.86 | 22.47 | 24.90 | 29.20 | 33.63 | 38.46 | 43.46 | | 49.34 | 3 / 1 | | |
| reaction time | 0.164 | interval | | 3.61 | 3.76 | 3.87 | 3.96 | | 4.04 | 4.30 | 4.43 | 4.83 | 5.00 | 5.88 | | 11.24 | 12.30 | 14.26 |
| | | velocity | 7.95 | 9.70 | 9.31 | 9.04 | 8.84 | 8.90 | 8.66 | 8.14 | 7.90 | 7.25 | 7.00 | 6.80 | 8.11 | 9.34 | 8.54 | 7.36 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 17.5 | 158.5 | | | |

**FINAL** - FINAL - 2022 Prefontaine Classic (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jun-22 | time | 5.67 | | | | | | | | | | | | dnf | 7 / -- | | |
| reaction time | 0.163 | interval | | | | | | | | | | | | | | | | |
| | | velocity | 7.94 | | | | | | | | | | | | | | | |
| H1 lead leg | L | strides | 20 | | | | | | | | | | | | 20 | | | |

**FINAL** - 2021 ISTAF (Berlin, GER) (TV Analysis) *Henson (2021) - Athlete First: 2021 Karsten Warholm 400m Hurdles World Record Season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Sep-21 | time | 5.76 | 9.28 | 12.96 | 16.70 | 20.56 | | 24.56 | 28.76 | 33.12 | 37.80 | 42.54 | | 48.08 | 7 / 1 | | |
| reaction time | 0.189 | interval | | 3.52 | 3.68 | 3.74 | 3.86 | | 4.00 | 4.20 | 4.36 | 4.68 | 4.74 | 5.54 | | 10.94 | 12.06 | 13.78 |
| | | velocity | 7.81 | 9.94 | 9.51 | 9.36 | 9.07 | | 8.75 | 8.33 | 8.03 | 7.48 | 7.38 | 7.22 | 8.32 | 9.60 | 8.71 | 7.62 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 18.5 | 159.5 | | | |

**FINAL** - 2021 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Sep-21 | time | 5.72 | 9.28 | 12.96 | 16.72 | 20.56 | 22.1 | 24.56 | 28.68 | 32.88 | 37.44 | 42.08 | | 47.35 | 7 / 1 | | |
| reaction time | 0.150 | interval | | 3.56 | 3.68 | 3.76 | 3.84 | | 4.00 | 4.12 | 4.20 | 4.56 | 4.64 | 5.27 | | 11.00 | 11.96 | 13.40 |
| | | velocity | 7.87 | 9.83 | 9.51 | 9.31 | 9.11 | 9.05 | 8.75 | 8.50 | 8.33 | 7.68 | 7.54 | 7.59 | 8.45 | 9.55 | 8.78 | 7.84 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 18 | 159 | | | |

**FINAL** - 2020 Olympic Games (Tokyo, JPN) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-21 | time | 5.60 | 9.08 | 12.62 | 16.28 | 19.96 | | 23.86 | 27.92 | 32.04 | 36.32 | 40.76 | | 45.94 | 6 / 1 | | |
| reaction time | 0.145 | interval | | 3.48 | 3.54 | 3.66 | 3.68 | | 3.90 | 4.06 | 4.12 | 4.28 | 4.44 | 5.18 | **WR** | 10.68 | 11.64 | 12.84 |
| | | velocity | 8.04 | 10.06 | 9.89 | 9.56 | 9.51 | | 8.97 | 8.62 | 8.50 | 8.18 | 7.88 | 7.72 | 8.71 | 9.83 | 9.02 | 8.18 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 18 | 157 | | | |

**Semi-Final 1** - 2020 Olympic Games (Tokyo, JPN) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Aug-21 | time | 5.60 | 9.14 | 12.76 | 16.51 | 20.42 | | 24.42 | 28.59 | 32.93 | 37.32 | 42.07 | | 47.30 | 7 / 1 | | |
| reaction time | 0.156 | interval | | 3.54 | 3.62 | 3.75 | 3.91 | | 4.00 | 4.17 | 4.34 | 4.39 | 4.75 | 5.23 | | 10.91 | 12.08 | 13.48 |
| | | velocity | 8.04 | 9.89 | 9.67 | 9.33 | 8.95 | | 8.75 | 8.39 | 8.06 | 7.97 | 7.37 | 7.65 | 8.46 | 9.62 | 8.69 | 7.79 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 17.5 | 156.5 | | | |

**Heat 3** - 2020 Olympic Games (Tokyo, JPN) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jul-21 | time | 5.67 | 9.31 | 13.04 | 16.98 | 21.02 | | 25.16 | 29.36 | 33.66 | 38.30 | 43.02 | | 48.65 | 8 / 1 | | |
| reaction time | 0.157 | interval | | 3.64 | 3.73 | 3.94 | 4.04 | | 4.14 | 4.20 | 4.30 | 4.64 | 4.72 | 5.63 | | 11.31 | 12.38 | 13.66 |
| | | velocity | 7.94 | 9.62 | 9.38 | 8.88 | 8.66 | | 8.45 | 8.33 | 8.14 | 7.54 | 7.42 | 7.10 | 8.22 | 9.28 | 8.48 | 7.69 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 17 | 158 | | | |

**FINAL** - 2021 Herculis Meeting International d'Athletisme (Monaco, MON) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-21 | time | 5.62 | 9.12 | 12.74 | 16.51 | 20.38 | 22.0 | 24.36 | 28.49 | 32.74 | 37.17 | 41.87 | | 47.08 | 7 / 1 | | |
| reaction time | 0.150 | interval | | 3.50 | 3.62 | 3.77 | 3.87 | | 3.98 | 4.13 | 4.25 | 4.43 | 4.70 | 5.21 | | 10.89 | 11.98 | 13.38 |
| | | velocity | 8.01 | 10.00 | 9.67 | 9.28 | 9.04 | 9.09 | 8.79 | 8.47 | 8.24 | 7.90 | 7.45 | 7.68 | 8.50 | 9.64 | 8.76 | 7.85 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 18 | 157 | | | |

**FINAL** - 2021 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jul-21 | time | 5.58 | 9.10 | 12.70 | 16.34 | 20.16 | | 24.08 | 28.18 | 32.38 | 36.78 | 41.44 | | 46.70 | 7 / 1 | | |
| reaction time | 0.163 | interval | | 3.52 | 3.60 | 3.64 | 3.82 | | 3.92 | 4.10 | 4.20 | 4.40 | 4.66 | 5.26 | **WR** | 10.76 | 11.84 | 13.26 |
| | | velocity | 8.06 | 9.94 | 9.72 | 9.62 | 9.16 | | 8.93 | 8.54 | 8.33 | 7.95 | 7.51 | 7.60 | 8.57 | 9.76 | 8.87 | 7.92 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 18 | 155 | | | |

**FINAL** - 2021 Bislett Night of Highlights (Oslo, NOR) (TV Analysis) (300m Hurdles) *Henson (2021) - Athlete First: 2021 Karsten Warholm 400m Hurdles World Record Season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jun-21 | time | 6.12 | 9.60 | 13.16 | 16.78 | 20.60 | | 24.52 | 28.58 | | | | | 33.26 | 7 / 1 | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | | interval | | 3.48 | 3.56 | 3.62 | 3.82 | | 3.92 | 4.06 | | | | 4.68 | WB PB | | 10.66 | 11.80 | |
| | | velocity | 8.17 | 10.06 | 9.83 | 9.67 | 9.16 | | 8.93 | 8.62 | | | | 8.55 | 9.02 | | 9.85 | 8.90 | |
| H1 lead leg | L | strides | 23 | 13 | 13 | 13 | 13 | | 13 | 13 | | | | 17 | 118 | | | | |

**FINAL** - 2020 Norweigen National Championships (Bergen, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Sep-20 | time | 5.73 | 9.33 | 13.07 | 16.87 | 20.80 | | 24.83 | 29.03 | 33.30 | 37.93 | 42.67 | | 48.23 | 7 / 1 | | | |
| reaction time | | interval | | 3.60 | 3.74 | 3.80 | 3.93 | | 4.03 | 4.20 | 4.27 | 4.63 | 4.74 | 5.56 | | | 11.14 | 12.16 | 13.64 |
| | | velocity | 7.85 | 9.72 | 9.36 | 9.21 | 8.91 | | 8.68 | 8.33 | 8.20 | 7.56 | 7.38 | 7.19 | 8.29 | | 9.43 | 8.63 | 7.70 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 17.5 | 158.5 | | | | |

**FINAL** - 2020 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Sep-20 | time | 5.64 | 9.24 | 12.95 | 16.75 | 20.65 | 22.3 | 24.66 | 28.80 | 33.07 | 37.47 | 41.91 | | 47.07 | 7 / 1 | | | |
| reaction time | 0.158 | interval | | 3.60 | 3.71 | 3.80 | 3.90 | | 4.01 | 4.14 | 4.27 | 4.40 | 4.44 | 5.16 | | | 11.11 | 12.05 | 13.11 |
| | | velocity | 7.98 | 9.72 | 9.43 | 9.21 | 8.97 | 8.97 | 8.73 | 8.45 | 8.20 | 7.95 | 7.88 | 7.75 | 8.50 | | 9.45 | 8.71 | 8.01 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 18 | 157 | | | | |

**FINAL** - 2020 ISTAF (Berlin, GER) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Sep-20 | time | 5.64 | 9.24 | 12.88 | 16.64 | 20.56 | | 24.56 | 28.68 | 32.92 | 37.24 | 41.88 | | 47.08 | 7 / 1 | | | |
| reaction time | 0.190 | interval | | 3.60 | 3.64 | 3.76 | 3.92 | | 4.00 | 4.12 | 4.24 | 4.32 | 4.64 | 5.20 | | | 11.00 | 12.04 | 13.20 |
| | | velocity | 7.98 | 9.72 | 9.62 | 9.31 | 8.93 | | 8.75 | 8.50 | 8.25 | 8.10 | 7.54 | 7.69 | 8.50 | | 9.55 | 8.72 | 7.95 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 18 | 157 | | | | |

**FINAL** - 2020 Golden Spike (Ostrava, CZE) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-20 | time | 5.77 | 9.37 | 13.05 | 16.82 | 20.65 | | 24.69 | 28.89 | 33.13 | 37.77 | 42.37 | | 47.62 | 8 / 1 | | | |
| reaction time | 0.168 | interval | | 3.60 | 3.68 | 3.77 | 3.83 | | 4.04 | 4.20 | 4.24 | 4.64 | 4.60 | 5.25 | | | 11.05 | 12.07 | 13.48 |
| | | velocity | 7.80 | 9.72 | 9.51 | 9.28 | 9.14 | | 8.66 | 8.33 | 8.25 | 7.54 | 7.61 | 7.62 | 8.40 | | 9.50 | 8.70 | 7.79 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 18 | 159 | | | | |

**FINAL** - 2020 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-20 | time | 5.58 | 9.14 | 12.80 | 16.60 | 20.44 | 22.2 | 24.42 | 28.48 | 32.64 | 36.94 | 41.48 | | 46.87 | 8 / 1 | | | |
| reaction time | 0.161 | interval | | 3.56 | 3.66 | 3.80 | 3.84 | | 3.98 | 4.06 | 4.16 | 4.30 | 4.54 | 5.39 | AR PB | | 11.02 | 11.88 | 13.00 |
| | | velocity | 8.06 | 9.83 | 9.56 | 9.21 | 9.11 | 9.01 | 8.79 | 8.62 | 8.41 | 8.14 | 7.71 | 7.42 | 8.53 | | 9.53 | 8.84 | 8.08 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 18 | 157 | | | | |

**FINAL** - 2020 Herculis Meeting International d'Athletisme (Monaco, MON) (TV Analysis) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-Aug-20 | time | 5.60 | 9.27 | 13.11 | 16.98 | 20.92 | | 25.02 | 29.23 | 33.47 | 37.80 | 42.17 | | 47.10 | 7 / 1 | | | |
| reaction time | 0.132 | interval | | 3.67 | 3.84 | 3.87 | 3.94 | | 4.10 | 4.21 | 4.24 | 4.33 | 4.37 | 4.93 | | | 11.38 | 12.25 | 12.94 |
| | | velocity | 8.04 | 9.54 | 9.11 | 9.04 | 8.88 | | 8.54 | 8.31 | 8.25 | 8.08 | 8.01 | 8.11 | 8.49 | | 9.23 | 8.57 | 8.11 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 17 | 154 | | | | |

**FINAL** - 2020 Impossible Games (Oslo, NOR) (TV Analysis) (300m Hurdles) *Henson (2020) - Athlete First: 2020 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 11-Jun-20 | time | 6.24 | 9.74 | 13.38 | 17.15 | 21.02 | | 25.02 | 29.13 | | | | | 33.78 | 7 / 1 | | | |
| reaction time | 0.182 | interval | | 3.50 | 3.64 | 3.77 | 3.87 | | 4.00 | 4.11 | | | | 4.65 | WB PB | | 10.91 | 11.98 | |
| | | velocity | 8.01 | 10.00 | 9.62 | 9.28 | 9.04 | | 8.75 | 8.52 | | | | 8.60 | 8.88 | | 9.62 | 8.76 | |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | | | | 16.5 | 114.5 | | | | |

**FINAL** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Sep-19 | time | 5.75 | 9.29 | 12.93 | 16.68 | 20.56 | | 24.56 | 28.68 | 32.91 | 37.40 | 42.01 | | 47.42 | 4 / 1 | | | |
| reaction time | 0.164 | interval | | 3.54 | 3.64 | 3.75 | 3.88 | | 4.00 | 4.12 | 4.23 | 4.49 | 4.61 | 5.41 | | | 10.93 | 12.00 | 13.33 |
| | | velocity | 7.83 | 9.89 | 9.62 | 9.33 | 9.02 | | 8.75 | 8.50 | 8.27 | 7.80 | 7.59 | 7.39 | 8.44 | | 9.61 | 8.75 | 7.88 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 18.2 | 157.2 | | | | |

**Semi-Final 2** - 2019 IAAF World Championships (Doha, QAT) *Kakehata (2019) - race analysis of men's 400m hurdles 2019 World Championships*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Sep-19 | time | 5.73 | 9.33 | 13.00 | 16.74 | 20.60 | | 24.68 | 28.91 | 33.24 | 37.88 | 42.61 | | 48.28 | 4 / 1 | | | |
| reaction time | 0.154 | interval | | 3.60 | 3.67 | 3.74 | 3.86 | | 4.08 | 4.23 | 4.33 | 4.64 | 4.73 | 5.67 | | | 11.01 | 12.17 | 13.70 |
| | | velocity | 7.85 | 9.72 | 9.54 | 9.36 | 9.07 | | 8.58 | 8.27 | 8.08 | 7.54 | 7.40 | 7.05 | 8.29 | | 9.54 | 8.63 | 7.66 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 17.2 | 158.2 | | | | |

**Heat 1** - 2019 IAAF World Championships (Doha, QAT) (TV Analysis) *Henson (2021) - Athlete First: 2021 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Sep-19 | time | 5.72 | 9.48 | 13.28 | 17.16 | 21.24 | | | 29.68 | 34.04 | 38.76 | 43.64 | | 49.27 | 4 / 1 | | | |
| reaction time | 0.161 | interval | | 3.76 | 3.80 | 3.88 | 4.08 | | | 8.44 | 4.36 | 4.72 | 4.88 | 5.63 | | | 11.44 | 12.52 | 13.96 |
| | | velocity | 7.87 | 9.31 | 9.21 | 9.02 | 8.58 | | | 8.29 | 8.03 | 7.42 | 7.17 | 7.10 | 8.12 | | 9.18 | 8.39 | 7.52 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | | | 13 | 15 | 15 | 17 | 132 | | | | |

**FINAL** - 2019 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Aug-19 | time | 5.66 | 9.16 | 12.76 | 16.40 | 20.22 | 21.9 | 24.18 | 28.32 | 32.56 | 37.08 | 41.62 | | 46.92 | 7 / 1 | | | |
| reaction time | 0.140 | interval | | 3.50 | 3.60 | 3.64 | 3.82 | | 3.96 | 4.14 | 4.24 | 4.52 | 4.54 | 5.30 | AR PB | | 10.74 | 11.92 | 13.30 |
| | | velocity | 7.95 | 10.00 | 9.72 | 9.62 | 9.16 | 9.13 | 8.84 | 8.45 | 8.25 | 7.74 | 7.71 | 7.55 | 8.53 | | 9.78 | 8.81 | 7.89 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 18.2 | 159.2 | | | | |

**FINAL** - 2019 Meeting de Paris (Paris, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-19 | time | 5.64 | 9.24 | 12.86 | 16.59 | 20.42 | 22.1 | 24.48 | 28.66 | 32.92 | 37.35 | 41.96 | | 47.26 | 7 / 1 | | | |
| reaction time | 0.157 | interval | | 3.60 | 3.62 | 3.73 | 3.83 | | 4.06 | 4.18 | 4.26 | 4.43 | 4.61 | 5.30 | | | 10.95 | 12.07 | 13.30 |
| | | velocity | 7.98 | 9.72 | 9.67 | 9.38 | 9.14 | 9.05 | 8.62 | 8.37 | 8.22 | 7.90 | 7.59 | 7.55 | 8.46 | | 9.59 | 8.70 | 7.89 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 18 | 155 | | | | |

**FINAL** - 2019 Norwegian National Championships (Hamar, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Aug-19 | time | 5.76 | 9.40 | 13.16 | 17.02 | 21.00 | | 25.08 | 29.28 | 33.56 | 37.96 | 42.36 | | 47.43 | 7 / 1 | | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | | interval | | 3.64 | 3.76 | 3.86 | 3.98 | | 4.08 | 4.20 | 4.28 | 4.40 | 4.40 | 5.07 | | | 11.26 | 12.26 | 13.08 |
| | | velocity | 7.81 | 9.62 | 9.31 | 9.07 | 8.79 | | 8.58 | 8.33 | 8.18 | 7.95 | 7.95 | 7.89 | 8.43 | | 9.33 | 8.56 | 8.03 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 13 | 17.2 | 154.2 | | | | |

**FINAL** - 2019 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Jul-19 | time | 5.72 | 9.24 | 12.84 | 16.56 | 20.40 | 22.0 | 24.44 | 28.56 | 32.88 | 37.28 | 41.92 | | 47.12 | 7 / 1 | | | |
| reaction time | 0.160 | interval | | 3.52 | 3.60 | 3.72 | 3.84 | | 4.04 | 4.12 | 4.32 | 4.40 | 4.64 | 5.20 | **AR PB** | | 10.84 | 12.00 | 13.36 |
| | | velocity | 7.87 | 9.94 | 9.72 | 9.41 | 9.11 | 9.09 | 8.66 | 8.50 | 8.10 | 7.95 | 7.54 | 7.69 | 8.49 | | 9.69 | 8.75 | 7.86 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 18 | 156 | | | | |

**FINAL** - 2019 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Jun-19 | time | 5.58 | 9.14 | 12.84 | 16.64 | 20.61 | 22.3 | 24.64 | 28.88 | 33.12 | 37.52 | 42.03 | | 47.33 | 7 / 1 | | | |
| reaction time | 0.148 | interval | | 3.56 | 3.70 | 3.80 | 3.97 | | 4.03 | 4.24 | 4.24 | 4.40 | 4.51 | 5.30 | **AR PB** | | 11.06 | 12.24 | 13.15 |
| | | velocity | 8.06 | 9.83 | 9.46 | 9.21 | 8.82 | 8.97 | 8.68 | 8.25 | 8.25 | 7.95 | 7.76 | 7.55 | 8.45 | | 9.49 | 8.58 | 7.98 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 18 | 157 | | | | |

**FINAL** - 2019 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2019 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-May-19 | time | 5.73 | 9.33 | 13.10 | 17.00 | 20.93 | 22.5 | 25.00 | 29.16 | 33.40 | 37.86 | 42.48 | | 47.85 | 7 / 1 | | | |
| reaction time | 0.146 | interval | | 3.60 | 3.77 | 3.90 | 3.93 | | 4.07 | 4.16 | 4.24 | 4.46 | 4.62 | 5.37 | | | 11.27 | 12.16 | 13.32 |
| | | velocity | 7.85 | 9.72 | 9.28 | 8.97 | 8.91 | 8.89 | 8.60 | 8.41 | 8.25 | 7.85 | 7.58 | 7.45 | 8.36 | | 9.32 | 8.63 | 7.88 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 17.7 | 156.7 | | | | |

**FINAL** - 2018 IAAF Continental Cup (Ostrava, CZE) (TV Analysis) *Henson (2021) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-18 | time | 5.76 | 9.40 | 13.12 | 17.00 | 21.00 | | 25.08 | 29.32 | 33.76 | 38.48 | 43.24 | | 48.56 | 4 / 3 | | | |
| reaction time | 0.175 | interval | | 3.64 | 3.72 | 3.88 | 4.00 | | 4.08 | 4.24 | 4.44 | 4.72 | 4.76 | 5.32 | | | 11.24 | 12.32 | 13.92 |
| | | velocity | 7.81 | 9.62 | 9.41 | 9.02 | 8.75 | | 8.58 | 8.25 | 7.88 | 7.42 | 7.35 | 7.52 | 8.24 | | 9.34 | 8.52 | 7.54 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 18 | 159 | | | | |

**FINAL** - 2018 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Aug-18 | time | 5.64 | 9.28 | 13.00 | 16.84 | 20.84 | 22.6 | 24.92 | 29.16 | 33.52 | 38.12 | 42.80 | | 48.10 | 5 / 2 | | | |
| reaction time | 0.135 | interval | | 3.64 | 3.72 | 3.84 | 4.00 | | 4.08 | 4.24 | 4.36 | 4.60 | 4.68 | 5.30 | | | 11.20 | 12.32 | 13.64 |
| | | velocity | 7.98 | 9.62 | 9.41 | 9.11 | 8.75 | 8.85 | 8.58 | 8.25 | 8.03 | 7.61 | 7.48 | 7.55 | 8.32 | | 9.38 | 8.52 | 7.70 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 18 | 159 | | | | |

**FINAL** - 2018 Müller Anniversary Games (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Jul-18 | time | 5.72 | 9.36 | 13.12 | 17.00 | 20.92 | | 24.92 | 29.04 | 33.28 | 37.68 | 42.32 | | 47.65 | 7 / 1 | | | |
| reaction time | 0.149 | interval | | 3.64 | 3.76 | 3.88 | 3.92 | | 4.00 | 4.12 | 4.24 | 4.40 | 4.64 | 5.33 | **NR PB** | | 11.28 | 12.04 | 13.28 |
| | | velocity | 7.87 | 9.62 | 9.31 | 9.02 | 8.93 | | 8.75 | 8.50 | 8.25 | 7.95 | 7.54 | 7.50 | 8.39 | | 9.31 | 8.72 | 7.91 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 17.5 | 156.5 | | | | |

**FINAL** - 2018 Athletissima (Lausanne, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jul-18 | time | 5.72 | 9.32 | 13.00 | 16.84 | 20.76 | | 24.84 | 29.04 | 33.32 | 37.88 | 42.52 | | 47.94 | 6 / 2 | | | |
| reaction time | 0.133 | interval | | 3.60 | 3.68 | 3.84 | 3.92 | | 4.08 | 4.20 | 4.28 | 4.56 | 4.64 | 5.42 | | | 11.12 | 12.20 | 13.48 |
| | | velocity | 7.87 | 9.72 | 9.51 | 9.11 | 8.93 | | 8.58 | 8.33 | 8.18 | 7.68 | 7.54 | 7.38 | 8.34 | | 9.44 | 8.61 | 7.79 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 18 | 159 | | | | |

**FINAL** - 2018 Meeting de Paris (Paris, FRA) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-18 | time | 5.72 | 9.32 | 13.04 | 16.84 | 20.72 | 22.5 | 24.76 | 28.84 | 33.08 | 37.44 | 42.44 | | 48.06 | 7 / 3 | | | |
| reaction time | 0.158 | interval | | 3.60 | 3.72 | 3.80 | 3.88 | | 4.04 | 4.08 | 4.24 | 4.36 | 5.00 | 5.62 | | | 11.12 | 12.00 | 13.60 |
| | | velocity | 7.87 | 9.72 | 9.41 | 9.21 | 9.02 | 8.89 | 8.66 | 8.58 | 8.25 | 8.03 | 7.00 | 7.12 | 8.32 | | 9.44 | 8.75 | 7.72 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 15 | 17.7 | 156.7 | | | | |

**FINAL** - 2018 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jun-18 | time | 5.68 | 9.36 | 13.20 | 17.08 | 21.12 | | 25.20 | 29.36 | 33.68 | 38.00 | 42.44 | | 47.81 | 7 / 2 | | | |
| reaction time | 0.134 | interval | | 3.68 | 3.84 | 3.88 | 4.04 | | 4.08 | 4.16 | 4.32 | 4.32 | 4.44 | 5.37 | **NR PB** | | 11.40 | 12.28 | 13.08 |
| | | velocity | 7.92 | 9.51 | 9.11 | 9.02 | 8.66 | | 8.58 | 8.41 | 8.10 | 8.10 | 7.88 | 7.45 | 8.37 | | 9.21 | 8.55 | 8.03 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 15 | 15 | 18 | 159 | | | | |

**FINAL** - 2018 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-18 | time | 5.68 | 9.24 | 12.96 | 16.80 | 20.80 | 22.6 | 24.88 | 29.16 | 33.48 | 37.92 | 42.64 | | 48.22 | 7 / 2 | | | |
| reaction time | 0.165 | interval | | 3.56 | 3.72 | 3.84 | 4.00 | | 4.08 | 4.28 | 4.32 | 4.44 | 4.72 | 5.58 | | | 11.12 | 12.36 | 13.48 |
| | | velocity | 7.92 | 9.83 | 9.41 | 9.11 | 8.75 | 8.85 | 8.58 | 8.18 | 8.10 | 7.88 | 7.42 | 7.17 | 8.30 | | 9.44 | 8.50 | 7.79 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 17.5 | 155.5 | | | | |

**FINAL** - 2018 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis) *Henson (2020) - Athlete First: 2018 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-May-18 | time | 5.68 | 9.24 | 12.92 | 16.76 | 20.68 | | 24.80 | 28.96 | 33.24 | 37.68 | 42.40 | | 47.82 | 7 / 2 | | | |
| reaction time | 0.155 | interval | | 3.56 | 3.68 | 3.84 | 3.92 | | 4.12 | 4.16 | 4.28 | 4.44 | 4.72 | 5.42 | **NR PB** | | 11.08 | 12.20 | 13.44 |
| | | velocity | 7.92 | 9.83 | 9.51 | 9.11 | 8.93 | | 8.50 | 8.41 | 8.18 | 7.88 | 7.42 | 7.38 | 8.36 | | 9.48 | 8.61 | 7.81 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 17.5 | 155.5 | | | | |

**FINAL** - 2017 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Aug-17 | time | 5.76 | 9.32 | 13.00 | 16.80 | 20.76 | | 24.84 | 29.08 | 33.52 | 38.28 | 43.00 | | 48.22 | 6 / 2 | | | |
| reaction time | 0.164 | interval | | 3.56 | 3.68 | 3.80 | 3.96 | | 4.08 | 4.24 | 4.44 | 4.76 | 4.72 | 5.22 | **NR PB** | | 11.04 | 12.28 | 13.92 |
| | | velocity | 7.81 | 9.83 | 9.51 | 9.21 | 8.84 | | 8.58 | 8.25 | 7.88 | 7.35 | 7.42 | 7.66 | 8.30 | | 9.51 | 8.55 | 7.54 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | | 15 | 17.7 | 145.7 | | | | |

**FINAL** - 2017 IAAF World Championships (London, GBR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Aug-17 | time | 5.68 | 9.32 | 13.04 | 16.80 | 20.64 | | 24.72 | 28.96 | 33.40 | 38.04 | 42.84 | | 48.35 | 5 / 1 | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | 0.175 | interval | | 3.64 | 3.72 | 3.76 | 3.84 | 4.08 | 4.24 | 4.44 | 4.64 | 4.80 | 5.51 | | | 11.12 | 12.16 | 13.88 |
| | | velocity | 7.92 | 9.62 | 9.41 | 9.31 | 9.11 | 8.58 | 8.25 | 7.88 | 7.54 | 7.29 | 7.26 | 8.27 | | 9.44 | 8.63 | 7.56 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 18.5 | 159.5 | | | | |

**FINAL** - 2017 Bauhaus Athletics (Stockholm, SWE) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Jun-17 | time | 5.76 | 9.48 | 13.24 | 17.04 | 21.00 | 25.20 | 29.44 | 33.92 | 38.68 | 43.44 | | 48.82 | 7 / 1 | | | |
| reaction time | 0.139 | interval | | 3.72 | 3.76 | 3.80 | 3.96 | 4.20 | 4.24 | 4.48 | 4.76 | 4.76 | 5.38 | | | 11.28 | 12.40 | 14.00 |
| | | velocity | 7.81 | 9.41 | 9.31 | 9.21 | 8.84 | 8.33 | 8.25 | 7.81 | 7.35 | 7.35 | 7.43 | 8.19 | | 9.31 | 8.47 | 7.50 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 17.7 | 158.7 | | | | |

**FINAL** - 2017 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Jun-17 | time | 5.86 | 9.46 | 13.06 | 16.93 | 20.86 | 25.00 | 29.30 | 33.56 | 38.20 | 42.90 | | 48.25 | 7 / 1 | | | |
| reaction time | 0.149 | interval | | 3.60 | 3.60 | 3.87 | 3.93 | 4.14 | 4.30 | 4.26 | 4.64 | 4.70 | 5.35 | **NR PB** | | 11.07 | 12.37 | 13.60 |
| | | velocity | 7.68 | 9.72 | 9.72 | 9.04 | 8.91 | 8.45 | 8.14 | 8.22 | 7.54 | 7.45 | 7.48 | 8.29 | | 9.49 | 8.49 | 7.72 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 17.5 | 158.5 | | | | |

**FINAL** - 2016 European Championships (Amsterdam, NED) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Jul-16 | time | 5.88 | 9.52 | 13.36 | 17.36 | 21.40 | 25.60 | 29.76 | 34.16 | 39.04 | 44.08 | | 49.82 | 4 / 6 | | | |
| reaction time | 0.153 | interval | | 3.64 | 3.84 | 4.00 | 4.04 | 4.20 | 4.16 | 4.40 | 4.88 | 5.04 | 5.74 | | | 11.48 | 12.40 | 14.32 |
| | | velocity | 7.65 | 9.62 | 9.11 | 8.75 | 8.66 | 8.33 | 8.41 | 7.95 | 7.17 | 6.94 | 6.97 | 8.03 | | 9.15 | 8.47 | 7.33 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | | 13 | 14 | 15 | 18 | 145 | | | | |

**FINAL** - 2016 Bislett Games (Oslo, NOR) (TV Analysis) *Henson (2021) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jun-16 | time | 5.92 | 9.72 | 13.64 | 17.60 | 21.80 | 26.00 | 30.36 | 34.96 | 39.76 | 44.60 | | 49.80 | 7 / 5 | | | |
| reaction time | 0.163 | interval | | 3.80 | 3.92 | 3.96 | 4.20 | 4.20 | 4.36 | 4.60 | 4.80 | 4.84 | 5.20 | | | 11.68 | 12.76 | 14.24 |
| | | velocity | 7.60 | 9.21 | 8.93 | 8.84 | 8.33 | 8.33 | 8.03 | 7.61 | 7.29 | 7.23 | 7.69 | 8.03 | | 8.99 | 8.23 | 7.37 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 15 | | 143 | | | | |

**Watanabe, Yoshihiro (JPN) (1997)**

**FINAL** - 2015 Japanese National Junior Championships (Nagoya, JPN) *Yasunori (2015) - race pattern analysis of the top 400m hurdlers in Japan*

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 18-Oct-15 | time | 6.01 | 9.75 | 13.64 | 17.68 | 21.78 | 26.08 | 30.52 | 35.02 | 39.66 | 44.50 | | 49.97 | 5 / 1 | | | |
| reaction time | | interval | | 3.74 | 3.89 | 4.04 | 4.10 | 4.30 | 4.44 | 4.50 | 4.64 | 4.84 | 5.47 | **PB** | | 11.67 | 12.84 | 13.98 |
| | | velocity | 7.49 | 9.36 | 9.00 | 8.66 | 8.54 | 8.14 | 7.88 | 7.78 | 7.54 | 7.23 | 7.31 | 8.00 | | 9.00 | 8.18 | 7.51 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Watrin, Julien (BEL) (1992)**

**Semi-Final 1** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 21-Aug-23 | time | 5.90 | 9.66 | 13.43 | 17.13 | 21.00 | 25.13 | 29.46 | 34.16 | 38.83 | 43.55 | | 48.94 | 3 / 5 | | | |
| reaction time | 0.205 | interval | | 3.76 | 3.77 | 3.70 | 3.87 | 4.13 | 4.33 | 4.70 | 4.67 | 4.72 | 5.39 | | | 11.23 | 12.33 | 14.09 |
| | | velocity | 7.63 | 9.31 | 9.28 | 9.46 | 9.04 | 8.47 | 8.08 | 7.45 | 7.49 | 7.42 | 7.42 | 8.17 | | 9.35 | 8.52 | 7.45 |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | | 14 | 15 | 15 | 18 | 147 | | | | |

**Heat 4** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 5.93 | 9.70 | 13.46 | 17.30 | 21.06 | 25.07 | | 33.63 | 38.27 | 43.10 | | 48.72 | 6 / 5 | | | |
| reaction time | 0.230 | interval | | 3.77 | 3.76 | 3.84 | 3.76 | 4.01 | | 8.56 | 4.64 | 4.83 | 5.62 | | | 11.37 | | |
| | | velocity | 7.59 | 9.28 | 9.31 | 9.11 | 9.31 | 8.73 | | 8.18 | 7.54 | 7.25 | 7.12 | 8.21 | | 9.23 | | |
| H1 lead leg | R | strides | 20 | 13 | 13 | 13 | 13 | 13 | | | 14 | 14 | 19 | 132 | | | | |

**FINAL** - 2023 Bislett Games (Oslo, NOR) *Omega Timing (2023) - diamond league race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Jun-23 | time | 5.80 | 9.44 | 13.24 | 17.10 | 21.04 | 25.21 | 29.58 | 34.10 | 38.87 | 43.71 | | 49.45 | 1 / 8 | | | |
| reaction time | 0.209 | interval | | 3.64 | 3.80 | 3.86 | 3.94 | 4.17 | 4.37 | 4.52 | 4.77 | 4.84 | 5.74 | | | 11.30 | 12.48 | 14.13 |
| | | velocity | 7.76 | 9.62 | 9.21 | 9.07 | 8.88 | 8.39 | 8.01 | 7.74 | 7.34 | 7.23 | 6.97 | 8.09 | | 9.29 | 8.41 | 7.43 |
| H1 lead leg | R | strides | 20 | | | 13 | 13 | 15 | | | 14 | 15 | | 90 | | | | |

**FINAL** - 2023 FBK Games (Hengelo, NED) *Omega Timing (2023) - continental tour race analysis*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 04-Jun-23 | time | 5.94 | 9.66 | 13.50 | 17.37 | 21.40 | 25.58 | 30.04 | 34.64 | 39.41 | 44.28 | | 49.92 | 4 / 7 | | | |
| reaction time | 0.242 | interval | | 3.72 | 3.84 | 3.87 | 4.03 | 4.18 | 4.46 | 4.60 | 4.77 | 4.87 | 5.64 | | | 11.43 | 12.67 | 14.24 |
| | | velocity | 7.58 | 9.41 | 9.11 | 9.04 | 8.68 | 8.37 | 7.85 | 7.61 | 7.34 | 7.19 | 7.09 | 8.01 | | 9.19 | 8.29 | 7.37 |
| H1 lead leg | R | strides | 20 | 13 | | | | | | | 14 | 15 | 18 | 80 | | | | |

**FINAL** - 2022 Weltklasse (Zürich, SUI) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-22 | time | 5.77 | 9.41 | | 17.15 | 21.15 | 22.77 | 25.29 | 29.50 | 33.90 | 38.60 | 43.44 | | 49.08 | 8 / 5 | | |
| reaction time | 0.183 | interval | | 3.64 | | 7.74 | 4.00 | | 4.14 | 4.21 | 4.40 | 4.70 | 4.84 | 5.64 | | | 11.38 | 12.35 | 13.94 |
| | | velocity | 7.80 | 9.62 | | 9.04 | 8.75 | 8.78 | 8.45 | 8.31 | 7.95 | 7.45 | 7.23 | 7.09 | 8.15 | | 9.23 | 8.50 | 7.53 |
| H1 lead leg | R | strides | 20 | 13 | | | 13 | | 13 | 13 | 14 | 15 | 15 | 17.7 | 133.7 | | | | |

**FINAL** - 2022 Memorial van Damme (Brussels, BEL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Sep-22 | time | 5.84 | 9.47 | 13.21 | 17.02 | 20.89 | 22.59 | 24.89 | 29.16 | 33.56 | 38.20 | 43.07 | | 48.66 | 7 / ~~5~~ 4 | | |
| reaction time | 0.224 | interval | | 3.63 | 3.74 | 3.81 | 3.87 | | 2.30 | 4.27 | 4.40 | 4.64 | 4.87 | 5.59 | **NR PB** | | 11.18 | 12.14 | 13.91 |
| | | velocity | 7.71 | 9.64 | 9.36 | 9.19 | 9.04 | 8.85 | 15.22 | 8.20 | 7.95 | 7.54 | 7.19 | 7.16 | 8.22 | | 9.39 | 8.65 | 7.55 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 18 | 161 | | | | |

**FINAL** - 2022 European Athletics Championships (Munich, GER) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Aug-22 | time | 6.02 | 9.62 | | 17.13 | 21.02 | 22.63 | 25.11 | 29.44 | 33.89 | 38.50 | 43.36 | | 48.98 | 2 / 6 | | |
| reaction time | 0.173 | interval | | 3.60 | | 7.51 | 3.89 | | 4.09 | 4.33 | 4.45 | 4.61 | 4.86 | 5.62 | | | 11.11 | 12.31 | 13.92 |
| | | velocity | 7.48 | 9.72 | | 9.32 | 9.00 | 8.84 | 8.56 | 8.08 | 7.87 | 7.59 | 7.20 | 7.12 | 8.17 | | 9.45 | 8.53 | 7.54 |
| H1 lead leg | R | strides | 21 | 13 | | | 13 | | 13 | 14 | 14 | 14 | 15 | 18 | 135 | | | | |

**FINAL** - 2022 Silesia Kamila Skolimowska Memorial (Chorzów, POL) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-22 | time | 5.86 | 9.56 | 13.30 | 17.10 | 21.06 | 22.73 | | 33.93 | 38.50 | 43.23 | | 48.91 | 3 / 5 | | | |
| reaction time | 0.225 | interval | | 3.70 | 3.74 | 3.80 | 3.96 | | | 12.87 | 4.57 | 4.73 | 5.68 | | | 11.24 | | |
| | | velocity | 7.68 | 9.46 | 9.36 | 9.21 | 8.84 | 8.80 | | 8.16 | 7.66 | 7.40 | 7.04 | 8.18 | | 9.34 | | |
| H1 lead leg | R | strides | 21 | 13 | 13 | | 13 | | | | 14 | 15 | 18 | 107 | | | | |

**Semi-Final 1** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Jul-22 | time | 5.87 | 9.57 | 13.40 | 17.26 | 21.20 | 23.08 | 25.33 | 29.53 | 34.00 | 38.73 | 43.60 | | 49.52 | 3 / 3 | | | |
| reaction time | 0.186 | interval | | 3.70 | 3.83 | 3.86 | 3.94 | | 4.13 | 4.20 | 4.47 | 4.73 | 4.87 | 5.92 | | | 11.39 | 12.27 | 14.07 |
| | | velocity | 7.67 | 9.46 | 9.14 | 9.07 | 8.88 | 8.67 | 8.47 | 8.33 | 7.83 | 7.40 | 7.19 | 6.76 | 8.08 | | 9.22 | 8.56 | 7.46 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18.7 | 164.7 | | | | |

**Heat 3** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 16-Jul-22 | time | 5.97 | 9.76 | 13.60 | 17.50 | 21.46 | 23.27 | 25.70 | 30.07 | 34.57 | 39.23 | 44.16 | | 49.83 | 5 / 2 | | | |
| reaction time | 0.199 | interval | | 3.79 | 3.84 | 3.90 | 3.96 | | 4.24 | 4.37 | 4.50 | 4.66 | 4.93 | 5.67 | | | 11.53 | 12.57 | 14.09 |
| | | velocity | 7.54 | 9.23 | 9.11 | 8.97 | 8.84 | 8.59 | 8.25 | 8.01 | 7.78 | 7.51 | 7.10 | 7.05 | 8.03 | | 9.11 | 8.35 | 7.45 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | 18 | 164 | | | | |

**FINAL** - 2022 Bauhaus Galan (Stockholm, SWE) (TV Analysis) *Henson (2022) - Athlete First: 2022 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-22 | time | 5.92 | 9.58 | 13.38 | 17.24 | 21.22 | 22.87 | 25.32 | 29.62 | 34.06 | 38.66 | 43.42 | | 49.01 | 2 / 6 | | | |
| reaction time | 0.216 | interval | | 3.66 | 3.80 | 3.86 | 3.98 | | 4.10 | 4.30 | 4.44 | 4.60 | 4.76 | 5.59 | | | 11.32 | 12.38 | 13.80 |
| | | velocity | 7.60 | 9.56 | 9.21 | 9.07 | 8.79 | 8.75 | 8.54 | 8.14 | 7.88 | 7.61 | 7.35 | 7.16 | 8.16 | | 9.28 | 8.48 | 7.61 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 17.7 | 161.7 | | | | |

**Weakley, Ian (JAM) (1974)**

**FINAL** - 2002 IAAF World Cup (Madrid, ESP) *Sanchez (2002) - copa del mundo de Madrid '02: análisis de la carreras con villas*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Sep-02 | time | 6.02 | 9.74 | 13.72 | 17.73 | 21.84 | | 26.08 | 30.49 | 34.95 | 39.53 | 44.17 | | 49.62 | 1 / 5 | | | |
| reaction time | 0.187 | interval | | 3.72 | 3.98 | 4.01 | 4.11 | | 4.24 | 4.41 | 4.46 | 4.58 | 4.64 | 5.45 | | | 11.71 | 12.76 | 13.68 |
| | | velocity | 7.48 | 9.41 | 8.79 | 8.73 | 8.52 | | 8.25 | 7.94 | 7.85 | 7.64 | 7.54 | 7.34 | 8.06 | | 8.97 | 8.23 | 7.68 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 169.5 | | | | |

**Heat 6** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.02 | 9.86 | 13.90 | 17.94 | 22.06 | | 26.34 | 30.74 | 35.34 | 40.22 | | | 52.18 | 2 / 8 | | | |
| reaction time | 0.179 | interval | | 3.84 | 4.04 | 4.04 | 4.12 | | 4.28 | 4.40 | 4.60 | 4.88 | | | | | 11.92 | 12.80 | |
| | | velocity | 7.48 | 9.11 | 8.66 | 8.66 | 8.50 | | 8.18 | 7.95 | 7.61 | 7.17 | | | 7.67 | | 8.81 | 8.20 | |
| H1 lead leg | | strides | 22 | 14 | 15 | 14 | 15 | | 15 | 15 | 15 | 16 | | | 141 | | | | |

**Wheeler, Quentin (USA) (1955)**

**Semi-Final 1** -1976 Olympic Games (Montreal, CAN) *Behm (1995) - la tactique du 400 haies*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jul-76 | time | 6.1 | 10.0 | 14.1 | 18.1 | 22.4 | | 26.6 | 31.1 | 35.5 | 40.1 | 44.6 | | 50.22 | 8 / 4 | | | |
| reaction time | | interval | | 3.87 | 4.15 | 4.01 | 4.29 | | 4.24 | 4.41 | 4.41 | 4.60 | 4.54 | 5.62 | | | 12.03 | 12.94 | 13.55 |
| | | velocity | 7.40 | 9.04 | 8.43 | 8.73 | 8.16 | | 8.25 | 7.94 | 7.94 | 7.61 | 7.71 | 7.12 | 7.96 | | 8.73 | 8.11 | 7.75 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Wei Pinyang (CHN) (2001)**

**FINAL** - 2021 Philippe Cup Athletics Invitational (Wuhan, CHN) *CAA Hurdle Development (2021)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-May-21 | time | 6.17 | 10.14 | 14.38 | 18.67 | 23.21 | | 27.91 | 32.77 | 37.77 | 43.19 | | | 55.87 | 4 / 5 | | | |
| reaction time | 0.234 | interval | | 3.97 | 4.24 | 4.29 | 4.54 | | 4.70 | 4.86 | 5.00 | 10.42 | | | | | 12.50 | 14.10 | |
| | | velocity | 7.29 | 8.82 | 8.25 | 8.16 | 7.71 | | 7.45 | 7.20 | 7.00 | 6.72 | | | 7.16 | | 8.40 | 7.45 | |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 17 | | | 143 | | | | |

**Whitney, Ron (USA) (1942)**

**FINAL** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) *Dessons (1982) - traite d'athletisme - volume 1: les courses*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Oct-68 | time | 6.1 | 10.3 | 14.2 | 18.2 | 22.4 | 24.3 | 26.6 | 30.8 | 35.1 | 39.5 | 44.0 | | 49.2 | 7 / 6 | | | |
| reaction time | | interval | | 4.20 | 3.90 | 4.00 | 4.20 | | 4.20 | 4.20 | 4.30 | 4.40 | 4.50 | 5.20 | *(49.27)* | | 12.10 | 12.60 | 13.20 |
| | | velocity | 7.38 | 8.33 | 8.97 | 8.75 | 8.33 | 8.23 | 8.33 | 8.33 | 8.14 | 7.95 | 7.78 | 7.69 | 8.13 | | 8.68 | 8.33 | 7.95 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | | 144 | | | | |

**Heat 3** - 1968 Olympic Games (Mexico City, MEX) (*Altitude*) *Jonath (1969) - wie gerhard hennige trainiert*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Oct-68 | time | 6.1 | 10.0 | 13.9 | 18.1 | 22.2 | 23.8 | 26.3 | 30.9 | 35.2 | 39.5 | 44.0 | | 49.0 | / 1 | | | |
| reaction time | | interval | | 3.90 | 3.90 | 4.20 | 4.10 | | 4.10 | 4.60 | 4.30 | 4.30 | 4.50 | 5.00 | **OR** | | 12.00 | 12.80 | 13.10 |
| | | velocity | 7.38 | 8.97 | 8.97 | 8.33 | 8.54 | 8.40 | 8.54 | 7.61 | 8.14 | 8.14 | 7.78 | 8.00 | 8.16 | *(49.06)* | 8.75 | 8.20 | 8.02 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Whyte, Annsert (JAM) (1987)**

**FINAL** - 2018 IAAF Continental Cup (Ostrava, CZE) (TV Analysis) *Henson (2021) - Athlete First: 2018 year end hurdle report*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-18 | time | 5.76 | 9.36 | 13.04 | 16.84 | 20.80 | | | 29.08 | 33.48 | 38.16 | 42.96 | | 48.46 | 1 / 2 | | | |
| reaction time | 0.168 | interval | | 3.60 | 3.68 | 3.80 | 3.96 | | | 8.28 | 4.40 | 4.68 | 4.80 | 5.50 | | | 11.08 | 12.24 | 13.88 |
| | | velocity | 7.81 | 9.72 | 9.51 | 9.21 | 8.84 | | | 8.45 | 7.95 | 7.48 | 7.29 | 7.27 | 8.25 | | 9.48 | 8.58 | 7.56 |
| H1 lead leg | L | strides | | 13 | 13 | 13 | 13 | | | 14 | 14 | 15 | 15 | 18.5 | 128.5 | | | | |

**FINAL** - 2017 Shanghai Diamond League (Shanghai, CHN) (TV Analysis) *Henson (2021) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-May-17 | time | 5.76 | 9.36 | 13.16 | 17.00 | 20.92 | | 25.08 | 29.56 | 34.24 | 39.08 | 44.16 | | 50.18 | 3 / 7 | | | |
| reaction time | 0.154 | interval | | 3.60 | 3.80 | 3.84 | 3.92 | | 4.16 | 4.48 | 4.68 | 4.84 | 5.08 | 6.02 | | | 11.24 | 12.56 | 14.60 |
| | | velocity | 7.81 | 9.72 | 9.21 | 9.11 | 8.93 | | 8.41 | 7.81 | 7.48 | 7.23 | 6.89 | 6.64 | 7.97 | | 9.34 | 8.36 | 7.19 |
| H1 lead leg | L | strides | 21 | 13 | 14 | 14 | 13 | | 14 | 15 | 15 | 15 | 16 | 19.2 | 169.2 | | | | |

**FINAL** - 2017 Doha Diamond League (Doha, QAT) (TV Analysis) *Henson (2020) - Athlete First: 2017 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-17 | time | 5.86 | 9.66 | 13.46 | 17.36 | 21.40 | | 25.66 | 30.00 | 34.56 | 39.40 | 44.66 | | 50.80 | 7 / 8 | | | |
| reaction time | 0.154 | interval | | 3.80 | 3.80 | 3.90 | 4.04 | | 4.26 | 4.34 | 4.56 | 4.84 | 5.26 | 6.14 | | | 11.50 | 12.64 | 14.66 |
| | | velocity | 7.68 | 9.21 | 9.21 | 8.97 | 8.66 | | 8.22 | 8.06 | 7.68 | 7.23 | 6.65 | 6.51 | 7.87 | | 9.13 | 8.31 | 7.16 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 16 | | 151 | | | | |

**Wilburn, Glenn (USA)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2003 USATF National Junior Championships (Palo Alto, CA) *USATF Women's Sprint Development (2003)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Jun-03 | time | 6.16 | 10.14 | 14.16 | 18.40 | 22.86 | | 27.14 | 31.88 | 36.57 | 41.54 | 46.68 | | 53.20 | 8 / 5 | | | |
| reaction time | | interval | | 3.98 | 4.02 | 4.24 | 4.46 | | 4.28 | 4.74 | 4.69 | 4.97 | 5.14 | 6.52 | | | 12.24 | 13.48 | 14.80 |
| | | velocity | 7.31 | 8.79 | 8.71 | 8.25 | 7.85 | | 8.18 | 7.38 | 7.46 | 7.04 | 6.81 | 6.13 | 7.52 | | 8.58 | 7.79 | 7.09 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Widlund, Hampus (SWE) (1993)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2011 Fridrott (Stockholm, SWE) *Blomkvist (2011) - www.elitlandslag.se/SprintHäck/LängSprintHäck.aspx*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-Jun-11 | time | 6.72 | 11.10 | 15.64 | 20.24 | 24.94 | | 29.74 | 34.82 | 39.96 | 45.28 | 50.84 | | 57.57 | / 4 | | | |
| reaction time | | interval | | 4.38 | 4.54 | 4.60 | 4.70 | | 4.80 | 5.08 | 5.14 | 5.32 | 5.56 | 6.73 | | | 13.52 | 14.58 | 16.02 |
| | | velocity | 6.70 | 7.99 | 7.71 | 7.61 | 7.45 | | 7.29 | 6.89 | 6.81 | 6.58 | 6.29 | 5.94 | 6.95 | | 7.77 | 7.20 | 6.55 |
| H1 lead leg | R | strides | | 14 | 14 | 14 | 14 | | 15 | | 15 | 15 | 17 | 19 | 137 | | | | |

**Williams, Derrick (USA) (1982)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2007 IAAF World Championships (Osaka, JPN) *Behm (2007) - Osaka 2007: Le quatrache*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Aug-07 | time | 5.7 | 9.4 | 13.2 | 17.3 | 21.4 | | 25.8 | 30.3 | 34.9 | 39.6 | | | 52.97 | 8 / 7 | | | |
| reaction time | 0.159 | interval | | 3.70 | 3.80 | 4.10 | 4.10 | | 4.40 | 4.50 | 4.60 | 4.70 | | | | | 11.60 | 13.00 | |
| | | velocity | 7.89 | 9.46 | 9.21 | 8.54 | 8.54 | | 7.95 | 7.78 | 7.61 | 7.45 | | | 7.55 | | 9.05 | 8.08 | |
| H1 lead leg | R | strides | 20 | 13 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | | | 134 | | | | |

**FINAL** - 2006 USATF National Championships (Indianapolis, IN) *USATF Men's Hurdle Development (2006)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Jun-06 | time | 5.92 | 9.61 | 13.48 | 17.35 | 21.34 | | 25.51 | 29.81 | 34.23 | 38.79 | 43.63 | | dnf | 7 / -- | | | |
| reaction time | | interval | | 3.69 | 3.87 | 3.87 | 3.99 | | 4.17 | 4.30 | 4.42 | 4.56 | 4.84 | | | | 11.43 | 12.46 | 13.82 |
| | | velocity | 7.60 | 9.49 | 9.04 | 9.04 | 8.77 | | 8.39 | 8.14 | 7.92 | 7.68 | 7.23 | | | | 9.19 | 8.43 | 7.60 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 16 | | 154 | | | | |

**Williams, Rhys (GBR) (1984)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2016 European Championships (Amsterdam, NED) (TV Analysis) *Henson (2020) - Athlete First: 2016 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Jul-16 | time | 6.00 | 9.68 | 13.56 | 17.64 | 21.72 | | 25.88 | 30.16 | 34.64 | 39.32 | 44.20 | | 49.63 | 8 / 5 | | | |
| reaction time | 0.141 | interval | | 3.68 | 3.88 | 4.08 | 4.08 | | 4.16 | 4.28 | 4.48 | 4.68 | 4.88 | 5.43 | | | 11.64 | 12.52 | 14.04 |
| | | velocity | 7.50 | 9.51 | 9.02 | 8.58 | 8.58 | | 8.41 | 8.18 | 7.81 | 7.48 | 7.17 | 7.37 | 8.06 | | 9.02 | 8.39 | 7.48 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | | 15 | 15 | 15 | 19 | 156 | | | | |

**FINAL** - 2010 Commonwealth Games (Dehli, IND) *Arnold (2010) - 400mH planning and peaking*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Oct-10 | time | 6.2 | 10.2 | 14.2 | 18.3 | 22.5 | 24.3 | 26.8 | 31.1 | 35.4 | 39.9 | 44.2 | | 49.19 | 5 / 3 | | | |
| reaction time | 0.214 | interval | | 4.00 | 4.00 | 4.10 | 4.20 | | 4.30 | 4.30 | 4.30 | 4.50 | 4.30 | 4.99 | | | 12.10 | 12.80 | 13.10 |
| | | velocity | 7.26 | 8.75 | 8.75 | 8.54 | 8.33 | 8.23 | 8.14 | 8.14 | 8.14 | 7.78 | 8.14 | 8.02 | 8.13 | | 8.68 | 8.20 | 8.02 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 18.5 | 170.5 | | | | |

**Heat 1** - 2010 Commonwealth Games (Dehli, IND) *Arnold (2010) - 400mH planning and peaking*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Oct-10 | time | 6.1 | 10.1 | 14.1 | 18.1 | 22.2 | 24.0 | 26.4 | 30.7 | 35.3 | 39.9 | 44.4 | | 49.81 | 4 / 1 | | | |
| reaction time | 0.209 | interval | | 4.00 | 4.00 | 4.00 | 4.10 | | 4.20 | 4.30 | 4.60 | 4.60 | 4.50 | 5.41 | | | 12.00 | 12.60 | 13.70 |
| | | velocity | 7.38 | 8.75 | 8.75 | 8.75 | 8.54 | 8.33 | 8.33 | 8.14 | 7.61 | 7.61 | 7.78 | 7.39 | 8.03 | | 8.75 | 8.33 | 7.66 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2010 European Championships (Barcelona, ESP) *Arnold (2010) - 400mH planning and peaking*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-10 | time | 6.20 | 10.06 | 13.96 | 17.78 | 21.72 | | 25.72 | 29.86 | 34.12 | 38.62 | 43.36 | | 48.96 | 5 / 2 | | | |
| reaction time | 0.195 | interval | | 3.86 | 3.90 | 3.82 | 3.94 | | 4.00 | 4.14 | 4.26 | 4.50 | 4.74 | 5.60 | PB | | 11.58 | 12.08 | 13.50 |
| | | velocity | 7.26 | 9.07 | 8.97 | 9.16 | 8.88 | | 8.75 | 8.45 | 8.22 | 7.78 | 7.38 | 7.14 | 8.17 | | 9.07 | 8.69 | 7.78 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 19.5 | 171.5 | | | | |

**Semi-Final 2** - 2010 European Championships (Barcelona, ESP) *Arnold (2010) - 400mH planning and peaking*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-Jul-10 | time | 6.32 | 10.18 | 14.08 | 18.14 | 22.28 | | 26.48 | 30.80 | 35.20 | 39.72 | 44.40 | | 49.61 | 4 / 1 | | | |
| reaction time | 0.223 | interval | | 3.86 | 3.90 | 4.06 | 4.14 | | 4.20 | 4.32 | 4.40 | 4.52 | 4.68 | 5.21 | | | 11.82 | 12.66 | 13.60 |
| | | velocity | 7.12 | 9.07 | 8.97 | 8.62 | 8.45 | | 8.33 | 8.10 | 7.95 | 7.74 | 7.48 | 7.68 | 8.06 | | 8.88 | 8.29 | 7.72 |
| H1 lead leg | R | strides | | | | | | | | | | | | | | | | | |

**Heat 2** - 2010 European Championships (Barcelona, ESP) *Arnold (2010) - 400mH planning and peaking*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Jul-10 | time | 6.22 | 10.00 | 13.82 | 17.68 | 21.72 | | 25.90 | 30.26 | 34.76 | 39.42 | 44.16 | | 49.35 | 5 / 1 | | | |
| reaction time | 0.208 | interval | | 3.78 | 3.82 | 3.86 | 4.04 | | 4.18 | 4.36 | 4.50 | 4.66 | 4.74 | 5.19 | | | 11.46 | 12.58 | 13.90 |
| | | velocity | 7.23 | 9.26 | 9.16 | 9.07 | 8.66 | | 8.37 | 8.03 | 7.78 | 7.51 | 7.38 | 7.71 | 8.11 | | 9.16 | 8.35 | 7.55 |
| H1 lead leg | R | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 2006 European Championships (Göteborg, SWE) *Behm (2006) - Göteborg 2006: Le quatrache*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Aug-06 | time | 5.9 | 9.7 | 13.5 | 17.7 | 21.8 | | 26.0 | 30.2 | 34.6 | 39.2 | 43.8 | | 49.12 | / 3 | | | |
| reaction time | | interval | | 3.80 | 3.80 | 4.20 | 4.10 | | 4.20 | 4.20 | 4.40 | 4.60 | 4.60 | 5.32 | | | 11.80 | 12.50 | 13.60 |
| | | velocity | 7.63 | 9.21 | 9.21 | 8.33 | 8.54 | | 8.33 | 8.33 | 7.95 | 7.61 | 7.61 | 7.52 | 8.14 | | 8.90 | 8.40 | 7.72 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 19 | 171 | | | | |

**Willis, Matthew (USA) (1984)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2003 USATF National Junior Championships (Palo Alto, CA) *USATF Women's Sprint Development (2003)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Jun-03 | time | 6.09 | 10.06 | 14.31 | 18.52 | 22.79 | | 27.34 | 32.10 | 36.87 | 41.59 | 46.46 | | 51.89 | 2 / 3 | | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| reaction time | | interval | | 3.97 | 4.25 | 4.21 | 4.27 | | 4.55 | 4.76 | 4.77 | 4.72 | 4.87 | 5.43 | | | 12.43 | 13.58 | 14.36 |
| | | velocity | 7.39 | 8.82 | 8.24 | 8.31 | 8.20 | | 7.69 | 7.35 | 7.34 | 7.42 | 7.19 | 7.37 | 7.71 | | 8.45 | 7.73 | 7.31 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Woody, Joey (USA) (1973)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 1** - 2007 USATF National Championships (Indianapolis, IN) | | | | | | | | | | | | | | | | *USATF Men's Hurdle Development (2007)* | | | |
| date | 21-Jun-07 | time | 6.09 | 9.99 | 13.68 | 17.60 | 21.62 | | 25.86 | 30.31 | 34.82 | 39.54 | 44.38 | | 49.92 | 4 / 2 | | | |
| reaction time | | interval | | 3.90 | 3.69 | 3.92 | 4.02 | | 4.24 | 4.45 | 4.51 | 4.72 | 4.84 | 5.54 | | | 11.51 | 12.71 | 14.07 |
| | | velocity | 7.39 | 8.97 | 9.49 | 8.93 | 8.71 | | 8.25 | 7.87 | 7.76 | 7.42 | 7.23 | 7.22 | 8.01 | | 9.12 | 8.26 | 7.46 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | | 144 | | | | |
| **FINAL** - 2006 USATF National Championships (Indianapolis, IN) | | | | | | | | | | | | | | | | *USATF Men's Hurdle Development (2006)* | | | |
| date | 24-Jun-06 | time | 6.09 | 9.78 | 13.55 | 17.38 | 21.34 | | 25.39 | 29.70 | 34.12 | 38.67 | 43.47 | | 49.12 | 5 / 4 | | | |
| reaction time | | interval | | 3.69 | 3.77 | 3.83 | 3.96 | | 4.05 | 4.31 | 4.42 | 4.55 | 4.80 | 5.65 | | | 11.29 | 12.32 | 13.77 |
| | | velocity | 7.39 | 9.49 | 9.28 | 9.14 | 8.84 | | 8.64 | 8.12 | 7.92 | 7.69 | 7.29 | 7.08 | 8.14 | | 9.30 | 8.52 | 7.63 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 19 | 163 | | | | |
| **FINAL** - 2003 IAAF World Championships (Paris, FRA) | | | | | | | | | | | | | | | | *Behm (2003) - Paris 2003:Le quatrache masculn - féminin* | | | |
| date | 29-Aug-03 | time | 5.9 | 9.5 | 13.4 | 17.2 | 21.0 | | 25.3 | 29.5 | 33.7 | 38.2 | 42.8 | | 48.18 | 6 / 2 | | | |
| reaction time | 0.167 | interval | | 3.60 | 3.90 | 3.80 | 3.80 | | 4.30 | 4.20 | 4.20 | 4.50 | 4.60 | 5.38 | | | 11.30 | 12.30 | 13.30 |
| | | velocity | 7.63 | 9.72 | 8.97 | 9.21 | 9.21 | | 8.14 | 8.33 | 8.33 | 7.78 | 7.61 | 7.43 | 8.30 | | 9.29 | 8.54 | 7.89 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 15 | 15 | 18 | 162 | | | | |
| **FINAL** - 2003 USATF National Championships (Palo Alto, CA) | | | | | | | | | | | | | | | | *USATF Women's Sprint Development (2003)* | | | |
| date | 22-Jun-03 | time | 5.87 | 9.66 | 13.50 | 17.47 | 21.54 | | 25.68 | 30.06 | 34.42 | 38.96 | 43.61 | | 49.22 | 3 / ~~3~~ 2 | | | |
| reaction time | | interval | | 3.79 | 3.84 | 3.97 | 4.07 | | 4.14 | 4.38 | 4.36 | 4.54 | 4.65 | 5.61 | | | 11.60 | 12.59 | 13.55 |
| | | velocity | 7.67 | 9.23 | 9.11 | 8.82 | 8.60 | | 8.45 | 7.99 | 8.03 | 7.71 | 7.53 | 7.13 | 8.13 | | 9.05 | 8.34 | 7.75 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |
| **FINAL** - 1999 IAAF World Championships (Sevilla, ESP) | | | | | | | | | | | | | | | | *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas* | | | |
| date | 27-Aug-99 | time | 5.62 | 9.25 | 12.89 | 16.65 | 20.59 | | 24.59 | 28.91 | 33.29 | 37.84 | 42.90 | | 48.77 | 6 / 6 | | | |
| reaction time | 0.175 | interval | | 3.63 | 3.64 | 3.76 | 3.94 | | 4.00 | 4.32 | 4.38 | 4.55 | 5.06 | 5.87 | | | 11.03 | 12.26 | 13.99 |
| | | velocity | 8.01 | 9.64 | 9.62 | 9.31 | 8.88 | | 8.75 | 8.10 | 7.99 | 7.69 | 6.92 | 6.81 | 8.20 | | 9.52 | 8.56 | 7.51 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | 17.5 | 160.5 | | | | |
| **Semi-Final 1** - 1999 IAAF World Championships (Sevilla, ESP) | | | | | | | | | | | | | | | | *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas* | | | |
| date | 25-Aug-99 | time | 5.64 | 9.36 | 13.14 | 17.01 | 20.99 | | 25.06 | 29.31 | 33.70 | 38.24 | 42.90 | | 48.55 | 8 / 1 | | | |
| reaction time | 0.214 | interval | | 3.72 | 3.78 | 3.87 | 3.98 | | 4.07 | 4.25 | 4.39 | 4.54 | 4.66 | 5.65 | | | 11.37 | 12.30 | 13.59 |
| | | velocity | 7.98 | 9.41 | 9.26 | 9.04 | 8.79 | | 8.60 | 8.24 | 7.97 | 7.71 | 7.51 | 7.08 | 8.24 | | 9.23 | 8.54 | 7.73 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 15 | 17.5 | 159.5 | | | | |
| **FINAL** - 1996 USA Olympic Trials (Atlanta, GA) | | | | | | | | | | | | | | | | *McNichols - Hurdle technique study through video analysis* | | | |
| date | 16-Jun-96 | time | 6.08 | 9.82 | 13.68 | 17.60 | 21.58 | 22.29 | 25.72 | 29.99 | 34.36 | 38.76 | 43.52 | | 48.96 | 2 / 7 | | | |
| reaction time | | interval | | 3.74 | 3.86 | 3.92 | 3.98 | | 4.14 | 4.27 | 4.37 | 4.40 | 4.76 | 5.44 | | | 11.52 | 12.39 | 13.53 |
| | | velocity | 7.40 | 9.36 | 9.07 | 8.93 | 8.79 | 8.97 | 8.45 | 8.20 | 8.01 | 7.95 | 7.35 | 7.35 | 8.17 | | 9.11 | 8.47 | 7.76 |
| H1 lead leg | R | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 14 | 14 | 14 | 15 | | 143 | | | | |

**Woodward, Nathan (GBR) (1989)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 1** - 2010 European Championships (Barcelona, ESP) | | | | | | | | | | | | | | | | *Arnold (2010) - 400mH planning and peaking* | | | |
| date | 29-Jul-10 | time | | 9.96 | 13.86 | 17.86 | 21.86 | | 26.06 | 30.38 | 34.90 | 39.72 | 44.70 | | 50.51 | 7 / 4 | | | |
| reaction time | 0.214 | interval | | | 3.90 | 4.00 | 4.00 | | 4.20 | 4.32 | 4.52 | 4.82 | 4.98 | 5.81 | | | | 12.52 | 14.32 |
| | | velocity | | 8.03 | 8.97 | 8.75 | 8.75 | | 8.33 | 8.10 | 7.74 | 7.26 | 7.03 | 6.88 | 7.92 | | | 8.39 | 7.33 |
| H1 lead leg | L | strides | | | | | | | | | | | | | | | | | |
| **Heat 1** - 2010 European Championships (Barcelona, ESP) | | | | | | | | | | | | | | | | *Arnold (2010) - 400mH planning and peaking* | | | |
| date | 28-Jul-10 | time | 6.22 | 10.14 | 14.16 | 18.16 | 22.30 | | 26.54 | 30.88 | 35.32 | 40.06 | 45.02 | | 50.45 | 8 / 3 | | | |
| reaction time | 0.187 | interval | | 3.92 | 4.02 | 4.00 | 4.14 | | 4.24 | 4.34 | 4.44 | 4.74 | 4.96 | 5.43 | | | 11.94 | 12.72 | 14.14 |
| | | velocity | 7.23 | 8.93 | 8.71 | 8.75 | 8.45 | | 8.25 | 8.06 | 7.88 | 7.38 | 7.06 | 7.37 | 7.93 | | 8.79 | 8.25 | 7.43 |
| H1 lead leg | L | strides | | | | | | | | | | | | | | | | | |

**Wu Jinhong (CHN) (2005)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 National Grand Prix (Chengdu, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 02-Apr-21 | time | 6.30 | 10.40 | 14.66 | 18.98 | 23.44 | | 28.19 | 32.99 | 37.97 | 43.09 | 48.27 | | 53.86 | 2 / 5 | | | |
| reaction time | 0.205 | interval | | 4.10 | 4.26 | 4.32 | 4.46 | | 4.75 | 4.80 | 4.98 | 5.12 | 5.18 | 5.59 | | | 12.68 | 14.01 | 15.28 |
| | | velocity | 7.14 | 8.54 | 8.22 | 8.10 | 7.85 | | 7.37 | 7.29 | 7.03 | 6.84 | 6.76 | 7.16 | 7.43 | | 8.28 | 7.49 | 6.87 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | | 16 | 16 | 17 | 17 | 17 | 20 | 185 | | | | |

**Wu Yuze (CHN) (2002)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **U18 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) (84cm) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.46 | 10.58 | 14.74 | 19.02 | 23.50 | | 28.12 | 32.82 | 37.74 | 43.02 | 48.82 | | 54.99 | 8 / 7 | | | |
| reaction time | 0.206 | interval | | 4.12 | 4.16 | 4.28 | 4.48 | | 4.62 | 4.70 | 4.92 | 5.28 | 5.80 | 6.17 | | | 12.56 | 13.80 | 16.00 |
| | | velocity | 6.97 | 8.50 | 8.41 | 8.18 | 7.81 | | 7.58 | 7.45 | 7.11 | 6.63 | 6.03 | 6.48 | 7.27 | | 8.36 | 7.61 | 6.56 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 18 | 20.5 | 181.5 | | | | |

**Xie Zhiyu (CHN) (2000)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Final 2** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2023) - Athlete First: 2023 year end hurdle report* | | | |
| date | 21-Aug-23 | time | 6.14 | 10.11 | 13.98 | 17.82 | 21.89 | | | 30.56 | 35.07 | | 44.48 | | 49.57 | 2 / 7 | | | |
| reaction time | 0.189 | interval | | 3.97 | 3.87 | 3.84 | 4.07 | | | 8.67 | 4.51 | | 9.41 | 5.09 | | | 11.68 | 12.74 | 13.92 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | velocity | 7.33 | 8.82 | 9.04 | 9.11 | 8.60 | | 8.07 | 7.76 | | 7.44 | 7.86 | 8.07 | | | 8.99 | 8.24 | 7.54 |
| H1 lead leg | L | strides | 21 | | 13 | 13 | 13 | | | 14 | | | 17 | 91 | | | | | |

**Heat 1** - 2023 World Athletics Championships (Budapest, HUN) (TV Analysis) *Henson (2023) - Athlete First: 2023 year end hurdle report*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Aug-23 | time | 6.16 | 10.13 | 13.96 | | 21.86 | 26.06 | 30.46 | 34.93 | 39.53 | 44.23 | | 49.40 | 8 / 4 | | | | |
| reaction time | 0.207 | interval | | 3.97 | 3.83 | | 7.90 | 4.20 | 4.40 | 4.47 | 4.60 | 4.70 | 5.17 | | | | | | 13.77 |
| | | velocity | 7.31 | 8.82 | 9.14 | | 8.86 | 8.33 | 7.95 | 7.83 | 7.61 | 7.45 | 7.74 | 8.10 | | | | | 7.63 |
| H1 lead leg | L | strides | 21 | 13 | 13 | | | 13 | 14 | 14 | 14 | | 17 | 119 | | | | | |

**FINAL** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.15 | 10.04 | 14.04 | 18.07 | 22.24 | 26.63 | 31.25 | 35.92 | 40.64 | 45.34 | | 50.4 | 3 / ~~2~~ | *(no official time given)* | | | |
| reaction time | 0.227 | interval | | 3.89 | 4.00 | 4.03 | 4.17 | 4.39 | 4.62 | 4.67 | 4.72 | 4.70 | 5.06 | DQ | | | 11.92 | 13.18 | 14.09 |
| | | velocity | 7.32 | 9.00 | 8.75 | 8.68 | 8.39 | 7.97 | 7.58 | 7.49 | 7.42 | 7.45 | 7.91 | 7.94 | | | 8.81 | 7.97 | 7.45 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17 | 159 | | | | | |

**Heat 1** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.22 | 10.03 | 13.88 | 17.78 | 21.79 | 25.98 | 30.45 | 34.94 | 39.54 | 44.21 | | 49.40 | 3 / 1 | | | | |
| reaction time | 0.239 | interval | | 3.81 | 3.85 | 3.90 | 4.01 | 4.19 | 4.47 | 4.49 | 4.60 | 4.67 | 5.19 | PB | | | 11.56 | 12.67 | 13.76 |
| | | velocity | 7.23 | 9.19 | 9.09 | 8.97 | 8.73 | 8.35 | 7.83 | 7.80 | 7.61 | 7.49 | 7.71 | 8.10 | | | 9.08 | 8.29 | 7.63 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.2 | 159.2 | | | | | |

**FINAL** - 2020 Chinese Olympic Trials (Shaoxing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Jun-21 | time | 6.22 | 10.21 | 14.25 | 18.28 | 22.47 | 26.91 | 31.38 | 35.97 | 40.44 | 44.98 | | 50.00 | 6 / 1 | | | | |
| reaction time | 0.225 | interval | | 3.99 | 4.04 | 4.03 | 4.19 | 4.44 | 4.47 | 4.59 | 4.47 | 4.54 | 5.02 | | | | 12.06 | 13.10 | 13.60 |
| | | velocity | 7.23 | 8.77 | 8.66 | 8.68 | 8.35 | 7.88 | 7.83 | 7.63 | 7.83 | 7.71 | 7.97 | 8.00 | | | 8.71 | 8.02 | 7.72 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 14 | 17 | 160 | | | | | |

**U20 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.42 | 10.36 | 14.34 | 18.39 | 22.60 | 26.86 | 31.20 | 35.64 | 40.34 | 44.92 | | 49.96 | 6 / 1 | | | | |
| reaction time | 0.284 | interval | | 3.94 | 3.98 | 4.05 | 4.21 | 4.26 | 4.34 | 4.44 | 4.70 | 4.58 | 5.04 | PB | | | 11.97 | 12.81 | 13.72 |
| | | velocity | 7.01 | 8.88 | 8.79 | 8.64 | 8.31 | 8.22 | 8.06 | 7.88 | 7.45 | 7.64 | 7.94 | 8.01 | | | 8.77 | 8.20 | 7.65 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 17 | 157 | | | | | |

**U20 Heat 2** - 2019 Chinese National Youth Games (Taiyuan, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.30 | 10.32 | 14.33 | 18.48 | 22.70 | 27.05 | 31.86 | 37.19 | 42.46 | 47.66 | | 53.98 | 5 / 1 | | | | |
| reaction time | 0.209 | interval | | 4.02 | 4.01 | 4.15 | 4.22 | 4.35 | 4.81 | 5.33 | 5.27 | 5.20 | 6.32 | | | | 12.18 | 13.38 | 15.80 |
| | | velocity | 7.14 | 8.71 | 8.73 | 8.43 | 8.29 | 8.05 | 7.28 | 6.57 | 6.64 | 6.73 | 6.33 | 7.41 | | | 8.62 | 7.85 | 6.65 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 15 | 15 | 15 | 17.8 | 162.8 | | | | | |

**Heat 2** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.44 | 10.63 | 14.77 | 19.04 | 23.42 | 27.91 | 32.72 | 37.45 | 42.23 | 47.05 | | 52.42 | 4 / 1 | | | | |
| reaction time | 0.228 | interval | | 4.19 | 4.14 | 4.27 | 4.38 | 4.49 | 4.81 | 4.73 | 4.78 | 4.82 | 5.37 | | | | 12.60 | 13.68 | 14.33 |
| | | velocity | 6.99 | 8.35 | 8.45 | 8.20 | 7.99 | 7.80 | 7.28 | 7.40 | 7.32 | 7.26 | 7.45 | 7.63 | | | 8.33 | 7.68 | 7.33 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17 | 159 | | | | | |

**FINAL** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-19 | time | 6.27 | 10.14 | 14.03 | 18.00 | 22.05 | 26.26 | 30.80 | 35.25 | 39.97 | 44.69 | | 50.01 | 5 / 1 | | | | |
| reaction time | 0.304 | interval | | 3.87 | 3.89 | 3.97 | 4.05 | 4.21 | 4.54 | 4.45 | 4.72 | 4.72 | 5.32 | PB | | | 11.73 | 12.80 | 13.89 |
| | | velocity | 7.18 | 9.04 | 9.00 | 8.82 | 8.64 | 8.31 | 7.71 | 7.87 | 7.42 | 7.42 | 7.52 | 8.00 | | | 8.95 | 8.20 | 7.56 |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.5 | 160.5 | | | | | |

**Heat 1** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-19 | time | 6.44 | 10.48 | 14.50 | 18.52 | 22.66 | 26.94 | 31.48 | 35.98 | 40.62 | 45.34 | | 50.85 | 7 / 2 | | | | |
| reaction time | 0.293 | interval | | 4.04 | 4.02 | 4.02 | 4.14 | 4.28 | 4.54 | 4.50 | 4.64 | 4.72 | 5.51 | PB | | | 12.08 | 12.96 | 13.86 |
| | | velocity | 6.99 | 8.66 | 8.71 | 8.71 | 8.45 | 8.18 | 7.71 | 7.78 | 7.54 | 7.42 | 7.26 | 7.87 | | | 8.69 | 8.10 | 7.58 |
| H1 lead leg | L | strides | 22 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 17.5 | 160.5 | | | | | |

**Xu Guoyu (CHN) (1997)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2019 Chinese National Grand Prix 2 (Huangshi, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 12-Apr-19 | time | 6.38 | 10.59 | 14.80 | 19.19 | 23.71 | | 28.38 | 33.10 | 37.90 | 42.71 | 47.51 | | 53.06 | 7 / 4 | | | |
| reaction time | 0.215 | interval | | 4.21 | 4.21 | 4.39 | 4.52 | | 4.67 | 4.72 | 4.80 | 4.81 | 4.80 | 5.55 | | | 12.81 | 13.91 | 14.41 |
| | | velocity | 7.05 | 8.31 | 8.31 | 7.97 | 7.74 | | 7.49 | 7.42 | 7.29 | 7.28 | 7.29 | 7.21 | 7.54 | | 8.20 | 7.55 | 7.29 |
| H1 lead leg | R | strides | 21 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 16 | 21 | 178 | | | | |

**Xu Xin (MAC) (2000)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **U20 Heat 2** - 2019 Chinese National Youth Games (Taiyuan, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.34 | 10.62 | 15.00 | 19.52 | 24.23 | | 29.38 | 34.80 | 40.40 | 46.16 | 52.40 | | 59.60 | 4 / 5 | | | |
| reaction time | 0.176 | interval | | 4.28 | 4.38 | 4.52 | 4.71 | | 5.15 | 5.42 | 5.60 | 5.76 | 6.24 | 7.20 | | | 13.18 | 15.28 | 17.60 |
| | | velocity | 7.10 | 8.18 | 7.99 | 7.74 | 7.43 | | 6.80 | 6.46 | 6.25 | 6.08 | 5.61 | 5.56 | 6.71 | | 7.97 | 6.87 | 5.97 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | | 15 | 15 | 17 | 17 | 19 | | 166 | | | | |

**Xu Zhihang (CHN) (1997)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2021 National Grand Prix (Chengdu, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 02-Apr-21 | time | 6.41 | 10.65 | 15.01 | 19.43 | 23.98 | | 28.71 | 33.61 | 38.82 | 44.03 | | | nt | 5 / 8 | | | |
| reaction time | 0.264 | interval | | 4.24 | 4.36 | 4.42 | 4.55 | | 4.73 | 4.90 | 5.21 | 5.21 | | | | | 13.02 | 14.18 | |
| | | velocity | 7.02 | 8.25 | 8.03 | 7.92 | 7.69 | | 7.40 | 7.14 | 6.72 | 6.72 | | | | | 8.06 | 7.40 | |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | | | 135 | | | | |

**Heat 2** - 2021 National Grand Prix (Chengdu, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Apr-21 | time | 6.18 | 10.14 | 14.18 | 18.28 | 22.42 | 26.80 | 31.28 | 36.02 | 41.00 | 46.08 | | 51.84 | 2 / 1 | | | |
| reaction time | 0.217 | interval | | 3.96 | 4.04 | 4.10 | 4.14 | 4.38 | 4.48 | 4.74 | 4.98 | 5.08 | 5.76 | | | 12.10 | 13.00 | 14.80 |
| | | velocity | 7.28 | 8.84 | 8.66 | 8.54 | 8.45 | 7.99 | 7.81 | 7.38 | 7.03 | 6.89 | 6.94 | 7.72 | | 8.68 | 8.08 | 7.09 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 16 | 16 | 16 | 19.5 | 174.5 | | | | |

**Heat 1** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.72 | 11.31 | | | | | | | | | | dnf | 4 / -- | | | |
| reaction time | | interval | | 4.59 | | | | | | | | | | | | | | |
| | | velocity | 6.70 | 7.63 | | | | | | | | | | | | | | |
| H1 lead leg | L | strides | 22 | 15 | | | | | | | | | | | | | | |

**FINAL** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-19 | time | 6.26 | 10.26 | 14.37 | 18.48 | 22.65 | 27.06 | 31.56 | 36.17 | 40.82 | 45.55 | | 50.81 | 4 / ~~4~~ 3 | | | |
| reaction time | 0.167 | interval | | 4.00 | 4.11 | 4.11 | 4.17 | 4.41 | 4.50 | 4.61 | 4.65 | 4.73 | 5.26 | | | 12.22 | 13.08 | 13.99 |
| | | velocity | 7.19 | 8.75 | 8.52 | 8.52 | 8.39 | 7.94 | 7.78 | 7.59 | 7.53 | 7.40 | 7.60 | 7.87 | | 8.59 | 8.03 | 7.51 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18 | 170 | | | | |

**Heat 2** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-19 | time | 6.22 | 10.20 | 14.28 | 18.39 | 22.58 | 26.96 | 31.42 | 35.96 | 40.64 | 45.56 | | 51.20 | 7 / ~~2~~ 1 | | | |
| reaction time | 0.158 | interval | | 3.98 | 4.08 | 4.11 | 4.19 | 4.38 | 4.46 | 4.54 | 4.68 | 4.92 | 5.64 | | | 12.17 | 13.03 | 14.14 |
| | | velocity | 7.23 | 8.79 | 8.58 | 8.52 | 8.35 | 7.99 | 7.85 | 7.71 | 7.48 | 7.11 | 7.09 | 7.81 | | 8.63 | 8.06 | 7.43 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | 19 | 172 | | | | |

**Yamada, Atsushi (JPN) (1991)**

**B FINAL** - 2021 Denka Athletics Challenge Cup (Niigata, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jun-21 | time | 5.99 | 9.71 | 13.48 | 17.38 | 21.45 | | 25.76 | 30.25 | 34.97 | 39.76 | 44.73 | | 50.33 | 8 / 3 | | | |
| reaction time | | interval | | 3.72 | 3.77 | 3.90 | 4.07 | | 4.31 | 4.49 | 4.72 | 4.79 | 4.97 | 5.60 | | | 11.39 | 12.87 | 14.48 |
| | | velocity | 7.51 | 9.41 | 9.28 | 8.97 | 8.60 | | 8.12 | 7.80 | 7.42 | 7.31 | 7.04 | 7.14 | 7.95 | | 9.22 | 8.16 | 7.25 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 14 | | 14 | 14 | 15 | 15 | 15 | 19.2 | 166.2 | | | | |

**FINAL** - 2020 Michitaka Kinami Memorial (Osaka, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Oct-20 | time | 5.96 | 9.84 | 13.82 | 17.85 | 21.91 | | 26.08 | 30.36 | 34.97 | 39.74 | 44.73 | | 50.49 | 3 / 5 | | | |
| reaction time | | interval | | 3.88 | 3.98 | 4.03 | 4.06 | | 4.17 | 4.28 | 4.61 | 4.77 | 4.99 | 5.76 | | | 11.89 | 12.51 | 14.37 |
| | | velocity | 7.55 | 9.02 | 8.79 | 8.68 | 8.62 | | 8.39 | 8.18 | 7.59 | 7.34 | 7.01 | 6.94 | 7.92 | | 8.83 | 8.39 | 7.31 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 20 | 170 | | | | |

**FINAL** - 2020 All Japan Corporate Championships (Kumagaya, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-Sep-20 | time | 6.10 | 10.04 | 14.07 | 18.23 | 22.52 | | 26.89 | 31.38 | 36.00 | 40.71 | 45.55 | | 50.94 | 4 / 4 | | | |
| reaction time | 0.202 | interval | | 3.94 | 4.03 | 4.16 | 4.29 | | 4.37 | 4.49 | 4.62 | 4.71 | 4.84 | 5.39 | | | 12.13 | 13.15 | 14.17 |
| | | velocity | 7.38 | 8.88 | 8.68 | 8.41 | 8.16 | | 8.01 | 7.80 | 7.58 | 7.43 | 7.23 | 7.42 | 7.85 | | 8.66 | 7.98 | 7.41 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | | 129 | | | | |

**Yamada, Hiromasa (JPN)**

**FINAL** - 2017 Japanese National High School Championships (Yamagata, JPN) *Kota (2017) - 70th high school championships: JAF scientific committee - biomechanics data collection*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-17 | time | 6.37 | 10.43 | 14.65 | 19.00 | 23.66 | | 28.45 | 33.25 | 38.10 | 43.09 | 47.98 | | 53.24 | 3 / 7 | | | |
| reaction time | 0.243 | interval | | 4.06 | 4.22 | 4.35 | 4.66 | | 4.79 | 4.80 | 4.85 | 4.99 | 4.89 | 5.26 | | | 12.63 | 14.25 | 14.73 |
| | | velocity | 7.06 | 8.62 | 8.29 | 8.05 | 7.51 | | 7.31 | 7.29 | 7.22 | 7.01 | 7.16 | 7.60 | 7.51 | | 8.31 | 7.37 | 7.13 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 15 | | 15 | 15 | 15 | 16 | 16 | | 134 | | | | |

**Yamada, Nao (JPN) (2004)**

**FINAL** - 2022 Japanese National High School Championships (Naruto, JPN) *Kishima (2022) - national high school championships biomechanics data collection*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Aug-22 | time | 6.18 | 10.18 | 14.28 | 18.40 | 22.62 | | 26.90 | 31.33 | 35.95 | 40.90 | 45.85 | | 51.48 | 3 / 4 | | | |
| reaction time | 0.184 | interval | | 4.00 | 4.10 | 4.12 | 4.22 | | 4.28 | 4.43 | 4.62 | 4.95 | 4.95 | 5.63 | PB | | 12.22 | 12.93 | 14.52 |
| | | velocity | 7.28 | 8.75 | 8.54 | 8.50 | 8.29 | | 8.18 | 7.90 | 7.58 | 7.07 | 7.07 | 7.10 | 7.77 | | 8.59 | 8.12 | 7.23 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 17 | 17 | 20 | 182 | | | | |

**Yamamoto, Ryo (JPN) (1995)**

**C FINAL** - 2021 Michitaka Kinami Memorial (Osaka, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jun-21 | time | 6.24 | 10.16 | 14.10 | 18.17 | 22.37 | | 26.73 | 31.11 | 35.59 | 40.21 | 44.94 | | 50.45 | 8 / 1 | | | |
| reaction time | 0.177 | interval | | 3.92 | 3.94 | 4.07 | 4.20 | | 4.36 | 4.38 | 4.48 | 4.62 | 4.73 | 5.51 | | | 11.93 | 12.94 | 13.83 |
| | | velocity | 7.21 | 8.93 | 8.88 | 8.60 | 8.33 | | 8.03 | 7.99 | 7.81 | 7.58 | 7.40 | 7.26 | 7.93 | | 8.80 | 8.11 | 7.59 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 18.5 | 170.5 | | | | |

**Yamamoto, Takeshi (JPN) (1998)**

**B FINAL** - 2020 World Athletics Trials (Fuji, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Sep-20 | time | 6.09 | 9.96 | 13.91 | 17.95 | 22.09 | | 26.38 | 30.75 | 35.30 | 40.16 | 45.40 | | 51.44 | 3 / 5 | | | |
| reaction time | | interval | | 3.87 | 3.95 | 4.04 | 4.14 | | 4.29 | 4.37 | 4.55 | 4.86 | 5.24 | 6.04 | | | 11.86 | 12.80 | 14.65 |
| | | velocity | 7.39 | 9.04 | 8.86 | 8.66 | 8.45 | | 8.16 | 8.01 | 7.69 | 7.20 | 6.68 | 6.62 | 7.78 | | 8.85 | 8.20 | 7.17 |
| H1 lead leg | R | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 17 | 20 | 175 | | | | |

**Yamamoto, Tatsuhiro (JPN) (1997)**

**FINAL** - 2022 Seiko Golden Grand Prix (Tokyo, JPN) *Wamani (2023) - race analysis of men's and women's 400m hurdles in the 2022 season*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-22 | time | 6.11 | 10.06 | 14.06 | 18.12 | 22.26 | | 26.51 | 30.88 | 35.35 | 39.86 | 44.54 | | 49.96 | 3 / 6 | | | |
| reaction time | 0.134 | interval | | 3.95 | 4.00 | 4.06 | 4.14 | | 4.25 | 4.37 | 4.47 | 4.51 | 4.68 | 5.42 | | | 12.01 | 12.76 | 13.66 |
| | | velocity | 7.36 | 8.86 | 8.75 | 8.62 | 8.45 | | 8.24 | 8.01 | 7.83 | 7.76 | 7.48 | 7.38 | 8.01 | | 8.74 | 8.23 | 7.69 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.7 | 168.7 | | | | |

**FINAL** - 2021 Japanese National Championships (Osaka, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 5.97 | 9.68 | 13.41 | 17.25 | 21.25 | 25.48 | 29.90 | 34.42 | 39.17 | 44.39 | | 51.32 | 9 / 8 | | | | |
| reaction time | 0.164 | interval | | 3.71 | 3.73 | 3.84 | 4.00 | 4.23 | 4.42 | 4.52 | 4.75 | 5.22 | 6.93 | | | 11.28 | 12.65 | 14.49 | |
| | | velocity | 7.54 | 9.43 | 9.38 | 9.11 | 8.75 | 8.27 | 7.92 | 7.74 | 7.37 | 6.70 | 5.77 | 7.79 | | 9.31 | 8.30 | 7.25 | |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 19.7 | 170.7 | | | | | |

**FINAL** - 2021 Denka Athletics Challenge Cup (Niigata, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Jun-21 | time | 6.09 | 9.98 | 13.88 | 17.88 | 21.94 | 26.06 | 30.40 | 34.82 | 39.44 | 44.23 | | 49.70 | 4 / 2 | | | | |
| reaction time | | interval | | 3.89 | 3.90 | 4.00 | 4.06 | 4.12 | 4.34 | 4.42 | 4.62 | 4.79 | 5.47 | | | 11.79 | 12.52 | 13.83 | |
| | | velocity | 7.39 | 9.00 | 8.97 | 8.75 | 8.62 | 8.50 | 8.06 | 7.92 | 7.58 | 7.31 | 7.31 | 8.05 | | 8.91 | 8.39 | 7.59 | |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 18.2 | 169.2 | | | | | |

**B FINAL** - 2021 Michitaka Kinami Memorial (Osaka, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Jun-21 | time | 6.09 | 10.03 | 14.03 | 17.95 | 22.04 | 26.31 | 30.65 | 35.04 | 39.62 | 44.44 | | 49.99 | 5 / 2 | | | | |
| reaction time | 0.165 | interval | | 3.94 | 4.00 | 3.92 | 4.09 | 4.27 | 4.34 | 4.39 | 4.58 | 4.82 | 5.55 | | | 11.86 | 12.70 | 13.79 | |
| | | velocity | 7.39 | 8.88 | 8.75 | 8.93 | 8.56 | 8.20 | 8.06 | 7.97 | 7.64 | 7.26 | 7.21 | 8.00 | | 8.85 | 8.27 | 7.61 | |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 19 | 171 | | | | | |

**FINAL** - 2020 Michitaka Kinami Memorial (Osaka, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Oct-20 | time | 6.06 | 9.99 | 13.96 | 17.92 | 21.96 | 26.08 | 30.36 | 34.87 | 39.62 | 44.48 | | 49.93 | 8 / 2 | | | | |
| reaction time | | interval | | 3.93 | 3.97 | 3.96 | 4.04 | 4.12 | 4.28 | 4.51 | 4.75 | 4.86 | 5.45 | | | 11.86 | 12.44 | 14.12 | |
| | | velocity | 7.43 | 8.91 | 8.82 | 8.84 | 8.66 | 8.50 | 8.18 | 7.76 | 7.37 | 7.20 | 7.34 | 8.01 | | 8.85 | 8.44 | 7.44 | |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18 | 170 | | | | | |

**FINAL** - 2020 Japanese National Championships (Niigata, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Oct-20 | time | 6.06 | 9.91 | 13.86 | 17.87 | 22.01 | 26.28 | 30.66 | 35.12 | 39.69 | 44.38 | | 49.79 | 4 / 2 | | | | |
| reaction time | 0.156 | interval | | 3.85 | 3.95 | 4.01 | 4.14 | 4.27 | 4.38 | 4.46 | 4.57 | 4.69 | 5.41 | | | 11.81 | 12.79 | 13.72 | |
| | | velocity | 7.43 | 9.09 | 8.86 | 8.73 | 8.45 | 8.20 | 7.99 | 7.85 | 7.66 | 7.46 | 7.39 | 8.03 | | 8.89 | 8.21 | 7.65 | |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.7 | 170.7 | | | | | |

**FINAL** - 2020 Seiko Golden Grand Prix (Tokyo, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 23-Aug-20 | time | 6.01 | 9.86 | 13.80 | 17.77 | 21.87 | 26.16 | 30.61 | 35.17 | 39.92 | 44.79 | | 50.34 | 4 / 3 | | | | |
| reaction time | 0.137 | interval | | 3.85 | 3.94 | 3.97 | 4.10 | 4.29 | 4.45 | 4.56 | 4.75 | 4.87 | 5.55 | | | 11.76 | 12.84 | 14.18 | |
| | | velocity | 7.49 | 9.09 | 8.88 | 8.82 | 8.54 | 8.16 | 7.87 | 7.68 | 7.37 | 7.19 | 7.21 | 7.95 | | 8.93 | 8.18 | 7.40 | |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | | |

**B FINAL** - 2018 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Morioka (2018) - race pattern analysis of Japan's top 400m hurdles - main national competitions in 2018*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-18 | time | 6.14 | 10.04 | 14.03 | 18.10 | 22.27 | 26.59 | 31.03 | 35.60 | 40.18 | 44.76 | | 49.94 | 8 / 2 | | | | |
| reaction time | 0.171 | interval | | 3.90 | 3.99 | 4.07 | 4.17 | 4.32 | 4.44 | 4.57 | 4.58 | 4.58 | 5.18 | **PB** | | 11.96 | 12.93 | 13.73 | |
| | | velocity | 7.33 | 8.97 | 8.77 | 8.60 | 8.39 | 8.10 | 7.88 | 7.66 | 7.64 | 7.64 | 7.72 | 8.01 | | 8.78 | 8.12 | 7.65 | |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 18.2 | 171.2 | | | | | |

**FINAL** - 2015 Japanese National High School Championships (Wakayama, JPN) *Enomoto (2015) - 68th high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-15 | time | 6.19 | 10.13 | 14.25 | 18.37 | 22.62 | 27.06 | 31.60 | 36.14 | 40.77 | 45.63 | | 51.32 | 7 / 3 | | | | |
| reaction time | | interval | | 3.94 | 4.12 | 4.12 | 4.25 | 4.44 | 4.54 | 4.54 | 4.63 | 4.86 | 5.69 | **PB** | | 12.18 | 13.23 | 14.03 | |
| | | velocity | 7.27 | 8.88 | 8.50 | 8.50 | 8.24 | 7.88 | 7.71 | 7.71 | 7.56 | 7.20 | 7.03 | 7.79 | | 8.62 | 7.94 | 7.48 | |
| H1 lead leg | | strides | | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 15 | | 132 | | | | | |

| **Yamashina, Shinnosuke (JPN) (2001)** | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2019 Japanese National High School Championships (Okinawa, JPN) *Kota (2019) - 72nd high school championships: JAF scientific committee - biomechanics data*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-19 | time | 6.33 | 10.56 | 14.78 | 19.11 | 23.70 | 28.56 | 33.50 | 38.49 | 43.69 | 49.11 | | 55.20 | 1 / 8 | | | | |
| reaction time | | interval | | 4.23 | 4.22 | 4.33 | 4.59 | 4.86 | 4.94 | 4.99 | 5.20 | 5.42 | 6.09 | | | 12.78 | 14.39 | 15.61 | |
| | | velocity | 7.11 | 8.27 | 8.29 | 8.08 | 7.63 | 7.20 | 7.09 | 7.01 | 6.73 | 6.46 | 6.57 | 7.25 | | 8.22 | 7.30 | 6.73 | |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | | 132 | | | | | |

| **Yamauchi, Hiromu (JPN) (1999)** | **H1** | **H2** | **H3** | **H4** | **H5** | **200m** | **H6** | **H7** | **H8** | **H9** | **H10** | **Run-In** | **Official Time** | **Lane / Place** | **H1-H4** | **H4-H7** | **H7-H10** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2021 Japanese National Championships (Osaka, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.09 | 10.01 | 13.95 | 17.93 | 21.97 | 26.08 | 30.28 | 34.67 | 39.24 | 43.96 | | 49.48 | 6 / 4 | | | | |
| reaction time | 0.217 | interval | | 3.92 | 3.94 | 3.98 | 4.04 | 4.11 | 4.20 | 4.39 | 4.57 | 4.72 | 5.52 | | | 11.84 | 12.35 | 13.68 | |
| | | velocity | 7.39 | 8.93 | 8.88 | 8.79 | 8.66 | 8.52 | 8.33 | 7.97 | 7.66 | 7.42 | 7.25 | 8.08 | | 8.87 | 8.50 | 7.68 | |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 19 | 169 | | | | | |

**FINAL** - 2021 Ready Steady Tokyo (Tokyo, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-May-21 | time | 6.01 | 9.91 | 13.90 | 17.90 | 21.99 | 26.16 | 30.30 | 34.68 | 39.14 | 43.68 | | 48.84 | 7 / 2 | | | | |
| reaction time | 0.187 | interval | | 3.90 | 3.99 | 4.00 | 4.09 | 4.17 | 4.14 | 4.38 | 4.46 | 4.54 | 5.16 | **PB** | | 11.89 | 12.40 | 13.38 | |
| | | velocity | 7.49 | 8.97 | 8.77 | 8.75 | 8.56 | 8.39 | 8.45 | 7.99 | 7.85 | 7.71 | 7.75 | 8.19 | | 8.83 | 8.47 | 7.85 | |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 18.5 | 168.5 | | | | | |

**FINAL** - 2021 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Sugimoto (2021) - race analysis of men's and women's 400m hurdles in the 2021 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-21 | time | 6.17 | 10.09 | 14.21 | 18.34 | 22.54 | 26.79 | 31.13 | 35.59 | 40.15 | 44.81 | | 50.23 | 3 / 2 | | | | |
| reaction time | 0.224 | interval | | 3.92 | 4.12 | 4.13 | 4.20 | 4.25 | 4.34 | 4.46 | 4.56 | 4.66 | 5.42 | | | 12.17 | 12.79 | 13.68 | |
| | | velocity | 7.29 | 8.93 | 8.50 | 8.47 | 8.33 | 8.24 | 8.06 | 7.85 | 7.68 | 7.51 | 7.38 | 7.96 | | 8.63 | 8.21 | 7.68 | |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 19.2 | 169.2 | | | | | |

**FINAL** - 2020 Japanese National Championships (Niigata, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 02-Oct-20 | time | 6.16 | 10.08 | 14.16 | 18.27 | 22.49 | 26.78 | 31.15 | 35.64 | 40.26 | 45.01 | | 50.50 | 6 / 5 | | | | |
| reaction time | 0.185 | interval | | 3.92 | 4.08 | 4.11 | 4.22 | 4.29 | 4.37 | 4.49 | 4.62 | 4.75 | 5.49 | | | 12.11 | 12.88 | 13.86 | |
| | | velocity | 7.31 | 8.93 | 8.58 | 8.52 | 8.29 | 8.16 | 8.01 | 7.80 | 7.58 | 7.37 | 7.29 | 7.92 | | 8.67 | 8.15 | 7.58 | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 19.2 | 169.2 | | | | |

**FINAL** - 2017 Japanese National High School Chamionships (Yamagata, JPN) *Kota (2017) - 70th high school championships: JAF scientific committee- biomechanics data*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 31-Jul-17 | time | 6.19 | 10.18 | 14.30 | 18.55 | 22.97 | 27.59 | 32.13 | 36.77 | 41.56 | 46.66 | | 51.97 | 9 / 2 | | | |
| reaction time | 0.168 | interval | | 3.99 | 4.12 | 4.25 | 4.42 | 4.62 | 4.54 | 4.64 | 4.79 | 5.10 | 5.31 | | | 12.36 | 13.58 | 14.53 |
| | | velocity | 7.27 | 8.77 | 8.50 | 8.24 | 7.92 | 7.58 | 7.71 | 7.54 | 7.31 | 6.86 | 7.53 | 7.70 | | 8.50 | 7.73 | 7.23 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | | 132 | | | | |

**Yamazaki, Kazuhiko (JPN) (1971)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 2** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 5.90 | 9.66 | 13.58 | 17.58 | 21.70 | 25.98 | | 35.10 | 39.78 | 44.54 | | 50.15 | 1 / 7 | | | |
| reaction time | 0.177 | interval | | 3.76 | 3.92 | 4.00 | 4.12 | 4.28 | | 9.12 | 4.68 | 4.76 | 5.61 | | | 11.68 | | |
| | | velocity | 7.63 | 9.31 | 8.93 | 8.75 | 8.50 | 8.18 | | 7.68 | 7.48 | 7.35 | 7.13 | 7.98 | | 8.99 | | |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Semi-Final 1** - 1999 IAAF World Championships (Sevilla, ESP) *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-99 | time | 5.69 | 9.44 | 13.24 | 17.16 | 21.22 | 25.38 | 29.70 | 34.21 | 38.75 | 43.47 | | 49.46 | 4 / 7 | | | |
| reaction time | 0.172 | interval | | 3.75 | 3.80 | 3.92 | 4.06 | 4.16 | 4.32 | 4.51 | 4.54 | 4.72 | 5.99 | | | 11.47 | 12.54 | 13.77 |
| | | velocity | 7.91 | 9.33 | 9.21 | 8.93 | 8.62 | 8.41 | 8.10 | 7.76 | 7.71 | 7.42 | 6.68 | 8.09 | | 9.15 | 8.37 | 7.63 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 18 | 163 | | | | |

**Yang Baichuan (CHN) (1995)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 2** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.25 | 10.19 | 14.33 | 18.50 | 22.70 | 27.09 | 31.61 | 36.27 | 41.11 | 46.34 | fell | | 4 / -- | | | |
| reaction time | 0.176 | interval | | 3.94 | 4.14 | 4.17 | 4.20 | 4.39 | 4.52 | 4.66 | 4.84 | 5.23 | | DQ | | 12.25 | 13.11 | 14.73 |
| | | velocity | 7.20 | 8.88 | 8.45 | 8.39 | 8.33 | 7.97 | 7.74 | 7.51 | 7.23 | 6.69 | | | | 8.57 | 8.01 | 7.13 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 17 | | 160 | | | | |

**FINAL** - 2020 Chinese National Championships (Shaoxing, CHN) *CAA Hurdle Development (2020)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Sep-20 | time | 6.08 | 10.12 | 14.25 | 18.50 | 22.83 | 27.25 | 31.75 | 36.42 | 41.12 | 45.92 | | 51.58 | 2 / 6 | | | |
| reaction time | | interval | | 4.04 | 4.13 | 4.25 | 4.33 | 4.42 | 4.50 | 4.67 | 4.70 | 4.80 | 5.66 | | | 12.42 | 13.25 | 14.17 |
| | | velocity | 7.40 | 8.66 | 8.47 | 8.24 | 8.08 | 7.92 | 7.78 | 7.49 | 7.45 | 7.29 | 7.07 | 7.75 | | 8.45 | 7.92 | 7.41 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 20 | 178 | | | | |

**Heat 1** - 2019 Chinese National Grand Prix Final (Daqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 22-Aug-19 | time | 6.37 | 10.48 | 14.75 | 19.15 | 23.59 | 28.09 | 32.67 | 37.32 | 42.13 | 46.98 | | 52.44 | 7 / 5 | | | |
| reaction time | 0.166 | interval | | 4.11 | 4.27 | 4.40 | 4.44 | 4.50 | 4.58 | 4.65 | 4.81 | 4.85 | 5.46 | | | 12.78 | 13.52 | 14.31 |
| | | velocity | 7.06 | 8.52 | 8.20 | 7.95 | 7.88 | 7.78 | 7.64 | 7.53 | 7.28 | 7.22 | 7.33 | 7.63 | | 8.22 | 7.77 | 7.34 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 20 | 178 | | | | |

**FINAL** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.12 | 10.14 | 14.30 | 18.56 | 22.92 | 27.25 | 31.68 | 36.21 | 40.78 | 45.55 | | 50.85 | 6 / 2 | | | |
| reaction time | 0.186 | interval | | 4.02 | 4.16 | 4.26 | 4.36 | 4.33 | 4.43 | 4.53 | 4.57 | 4.77 | 5.30 | | | 12.44 | 13.12 | 13.87 |
| | | velocity | 7.35 | 8.71 | 8.41 | 8.22 | 8.03 | 8.08 | 7.90 | 7.73 | 7.66 | 7.34 | 7.55 | 7.87 | | 8.44 | 8.00 | 7.57 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 20 | 178 | | | | |

**Heat 2** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.29 | 10.36 | 14.56 | 18.80 | 23.21 | 27.80 | 32.47 | 37.23 | 42.10 | 47.26 | | 53.14 | 7 / 2 | | | |
| reaction time | 0.194 | interval | | 4.07 | 4.20 | 4.24 | 4.41 | 4.59 | 4.67 | 4.76 | 4.87 | 5.16 | 5.88 | | | 12.51 | 13.67 | 14.79 |
| | | velocity | 7.15 | 8.60 | 8.33 | 8.25 | 7.94 | 7.63 | 7.49 | 7.35 | 7.19 | 6.78 | 6.80 | 7.53 | | 8.39 | 7.68 | 7.10 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 20 | 178 | | | | |

**FINAL** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-19 | time | 6.12 | 9.96 | 13.97 | 18.04 | 22.19 | 26.44 | 30.88 | 35.47 | 40.24 | 45.30 | | 50.93 | 1 / ~~5~~ 4 | | | |
| reaction time | 0.206 | interval | | 3.84 | 4.01 | 4.07 | 4.15 | 4.25 | 4.44 | 4.59 | 4.77 | 5.06 | 5.63 | | | 11.92 | 12.84 | 14.42 |
| | | velocity | 7.35 | 9.11 | 8.73 | 8.60 | 8.43 | 8.24 | 7.88 | 7.63 | 7.34 | 6.92 | 7.10 | 7.85 | | 8.81 | 8.18 | 7.28 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 20.5 | 178.5 | | | | |

**Heat 1** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-19 | time | 6.32 | 10.36 | 14.59 | 18.84 | 23.11 | 27.39 | 31.80 | 36.27 | 40.89 | 45.76 | | 51.20 | 1 / 4 | | | |
| reaction time | 0.218 | interval | | 4.04 | 4.23 | 4.25 | 4.27 | 4.28 | 4.41 | 4.47 | 4.62 | 4.87 | 5.44 | | | 12.52 | 12.96 | 13.96 |
| | | velocity | 7.12 | 8.66 | 8.27 | 8.24 | 8.20 | 8.18 | 7.94 | 7.83 | 7.58 | 7.19 | 7.35 | 7.81 | | 8.39 | 8.10 | 7.52 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 20.3 | 178.3 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 2 (Huangshi, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Apr-19 | time | 6.27 | 10.41 | 14.71 | 19.05 | 23.44 | 27.93 | 32.47 | 37.14 | 42.08 | 47.46 | | 53.44 | 5 / 5 | | | |
| reaction time | 0.181 | interval | | 4.14 | 4.30 | 4.34 | 4.39 | 4.49 | 4.54 | 4.67 | 4.94 | 5.38 | 5.98 | | | 12.78 | 13.42 | 14.99 |
| | | velocity | 7.18 | 8.45 | 8.14 | 8.06 | 7.97 | 7.80 | 7.71 | 7.49 | 7.09 | 6.51 | 6.69 | 7.49 | | 8.22 | 7.82 | 7.00 |
| H1 lead leg | L | strides | 21 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 17 | 20 | 178 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 1 (Zhaoqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Apr-19 | time | 6.20 | 10.12 | 14.20 | 18.38 | 22.60 | 26.88 | 31.36 | 36.10 | 41.04 | 46.24 | | 52.06 | 2 / 4 | | | |
| reaction time | 0.202 | interval | | 3.92 | 4.08 | 4.18 | 4.22 | 4.28 | 4.48 | 4.74 | 4.94 | 5.20 | 5.82 | | | 12.18 | 12.98 | 14.88 |
| | | velocity | 7.26 | 8.93 | 8.58 | 8.37 | 8.29 | 8.18 | 7.81 | 7.38 | 7.09 | 6.73 | 6.87 | 7.68 | | 8.62 | 8.09 | 7.06 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 16 | 20.5 | 179.5 | | | | |

**Yang Pengjun (CHN) (2002)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 3** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.34 | 10.36 | 14.58 | 18.88 | 23.32 | | 27.78 | 32.58 | 37.82 | 43.53 | 49.83 | | 55.58 | 6 / 5 | | | |
| reaction time | 0.230 | interval | | 4.02 | 4.22 | 4.30 | 4.44 | | 4.46 | 4.80 | 5.24 | 5.71 | 6.30 | 5.75 | | | 12.54 | 13.70 | 17.25 |
| | | velocity | 7.10 | 8.71 | 8.29 | 8.14 | 7.88 | | 7.85 | 7.29 | 6.68 | 6.13 | 5.56 | 6.96 | 7.20 | | 8.37 | 7.66 | 6.09 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 17 | 17 | 19 | 19 | 19 | 188 | | | | |

**Yates, Richard (GBR) (1986)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2010 Commonwealth Games (Dehli, IND) *Arnold (2010) - 400mH planning and peaking*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Oct-10 | time | 6.2 | 10.1 | 14.1 | 18.2 | 22.4 | | 26.5 | 30.9 | 35.3 | 39.8 | 44.5 | | 49.84 | 4 / 5 | | | |
| reaction time | 0.225 | interval | | 3.90 | 4.00 | 4.10 | 4.20 | | 4.10 | 4.40 | 4.40 | 4.50 | 4.70 | 5.34 | | | 12.00 | 12.70 | 13.60 |
| | | velocity | 7.26 | 8.97 | 8.75 | 8.54 | 8.33 | | 8.54 | 7.95 | 7.95 | 7.78 | 7.45 | 7.49 | 8.03 | | 8.75 | 8.27 | 7.72 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 14 | 15 | 15 | 18 | 167 | | | | |

**Heat 3** - 2010 Commonwealth Games (Dehli, IND) *Arnold (2010) - 400mH planning and peaking*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Oct-10 | time | 6.0 | 9.9 | 13.8 | 17.9 | 22.1 | 23.9 | 26.3 | 30.6 | 35.0 | 39.6 | 44.3 | | 49.83 | 5 / 1 | | | |
| reaction time | 0.233 | interval | | 3.90 | 3.90 | 4.10 | 4.20 | | 4.20 | 4.30 | 4.40 | 4.60 | 4.70 | 5.53 | | | 11.90 | 12.70 | 13.70 |
| | | velocity | 7.50 | 8.97 | 8.97 | 8.54 | 8.33 | 8.37 | 8.33 | 8.14 | 7.95 | 7.61 | 7.45 | 7.23 | 8.03 | | 8.82 | 8.27 | 7.66 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**Yatsevich, Aleksandr (URS) (1956)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 1982 European Championships (Athens, GRE) *(1982) - XIII championnats d'Europe d'Atlletisma, Athens 1982*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Sep-82 | time | 6.0 | 9.9 | 13.8 | 17.7 | 21.7 | | 25.9 | 30.2 | 34.3 | 38.7 | 43.3 | | 48.60 | 3 / 2 | | | |
| reaction time | | interval | | 3.90 | 3.90 | 3.90 | 4.00 | | 4.20 | 4.30 | 4.10 | 4.40 | 4.60 | 5.30 | PB | | 11.70 | 12.50 | 13.10 |
| | | velocity | 7.50 | 8.97 | 8.97 | 8.97 | 8.75 | | 8.33 | 8.14 | 8.54 | 7.95 | 7.61 | 7.55 | 8.23 | | 8.97 | 8.40 | 8.02 |
| H1 lead leg | R | strides | 21 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 18 | 174 | | | | |

**Ye Anan (CHN) (2004)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Heat 1** - 2021 Chinese National Championships (Chongqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 26-Jun-21 | time | 6.37 | 10.44 | 14.64 | 18.83 | 23.19 | | 27.69 | 32.22 | 36.91 | 41.57 | 46.24 | | 51.64 | 5 / 4 | | | |
| reaction time | 0.272 | interval | | 4.07 | 4.20 | 4.19 | 4.36 | | 4.50 | 4.53 | 4.69 | 4.66 | 4.67 | 5.40 | | | 12.46 | 13.39 | 14.02 |
| | | velocity | 7.06 | 8.60 | 8.33 | 8.35 | 8.03 | | 7.78 | 7.73 | 7.46 | 7.51 | 7.49 | 7.41 | 7.75 | | 8.43 | 7.84 | 7.49 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.2 | 169.2 | | | | |

**FINAL** - 2020 Chinese Olympic Trials (Shaoxing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 13-Jun-21 | time | 6.09 | 9.98 | 14.13 | 18.20 | 22.49 | | 26.86 | 31.41 | 36.02 | 40.62 | 45.24 | | 50.73 | 5 / 4 | | | |
| reaction time | 0.215 | interval | | 3.89 | 4.15 | 4.07 | 4.29 | | 4.37 | 4.55 | 4.61 | 4.60 | 4.62 | 5.49 | PB | | 12.11 | 13.21 | 13.83 |
| | | velocity | 7.39 | 9.00 | 8.43 | 8.60 | 8.16 | | 8.01 | 7.69 | 7.59 | 7.61 | 7.58 | 7.29 | 7.88 | | 8.67 | 7.95 | 7.59 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 18.2 | 170.2 | | | | |

**FINAL** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.21 | 10.21 | 14.33 | 18.47 | 22.82 | | 27.16 | 31.68 | 36.24 | 41.04 | 45.79 | | 51.15 | 5 / 2 | | | |
| reaction time | 0.221 | interval | | 4.00 | 4.12 | 4.14 | 4.35 | | 4.34 | 4.52 | 4.56 | 4.80 | 4.75 | 5.36 | PB | | 12.26 | 13.21 | 14.11 |
| | | velocity | 7.25 | 8.75 | 8.50 | 8.45 | 8.05 | | 8.06 | 7.74 | 7.68 | 7.29 | 7.37 | 7.46 | 7.82 | | 8.56 | 7.95 | 7.44 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 169.5 | | | | |

**Heat 1** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.28 | 10.24 | 14.48 | 18.72 | 23.10 | | 27.61 | 32.11 | 36.70 | 41.47 | 46.31 | | 51.82 | 6 / 1 | | | |
| reaction time | 0.299 | interval | | 3.96 | 4.24 | 4.24 | 4.38 | | 4.51 | 4.50 | 4.59 | 4.77 | 4.84 | 5.51 | PB | | 12.44 | 13.39 | 14.20 |
| | | velocity | 7.17 | 8.84 | 8.25 | 8.25 | 7.99 | | 7.76 | 7.78 | 7.63 | 7.34 | 7.23 | 7.26 | 7.72 | | 8.44 | 7.84 | 7.39 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 19 | 172 | | | | |

**Yego, Gideon (KEN) (1960)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Semi-Final 2** - 1988 Olympic Games (Seoul, KOR) *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-88 | time | 6.20 | 10.14 | 14.07 | 18.06 | 22.17 | | 26.30 | 30.55 | 34.93 | 39.60 | | | | 8 / | | | |
| reaction time | | interval | | 3.94 | 3.93 | 3.99 | 4.11 | | 4.13 | 4.25 | 4.38 | 4.67 | | | DQ | | 11.86 | 12.49 | |
| | | velocity | 7.26 | 8.88 | 8.91 | 8.77 | 8.52 | | 8.47 | 8.24 | 7.99 | 7.49 | | | | | 8.85 | 8.41 | |
| H1 lead leg | | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | | | 142 | | | | |

**Yoneda, Taiyo (JPN) (2001)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**B FINAL** - 2020 Japanese U20 National Championships (Hiroshima, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Oct-20 | time | 6.22 | 10.28 | 14.46 | 18.72 | 23.09 | | 27.61 | 32.32 | 37.14 | 42.03 | 47.00 | | 52.56 | 4 / 1 | | | |
| reaction time | 0.163 | interval | | 4.06 | 4.18 | 4.26 | 4.37 | | 4.52 | 4.71 | 4.82 | 4.89 | 4.97 | 5.56 | | | 12.50 | 13.60 | 14.68 |
| | | velocity | 7.23 | 8.62 | 8.37 | 8.22 | 8.01 | | 7.74 | 7.43 | 7.26 | 7.16 | 7.04 | 7.19 | 7.61 | | 8.40 | 7.72 | 7.15 |
| H1 lead leg | R | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 15 | 19 | 171 | | | | |

**Yoshida, Kazuaki (JPN) (1987)**

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**FINAL** - 2016 Kansai Business Championships (Osaka, JPN) *(2017) - tfdata-store.com/2017/05/22/post-605/*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 20-May-16 | time | 6.20 | 10.12 | 14.08 | 18.08 | 22.27 | | 26.71 | 31.11 | 35.58 | 40.21 | 44.99 | | 50.60 | 6 / 2 | | | |
| reaction time | | interval | | 3.92 | 3.96 | 4.00 | 4.19 | | 4.44 | 4.40 | 4.47 | 4.63 | 4.78 | 5.61 | | | 11.88 | 13.03 | 13.88 |
| | | velocity | 7.26 | 8.93 | 8.84 | 8.75 | 8.35 | | 7.88 | 7.95 | 7.83 | 7.56 | 7.32 | 7.13 | 7.91 | | 8.84 | 8.06 | 7.56 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 15 | 15 | 15 | 15 | 15 | | 127 | | | | |

**FINAL** - 2014 Japanese National Championships (Fukushima, JPN) *Yasunori (2014) - race pattern analysis of Japanese top 400m hurdlers for major domestic competitions*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Jun-14 | time | 5.96 | 9.75 | 13.60 | 17.55 | 21.60 | | 25.87 | 30.27 | 34.76 | 39.40 | 44.27 | | 50.05 | 9 / 5 | | | |
| reaction time | | interval | | 3.79 | 3.85 | 3.95 | 4.05 | | 4.27 | 4.40 | 4.49 | 4.64 | 4.87 | 5.78 | | | 11.59 | 12.72 | 14.00 |
| | | velocity | 7.55 | 9.23 | 9.09 | 8.86 | 8.64 | | 8.20 | 7.95 | 7.80 | 7.54 | 7.19 | 6.92 | 7.99 | | 9.06 | 8.25 | 7.50 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 15 | 18.2 | 164 | | | | |

**B FINAL** - 2014 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Yasunori (2014) - race pattern analysis of Japanese top 400m hurdlers for major domestic competitions*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-14 | time | 6.04 | 9.91 | 13.87 | 17.83 | 21.92 | 26.09 | 30.48 | 34.95 | 39.60 | 44.42 | | 50.15 | / 1 | | | |
| reaction time | | interval | | 3.87 | 3.96 | 3.96 | 4.09 | 4.17 | 4.39 | 4.47 | 4.65 | 4.82 | 5.73 | | | 11.79 | 12.65 | 13.94 |
| | | velocity | 7.45 | 9.04 | 8.84 | 8.84 | 8.56 | 8.39 | 7.97 | 7.83 | 7.53 | 7.26 | 6.98 | 7.98 | | 8.91 | 8.30 | 7.53 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | 13 | 15 | 15 | 15 | 15 | | 125 | | | | |

**Heat 2** - 2009 IAAF World Championships (Berlin, GER) *Graubner (2009) - biomechanical analyses at the 12th IAAF world championships*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 15-Aug-09 | time | 6.00 | 9.79 | 13.61 | 17.51 | 21.55 | 25.73 | 30.07 | 34.49 | 39.07 | 43.87 | | 49.45 | 4 / 3 | | | |
| reaction time | 0.152 | interval | | 3.79 | 3.82 | 3.90 | 4.04 | 4.18 | 4.34 | 4.42 | 4.58 | 4.80 | 5.58 | PB | | 11.51 | 12.56 | 13.80 |
| | | velocity | 7.50 | 9.23 | 9.16 | 8.97 | 8.66 | 8.37 | 8.06 | 7.92 | 7.64 | 7.29 | 7.17 | 8.09 | | 9.12 | 8.36 | 7.61 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Yoshida, Kyohei (JPN) (1997)**

**B FINAL** - 2020 World Athletics Trials (Fuji, JPN) *Sugimoto (2020) - race pattern analysis of japan's top male and female 400m hurdlers- 2020 season*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Sep-20 | time | 6.01 | 9.84 | 13.75 | 17.80 | 21.94 | | 26.21 | 30.58 | 35.22 | 39.97 | 44.79 | | 50.32 | 5 / 1 | | | |
| reaction time | | interval | | 3.83 | 3.91 | 4.05 | 4.14 | | 4.27 | 4.37 | 4.64 | 4.75 | 4.82 | 5.53 | | | 11.79 | 12.78 | 14.21 |
| | | velocity | 7.49 | 9.14 | 8.95 | 8.64 | 8.45 | | 8.20 | 8.01 | 7.54 | 7.37 | 7.26 | 7.23 | 7.95 | | 8.91 | 8.22 | 7.39 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 19 | 169 | | | | |

**Yoshikata, Masahira (JPN) (1982)**

**FINAL** - 2009 Japanese National Championships (Hiroshima, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 27-Jun-09 | time | 6.06 | 9.86 | 13.75 | 17.75 | 21.84 | | 26.04 | 30.44 | 34.93 | 39.55 | 44.29 | | 49.61 | 5 / 2 | | | |
| reaction time | | interval | | 3.80 | 3.89 | 4.00 | 4.09 | | 4.20 | 4.40 | 4.49 | 4.62 | 4.74 | 5.32 | | | 11.69 | 12.69 | 13.85 |
| | | velocity | 7.43 | 9.21 | 9.00 | 8.75 | 8.56 | | 8.33 | 7.95 | 7.80 | 7.58 | 7.38 | 7.52 | 8.06 | | 8.98 | 8.27 | 7.58 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 13 | 15 | 15 | 15 | 15 | | 125 | | | | |

**FINAL** - 2009 Osaka Grand Prix (Osaka, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-May-09 | time | 6.06 | 9.85 | 13.75 | 17.66 | 21.76 | 25.91 | 30.25 | 34.62 | 39.16 | 43.83 | | 49.34 | / 4 | | | |
| reaction time | | interval | | 3.79 | 3.90 | 3.91 | 4.10 | 4.15 | 4.34 | 4.37 | 4.54 | 4.67 | 5.51 | | | 11.60 | 12.59 | 13.58 |
| | | velocity | 7.43 | 9.23 | 8.97 | 8.95 | 8.54 | 8.43 | 8.06 | 8.01 | 7.71 | 7.49 | 7.26 | 8.11 | | 9.05 | 8.34 | 7.73 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | | 130 | | | | |

**Race C** - 2009 Shizuoka International Athletics Meeting (Fukuroi, JPN) *Yasuhori (2012) - race pattern analysis of top Japanese 400m hurdlers at major domestic competitions 2009-11*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-May-09 | time | 6.09 | 9.86 | 13.80 | 17.75 | 21.85 | 25.99 | 30.41 | 34.90 | 39.55 | 44.39 | | 49.95 | / 1 | | | |
| reaction time | | interval | | 3.77 | 3.94 | 3.95 | 4.10 | 4.14 | 4.42 | 4.49 | 4.65 | 4.84 | 5.56 | | | 11.66 | 12.66 | 13.98 |
| | | velocity | 7.39 | 9.28 | 8.88 | 8.86 | 8.54 | 8.45 | 7.92 | 7.80 | 7.53 | 7.23 | 7.19 | 8.01 | | 9.01 | 8.29 | 7.51 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | | 130 | | | | |

**Heat 2** - 2007 IAAF World Championships (Osaka, JPN) *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Aug-07 | time | 6.02 | 9.76 | 13.61 | 17.55 | 21.67 | 25.92 | 30.41 | 34.96 | 39.70 | 44.67 | | 50.59 | 6 / 6 | | | |
| reaction time | 0.187 | interval | | 3.74 | 3.85 | 3.94 | 4.12 | 4.25 | 4.49 | 4.55 | 4.74 | 4.97 | 5.92 | | | 11.53 | 12.86 | 14.26 |
| | | velocity | 7.48 | 9.36 | 9.09 | 8.88 | 8.50 | 8.24 | 7.80 | 7.69 | 7.38 | 7.04 | 6.76 | 7.91 | | 9.11 | 8.16 | 7.36 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 19.7 | 170.7 | | | | |

**FINAL** - 2007 Japanese National Championships (Osaka, JPN) *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 30-Jun-07 | time | 6.02 | 9.79 | 13.73 | 17.75 | 21.85 | 26.07 | 30.44 | 34.84 | 39.38 | 44.05 | | 49.53 | / 3 | | | |
| reaction time | | interval | | 3.77 | 3.94 | 4.02 | 4.10 | 4.22 | 4.37 | 4.40 | 4.54 | 4.67 | 5.48 | | | 11.73 | 12.69 | 13.61 |
| | | velocity | 7.48 | 9.28 | 8.88 | 8.71 | 8.54 | 8.29 | 8.01 | 7.95 | 7.71 | 7.49 | 7.30 | 8.08 | | 8.95 | 8.27 | 7.71 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | | 130 | | | | |

**FINAL** - 2007 Osaka Grand Prix (Osaka, JPN) *Yasunori (2008) - race pattern analysis of the world and Japanese top 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-May-07 | time | 6.07 | 9.82 | 13.69 | 17.61 | 21.71 | 25.88 | 30.27 | 34.72 | 39.34 | 44.13 | | 49.69 | / 5 | | | |
| reaction time | | interval | | 3.75 | 3.87 | 3.92 | 4.10 | 4.17 | 4.39 | 4.45 | 4.62 | 4.79 | 5.56 | | | 11.54 | 12.66 | 13.86 |
| | | velocity | 7.41 | 9.33 | 9.04 | 8.93 | 8.54 | 8.39 | 7.97 | 7.87 | 7.58 | 7.31 | 7.19 | 8.05 | | 9.10 | 8.29 | 7.58 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | | 130 | | | | |

**FINAL** - 2006 Seiko Super Grand Prix (Yokohama, JPN) *Yasunori (2007) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-06 | time | 5.92 | 9.57 | 13.31 | 17.15 | 21.14 | 25.31 | 29.66 | 34.10 | 38.75 | 43.77 | | 49.76 | / 6 | | | |
| reaction time | | interval | | 3.65 | 3.74 | 3.84 | 3.99 | 4.17 | 4.35 | 4.44 | 4.65 | 5.02 | 5.99 | | | 11.23 | 12.51 | 14.11 |
| | | velocity | 7.60 | 9.59 | 9.36 | 9.11 | 8.77 | 8.39 | 8.05 | 7.88 | 7.53 | 6.97 | 6.68 | 8.04 | | 9.35 | 8.39 | 7.44 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | | 130 | | | | |

**FINAL** - 2006 Osaka Grand Prix (Osaka, JPN) *Yasunori (2007) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-May-06 | time | 6.00 | 9.74 | 13.58 | 17.45 | 21.42 | 25.56 | 29.81 | 34.18 | 38.70 | 43.42 | | 48.93 | / 6 | | | |
| reaction time | | interval | | 3.74 | 3.84 | 3.87 | 3.97 | 4.14 | 4.25 | 4.37 | 4.52 | 4.72 | 5.51 | | | 11.45 | 12.36 | 13.61 |
| | | velocity | 7.50 | 9.36 | 9.11 | 9.04 | 8.82 | 8.45 | 8.24 | 8.01 | 7.74 | 7.42 | 7.26 | 8.17 | | 9.17 | 8.50 | 7.71 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | | 130 | | | | |

**FINAL** - 2005 Seiko Super Grand Prix (Yokohama, JPN) *Yasunori (2006) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Sep-05 | time | 5.96 | 9.71 | 13.63 | 17.55 | 21.60 | 25.72 | 29.92 | 34.16 | 38.53 | 43.13 | | 48.66 | / 3 | | | |
| reaction time | | interval | | 3.75 | 3.92 | 3.92 | 4.05 | 4.12 | 4.20 | 4.24 | 4.37 | 4.60 | 5.53 | PB | | 11.59 | 12.37 | 13.21 |
| | | velocity | 7.55 | 9.33 | 8.93 | 8.93 | 8.64 | 8.50 | 8.33 | 8.25 | 8.01 | 7.61 | 7.23 | 8.22 | | 9.06 | 8.49 | 7.95 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | | 130 | | | | |

**FINAL** - 2005 Osaka Grand Prix (Osaka, JPN) *Yasunori (2006) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 07-May-05 | time | 5.99 | 9.69 | 13.54 | 17.49 | 21.58 | 25.90 | 30.32 | 34.82 | 39.36 | 44.00 | | 49.52 | / 6 | | | |
| reaction time | | interval | | 3.70 | 3.85 | 3.95 | 4.09 | 4.32 | 4.42 | 4.50 | 4.54 | 4.64 | 5.52 | | | 11.50 | 12.83 | 13.68 |
| | | velocity | 7.51 | 9.46 | 9.09 | 8.86 | 8.56 | 8.10 | 7.92 | 7.78 | 7.71 | 7.54 | 7.25 | 8.08 | | 9.13 | 8.18 | 7.68 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**FINAL** - 2004 Osaka Grand Prix (Osaka, JPN) *Yasunori (2005) - race pattern analysis of top Japanese 400m hurdlers*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-May-04 | time | 5.86 | 9.71 | 13.65 | 17.69 | 21.84 | 26.08 | 30.32 | 34.64 | 39.16 | 43.86 | | 49.37 | / 5 | | | |
| reaction time | | interval | | 3.85 | 3.94 | 4.04 | 4.15 | 4.24 | 4.24 | 4.32 | 4.52 | 4.70 | 5.51 | PB | | 11.83 | 12.63 | 13.54 |
| | | velocity | 7.68 | 9.09 | 8.88 | 8.66 | 8.43 | 8.25 | 8.25 | 8.10 | 7.74 | 7.45 | 7.26 | 8.10 | | 8.88 | 8.31 | 7.75 |
| H1 lead leg | | strides | | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | | 131 | | | | |

**Yoshizawa, Ken (JPN) (1978)**

**FINAL** - 2004 Japanese National Championships (Tottori, JPN) *Yasunori (2005) - race pattern analysis of top Japanese 400m hurdlers*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 05-Jun-04 | time | 5.96 | 9.65 | 13.45 | 17.39 | 21.49 | | 25.78 | 30.17 | 34.62 | 39.21 | 44.01 | | 49.63 | / 2 | | | |
| reaction time | | interval | | 3.69 | 3.80 | 3.94 | 4.10 | | 4.29 | 4.39 | 4.45 | 4.59 | 4.80 | 5.62 | | | 11.43 | 12.78 | 13.84 |
| | | velocity | 7.55 | 9.49 | 9.21 | 8.88 | 8.54 | | 8.16 | 7.97 | 7.87 | 7.63 | 7.29 | 7.12 | 8.06 | | 9.19 | 8.22 | 7.59 |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | 15 | | 125 | | | | |

**Young, Blair (AUS) (1971)**

**Semi-Final 2** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-00 | time | 6.12 | 9.96 | 13.84 | 17.68 | 21.60 | 23.24 | 25.84 | 30.16 | 34.60 | 39.24 | | | 49.20 | 8 / 4 | | | |
| reaction time | 0.255 | interval | | 3.84 | 3.88 | 3.84 | 3.92 | | 4.24 | 4.32 | 4.44 | 4.64 | | | | | 11.56 | 12.48 | |
| | | velocity | 7.35 | 9.11 | 9.02 | 9.11 | 8.93 | 8.61 | 8.25 | 8.10 | 7.88 | 7.54 | | | 8.13 | | 9.08 | 8.41 | |
| H1 lead leg | | strides | | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 15 | | | 110 | | | | |

**Heat 2** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.06 | 9.82 | 13.74 | 17.74 | 21.86 | | 26.18 | | 35.42 | 39.90 | 44.50 | | 49.75 | 6 / 4 | | | |
| reaction time | 0.193 | interval | | 3.76 | 3.92 | 4.00 | 4.12 | | 4.32 | | 9.24 | 4.48 | 4.60 | 5.25 | | | 11.68 | | |
| | | velocity | 7.43 | 9.31 | 8.93 | 8.75 | 8.50 | | 8.10 | | 7.58 | 7.81 | 7.61 | 7.62 | 8.04 | | 8.99 | | |
| H1 lead leg | | strides | 21 | 13 | 13 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 18.4 | 167.4 | | | | |

**Young, Curt (PAN) (1974)**

**Heat 8** - 2000 Olympic Games (Sydney, AUS) *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-00 | time | 6.02 | 9.74 | 13.54 | 17.54 | 21.74 | | 25.98 | 30.58 | 35.50 | 40.78 | 46.18 | | 52.46 | 2 / 6 | | | |
| reaction time | 0.164 | interval | | 3.72 | 3.80 | 4.00 | 4.20 | | 4.24 | 4.60 | 4.92 | 5.28 | 5.40 | 6.28 | | | 11.52 | 13.04 | 15.60 |
| | | velocity | 7.48 | 9.41 | 9.21 | 8.75 | 8.33 | | 8.25 | 7.61 | 7.11 | 6.63 | 6.48 | 6.37 | 7.62 | | 9.11 | 8.05 | 6.73 |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 15 | 15 | 16 | 16 | | 149 | | | | |

**Young, Kevin (USA) (1966)**

**Heat 2** - 1996 USA Olympic Trials (Atlanta, GA) *Lyle - miscellaneous coaching notes*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 14-Jun-96 | time | 5.72 | 9.92 | 13.46 | 17.34 | 21.27 | | 25.47 | 29.73 | 34.09 | 38.57 | 43.27 | | 49.15 | / 3 | | | |
| reaction time | | interval | | 4.20 | 3.54 | 3.88 | 3.93 | | 4.20 | 4.26 | 4.36 | 4.48 | 4.70 | 5.88 | | | 11.62 | 12.39 | 13.54 |
| | | velocity | 7.87 | 8.33 | 9.89 | 9.02 | 8.91 | | 8.33 | 8.22 | 8.03 | 7.81 | 7.45 | 6.80 | 8.14 | | 9.04 | 8.47 | 7.75 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | | |

**FINAL** - 1993 IAAF World Championships (Stuttgart, GER) *Graubner (2008) - http://www.fgs.uni-halle.de*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 19-Aug-93 | time | 6.05 | 9.68 | 13.43 | 17.12 | 20.92 | | 24.86 | 28.89 | 33.00 | 37.34 | 41.46 | | 47.18 | 6 / 1 | | | |
| reaction time | 0.267 | interval | | 3.63 | 3.75 | 3.69 | 3.80 | | 3.94 | 4.03 | 4.11 | 4.34 | 4.12 | 5.72 | | | 11.07 | 11.77 | 12.57 |
| | | velocity | 7.44 | 9.64 | 9.33 | 9.49 | 9.21 | | 8.88 | 8.68 | 8.52 | 8.06 | 8.50 | 6.99 | 8.48 | | 9.49 | 8.92 | 8.35 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 12 | 12 | | 13 | 13 | 13 | 13 | 13 | 17 | 152 | | | | |

**Semi-Final 3** - 1993 IAAF World Championships (Stuttgart, GER) *Letzelter (1995) - schrittgestaltung im 400m-hürdenlauf der jugend*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-93 | time | 5.92 | 9.64 | 13.42 | 17.18 | 20.98 | | 25.04 | 29.16 | 33.48 | 37.86 | 42.40 | | 47.99 | 3 / 1 | | | |
| reaction time | | interval | | 3.72 | 3.78 | 3.76 | 3.80 | | 4.06 | 4.12 | 4.32 | 4.38 | 4.54 | 5.59 | | | 11.26 | 11.98 | 13.24 |
| | | velocity | 7.60 | 9.41 | 9.26 | 9.31 | 9.21 | | 8.62 | 8.50 | 8.10 | 7.99 | 7.71 | 7.16 | 8.34 | | 9.33 | 8.76 | 7.93 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 12 | 12 | | 13 | 13 | 13 | 13 | 13 | 16 | 151 | | | | |

**FINAL** - 1992 Olympic Games (Barcelona, ESP) *Letzelter (1995) - schrittgestaltung im 400m-hürdenlauf der jugend*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 06-Aug-92 | time | 5.92 | 9.58 | 13.24 | 16.94 | 20.72 | | 24.68 | 28.74 | 32.88 | 37.18 | 41.58 | | 46.78 | 4 / 1 | | | |
| reaction time | | interval | | 3.66 | 3.66 | 3.70 | 3.78 | | 3.96 | 4.06 | 4.14 | 4.30 | 4.40 | 5.20 | WR | | 11.02 | 11.80 | 12.84 |
| | | velocity | 7.60 | 9.56 | 9.56 | 9.46 | 9.26 | | 8.84 | 8.62 | 8.45 | 8.14 | 7.95 | 7.69 | 8.55 | | 9.53 | 8.90 | 8.18 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 12 | 12 | | 13 | 13 | 13 | 13 | 13 | 16.7 | 152 | | | | |

**FINAL** - 1988 Olympic Games (Seoul, KOR) *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Sep-88 | time | 6.07 | 9.72 | 13.40 | 17.20 | 21.09 | | 25.13 | 29.25 | 33.46 | 37.94 | 42.61 | | 47.94 | 2 / 4 | | | |
| reaction time | 0.214 | interval | | 3.65 | 3.68 | 3.80 | 3.89 | | 4.04 | 4.12 | 4.21 | 4.48 | 4.67 | 5.33 | | | 11.13 | 12.05 | 13.36 |
| | | velocity | 7.41 | 9.59 | 9.51 | 9.21 | 9.00 | | 8.66 | 8.50 | 8.31 | 7.81 | 7.49 | 7.50 | 8.34 | | 9.43 | 8.71 | 7.86 |
| H1 lead leg | L | strides | 20 | 12 | 12 | 12 | 12 | | 13 | 13 | 13 | 13 | 14 | 17 | 151 | | | | |

**Semi-Final 1** - 1988 Olympic Games (Seoul, KOR) *Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988*

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 24-Sep-88 | time | 6.29 | 10.21 | 14.14 | 18.02 | 21.86 | | 25.79 | 29.82 | 33.95 | 38.36 | 43.00 | | 48.56 | 5 / 2 | | | |
| reaction time | | interval | | 3.92 | 3.93 | 3.88 | 3.84 | | 3.93 | 4.03 | 4.13 | 4.41 | 4.64 | 5.56 | | | 11.73 | 11.80 | 13.18 |
| | | velocity | 7.15 | 8.93 | 8.91 | 9.02 | 9.11 | | 8.91 | 8.68 | 8.47 | 7.94 | 7.54 | 7.19 | 8.24 | | 8.95 | 8.90 | 7.97 |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | 17 | 155 | | | | |

**Yu Zhiyou (CHN) (2003)**

**U18 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) (84cm) *CAA Hurdle Development (2019)*

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.44 | 10.56 | 14.76 | 19.08 | 23.54 | | 28.32 | 33.28 | 38.40 | 43.68 | 49.04 | | 54.92 | 2 / 6 | | | |
| reaction time | 0.201 | interval | | 4.12 | 4.20 | 4.32 | 4.46 | | 4.78 | 4.96 | 5.12 | 5.28 | 5.36 | 5.88 | | | 12.64 | 14.20 | 15.76 |
| | | velocity | 6.99 | 8.50 | 8.33 | 8.10 | 7.85 | | 7.32 | 7.06 | 6.84 | 6.63 | 6.53 | 6.80 | 7.28 | | 8.31 | 7.39 | 6.66 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | | 16 | 16 | 17 | 17 | 17 | 21 | 187 | | | | |

**Zadoinov, Vadim (MDA) (1969)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 4** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 24-Sep-00 | time | 6.04 | 9.84 | 13.84 | 17.84 | 21.84 | | 26.00 | 30.44 | 35.16 | 40.28 | | | 51.08 | 7 / 5 | | | |
| reaction time | 0.173 | interval | | 3.80 | 4.00 | 4.00 | 4.00 | | 4.16 | 4.44 | 4.72 | 5.12 | | | | | 11.80 | 12.60 | |
| | | velocity | 7.45 | 9.21 | 8.75 | 8.75 | 8.75 | | 8.41 | 7.88 | 7.42 | 6.84 | | | 7.83 | | 8.90 | 8.33 | |
| H1 lead leg | | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 15 | | | 127 | | | | |

**Zazini, Sokwakhana (RSA) (2000)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2023 Doha Diamond League (Doha, QAT) | | | | | | | | | | | | | | | | *Omega Timing (2023) - diamond league race analysis* | | | |
| date | 05-May-23 | time | 5.83 | 9.46 | 13.25 | 17.13 | 21.12 | | 25.58 | 30.07 | 34.69 | 39.36 | 44.01 | | 49.74 | 1 / 6 | | | |
| reaction time | 0.170 | interval | | 3.63 | 3.79 | 3.88 | 3.99 | | 4.46 | 4.49 | 4.62 | 4.67 | 4.65 | 5.73 | | | 11.30 | 12.94 | 13.94 |
| | | velocity | 7.72 | 9.64 | 9.23 | 9.02 | 8.77 | | 7.85 | 7.80 | 7.58 | 7.49 | 7.53 | 6.98 | 8.04 | | 9.29 | 8.11 | 7.53 |
| H1 lead leg | L | strides | 23 | 14 | 14 | 14 | 14 | | 15 | | | 16 | 16 | | 126 | | | | |
| **Semi-Final 3** - 2022 World Athletics Championships (Eugene, OR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date | 17-Jul-22 | time | 5.87 | 9.66 | 13.56 | 17.30 | 21.26 | 23.04 | | 29.90 | 34.57 | 39.50 | 44.37 | | 50.22 | 2 / 7 | | | |
| reaction time | 0.153 | interval | | 3.79 | 3.90 | 3.74 | 3.96 | | | 8.64 | 4.67 | 4.93 | 4.87 | 5.85 | | | 11.43 | 12.60 | 14.47 |
| | | velocity | 7.67 | 9.23 | 8.97 | 9.36 | 8.84 | 8.68 | | 8.10 | 7.49 | 7.10 | 7.19 | 6.84 | 7.96 | | 9.19 | 8.33 | 7.26 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | | | | 16 | 17 | 17 | 20.2 | 153.2 | | | | |
| **FINAL** - 2022 Bauhaus Galan (Stockholm, SWE) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date | 30-Jun-22 | time | 5.92 | 9.76 | 13.60 | 17.46 | 21.44 | 23.11 | 25.56 | 29.90 | 34.34 | 39.02 | 43.94 | | 49.80 | 1 / 8 | | | |
| reaction time | 0.171 | interval | | 3.84 | 3.84 | 3.86 | 3.98 | | 4.12 | 4.34 | 4.44 | 4.68 | 4.92 | 5.86 | | | 11.54 | 12.44 | 14.04 |
| | | velocity | 7.60 | 9.11 | 9.11 | 9.07 | 8.79 | 8.65 | 8.50 | 8.06 | 7.88 | 7.48 | 7.11 | 6.83 | 8.03 | | 9.10 | 8.44 | 7.48 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | | 15 | 16 | 16 | 17 | 17 | 21 | 185 | | | | |
| **FINAL** - 2022 Bislett Games (Oslo, NOR) (TV Analysis) | | | | | | | | | | | | | | | | *Henson (2022) - Athlete First: 2022 year end hurdle report* | | | |
| date | 16-Jun-22 | time | 5.92 | 9.76 | 13.56 | 17.48 | 21.56 | 23.37 | 25.96 | 30.44 | 34.96 | 39.76 | 44.56 | | 50.17 | 8 / 7 | | | |
| reaction time | 0.184 | interval | | 3.84 | 3.80 | 3.92 | 4.08 | | 4.40 | 4.48 | 4.52 | 4.80 | 4.80 | 5.61 | | | 11.56 | 12.96 | 14.12 |
| | | velocity | 7.60 | 9.11 | 9.21 | 8.93 | 8.58 | 8.56 | 7.95 | 7.81 | 7.74 | 7.29 | 7.29 | 7.13 | 7.97 | | 9.08 | 8.10 | 7.44 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | | 16 | 16 | 17 | 17 | 17 | 20 | 186 | | | | |

**Zbinden, Carlos (CHI) (1976)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 1** - 2000 Olympic Games (Sydney, AUS) | | | | | | | | | | | | | | | | *Ditroilo (2001) - analysis of the race distribution for male 400m hurdlers competing at the 2000 sydney olympic games* | | | |
| date | 24-Sep-00 | time | 6.10 | 9.90 | 13.82 | 17.70 | 21.70 | | 25.94 | 30.38 | 34.98 | 40.02 | | | 51.36 | 6 / 6 | | | |
| reaction time | 0.180 | interval | | 3.80 | 3.92 | 3.88 | 4.00 | | 4.24 | 4.44 | 4.60 | 5.04 | | | | | 11.60 | 12.68 | |
| | | velocity | 7.38 | 9.21 | 8.93 | 9.02 | 8.75 | | 8.25 | 7.88 | 7.61 | 6.94 | | | 7.79 | | 9.05 | 8.28 | |
| H1 lead leg | | strides | 21 | 13 | 13 | 13 | 13 | | 14 | 14 | 15 | 16 | | | 132 | | | | |
| **FINAL** - 1998 European Championships (Budapest, HUN) | | | | | | | | | | | | | | | | *Sanchez (1998) - Budapest '98: análisis de la carreras con villas* | | | |
| date | 20-Aug-98 | time | 6.05 | | | | 21.57 | | | | | | 43.70 | | 49.10 | 4 / 5 | | | |
| reaction time | | interval | | | | | 15.52 | | | | | | 22.13 | 5.40 | | | | | |
| | | velocity | 7.44 | | | | 9.02 | | | | | | 7.91 | 7.41 | 8.15 | | | | |
| H1 lead leg | L | strides | 19 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17 | 155 | | | | |

**Zellner, Torrance (USA) (1970)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 1999 IAAF World Championships (Sevilla, ESP) | | | | | | | | | | | | | | | | *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas* | | | |
| date | 27-Aug-99 | time | 5.66 | 9.38 | 13.10 | 16.88 | 20.68 | | 24.72 | 28.92 | 33.49 | 38.05 | 42.86 | | 49.06 | 1 / 8 | | | |
| reaction time | 0.133 | interval | | 3.72 | 3.72 | 3.78 | 3.80 | | 4.04 | 4.20 | 4.57 | 4.56 | 4.81 | 6.20 | | | 11.22 | 12.04 | 13.94 |
| | | velocity | 7.95 | 9.41 | 9.41 | 9.26 | 9.21 | | 8.66 | 8.33 | 7.66 | 7.68 | 7.28 | 6.45 | 8.15 | | 9.36 | 8.72 | 7.53 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 14 | 14 | 15 | 18 | 159 | | | | |
| **Semi-Final 2** - 1999 IAAF World Championships (Sevilla, ESP) | | | | | | | | | | | | | | | | *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas* | | | |
| date | 25-Aug-99 | time | 5.68 | 9.45 | 13.25 | 17.05 | 21.08 | | 25.09 | 29.21 | 33.62 | 38.22 | 42.85 | | 48.53 | 7 / 4 | | | |
| reaction time | 0.129 | interval | | 3.77 | 3.80 | 3.80 | 4.03 | | 4.01 | 4.12 | 4.41 | 4.60 | 4.63 | 5.68 | | | 11.37 | 12.16 | 13.64 |
| | | velocity | 7.92 | 9.28 | 9.21 | 9.21 | 8.68 | | 8.73 | 8.50 | 7.94 | 7.61 | 7.56 | 7.04 | 8.24 | | 9.23 | 8.63 | 7.70 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 14 | 14 | 17 | 156 | | | | |
| **FINAL** - 1996 USA Olympic Trials (Atlanta, GA) | | | | | | | | | | | | | | | | *McNichols - Hurdle technique study through video analysis* | | | |
| date | 16-Jun-96 | time | 5.81 | 9.63 | 13.49 | 17.35 | 21.37 | 22.99 | 25.60 | 29.95 | 34.27 | 38.67 | 43.25 | | 48.65 | 7 / 5 | | | |
| reaction time | | interval | | 3.82 | 3.86 | 3.86 | 4.02 | | 4.23 | 4.35 | 4.32 | 4.40 | 4.58 | 5.40 | | | 11.54 | 12.60 | 13.30 |
| | | velocity | 7.75 | 9.16 | 9.07 | 9.07 | 8.71 | 8.70 | 8.27 | 8.05 | 8.10 | 7.95 | 7.64 | 7.41 | 8.22 | | 9.10 | 8.33 | 7.89 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 13 | 13 | 14 | | 138 | | | | |

**Zeng Lingxian (CHN) (2002)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **U18 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) (84cm) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.42 | 10.58 | 14.90 | 19.24 | 23.72 | | 28.34 | 33.08 | 37.92 | 43.00 | 48.30 | | 54.14 | 9 / 5 | | | |
| reaction time | 0.203 | interval | | 4.16 | 4.32 | 4.34 | 4.48 | | 4.62 | 4.74 | 4.84 | 5.08 | 5.30 | 5.84 | | | 12.82 | 13.84 | 15.22 |
| | | velocity | 7.01 | 8.41 | 8.10 | 8.06 | 7.81 | | 7.58 | 7.38 | 7.23 | 6.89 | 6.60 | 6.85 | 7.39 | | 8.19 | 7.59 | 6.90 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 15 | 17 | 21 | 180 | | | | |

**Zhang Hongxi (CHN) (2001)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **U20 Heat 3** - 2019 Chinese National Youth Games (Taiyuan, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.64 | 10.82 | 15.17 | 19.70 | 24.35 | | 29.10 | 34.27 | 39.64 | 45.23 | 50.86 | | 57.30 | 4 / 6 | | | |
| reaction time | 0.239 | interval | | 4.18 | 4.35 | 4.53 | 4.65 | | 4.75 | 5.17 | 5.37 | 5.59 | 5.63 | 6.44 | | | 13.06 | 14.57 | 16.59 |
| | | velocity | 6.78 | 8.37 | 8.05 | 7.73 | 7.53 | | 7.37 | 6.77 | 6.52 | 6.26 | 6.22 | 6.21 | 6.98 | | 8.04 | 7.21 | 6.33 |
| H1 lead leg | R | strides | 23 | 15 | 15 | 15 | 15 | | 15 | 17 | 17 | 17 | 17 | | 166 | | | | |

**Zhang Shibao (CHN) (1984)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL** - 2001 Chinese National Games (Guangzhou, CHN) | | | | | | | | | | | | | | | | *Gong (2003) - discussion on technique of gold and silver medallist of men's 400m hurdles of the 9th National Games* | | | |
| date | 22-Nov-01 | time | 6.09 | 9.93 | 13.77 | 17.77 | 21.97 | | 26.25 | 30.65 | 35.07 | 39.69 | 44.57 | | 50.33 | / 2 | | | |
| reaction time | | interval | | 3.84 | 3.84 | 4.00 | 4.20 | | 4.28 | 4.40 | 4.42 | 4.62 | 4.88 | 5.76 | NYR | | 11.68 | 12.88 | 13.92 |
| | | velocity | 7.39 | 9.11 | 9.11 | 8.75 | 8.33 | | 8.18 | 7.95 | 7.92 | 7.58 | 7.17 | 6.94 | 7.95 | | 8.99 | 8.15 | 7.54 |
| H1 lead leg | | strides | | 13 | 13 | 15 | 15 | | 15 | 15 | 15 | 15 | 15 | 18.5 | 149.5 | | | | |

**Zheng Hao (CHN) (2001)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **U20 Heat 2** - 2019 Chinese National Youth Games (Taiyuan, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.40 | 10.61 | 14.95 | 19.36 | 23.89 | | 28.56 | 33.51 | 38.76 | 44.17 | 49.76 | | 55.58 | 3 / 4 | | | |
| reaction time | 0.208 | interval | | 4.21 | 4.34 | 4.41 | 4.53 | | 4.67 | 4.95 | 5.25 | 5.41 | 5.59 | 5.82 | PB | | 12.96 | 14.15 | 16.25 |
| | | velocity | 7.03 | 8.31 | 8.06 | 7.94 | 7.73 | | 7.49 | 7.07 | 6.67 | 6.47 | 6.26 | 6.87 | 7.20 | | 8.10 | 7.42 | 6.46 |
| H1 lead leg | R | strides | 23 | 15 | 15 | 15 | 15 | | 15 | 15 | 16 | 16 | 17 | 19.5 | 181.5 | | | | |

**Zheng Pan (CHN) (2001)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 2** - 2021 Chinese National Championships (Chongqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 26-Jun-21 | time | 6.38 | 10.34 | 14.33 | 18.38 | 22.61 | | 27.11 | 31.73 | 36.48 | 41.49 | 46.59 | | 52.36 | 7 / 4 | | | |
| reaction time | 0.203 | interval | | 3.96 | 3.99 | 4.05 | 4.23 | | 4.50 | 4.62 | 4.75 | 5.01 | 5.10 | 5.77 | | | 12.00 | 13.35 | 14.86 |
| | | velocity | 7.05 | 8.84 | 8.77 | 8.64 | 8.27 | | 7.78 | 7.58 | 7.37 | 6.99 | 6.86 | 6.93 | 7.64 | | 8.75 | 7.87 | 7.07 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 16 | 16 | 19 | 174 | | | | |
| **FINAL** - 2021 National Grand Prix (Chengdu, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 02-Apr-21 | time | 6.15 | 10.08 | 14.06 | 18.11 | 22.33 | | 26.69 | 31.27 | 36.05 | 41.17 | 46.40 | | 52.27 | 7 / 2 | | | |
| reaction time | 0.187 | interval | | 3.93 | 3.98 | 4.05 | 4.22 | | 4.36 | 4.58 | 4.78 | 5.12 | 5.23 | 5.87 | | | 11.96 | 13.16 | 15.13 |
| | | velocity | 7.32 | 8.91 | 8.79 | 8.64 | 8.29 | | 8.03 | 7.64 | 7.32 | 6.84 | 6.69 | 6.81 | 7.65 | | 8.78 | 7.98 | 6.94 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 16 | 19 | 178 | | | | |
| **Heat 2** - 2021 National Grand Prix (Chengdu, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 01-Apr-21 | time | 6.46 | 10.58 | 14.80 | 19.00 | 23.28 | | 27.70 | 32.22 | 36.92 | 41.98 | 47.14 | | 52.78 | 3 / 3 | | | |
| reaction time | 0.203 | interval | | 4.12 | 4.22 | 4.20 | 4.28 | | 4.42 | 4.52 | 4.70 | 5.06 | 5.16 | 5.64 | PB | | 12.54 | 13.22 | 14.92 |
| | | velocity | 6.97 | 8.50 | 8.29 | 8.33 | 8.18 | | 7.92 | 7.74 | 7.45 | 6.92 | 6.78 | 7.09 | 7.58 | | 8.37 | 7.94 | 7.04 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 16 | 16 | 19 | 178 | | | | |

**Zhou Chao (CHN) (2000)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **U20 Heat 1** - 2019 Chinese National Youth Games (Taiyuan, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.42 | 10.56 | 14.86 | 19.16 | 23.64 | | 28.18 | 32.78 | 37.84 | 42.96 | 48.14 | | 53.90 | 3 / 4 | | | |
| reaction time | 0.208 | interval | | 4.14 | 4.30 | 4.30 | 4.48 | | 4.54 | 4.60 | 5.06 | 5.12 | 5.18 | 5.76 | PB | | 12.74 | 13.62 | 15.36 |
| | | velocity | 7.01 | 8.45 | 8.14 | 8.14 | 7.81 | | 7.71 | 7.61 | 6.92 | 6.84 | 6.76 | 6.94 | 7.42 | | 8.24 | 7.71 | 6.84 |
| H1 lead leg | L | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 16 | 16 | 16 | 19 | 179 | | | | |

**Zhu Yizheng (CHN) (2000)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **U20 FINAL** - 2019 Chinese National Youth Games (Taiyuan, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.41 | 10.46 | 14.54 | 18.74 | 23.11 | | 27.70 | 32.44 | 37.34 | 42.46 | 47.66 | | 53.54 | 4 / 7 | | | |
| reaction time | 0.223 | interval | | 4.05 | 4.08 | 4.20 | 4.37 | | 4.59 | 4.74 | 4.90 | 5.12 | 5.20 | 5.88 | | | 12.33 | 13.70 | 15.22 |
| | | velocity | 7.02 | 8.64 | 8.58 | 8.33 | 8.01 | | 7.63 | 7.38 | 7.14 | 6.84 | 6.73 | 6.80 | 7.47 | | 8.52 | 7.66 | 6.90 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 16 | 16 | 19 | 174 | | | | |
| **U20 Heat 1** - 2019 Chinese National Youth Games (Taiyuan, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 17-Aug-19 | time | 6.47 | 10.50 | 14.56 | 18.74 | 23.04 | | 27.54 | 32.10 | 36.90 | 41.96 | 47.10 | | 52.90 | 5 / 2 | | | |
| reaction time | 0.209 | interval | | 4.03 | 4.06 | 4.18 | 4.30 | | 4.50 | 4.56 | 4.80 | 5.06 | 5.14 | 5.80 | PB | | 12.27 | 13.36 | 15.00 |
| | | velocity | 6.96 | 8.68 | 8.62 | 8.37 | 8.14 | | 7.78 | 7.68 | 7.29 | 6.92 | 6.81 | 6.90 | 7.56 | | 8.56 | 7.86 | 7.00 |
| H1 lead leg | L | strides | 22 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 16 | 16 | 19 | 174 | | | | |

**Zhuang Linfei (CHN) (1996)**

| | | | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Heat 2** - 2021 Chinese National Championships (Chongqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2021)* | | | |
| date | 26-Jun-21 | time | 6.24 | 10.23 | 14.33 | 18.59 | 22.97 | | 27.61 | 32.34 | 37.27 | 42.46 | 47.98 | | 54.37 | 4 / 5 | | | |
| reaction time | 0.183 | interval | | 3.99 | 4.10 | 4.26 | 4.38 | | 4.64 | 4.73 | 4.93 | 5.19 | 5.52 | 6.39 | | | 12.35 | 13.75 | 15.64 |
| | | velocity | 7.21 | 8.77 | 8.54 | 8.22 | 7.99 | | 7.54 | 7.40 | 7.10 | 6.74 | 6.34 | 6.26 | 7.36 | | 8.50 | 7.64 | 6.71 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | | 15 | 15 | 15 | 15 | 17 | 20 | 174 | | | | |
| **FINAL** - 2019 Chinese National Grand Prix Final (Daqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 23-Aug-19 | time | 6.20 | 10.04 | 14.03 | 18.18 | 22.48 | | 27.00 | 31.60 | 36.24 | 41.11 | 46.02 | | 51.67 | 7 / 5 | | | |
| reaction time | 0.220 | interval | | 3.84 | 3.99 | 4.15 | 4.30 | | 4.52 | 4.60 | 4.64 | 4.87 | 4.91 | 5.65 | | | 11.98 | 13.42 | 14.42 |
| | | velocity | 7.26 | 9.11 | 8.77 | 8.43 | 8.14 | | 7.74 | 7.61 | 7.54 | 7.19 | 7.13 | 7.08 | 7.74 | | 8.76 | 7.82 | 7.28 |
| H1 lead leg | L | strides | 13 | 13 | 14 | 14 | 14 | | 14 | 15 | 15 | 15 | 15 | 18.5 | 160.5 | | | | |
| **Heat 2** - 2019 Chinese National Grand Prix Final (Daqing, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 22-Aug-19 | time | 6.33 | 10.28 | 14.34 | 18.55 | 22.94 | | 27.51 | 32.08 | 36.85 | 41.69 | 46.55 | | 52.04 | 8 / 2 | | | |
| reaction time | 0.233 | interval | | 3.95 | 4.06 | 4.21 | 4.39 | | 4.57 | 4.57 | 4.77 | 4.84 | 4.86 | 5.49 | | | 12.22 | 13.53 | 14.47 |
| | | velocity | 7.11 | 8.86 | 8.62 | 8.31 | 7.97 | | 7.66 | 7.66 | 7.34 | 7.23 | 7.20 | 7.29 | 7.69 | | 8.59 | 7.76 | 7.26 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18 | 166 | | | | |
| **FINAL** - 2019 Chinese World Championship Trials (Shenyang, CHN) | | | | | | | | | | | | | | | | *CAA Hurdle Development (2019)* | | | |
| date | 03-Aug-19 | time | 6.28 | 10.20 | 14.22 | 18.38 | 22.66 | | 27.12 | 31.65 | 36.31 | 41.06 | 45.98 | | 51.60 | 8 / ~~5~~ | | | |
| reaction time | 0.256 | interval | | 3.92 | 4.02 | 4.16 | 4.28 | | 4.46 | 4.53 | 4.66 | 4.75 | 4.92 | 5.62 | DQ | | 12.10 | 13.27 | 14.33 |
| | | velocity | 7.17 | 8.93 | 8.71 | 8.41 | 8.18 | | 7.85 | 7.73 | 7.51 | 7.37 | 7.11 | 7.12 | 7.75 | | 8.68 | 7.91 | 7.33 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 14 | 14 | | 14 | 14 | 15 | 15 | 15 | 18.5 | 166.5 | | | | |

**Heat 2** - 2019 Chinese World Championship Trials (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Aug-19 | time | 6.57 | 10.76 | 15.16 | 19.67 | 24.36 | 29.29 | 34.18 | 38.94 | 43.72 | 48.45 | | 53.76 | 5 / 3 | | | |
| reaction time | 0.260 | interval | | 4.19 | 4.40 | 4.51 | 4.69 | 4.93 | 4.89 | 4.76 | 4.78 | 4.73 | 5.31 | | | 13.10 | 14.51 | 14.27 |
| | | velocity | 6.85 | 8.35 | 7.95 | 7.76 | 7.46 | 7.10 | 7.16 | 7.35 | 7.32 | 7.40 | 7.53 | 7.44 | | 8.02 | 7.24 | 7.36 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 17.5 | 167.5 | | | | |

**FINAL** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 10-Jul-19 | time | 6.20 | 10.08 | 14.02 | 18.06 | 22.21 | 26.60 | 31.08 | 35.76 | 40.56 | 45.45 | | 50.99 | 7 / ~~6~~ 5 | | | |
| reaction time | 0.250 | interval | | 3.88 | 3.94 | 4.04 | 4.15 | 4.39 | 4.48 | 4.68 | 4.80 | 4.89 | 5.54 | | | 11.86 | 13.02 | 14.37 |
| | | velocity | 7.26 | 9.02 | 8.88 | 8.66 | 8.43 | 7.97 | 7.81 | 7.48 | 7.29 | 7.16 | 7.22 | 7.84 | | 8.85 | 8.06 | 7.31 |
| H1 lead leg | L | strides | 21 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 17.8 | 165.8 | | | | |

**Heat 1** - 2019 Chinese National Championships (Shenyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 09-Jul-19 | time | 6.20 | 10.09 | 14.08 | 18.22 | 22.43 | 26.78 | 31.20 | 35.75 | 40.46 | 45.33 | | 50.98 | 5 / 3 | | | |
| reaction time | 0.199 | interval | | 3.89 | 3.99 | 4.14 | 4.21 | 4.35 | 4.42 | 4.55 | 4.71 | 4.87 | 5.65 | PB | | 12.02 | 12.98 | 14.13 |
| | | velocity | 7.26 | 9.00 | 8.77 | 8.45 | 8.31 | 8.05 | 7.92 | 7.69 | 7.43 | 7.19 | 7.08 | 7.85 | | 8.74 | 8.09 | 7.43 |
| H1 lead leg | L | strides | 21 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 19 | 169 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 4 (Luoyang, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 29-May-19 | time | 6.42 | 10.46 | | 18.86 | 23.34 | 27.95 | 32.64 | 37.43 | 42.35 | 47.28 | | 52.76 | 8 / 5 | | | |
| reaction time | 0.298 | interval | | 4.04 | | 8.40 | 4.48 | 4.61 | 4.69 | 4.79 | 4.92 | 4.93 | 5.48 | | | 12.44 | 13.78 | 14.64 |
| | | velocity | 7.01 | 8.66 | | 8.33 | 7.81 | 7.59 | 7.46 | 7.31 | 7.11 | 7.10 | 7.30 | 7.58 | | 8.44 | 7.62 | 7.17 |
| H1 lead leg | L | strides | 21 | 14 | | | 14 | 15 | 15 | 15 | 15 | 15 | 18 | 142 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 2 (Huangshi, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 12-Apr-19 | time | 6.48 | 10.54 | 14.82 | 19.22 | 23.76 | 28.38 | 33.26 | 38.18 | 43.28 | 48.48 | | 54.17 | 2 / 6 | | | |
| reaction time | 0.225 | interval | | 4.06 | 4.28 | 4.40 | 4.54 | 4.62 | 4.88 | 4.92 | 5.10 | 5.20 | 5.69 | | | 12.74 | 14.04 | 15.22 |
| | | velocity | 6.94 | 8.62 | 8.18 | 7.95 | 7.71 | 7.58 | 7.17 | 7.11 | 6.86 | 6.73 | 7.03 | 7.38 | | 8.24 | 7.48 | 6.90 |
| H1 lead leg | L | strides | 21 | 16 | 16 | 16 | 16 | 16 | 16 | 15 | 15 | 16 | 19 | 182 | | | | |

**FINAL** - 2019 Chinese National Grand Prix 1 (Zhaoqing, CHN) *CAA Hurdle Development (2019)*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 08-Apr-19 | time | 6.32 | 10.30 | 14.36 | 18.48 | 22.74 | 27.18 | 31.82 | 36.70 | 41.70 | 46.84 | | 52.70 | 4 / 7 | | | |
| reaction time | 0.240 | interval | | 3.98 | 4.06 | 4.12 | 4.26 | 4.44 | 4.64 | 4.88 | 5.00 | 5.14 | 5.86 | | | 12.16 | 13.34 | 15.02 |
| | | velocity | 7.12 | 8.79 | 8.62 | 8.50 | 8.22 | 7.88 | 7.54 | 7.17 | 7.00 | 6.81 | 6.83 | 7.59 | | 8.63 | 7.87 | 6.99 |
| H1 lead leg | L | strides | 21 | 16 | 16 | 16 | 16 | 15 | 15 | 15 | 15 | 15 | 19 | 179 | | | | |

## Zhuang Zhixiong (CHN) (1998)

**Heat 2** - 2021 East China District Meeting (Zhaoqing, CHN) *CAA Hurdle Development (2021)*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 25-Apr-21 | time | 6.39 | 10.51 | 14.76 | 19.15 | 23.64 | 28.33 | 33.22 | 38.25 | 43.56 | 49.03 | 55.17 | 4 / 4 | | | |
| reaction time | 0.199 | interval | | 4.12 | 4.25 | 4.39 | 4.49 | 4.69 | 4.89 | 5.03 | 5.31 | 5.47 | 6.14 | | 12.76 | 14.07 | 15.81 |
| | | velocity | 7.04 | 8.50 | 8.24 | 7.97 | 7.80 | 7.46 | 7.16 | 6.96 | 6.59 | 6.40 | 6.51 | 7.25 | 8.23 | 7.46 | 6.64 |
| H1 lead leg | L | strides | 23 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 17 | 17 | 19.5 | 181.5 | | | |

## Ziegler, Rolf (FRG) (1951)

**FINAL** - 1975 West German National Championships (Gelsenkirchen, FRG) *Helbig (1975) - 400-m-hürdenlauf*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 28-Jun-75 | time | 6.2 | 10.2 | 14.2 | 18.4 | 22.6 | 24.6 | 27.0 | 31.5 | 36.1 | 40.8 | 45.4 | 51.47 | 7 / 4 | | | |
| reaction time | | interval | | 4.06 | 4.01 | 4.14 | 4.19 | | 4.41 | 4.49 | 4.64 | 4.71 | 4.59 | 6.07 | | 12.21 | 13.09 | 13.94 |
| | | velocity | 7.31 | 8.62 | 8.73 | 8.45 | 8.35 | 8.14 | 7.94 | 7.80 | 7.54 | 7.43 | 7.63 | 6.59 | 7.77 | 8.60 | 8.02 | 7.53 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

**Heat 5** - 1972 Olympic Games (Munich, FRG) *Schmidt (1973) - vorolympishces training von john akii-bua über 400 hürden*

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 01-Sep-72 | time | | | | | 21.6 | | | 30.4 | | 44.5 | | 50.17 | 7 / 3 | | | |
| reaction time | | interval | | | | | | | | 8.80 | | 14.10 | 5.67 | | | | | 14.10 |
| | | velocity | | | | | 8.56 | | | 7.95 | | 7.45 | 7.05 | 7.97 | | | | 7.45 |
| H1 lead leg | | strides | | | | | | | | | | | | | | | | |

## Zorin, Yuriy (URS) (1947)

**FINAL** - 1972 Olympic Games (Munich, FRG) *Letzelter (1973) - schrittgestaltung und geschwindigkeitsverlauf beim 400-m-hürdenlauf der olympischen spiele 1972*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 03-Sep-72 | time | 6.0 | 9.8 | 13.5 | 17.4 | 21.4 | | 25.6 | 30.0 | 34.6 | 39.4 | 44.4 | 50.25 | 3 / 8 | | | |
| reaction time | | interval | | 3.75 | 3.75 | 3.90 | 4.00 | | 4.20 | 4.40 | 4.60 | 4.80 | 4.95 | 5.90 | | 11.40 | 12.60 | 14.35 |
| | | velocity | 7.50 | 9.33 | 9.33 | 8.97 | 8.75 | | 8.33 | 7.95 | 7.61 | 7.29 | 7.07 | 6.78 | 7.96 | 9.21 | 8.33 | 7.32 |
| H1 lead leg | L | strides | 20 | 13 | 13 | 13 | 13 | | 13 | 13 | 15 | 15 | 15 | | 143 | | | |

## Zou Haichao (CHN) (2001)

**U20 Heat 2** - 2019 Chinese National Youth Games (Taiyuan, CHN) *CAA Hurdle Development (2019)*

| | H1 | H2 | H3 | H4 | H5 | 200m | H6 | H7 | H8 | H9 | H10 | Run-In | Official Time | Lane / Place | H1-H4 | H4-H7 | H7-H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| date | 17-Aug-19 | time | 6.28 | 10.42 | 14.73 | 19.13 | 23.62 | | 28.23 | 32.89 | 37.72 | 42.91 | 48.34 | 54.46 | 6 / 3 | | | |
| reaction time | 0.181 | interval | | 4.14 | 4.31 | 4.40 | 4.49 | | 4.61 | 4.66 | 4.83 | 5.19 | 5.43 | 6.12 | | 12.85 | 13.76 | 15.45 |
| | | velocity | 7.17 | 8.45 | 8.12 | 7.95 | 7.80 | | 7.59 | 7.51 | 7.25 | 6.74 | 6.45 | 6.54 | 7.34 | 8.17 | 7.63 | 6.80 |
| H1 lead leg | R | strides | 22 | 15 | 15 | 15 | 15 | | 15 | 15 | 15 | 17 | 17 | 19.3 | 180.3 | | | |

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