Women's 100m Hurdles Touchdown Times - by athletics meeting

LAST UPDATE: 12-Nov-23

2023 Prefontaine Classic (Eugene, OR)

FINAL date 17-Sep-23 wind 1.8 m/s

Omega Timing (2023) - diamond league race analysis

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.42	3.44	4.41	5.37	6.30	7.24	8.18	9.14	10.10	11.09		12.33	4 / 1			
reaction time 0.134	interval		1.02	0.97	0.96	0.93	0.94	0.94	0.96	0.96	0.99	1.24			2.95	2.81	2.91
	velocity	5.37	8.33	8.76	8.85	9.14	9.04	9.04	8.85	8.85	8.59	8.10	8.11		8.64	9.07	8.76
Camacho-Quinn, Jasmine (PU	time	2.45	3.47	4.46	5.41	6.35	7.29	8.24	9.20	10.17	11.15		12.38	5 / 2			
reaction time 0.140	interval		1.02	0.99	0.95	0.94	0.94	0.95	0.96	0.97	0.98	1.23			2.96	2.83	2.91
	velocity	5.31	8.33	8.59	8.95	9.04	9.04	8.95	8.85	8.76	8.67	8.17	8.08		8.61	9.01	8.76
Harrison, Kendra (USA) 1992)	time	2.45	3.48	4.47	5.42	6.37	7.31	8.28	9.24	10.22	11.20		12.44	6 / 3			
reaction time 0.166	interval		1.03	0.99	0.95	0.95	0.94	0.97	0.96	0.98	0.98	1.24			2.97	2.86	2.92
	velocity	5.31	8.25	8.59	8.95	8.95	9.04	8.76	8.85	8.67	8.67	8.10	8.04		8.59	8.92	8.73
Williams, Danielle (JAM) (1992	time	2.41	3.44	4.43	5.40	6.36	7.31	8.27	9.25	10.23	11.23		12.47	3 / 4			
reaction time 0.140	interval		1.03	0.99	0.97	0.96	0.95	0.96	0.98	0.98	1.00	1.24			2.99	2.87	2.96
	velocity	5.39	8.25	8.59	8.76	8.85	8.95	8.85	8.67	8.67	8.50	8.10	8.02		8.53	8.89	8.61
Tapper, Megan (JAM) (1994)	time	2.43	3.47	4.46	5.42	6.37	7.32	8.28	9.25	10.24	11.24		12.48	9 / 5			
reaction time 0.148	interval		1.04	0.99	0.96	0.95	0.95	0.96	0.97	0.99	1.00	1.24			2.99	2.86	2.96
	velocity	5.35	8.17	8.59	8.85	8.95	8.95	8.85	8.76	8.59	8.50	8.10	8.01		8.53	8.92	8.61
Johnson, Alaysha (USA) (199(	time	2.43	3.48	4.47	5.44	6.40	7.37	8.34	9.31	10.27	11.26		12.48	7 / 6			
reaction time 0.152	interval		1.05	0.99	0.97	0.96	0.97	0.97	0.97	0.96	0.99	1.22			3.01	2.90	2.92
	velocity	5.35	8.10	8.59	8.76	8.85	8.76	8.76	8.76	8.85	8.59	8.24	8.01		8.47	8.79	8.73
Ali, Nia (USA) (1988)	time	2.44	3.48	4.47	5.45	6.42	7.39	8.36	9.35	10.35	11.36		12.62	2 / 7			
reaction time 0.153	interval		1.04	0.99	0.98	0.97	0.97	0.97	0.99	1.00	1.01	1.26			3.01	2.91	3.00
	velocity	5.33	8.17	8.59	8.67	8.76	8.76	8.76	8.59	8.50	8.42	7.98	7.92		8.47	8.76	8.50
Skrzyszowska, Pia (POL) (2001	time	2.47	3.52	4.54	5.54	6.53	7.51	8.50	9.50	10.51	11.54		12.81	1 / 8			
reaction time 0.140	interval		1.05	1.02	1.00	0.99	0.98	0.99	1.00	1.01	1.03	1.27			3.07	2.96	3.04
	velocity	5.26	8.10	8.33	8.50	8.59	8.67	8.59	8.50	8.42	8.25	7.91	7.81		8.31	8.61	8.39
Jones, Tia (USA) (2000)	time	2.45	3.49	4.49	5.47	6.44	7.41	8.39	9.39	10.40	11.42		12.82	8 / 9			
reaction time 0.140	interval		1.04	1.00	0.98	0.97	0.97	0.98	1.00	1.01	1.02	1.40			3.02	2.92	3.03
	velocity	5.31	8.17	8.50	8.67	8.76	8.76	8.67	8.50	8.42	8.33	7.18	7.80		8.44	8.73	8.42

2023 Xiamen Diamond League (Xiamen, CHN)

National FINAL date 02-Sep-23 wind 0.1 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lin Yuwei (CHN) (1999)	time	2.60	3.64	4.67	5.67	6.67	7.66	8.68	9.70	10.75	11.82		13.00	5 / 1			
reaction time 0.139	interval		1.04	1.03	1.00	1.00	0.99	1.02	1.02	1.05	1.07	1.18			3.07	3.01	3.14
	velocity	5.00	8.17	8.25	8.50	8.50	8.59	8.33	8.33	8.10	7.94	8.52	7.69		8.31	8.47	8.12
Xia Sining (CHN) (2003)	time	2.70	3.77	4.82	5.84	6.87	7.90	8.92	9.94	11.00	12.04		13.19	6 / 2			
reaction time 0.158	interval		1.07	1.05	1.02	1.03	1.03	1.02	1.02	1.06	1.04	1.15			3.14	3.08	3.12
	velocity	4.81	7.94	8.10	8.33	8.25	8.25	8.33	8.33	8.02	8.17	8.74	7.58		8.12	8.28	8.17
Luo Xianyan (CHN) (1997)	time	2.65	3.73	4.77	5.82	6.87	7.91	8.97	10.04	11.12	12.22		13.45	7 / 3			
reaction time 0.158	interval		1.08	1.04	1.05	1.05	1.04	1.06	1.07	1.08	1.10	1.23			3.17	3.15	3.25
	velocity	4.91	7.87	8.17	8.10	8.10	8.17	8.02	7.94	7.87	7.73	8.17	7.43		8.04	8.10	7.85
Zheng Ninali (CHN) (1998)	time	2.65	3.73	4.79	5.81	6.85	7.91	8.97	10.07	11.18	12.31		13.54	2 / 4			
reaction time 0.169	interval		1.08	1.06	1.02	1.04	1.06	1.06	1.10	1.11	1.13	1.23			3.16	3.16	3.34
	velocity	4.91	7.87	8.02	8.33	8.17	8.02	8.02	7.73	7.66	7.52	8.17	7.39		8.07	8.07	7.63
Jiang Liyunzhe (CHN) (2002)	time	2.70	3.78	4.87	5.92	7.00	8.06	9.12	10.21	11.27	12.35		13.54	4 / 5			
reaction time 0.155	interval		1.08	1.09	1.05	1.08	1.06	1.06	1.09	1.06	1.08	1.19			3.22	3.20	3.23
	velocity	4.81	7.87	7.80	8.10	7.87	8.02	8.02	7.80	8.02	7.87	8.45	7.39		7.92	7.97	7.89
Gao Yirong (CHN) (2004)	time	2.67	3.74	4.80	5.87	6.94	7.98	9.07	10.17	11.27	12.44		13.70	8 / 6			
reaction time 0.161	interval		1.07	1.06	1.07	1.07	1.04	1.09	1.10	1.10	1.17	1.26			3.20	3.20	3.37
	velocity	4.87	7.94	8.02	7.94	7.94	8.17	7.80	7.73	7.73	7.26	7.98	7.30		7.97	7.97	7.57
Chen Yanqi (CHN) (2006)	time	2.67	3.77	4.83	5.90	6.97	8.04	9.14	10.24	11.37	12.48		13.74	9 / 7			
reaction time 0.154	interval		1.10	1.06	1.07	1.07	1.07	1.10	1.10	1.13	1.11	1.26	PB		3.23	3.24	3.34
	velocity	4.87	7.73	8.02	7.94	7.94	7.94	7.73	7.73	7.52	7.66	7.98	7.28		7.89	7.87	7.63
Wu Binbin (CHN) (2006)	time	2.70	3.79	4.85	5.94	7.03	8.14	9.24	10.41	11.54	12.71		13.92	3 / 8			
reaction time 0.159	interval		1.09	1.06	1.09	1.09	1.11	1.10	1.17	1.13	1.17	1.21			3.24	3.30	3.47
	velocity	4.81	7.80	8.02	7.80	7.80	7.66	7.73	7.26	7.52	7.26	8.31	7.18		7.87	7.73	7.35

2023 Weltklasse (Zürich, SUI)

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

FINAL

date 31-Aug-23 wind -0.2 m/s

Omega Timing (2023) - diamond league race analysis

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Williams, Danielle (JAM) (1992		time	2.37	3.40	4.38	5.35	6.32	7.29	8.27	9.27	10.28	11.30		12.54	3 / 1			
reaction time 0.122		interval		1.03	0.98	0.97	0.97	0.97	0.98	1.00	1.01	1.02	1.24			2.98	2.92	3.03
		velocity	5.49	8.25	8.67	8.76	8.76	8.76	8.67	8.50	8.42	8.33	8.10	7.97		8.56	8.73	8.42
Johnson, Alaysha (USA) (199(		time	2.46	3.51	4.50	5.46	6.42	7.38	8.35	9.35	10.35	11.36		12.58	7 / 2			
reaction time 0.151		interval		1.05	0.99	0.96	0.96	0.96	0.97	1.00	1.00	1.01	1.22			3.00	2.89	3.01
		velocity	5.28	8.10	8.59	8.85	8.85	8.85	8.76	8.50	8.50	8.42	8.24	7.95		8.50	8.82	8.47
Harrison, Kendra (USA) 1992)		time	2.42	3.46	4.46	5.44	6.40	7.36	8.33	9.32	10.33	11.34		12.59	5 / 3			
reaction time 0.145		interval		1.04	1.00	0.98	0.96	0.96	0.97	0.99	1.01	1.01	1.25			3.02	2.89	3.01
		velocity	5.37	8.17	8.50	8.67	8.85	8.85	8.76	8.59	8.42	8.42	8.04	7.94		8.44	8.82	8.47
Jones, Tia (USA) (2000)		time	2.47	3.51	4.49	5.46	6.42	7.38	8.35	9.34	10.35	11.36		12.62	6 / 4			
reaction time 0.150		interval		1.04	0.98	0.97	0.96	0.96	0.97	0.99	1.01	1.01	1.26			2.99	2.89	3.01
		velocity	5.26	8.17	8.67	8.76	8.85	8.85	8.76	8.59	8.42	8.42	7.98	7.92		8.53	8.82	8.47
Tapper, Megan (JAM) (1994)		time	2.43	3.46	4.45	5.42	6.39	7.35	8.34	9.34	10.36	11.39		12.64	8 / 5			
reaction time 0.150		interval		1.03	0.99	0.97	0.97	0.96	0.99	1.00	1.02	1.03	1.25			2.99	2.92	3.05
		velocity	5.35	8.25	8.59	8.76	8.76	8.85	8.59	8.50	8.33	8.25	8.04	7.91		8.53	8.73	8.36
Kambundji, Ditaji (SUI) (2002)		time	2.44	3.48	4.47	5.44	6.42	7.40	8.38	9.37	10.39	11.45		12.73	2 / 6			
reaction time 0.122		interval		1.04	0.99	0.97	0.98	0.98	0.98	0.99	1.02	1.06	1.28			3.00	2.94	3.07
		velocity	5.33	8.17	8.59	8.76	8.67	8.67	8.67	8.59	8.33	8.02	7.85	7.86		8.50	8.67	8.31
Ali, Nia (USA) (1988)		time	2.45	3.50	4.50	5.49	6.47	7.45	8.43	9.42	10.44	11.47		12.75	4 / 7			
reaction time 0.165		interval		1.05	1.00	0.99	0.98	0.98	0.98	0.99	1.02	1.03	1.28			3.04	2.94	3.04
		velocity	5.31	8.10	8.50	8.59	8.67	8.67	8.67	8.59	8.33	8.25	7.85	7.84		8.39	8.67	8.39
Charlton, Devynne (BAH) (19!		time	2.43	3.47	4.48	5.46	6.44	7.42	8.40	9.41	10.44	11.49		12.75	1 / 8			
reaction time 0.152		interval		1.04	1.01	0.98	0.98	0.98	0.98	1.01	1.03	1.05	1.26			3.03	2.94	3.09
		velocity	5.35	8.17	8.42	8.67	8.67	8.67	8.67	8.42	8.25	8.10	7.98	7.84		8.42	8.67	8.25
Skrzyszowska, Pia (POL) (2001		time	2.45	3.50	4.54	5.53	6.52	7.51	8.52	9.54	10.59	11.68		13.10	9 / 9			
reaction time 0.134		interval		1.05	1.04	0.99	0.99	0.99	1.01	1.02	1.05	1.09	1.42			3.08	2.99	3.16
		velocity	5.31	8.10	8.17	8.59	8.59	8.59	8.42	8.33	8.10	7.80	7.08	7.63		8.28	8.53	8.07

2023 World Athletics Championships (Budapest, HUN) (TV Analysis)

FINAL

date 24-Aug-23 wind -0.2 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Williams, Danielle (JAM) (1992		time	2.48	3.46	4.44	5.40	6.36	7.32	8.28	9.26	10.24	11.24		12.43	2 / 1			
reaction time 0.132		interval		0.98	0.98	0.96	0.96	0.96	0.96	0.98	0.98	1.00	1.19			2.92	2.88	2.96
		velocity	5.24	8.67	8.67	8.85	8.85	8.85	8.85	8.67	8.67	8.50	8.45	8.05		8.73	8.85	8.61
Camacho-Quinn, Jasmine (PU		time	2.52	3.52	4.52	5.48	6.42	7.36	8.30	9.28	10.26	11.26		12.44	7 / 2			
reaction time 0.164		interval		1.00	1.00	0.96	0.94	0.94	0.94	0.98	0.98	1.00	1.18			2.96	2.82	2.96
		velocity	5.16	8.50	8.50	8.85	9.04	9.04	9.04	8.67	8.67	8.50	8.52	8.04		8.61	9.04	8.61
Harrison, Kendra (USA) 1992)		time	2.52	3.52	4.52	5.46	6.42	7.36	8.32	9.30	10.28	11.30		12.46	4 / 3			
reaction time 0.155		interval		1.00	1.00	0.94	0.96	0.94	0.96	0.98	0.98	1.02	1.16			2.94	2.86	2.98
		velocity	5.16	8.50	8.50	9.04	8.85	9.04	8.85	8.67	8.67	8.33	8.66	8.03		8.67	8.92	8.56
Charlton, Devynne (BAH) (19!		time	2.44	3.48	4.46	5.44	6.42	7.38	8.34	9.34	10.34	11.36		12.52	6 / 4			
reaction time 0.149		interval		1.04	0.98	0.98	0.98	0.96	0.96	1.00	1.00	1.02	1.16			3.00	2.90	3.02
		velocity	5.33	8.17	8.67	8.67	8.67	8.85	8.85	8.50	8.50	8.33	8.66	7.99		8.50	8.79	8.44
Nugent, Ackera (JAM) (2002)		time	2.52	3.52	4.50	5.46	6.42	7.40	8.36	9.36	10.40	11.44		12.61	8 / 5			
reaction time 0.135		interval		1.00	0.98	0.96	0.96	0.98	0.96	1.00	1.04	1.04	1.17			2.94	2.90	3.08
		velocity	5.16	8.50	8.67	8.85	8.85	8.67	8.85	8.50	8.17	8.17	8.59	7.93		8.67	8.79	8.28
Amusan, Tobi (NGR) (1997)		time	2.50	3.52	4.50	5.48	6.44	7.42	8.40	9.42	10.44	11.48		12.62	5 / 6			
reaction time 0.152		interval		1.02	0.98	0.98	0.96	0.98	0.98	1.02	1.02	1.04	1.14			2.98	2.92	3.08
		velocity	5.20	8.33	8.67	8.67	8.85	8.67	8.67	8.33	8.33	8.17	8.82	7.92		8.56	8.73	8.28
Kambundji, Ditaji (SUI) (2002)		time	2.52	3.54	4.54	5.54	6.52	7.50	8.50	9.50	10.50	11.54		12.70	9 / 7			
reaction time 0.140		interval		1.02	1.00	1.00	0.98	0.98	1.00	1.00	1.00	1.04	1.16			3.02	2.96	3.04
		velocity	5.16	8.33	8.50	8.50	8.67	8.67	8.50	8.50	8.50	8.17	8.66	7.87		8.44	8.61	8.39
Ali, Nia (USA) (1988)		time	2.48	3.56	4.58	5.60	6.60	7.58	8.58	9.58	10.58	11.62		12.78	3 / 8			
reaction time 0.159		interval		1.08	1.02	1.02	1.00	0.98	1.00	1.00	1.00	1.04	1.16			3.12	2.98	3.04
		velocity	5.24	7.87	8.33	8.33	8.50	8.67	8.50	8.50	8.50	8.17	8.66	7.82		8.17	8.56	8.39

Semi-Final 3

date 23-Aug-23 wind -0.4 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU		time	2.50	3.54	4.54	5.49	6.42	7.38	8.34	9.30	10.28	11.28		12.41	5 / 1			
reaction time 0.138		interval		1.04	1.00	0.95	0.93	0.96	0.96	0.96	0.98	1.00	1.13			2.99	2.85	2.94

	velocity	5.20	8.17	8.50	8.95	9.14	8.85	8.85	8.85	8.67	8.50	8.89	8.06		8.53	8.95	8.67
Ali, Nia (USA) (1988)	time	2.53	3.53	4.52	5.49	6.45	7.42	8.39	9.37	10.35	11.35		12.49	6 / 2			
reaction time 0.156	interval		1.00	0.99	0.97	0.96	0.97	0.97	0.98	0.98	1.00	1.14			2.96	2.90	2.96
	velocity	5.14	8.50	8.59	8.76	8.85	8.76	8.76	8.67	8.67	8.50	8.82	8.01		8.61	8.79	8.61
Williams, Danielle (JAM) (1992	time	2.51	3.50	4.48	5.44	6.40	7.38	8.35	9.34	10.34	11.36		12.50	4 / 3			
reaction time 0.133	interval		0.99	0.98	0.96	0.96	0.98	0.97	0.99	1.00	1.02	1.14			2.93	2.91	3.01
	velocity	5.18	8.59	8.67	8.85	8.85	8.67	8.76	8.59	8.50	8.33	8.82	8.00		8.70	8.76	8.47
Skrzyszowska, Pia (POL) (2001	time	2.53	3.54	4.55	5.50	6.48	7.45	8.42	9.39	10.41	11.48		12.71	7 / 4			
reaction time 0.136	interval		1.01	1.01	0.95	0.98	0.97	0.97	0.97	1.02	1.07	1.23			2.97	2.92	3.06
	velocity	5.14	8.42	8.42	8.95	8.67	8.76	8.76	8.76	8.33	7.94	8.17	7.87		8.59	8.73	8.33
Jenneke, Michelle (AUS) (1993	time	2.55	3.57	4.57	5.55	6.54	7.52	8.52	9.52	10.54	11.58		12.80	3 / 5			
reaction time 0.146	interval		1.02	1.00	0.98	0.99	0.98	1.00	1.00	1.02	1.04	1.22			3.00	2.97	3.06
	velocity	5.10	8.33	8.50	8.67	8.59	8.67	8.50	8.50	8.33	8.17	8.24	7.81		8.50	8.59	8.33
Fourie, Marione (RSA) (2002)	time	2.60	3.62	4.64	5.64	6.64	7.62	8.64	9.64	10.67	11.74		12.89	8 / 6			
reaction time 0.158	interval		1.02	1.02	1.00	1.00	0.98	1.02	1.00	1.03	1.07	1.15			3.04	3.00	3.10
	velocity	5.00	8.33	8.33	8.50	8.50	8.67	8.33	8.50	8.25	7.94	8.74	7.76		8.39	8.50	8.23
Graversgaard, Mette (DEN) (19	time	2.60	3.64	4.66	5.64	6.66	7.66	8.65	9.66	10.70	11.78		12.94	9 / 7			
reaction time 0.163	interval		1.04	1.02	0.98	1.02	1.00	0.99	1.01	1.04	1.08	1.16			3.04	3.01	3.13
	velocity	5.00	8.17	8.33	8.67	8.33	8.50	8.59	8.42	8.17	7.87	8.66	7.73		8.39	8.47	8.15
Harrison, Michelle (CAN) (199	time	2.67	3.67	4.69	5.70	6.70	7.72	8.72	9.74	10.78	11.82		13.05	2 / 8			
reaction time 0.158	interval		1.00	1.02	1.01	1.00	1.02	1.00	1.02	1.04	1.04	1.23			3.03	3.02	3.10
	velocity	4.87	8.50	8.33	8.42	8.50	8.33	8.50	8.33	8.17	8.17	8.17	7.66		8.42	8.44	8.23

Semi-Final 2

date 23-Aug-23 wind -0.7 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.53	3.57	4.52	5.48	6.44	7.42	8.40	9.38	10.40	11.42		12.56	7 / 1			
reaction time 0.155	interval		1.04	0.95	0.96	0.96	0.98	0.98	0.98	1.02	1.02	1.14			2.95	2.92	3.02
	velocity	5.14	8.17	8.95	8.85	8.85	8.67	8.67	8.67	8.33	8.33	8.82	7.96		8.64	8.73	8.44
Nugent, Ackera (JAM) (2002)	time	2.50	3.50	4.48	5.45	6.42	7.38	8.36	9.32	10.32	11.40		12.60	5 / 2			
reaction time 0.130	interval		1.00	0.98	0.97	0.97	0.96	0.98	0.96	1.00	1.08	1.20			2.95	2.91	3.04
	velocity	5.20	8.50	8.67	8.76	8.76	8.85	8.67	8.85	8.50	7.87	8.38	7.94		8.64	8.76	8.39
Visser, Nadine (NED) (1995)	time	2.53	3.57	4.55	5.52	6.49	7.45	8.42	9.41	10.41	11.46		12.64	6 / 3			
reaction time 0.131	interval		1.04	0.98	0.97	0.97	0.96	0.97	0.99	1.00	1.05	1.18			2.99	2.90	3.04
	velocity	5.14	8.17	8.67	8.76	8.76	8.85	8.76	8.59	8.50	8.10	8.52	7.91		8.53	8.79	8.39
Kozák, Luca (HUN) (1996)	time	2.53	3.57	4.57	5.55	6.53	7.51	8.51	9.49	10.51	11.54		12.73	3 / 4			
reaction time 0.142	interval		1.04	1.00	0.98	0.98	0.98	1.00	0.98	1.02	1.03	1.19			3.02	2.96	3.03
	velocity	5.14	8.17	8.50	8.67	8.67	8.67	8.50	8.67	8.33	8.25	8.45	7.86		8.44	8.61	8.42
Samba-Mayela, Cyréna (FRA)	time	2.53	3.56	4.57	5.55	6.54	7.52	8.55	9.61	10.65	11.73		12.95	8 / 5			
reaction time 0.170	interval		1.03	1.01	0.98	0.99	0.98	1.03	1.06	1.04	1.08	1.22			3.02	3.00	3.18
	velocity	5.14	8.25	8.42	8.67	8.59	8.67	8.25	8.02	8.17	7.87	8.24	7.72		8.44	8.50	8.02
Mucci, Celeste (AUS) (1999)	time	2.60	3.63	4.65	5.65	6.64	7.64	8.64	9.67	10.71	11.76		12.97	2 / 6			
reaction time 0.175	interval		1.03	1.02	1.00	0.99	1.00	1.00	1.03	1.04	1.05	1.21			3.05	2.99	3.12
	velocity	5.00	8.25	8.33	8.50	8.59	8.50	8.50	8.25	8.17	8.10	8.31	7.71		8.36	8.53	8.17
Hurske, Reetta (FIN) (1995)	time	2.53	3.57	4.59	5.61	6.61	7.64	8.67	9.70	10.74	11.82		13.05	9 / 7			
reaction time 0.137	interval		1.04	1.02	1.02	1.00	1.03	1.03	1.03	1.04	1.08	1.23			3.08	3.06	3.15
	velocity	5.14	8.17	8.33	8.33	8.50	8.25	8.25	8.25	8.17	7.87	8.17	7.66		8.28	8.33	8.10
Russell, Masai (USA) (2000)	time	2.46	3.48	4.57	5.84	7.05							dnf	4 / --			
reaction time 0.152	interval		1.02	1.09	1.27	1.21									3.38		
	velocity	5.28	8.33	7.80	6.69	7.02									7.54		

Semi-Final 1

date 23-Aug-23 wind 0.5 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) 1992)	time	2.50	3.48	4.45	5.39	6.32	7.25	8.21	9.18	10.15	11.15		12.33	7 / 1			
reaction time 0.142	interval		0.98	0.97	0.94	0.93	0.93	0.96	0.97	0.97	1.00	1.18			2.89	2.82	2.94
	velocity	5.20	8.67	8.76	9.04	9.14	9.14	8.85	8.76	8.76	8.50	8.52	8.11		8.82	9.04	8.67
Charlton, Devynne (BAH) (19	time	2.50	3.50	4.48	5.44	6.39	7.36	8.34	9.31	10.32	11.34		12.49	6 / 2			
reaction time 0.177	interval		1.00	0.98	0.96	0.95	0.97	0.98	0.97	1.01	1.02	1.15			2.94	2.90	3.00
	velocity	5.20	8.50	8.67	8.85	8.95	8.76	8.67	8.76	8.42	8.33	8.74	8.01		8.67	8.79	8.50
Kambundji, Ditaji (SUI) (2002)	time	2.53	3.53	4.51	5.47	6.45	7.42	8.40	9.37	10.35	11.37		12.50	3 / 3			
reaction time 0.141	interval		1.00	0.98	0.96	0.98	0.97	0.98	0.97	0.98	1.02	1.13			2.94	2.93	2.97
	velocity	5.14	8.50	8.67	8.85	8.67	8.76	8.67	8.76	8.67	8.33	8.89	8.00		8.67	8.70	8.59

Tapper, Megan (JAM) (1994)	time	2.53	3.53	4.52	5.48	6.44	7.40	8.38	9.37	10.37	11.40		12.55	5 / 4			
reaction time 0.162	interval		1.00	0.99	0.96	0.96	0.96	0.98	0.99	1.00	1.03	1.15			2.95	2.90	3.02
	velocity	5.14	8.50	8.59	8.85	8.85	8.85	8.67	8.59	8.50	8.25	8.74	7.97		8.64	8.79	8.44
Lavin, Sarah (IRL) (1994)	time	2.57	3.57	4.57	5.54	6.50	7.47	8.45	9.42	10.45	11.48		12.62	4 / 5			
reaction time 0.139	interval		1.00	1.00	0.97	0.96	0.97	0.98	0.97	1.03	1.03	1.14	NR		2.97	2.91	3.03
	velocity	5.06	8.50	8.50	8.76	8.85	8.76	8.67	8.76	8.25	8.25	8.82	7.92		8.59	8.76	8.42
Sember, Cindy (GBR) (1994)	time	2.60	3.62	4.62	5.60	6.64	7.62	8.62	9.64	10.69	11.75		12.97	8 / 6			
reaction time 0.167	interval		1.02	1.00	0.98	1.04	0.98	1.00	1.02	1.05	1.06	1.22			3.00	3.02	3.13
	velocity	5.00	8.33	8.50	8.67	8.17	8.67	8.50	8.33	8.10	8.02	8.24	7.71		8.50	8.44	8.15
Tjin-A-Lim, Maayke (NED) (19	time	2.57	3.60	4.63	5.63	6.64	7.66	8.68	9.72	10.76	11.82		13.05	2 / 7			
reaction time 0.135	interval		1.03	1.03	1.00	1.01	1.02	1.02	1.04	1.04	1.06	1.23			3.06	3.05	3.14
	velocity	5.06	8.25	8.25	8.50	8.42	8.33	8.33	8.17	8.17	8.02	8.17	7.66		8.33	8.36	8.12
Christofi, Natalia (CYP) (1997)	time	2.60	3.64	4.64	5.64	6.64	7.67	8.68	9.72	10.76	11.82		13.15	9 / 8			
reaction time 0.155	interval		1.04	1.00	1.00	1.00	1.03	1.01	1.04	1.04	1.06	1.33			3.04	3.04	3.14
	velocity	5.00	8.17	8.50	8.50	8.50	8.25	8.42	8.17	8.17	8.02	7.56	7.60		8.39	8.39	8.12

Heat 5

date 22-Aug-23 wind 0.4 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.54	3.55	4.54	5.52	6.47	7.41	8.38	9.34	10.34	11.35		12.48	4 / 1			
reaction time 0.149	interval		1.01	0.99	0.98	0.95	0.94	0.97	0.96	1.00	1.01	1.13			2.98	2.86	2.97
	velocity	5.12	8.42	8.59	8.67	8.95	9.04	8.76	8.85	8.50	8.42	8.89	8.01		8.56	8.92	8.59
Tapper, Megan (JAM) (1994)	time	2.58	3.58	4.56	5.53	6.50	7.45	8.42	9.38	10.36	11.41		12.51	3 / 2			
reaction time 0.168	interval		1.00	0.98	0.97	0.97	0.95	0.97	0.96	0.98	1.05	1.10			2.95	2.89	2.99
	velocity	5.04	8.50	8.67	8.76	8.76	8.95	8.76	8.85	8.67	8.10	9.14	7.99		8.64	8.82	8.53
Jenneke, Michelle (AUS) (1993	time	2.53	3.55	4.53	5.52	6.51	7.48	8.48	9.47	10.48	11.52		12.71	5 / 3			
reaction time 0.156	interval		1.02	0.98	0.99	0.99	0.97	1.00	0.99	1.01	1.04	1.19			2.99	2.96	3.04
	velocity	5.14	8.33	8.67	8.59	8.59	8.76	8.50	8.59	8.42	8.17	8.45	7.87		8.53	8.61	8.39
Christofi, Natalia (CYP) (1997)	time	2.58	3.63	4.65	5.64	6.63	7.60	8.60	9.65	10.68	11.73		12.90	7 / 4			
reaction time 0.147	interval		1.05	1.02	0.99	0.99	0.97	1.00	1.05	1.03	1.05	1.17			3.06	2.96	3.13
	velocity	5.04	8.10	8.33	8.59	8.59	8.76	8.50	8.10	8.25	8.10	8.59	7.75		8.33	8.61	8.15
Tjin-A-Lim, Maayke (NED) (19	time	2.56	3.63	4.63	5.65	6.65	7.65	8.65	9.68	10.70	11.75		12.92	2 / 5			
reaction time 0.155	interval		1.07	1.00	1.02	1.00	1.00	1.00	1.03	1.02	1.05	1.17			3.09	3.00	3.10
	velocity	5.08	7.94	8.50	8.33	8.50	8.50	8.50	8.25	8.33	8.10	8.59	7.74		8.25	8.50	8.23

Heat 4

date 22-Aug-23 wind 0.0 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.52	3.56	4.54	5.51	6.47	7.44	8.40	9.35	10.35	11.35		12.50	9 / 1			
reaction time 0.160	interval		1.04	0.98	0.97	0.96	0.97	0.96	0.95	1.00	1.00	1.15			2.99	2.89	2.95
	velocity	5.16	8.17	8.67	8.76	8.85	8.76	8.85	8.95	8.50	8.50	8.74	8.00		8.53	8.82	8.64
Visser, Nadine (NED) (1995)	time	2.56	3.58	4.56	5.54	6.51	7.49	8.47	9.47	10.47	11.50		12.68	4 / 2			
reaction time 0.146	interval		1.02	0.98	0.98	0.97	0.98	0.98	1.00	1.00	1.03	1.18			2.98	2.93	3.03
	velocity	5.08	8.33	8.67	8.67	8.76	8.67	8.67	8.50	8.50	8.25	8.52	7.89		8.56	8.70	8.42
Kambundji, Ditaji (SUI) (2002)	time	2.55	3.55	4.55	5.56	6.54	7.52	8.50	9.52	10.53	11.56		12.71	2 / 3			
reaction time 0.145	interval		1.00	1.00	1.01	0.98	0.98	0.98	1.02	1.01	1.03	1.15			3.01	2.94	3.06
	velocity	5.10	8.50	8.50	8.42	8.67	8.67	8.67	8.33	8.42	8.25	8.74	7.87		8.47	8.67	8.33
Mucci, Celeste (AUS) (1999)	time	2.56	3.64	4.67	5.65	6.65	7.65	8.67	9.68	10.70	11.73		12.90	3 / 4			
reaction time 0.171	interval		1.08	1.03	0.98	1.00	1.00	1.02	1.01	1.02	1.03	1.17			3.09	3.02	3.06
	velocity	5.08	7.87	8.25	8.67	8.50	8.50	8.33	8.42	8.33	8.25	8.59	7.75		8.25	8.44	8.33

Heat 3

date 22-Aug-23 wind 0.1 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) 1992)	time	2.50	3.47	4.44	5.39	6.31	7.26	8.21	9.15	10.12	11.11		12.24	4 / 1			
reaction time 0.155			0.97	0.97	0.95	0.92	0.95	0.95	0.94	0.97	0.99	1.13			2.89	2.82	2.90
	velocity	5.20	8.76	8.76	8.95	9.24	8.95	8.95	9.04	8.76	8.59	8.89	8.17		8.82	9.04	8.79
Charlton, Devynne (BAH) (19	time	2.50	3.49	4.46	5.43	6.39	7.34	8.30	9.28	10.26	11.30		12.44	9 / 2			
reaction time 0.159	interval		0.99	0.97	0.97	0.96	0.95	0.96	0.98	0.98	1.04	1.14	NR		2.93	2.87	3.00
	velocity	5.20	8.59	8.76	8.76	8.85	8.95	8.85	8.67	8.67	8.17	8.82	8.04		8.70	8.89	8.50
Williams, Danielle (JAM) (1992	time	2.50	3.47	4.44	5.41	6.37	7.34	8.30	9.28	10.28	11.32		12.51	3 / 3			
reaction time 0.116	interval		0.97	0.97	0.97	0.96	0.97	0.96	0.98	1.00	1.04	1.19			2.91	2.89	3.02
	velocity	5.20	8.76	8.76	8.76	8.85	8.76	8.85	8.67	8.50	8.17	8.45	7.99		8.76	8.82	8.44
Sember, Cindy (GBR) (1994)	time	2.60	3.64	4.64	5.62	6.60	7.59	8.58	9.58	10.60	11.63		12.83	8 / 4			
reaction time 0.173	interval		1.04	1.00	0.98	0.98	0.99	0.99	1.00	1.02	1.03	1.20			3.02	2.96	3.05
	velocity	5.00	8.17	8.50	8.67	8.67	8.59	8.59	8.50	8.33	8.25	8.38	7.79		8.44	8.61	8.36

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Hurske, Reetta (FIN) (1995)		time	2.53	3.54	4.56	5.57	6.56	7.56	8.57	9.60	10.64	11.71		12.92	1 / 5			
reaction time 0.140		interval		1.01	1.02	1.01	0.99	1.00	1.01	1.03	1.04	1.07	1.21			3.04	3.00	3.14
		velocity	5.14	8.42	8.33	8.42	8.59	8.50	8.42	8.25	8.17	7.94	8.31	7.74		8.39	8.50	8.12

Heat 2

date 22-Aug-23 wind 0.0 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ali, Nia (USA) (1988)		time	2.54	3.54	4.54	5.53	6.50	7.48	8.46	9.46	10.45	11.43		12.55	5 / 1			
reaction time 0.142		interval		1.00	1.00	0.99	0.97	0.98	0.98	1.00	0.99	0.98	1.12			2.99	2.93	2.97
		velocity	5.12	8.50	8.50	8.59	8.76	8.67	8.67	8.50	8.59	8.67	8.97	7.97		8.53	8.70	8.59
Skrzyszowska, Pia (POL) (2001		time	2.56	3.60	4.60	5.58	6.56	7.54	8.53	9.53	10.53	11.52		12.65	4 / 2			
reaction time 0.142		interval		1.04	1.00	0.98	0.98	0.98	0.99	1.00	1.00	0.99	1.13			3.02	2.95	2.99
		velocity	5.08	8.17	8.50	8.67	8.67	8.67	8.59	8.50	8.50	8.59	8.89	7.91		8.44	8.64	8.53
Fourie, Marione (RSA) (2002)		time	2.56	3.57	4.58	5.56	6.56	7.55	8.53	9.53	10.53	11.56		12.71	2 / 3			
reaction time 0.164		interval		1.01	1.01	0.98	1.00	0.99	0.98	1.00	1.00	1.03	1.15			3.00	2.97	3.03
		velocity	5.08	8.42	8.42	8.67	8.50	8.59	8.67	8.50	8.50	8.25	8.74	7.87		8.50	8.59	8.42
Kozák, Luca (HUN) (1996)		time	2.58	3.62	4.61	5.61	6.58	7.58	8.56	9.54	10.55	11.58		12.71	6 / 3			
reaction time 0.149		interval		1.04	0.99	1.00	0.97	1.00	0.98	0.98	1.01	1.03	1.13			3.03	2.95	3.02
		velocity	5.04	8.17	8.59	8.50	8.76	8.50	8.67	8.67	8.42	8.25	8.89	7.87		8.42	8.64	8.44

Heat 1

date 22-Aug-23 wind 0.1 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nugent, Ackera (JAM) (2002)		time	2.54	3.55	4.50	5.46	6.42	7.42	8.40	9.42	10.43	11.46		12.60	7 / 1			
reaction time 0.134		interval		1.01	0.95	0.96	0.96	1.00	0.98	1.02	1.01	1.03	1.14			2.92	2.94	3.06
		velocity	5.12	8.42	8.95	8.85	8.85	8.50	8.67	8.33	8.42	8.25	8.82	7.94		8.73	8.67	8.33
Russell, Masai (USA) (2000)		time	2.50	3.53	4.55	5.52	6.47	7.43	8.40	9.42	10.42	11.43		12.60	6 / 2			
reaction time 0.164		interval		1.03	1.02	0.97	0.95	0.96	0.97	1.02	1.00	1.01	1.17			3.02	2.88	3.03
		velocity	5.20	8.25	8.33	8.76	8.95	8.85	8.76	8.33	8.50	8.42	8.59	7.94		8.44	8.85	8.42
Lavin, Sarah (IRL) (1994)		time	2.60	3.60	4.60	5.58	6.56	7.56	8.55	9.54	10.53	11.56		12.69	2 / 3			
reaction time 0.139		interval		1.00	1.00	0.98	0.98	1.00	0.99	0.99	0.99	1.03	1.13			2.98	2.97	3.01
		velocity	5.00	8.50	8.50	8.67	8.67	8.50	8.59	8.59	8.59	8.25	8.89	7.88		8.56	8.59	8.47
Samba-Mayela, Cyréna (FRA)		time	2.50	3.53	4.55	5.53	6.48	7.46	8.45	9.46	10.48	11.53		12.71	9 / 4			
reaction time 0.144		interval		1.03	1.02	0.98	0.95	0.98	0.99	1.01	1.02	1.05	1.18			3.03	2.92	3.08
		velocity	5.20	8.25	8.33	8.67	8.95	8.67	8.59	8.42	8.33	8.10	8.52	7.87		8.42	8.73	8.28
Graversgaard, Mette (DEN) (1!		time	2.60	3.63	4.65	5.65	6.63	7.62	8.62	9.63	10.65	11.67		12.87	5 / 5			
reaction time 0.166		interval		1.03	1.02	1.00	0.98	0.99	1.00	1.01	1.02	1.02	1.20			3.05	2.97	3.05
		velocity	5.00	8.25	8.33	8.50	8.67	8.59	8.50	8.42	8.33	8.33	8.38	7.77		8.36	8.59	8.36
Harrison, Michelle (CAN) (199!		time	2.63	3.63	4.63	5.63	6.62	7.62	8.61	9.63	10.63	11.67		12.88	8 / 6			
reaction time 0.152		interval		1.00	1.00	1.00	0.99	1.00	0.99	1.02	1.00	1.04	1.21			3.00	2.98	3.06
		velocity	4.94	8.50	8.50	8.50	8.59	8.50	8.59	8.33	8.50	8.17	8.31	7.76		8.50	8.56	8.33

2023 Herculis Meeting International d'Athlétisme (Monaco, MON)

FINAL

date 21-Jul-23 wind 0.6 m/s

Omega Timing (2023) - diamond league race analysis

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ali, Nia (USA) (1988)		time	2.40	3.42	4.39	5.35	6.30	7.25	8.20	9.15	10.13	11.11		12.30	5 / 1			
reaction time 0.153		interval		1.02	0.97	0.96	0.95	0.95	0.95	0.95	0.98	0.98	1.19	PB		2.95	2.85	2.91
		velocity	5.42	8.33	8.76	8.85	8.95	8.95	8.95	8.95	8.67	8.67	8.45	8.13		8.64	8.95	8.76
Harrison, Kendra (USA) 1992)		time	2.42	3.44	4.42	5.36	6.30	7.24	8.18	9.13	10.10	11.09		12.31	4 / 2			
reaction time 0.165		interval		1.02	0.98	0.94	0.94	0.94	0.94	0.95	0.97	0.99	1.22			2.94	2.82	2.91
		velocity	5.37	8.33	8.67	9.04	9.04	9.04	9.04	8.95	8.76	8.59	8.24	8.12		8.67	9.04	8.76
Johnson, Alaysha (USA) (199(		time	2.46	3.50	4.51	5.47	6.43	7.38	8.33	9.28	10.24	11.22		12.39	2 / 3			
reaction time 0.172		interval		1.04	1.01	0.96	0.96	0.95	0.95	0.95	0.96	0.98	1.17			3.01	2.86	2.89
		velocity	5.28	8.17	8.42	8.85	8.85	8.95	8.95	8.95	8.85	8.67	8.59	8.07		8.47	8.92	8.82
Jones, Tia (USA) (2000)		time	2.43	3.45	4.43	5.38	6.33	7.28	8.24	9.20	10.17	11.17		12.39	7 / 4			
reaction time 0.156		interval		1.02	0.98	0.95	0.95	0.95	0.96	0.96	0.97	1.00	1.22			2.95	2.86	2.93
		velocity	5.35	8.33	8.67	8.95	8.95	8.95	8.85	8.85	8.76	8.50	8.24	8.07		8.64	8.92	8.70
Skrzyszowska, Pia (POL) (2001		time	2.43	3.46	4.45	5.42	6.38	7.34	8.30	9.29	10.33	11.41		12.68	3 / 5			
reaction time 0.125		interval		1.03	0.99	0.97	0.96	0.96	0.96	0.99	1.04	1.08	1.27			2.99	2.88	3.11
		velocity	5.35	8.25	8.59	8.76	8.85	8.85	8.85	8.59	8.17	7.87	7.91	7.89		8.53	8.85	8.20
Bapté, Laeticia (FRA) (1999)		time	2.45	3.50	4.50	5.48	6.46	7.44	8.44	9.43	10.45	11.48		12.73	1 / 6			
reaction time 0.153		interval	7 steps	1.05	1.00	0.98	0.98	0.98	1.00	0.99	1.02	1.03	1.25	PB		3.03	2.96	3.04
		velocity	5.31	8.10	8.50	8.67	8.67	8.67	8.50	8.59	8.33	8.25	8.04	7.86		8.42	8.61	8.39
Lavin, Sarah (IRL) (1994)		time	2.51	3.57	4.57	5.55	6.53	7.51	8.50	9.49	10.50	11.51		12.74	6 / 7			

reaction time 0.156	interval		1.06	1.00	0.98	0.98	0.98	0.99	0.99	1.01	1.01	1.23			3.04	2.95	3.01
	velocity	5.18	8.02	8.50	8.67	8.67	8.67	8.59	8.59	8.42	8.42	8.17	7.85		8.39	8.64	8.47
Carraro, Elena (ITA) (2001)	time	2.56	3.63	4.68	5.69	6.70	7.72	8.76	9.82	10.91	11.99		13.28	8 / 8			
reaction time 0.172	interval		1.07	1.05	1.01	1.01	1.02	1.04	1.06	1.09	1.08	1.29			3.13	3.07	3.23
	velocity	5.08	7.94	8.10	8.42	8.42	8.33	8.17	8.02	7.80	7.87	7.79	7.53		8.15	8.31	7.89

2023 Kamila Skolimowska Memorial (Silesia, POL)

FINAL date 16-Jul-23 wind 0.9 m/s

Omega Timing (2023) - diamond league race analysis

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.43	3.46	4.44	5.39	6.33	7.27	8.22	9.19	10.15	11.14		12.34	5 / 1			
reaction time 0.146	interval		1.03	0.98	0.95	0.94	0.94	0.95	0.97	0.96	0.99	1.20			2.96	2.83	2.92
	velocity	5.35	8.25	8.67	8.95	9.04	9.04	8.95	8.76	8.85	8.59	8.38	8.10		8.61	9.01	8.73
Harrison, Kendra (USA) 1992)	time	2.44	3.46	4.44	5.40	6.35	7.29	8.23	9.18	10.15	11.13		12.35	4 / 2			
reaction time 0.161	interval		1.02	0.98	0.96	0.95	0.94	0.94	0.95	0.97	0.98	1.22			2.96	2.83	2.90
	velocity	5.33	8.33	8.67	8.85	8.95	9.04	9.04	8.95	8.76	8.67	8.24	8.10		8.61	9.01	8.79
Ali, Nia (USA) (1988)	time	2.40	3.42	4.39	5.33	6.28	7.24	8.22	9.21	10.19	11.18		12.38	6 / 3			
reaction time 0.162	interval		1.02	0.97	0.94	0.95	0.96	0.98	0.99	0.98	0.99	1.20			2.93	2.89	2.96
	velocity	5.42	8.33	8.76	9.04	8.95	8.85	8.67	8.59	8.67	8.59	8.37	8.08		8.70	8.82	8.61
Tapper, Megan (JAM) (1994)	time	2.41	3.45	4.43	5.40	6.36	7.32	8.28	9.25	10.24	11.24		12.49	8 / 4			
reaction time 0.150	interval		1.04	0.98	0.97	0.96	0.96	0.96	0.97	0.99	1.00	1.25			2.99	2.88	2.96
	velocity	5.39	8.17	8.67	8.76	8.85	8.85	8.85	8.76	8.59	8.50	8.04	8.01		8.53	8.85	8.61
Williams, Danielle (JAM) (1992	time	2.41	3.44	4.42	5.38	6.33	7.29	8.25	9.25	10.27	11.30		12.55	9 / 5			
reaction time 0.141	interval		1.03	0.98	0.96	0.95	0.96	0.96	1.00	1.02	1.03	1.25			2.97	2.87	3.05
	velocity	5.39	8.25	8.67	8.85	8.95	8.85	8.85	8.50	8.33	8.25	8.04	7.97		8.59	8.89	8.36
Jones, Tia (USA) (2000)	time	2.48	3.52	4.51	5.49	6.45	7.42	8.38	9.35	10.34	11.34		12.57	2 / 6			
reaction time 0.175	interval		1.04	0.99	0.98	0.96	0.97	0.96	0.97	0.99	1.00	1.23			3.01	2.89	2.96
	velocity	5.24	8.17	8.59	8.67	8.85	8.76	8.85	8.76	8.59	8.50	8.17	7.96		8.47	8.82	8.61
Johnson, Alaysha (USA) (199(	time	2.44	3.49	4.49	5.48	6.47	7.44	8.41	9.39	10.37	11.36		12.58	3 / 7			
reaction time 0.151	interval		1.05	1.00	0.99	0.99	0.97	0.97	0.98	0.98	0.99	1.22			3.04	2.93	2.95
	velocity	5.33	8.10	8.50	8.59	8.59	8.76	8.76	8.67	8.67	8.59	8.24	7.95		8.39	8.70	8.64
Skrzyszowska, Pia (POL) (2001	time	2.44	3.48	4.48	5.46	6.43	7.40	8.38	9.37	10.38	11.41		12.67	7 / 8			
reaction time 0.130	interval		1.04	1.00	0.98	0.97	0.97	0.98	0.99	1.01	1.03	1.26			3.02	2.92	3.03
	velocity	5.33	8.17	8.50	8.67	8.76	8.76	8.67	8.59	8.42	8.25	7.98	7.89		8.44	8.73	8.42
Fourie, Marione (RSA) (2002)	time	2.44	3.49	4.51	5.50	6.47	7.45	8.43	9.43	10.44	11.47		12.73	1 / 9			
reaction time 0.148	interval		1.05	1.02	0.99	0.97	0.98	0.98	1.00	1.01	1.03	1.26			3.06	2.93	3.04
	velocity	5.33	8.10	8.33	8.59	8.76	8.67	8.67	8.50	8.42	8.25	7.98	7.86		8.33	8.70	8.39

2023 USATF National Championships (Eugene, OR) (TV Analysis)

FINAL date 08-Jul-23 wind 0.4 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ali, Nia (USA) (1988)	time	2.51	3.53	4.50	5.47	6.42	7.36	8.31	9.28	10.27	11.26		12.37	4 / 1			
reaction time	interval		1.02	0.97	0.97	0.95	0.94	0.95	0.97	0.99	0.99	1.11			2.96	2.84	2.95
	velocity	5.18	8.33	8.76	8.76	8.95	9.04	8.95	8.76	8.59	8.59	9.05	8.08		8.61	8.98	8.64
Harrison, Kendra (USA) 1992)	time	2.55	3.55	4.55	5.51	6.46	7.41	8.36	9.32	10.32	11.30		12.42	6 / 2			
reaction time	interval		1.00	1.00	0.96	0.95	0.95	0.95	0.96	1.00	0.98	1.12			2.96	2.85	2.94
	velocity	5.10	8.50	8.50	8.85	8.95	8.95	8.95	8.85	8.50	8.67	8.97	8.05		8.61	8.95	8.67
Russell, Masai (USA) (2000)	time	2.53	3.55	4.55	5.54	6.51	7.47	8.44	9.41	10.38	11.38		12.46	2 / 3			
reaction time	interval		1.02	1.00	0.99	0.97	0.96	0.97	0.97	0.97	1.00	1.08			3.01	2.90	2.94
	velocity	5.14	8.33	8.50	8.59	8.76	8.85	8.76	8.76	8.76	8.50	9.31	8.03		8.47	8.79	8.67
Johnson, Alaysha (USA) (199(	time	2.57	3.59	4.57	5.54	6.48	7.44	8.40	9.36	10.32	11.34		12.46	3 / 4			
reaction time	interval		1.02	0.98	0.97	0.94	0.96	0.96	0.96	0.96	1.02	1.12			2.97	2.86	2.94
	velocity	5.06	8.33	8.67	8.76	9.04	8.85	8.85	8.85	8.85	8.33	8.97	8.03		8.59	8.92	8.67
Jones, Tia (USA) (2000)	time	2.55	3.57	4.55	5.53	6.48	7.44	8.41	9.38	10.36	11.35		12.50	7 / 5			
reaction time	interval		1.02	0.98	0.98	0.95	0.96	0.97	0.97	0.98	0.99	1.15			2.98	2.88	2.94
	velocity	5.10	8.33	8.67	8.67	8.95	8.85	8.76	8.76	8.67	8.59	8.74	8.00		8.56	8.85	8.67
Marshall, Tonea (USA) (1998)	time	2.51	3.54	4.54	5.52	6.48	7.45	8.42	9.41	10.42	11.44		12.63	5 / 6			
reaction time	interval		1.03	1.00	0.98	0.96	0.97	0.97	0.99	1.01	1.02	1.19			3.01	2.90	3.02
	velocity	5.18	8.25	8.50	8.67	8.85	8.76	8.76	8.59	8.42	8.33	8.45	7.92		8.47	8.79	8.44
Armstrong, Alia (USA) (2000)	time	2.53	3.55	4.53	5.50	6.47	7.45	8.42	9.42	10.44	11.49		12.70	1 / 7			
reaction time	interval		1.02	0.98	0.97	0.97	0.98	0.97	1.00	1.02	1.05	1.21			2.97	2.92	3.07
	velocity	5.14	8.33	8.67	8.76	8.76	8.67	8.76	8.50	8.33	8.10	8.31	7.87		8.59	8.73	8.31

Stark, Grace (USA) (2001)	time	2.57	3.59	4.58	5.57	6.56	7.54	8.53	9.52	10.53	11.56		12.70	8 / 8				
reaction time	interval		1.02	0.99	0.99	0.99	0.98	0.99	0.99	1.01	1.03	1.14			3.00	2.96	3.03	
	velocity	5.06	8.33	8.59	8.59	8.59	8.67	8.59	8.59	8.42	8.25	8.82	7.87		8.50	8.61	8.42	

2023 Bauhaus Galan (Stockholm, SWE)

FINAL

date 02-Jul-23 wind 0.9 m/s

Omega Timing (2023) - diamond league race analysis

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.44	3.48	4.46	5.42	6.38	7.34	8.32	9.30	10.29	11.28		12.52	4 / 1			
reaction time 0.145	interval		1.04	0.98	0.96	0.96	0.96	0.98	0.98	0.99	0.99	1.24			2.98	2.90	2.96
	velocity	5.33	8.17	8.67	8.85	8.85	8.85	8.67	8.67	8.59	8.59	8.10	7.99		8.56	8.79	8.61
Lavin, Sarah (IRL) (1994)	time	2.47	3.54	4.54	5.52	6.50	7.47	8.45	9.44	10.44	11.45		12.73	1 / 2			
reaction time 0.139	interval		1.07	1.00	0.98	0.98	0.97	0.98	0.99	1.00	1.01	1.28	PB		3.05	2.93	3.00
	velocity	5.26	7.94	8.50	8.67	8.67	8.76	8.67	8.59	8.50	8.42	7.85	7.86		8.36	8.70	8.50
Skrzyszowska, Pia (POL) (2001	time	2.42	3.44	4.43	5.41	6.38	7.37	8.35	9.33	10.37	11.47		12.78	5 / 3			
reaction time 0.132	interval		1.02	0.99	0.98	0.97	0.99	0.98	0.98	1.04	1.10	1.31			2.99	2.94	3.12
	velocity	5.37	8.33	8.59	8.67	8.76	8.59	8.67	8.67	8.17	7.73	7.67	7.82		8.53	8.67	8.17
Charlton, Devynne (BAH) (19	time	2.40	3.46	4.49	5.48	6.47	7.47	8.47	9.48	10.50	11.56		12.85	3 / 4			
reaction time 0.141	interval		1.06	1.03	0.99	0.99	1.00	1.00	1.01	1.02	1.06	1.29			3.08	2.99	3.09
	velocity	5.42	8.02	8.25	8.59	8.59	8.50	8.50	8.42	8.33	8.02	7.79	7.78		8.28	8.53	8.25
Visser, Nadine (NED) (1995)	time	2.47	3.52	4.54	5.54	6.54	7.53	8.54	9.56	10.59	11.65		12.97	6 / 5			
reaction time 0.149	interval		1.05	1.02	1.00	1.00	0.99	1.01	1.02	1.03	1.06	1.32			3.07	3.00	3.11
	velocity	5.26	8.10	8.33	8.50	8.50	8.59	8.42	8.33	8.25	8.02	7.61	7.71		8.31	8.50	8.20
Hurske, Reetta (FIN) (1995)	0.122	no information available											12.98	2 / 6			
Jenneke, Michelle (AUS) (1993	time	2.45	3.51	4.53	5.54	6.55	7.56	8.59	9.61	10.65	11.70		13.01	7 / 7			
reaction time 0.145	interval		1.06	1.02	1.01	1.01	1.01	1.03	1.02	1.04	1.05	1.31			3.09	3.05	3.11
	velocity	5.31	8.02	8.33	8.42	8.42	8.42	8.25	8.33	8.17	8.10	7.67	7.69		8.25	8.36	8.20
Bapté, Laeticia (FRA) (1999)	time	2.49	3.56	4.58	5.59	6.59	7.60	8.61	9.63	10.68	11.75		13.09	8 / 8			
reaction time 0.171	interval	7 steps	1.07	1.02	1.01	1.00	1.01	1.01	1.02	1.05	1.07	1.34			3.10	3.02	3.14
	velocity	5.22	7.94	8.33	8.42	8.50	8.42	8.42	8.33	8.10	7.94	7.50	7.64		8.23	8.44	8.12

National FINAL

date 02-Jul-23 wind 0.6 m/s

Omega Timing (2023) - diamond league race analysis

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lavin, Sarah (IRL) (1994)	time	2.50	3.57	4.58	5.58	6.57	7.57	8.56	9.58	10.60	11.63		12.89	3 / 1			
reaction time 0.140	interval		1.07	1.01	1.00	0.99	1.00	0.99	1.02	1.02	1.03	1.26			3.08	2.98	3.07
	velocity	5.20	7.94	8.42	8.50	8.59	8.50	8.59	8.33	8.33	8.25	7.98	7.76		8.28	8.56	8.31
Bieldt, Taylon (RSA) (1998)	time	2.49	3.58	4.61	5.60	6.60	7.59	8.59	9.60	10.63	11.65		12.92	4 / 2			
reaction time 0.141	interval		1.09	1.03	0.99	1.00	0.99	1.00	1.01	1.03	1.02	1.27			3.11	2.99	3.06
	velocity	5.22	7.80	8.25	8.59	8.50	8.59	8.50	8.42	8.25	8.33	7.91	7.74		8.20	8.53	8.33
Morrison, Ebony (LBR) (1994)	time	2.44	3.54	4.60	5.65	6.69	7.72	8.76	9.82	10.89	11.99		13.39	6 / 3			
reaction time 0.137	interval		1.10	1.06	1.05	1.04	1.03	1.04	1.06	1.07	1.10	1.40			3.21	3.11	3.23
	velocity	5.33	7.73	8.02	8.10	8.17	8.25	8.17	8.02	7.94	7.73	7.18	7.47		7.94	8.20	7.89
Lindeblad, Elin (SWE) (1995)	time	2.57	3.69	4.79	5.86	6.92	8.01	9.08	10.16	11.25	12.36		13.75	5 / 4			
reaction time 0.140	interval		1.12	1.10	1.07	1.06	1.09	1.07	1.08	1.09	1.11	1.39			3.29	3.22	3.28
	velocity	5.06	7.59	7.73	7.94	8.02	7.80	7.94	7.87	7.80	7.66	7.23	7.27		7.75	7.92	7.77
Carlsson, Johanna (SWE) (19	time	2.56	3.68	4.74	5.78	6.83	7.89	8.96	10.06	11.22	12.41		13.91	1 / 5			
reaction time 0.149	interval		1.12	1.06	1.04	1.05	1.06	1.07	1.10	1.16	1.19	1.50	PB		3.22	3.18	3.45
	velocity	5.08	7.59	8.02	8.17	8.10	8.02	7.94	7.73	7.33	7.14	6.70	7.19		7.92	8.02	7.39
Lindeén, Jonna (SWE) (1996)	time	2.66	3.81	4.92	6.01	7.08	8.15	9.23	10.32	11.42	12.54		13.95	7 / 6			
reaction time 0.195	interval		1.15	1.11	1.09	1.07	1.07	1.08	1.09	1.10	1.12	1.41			3.35	3.22	3.31
	velocity	4.89	7.39	7.66	7.80	7.94	7.94	7.87	7.80	7.73	7.59	7.13	7.17		7.61	7.92	7.70
von Gerber, Alva (SWE) (2000)	time	2.60	3.75	4.89	5.97	7.05	8.14	9.22	10.32	11.43	12.57		13.98	2 / 7			
reaction time 0.141	interval		1.15	1.14	1.08	1.08	1.09	1.08	1.10	1.11	1.14	1.41			3.37	3.25	3.35
	velocity	5.00	7.39	7.46	7.87	7.87	7.80	7.87	7.73	7.66	7.46	7.13	7.15		7.57	7.85	7.61
Södergren, Maria (SWE) (1998	time	2.67	3.82	4.95	6.06	7.14	8.25	9.36	10.52	11.69	12.87		14.35	8 / 8			
reaction time 0.140	interval		1.15	1.13	1.11	1.08	1.11	1.11	1.16	1.17	1.18	1.48			3.39	3.30	3.51
	velocity	4.87	7.39	7.52	7.66	7.87	7.66	7.66	7.33	7.26	7.20	6.79	6.97		7.52	7.73	7.26

2023 Athletissima (Lausanne, SUI)

FINAL

date 30-Jun-23 wind -1.4 m/s

Omega Timing (2023) - diamond league race analysis

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.42	3.44	4.43	5.38	6.33	7.28	8.24	9.21	10.19	11.18		12.40	5 / 1			
reaction time 0.139	interval		1.02	0.99	0.95	0.95	0.95	0.96	0.97	0.98	0.99	1.22			2.96	2.86	2.94
	velocity	5.37	8.33	8.59	8.95	8.95	8.95	8.85	8.76	8.67	8.59	8.24	8.06		8.61	8.92	8.67

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

Amusan, Tobi (NGR) (1997)	time	2.43	3.46	4.44	5.39	6.34	7.29	8.25	9.23	10.22	11.24		12.47	4 / 2			
reaction time 0.133	interval		1.03	0.98	0.95	0.95	0.95	0.96	0.98	0.99	1.02	1.23			2.96	2.86	2.99
	velocity	5.35	8.25	8.67	8.95	8.95	8.95	8.85	8.67	8.59	8.33	8.17	8.02		8.61	8.92	8.53
Jones, Tia (USA) (2000)	time	2.43	3.47	4.46	5.42	6.37	7.33	8.29	9.27	10.26	11.27		12.51	3 / 3			
reaction time 0.139	interval		1.04	0.99	0.96	0.95	0.96	0.96	0.98	0.99	1.01	1.24			2.99	2.87	2.98
	velocity	5.35	8.17	8.59	8.85	8.95	8.85	8.85	8.67	8.59	8.42	8.10	7.99		8.53	8.89	8.56
Skrzyszowska, Pia (POL) (2001	time	2.43	3.46	4.46	5.44	6.43	7.42	8.41	9.43	10.46	11.52		12.81	8 / 4			
reaction time 0.139	interval		1.03	1.00	0.98	0.99	0.99	0.99	1.02	1.03	1.06	1.29			3.01	2.97	3.11
	velocity	5.35	8.25	8.50	8.67	8.59	8.59	8.59	8.33	8.25	8.02	7.79	7.81		8.47	8.59	8.20
Kambundji, Ditaji (SUI) (2002)	time	2.43	3.47	4.48	5.47	6.46	7.45	8.44	9.45	10.47	11.50		12.83	7 / 5			
reaction time 0.142	interval		1.04	1.01	0.99	0.99	0.99	0.99	1.01	1.02	1.03	1.33			3.04	2.97	3.06
	velocity	5.35	8.17	8.42	8.59	8.59	8.59	8.59	8.42	8.33	8.25	7.56	7.79		8.39	8.59	8.33
Ali, Nia (USA) (1988)	time	2.45	3.51	4.53	5.54	6.53	7.52	8.52	9.53	10.54	11.57		12.83	2 / 6			
reaction time 0.154	interval		1.06	1.02	1.01	0.99	0.99	1.00	1.01	1.01	1.03	1.26			3.09	2.98	3.05
	velocity	5.31	8.02	8.33	8.42	8.59	8.59	8.50	8.42	8.42	8.25	7.98	7.79		8.25	8.56	8.36
Visser, Nadine (NED) (1995)	time	2.50	3.57	4.59	5.60	6.59	7.59	8.61	9.64	10.69	11.76		13.09	1 / 7			
reaction time 0.182	interval		1.07	1.02	1.01	0.99	1.00	1.02	1.03	1.05	1.07	1.33			3.10	3.01	3.15
	velocity	5.20	7.94	8.33	8.42	8.59	8.50	8.33	8.25	8.10	7.94	7.56	7.64		8.23	8.47	8.10
Johnson, Alaysha (USA) (199	time	2.45	3.52	4.55	5.57	6.61	7.65	8.69	9.73	10.80	12.11		14.36	6 / 8			
reaction time 0.139	interval		1.07	1.03	1.02	1.04	1.04	1.04	1.04	1.07	1.31	2.25			3.12	3.12	3.42
	velocity	5.31	7.94	8.25	8.33	8.17	8.17	8.17	8.17	7.94	6.49	4.47	6.96		8.17	8.17	7.46

2023 USATF New York City Grand Prix (Randalls Island, NY) (TV Analysis)

FINAL date 24-Jun-23 wind 2.8 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) 1992)	time	2.53	3.57	4.52	5.45	6.40	7.34	8.28	9.24	10.21	11.20		12.29	5 / 1			
reaction time 0.151	interval		1.04	0.95	0.93	0.95	0.94	0.94	0.96	0.97	0.99	1.09			2.92	2.83	2.92
	velocity	5.14	8.17	8.95	9.14	8.95	9.04	9.04	8.85	8.76	8.59	9.22	8.14		8.73	9.01	8.73
Johnson, Alaysha (USA) (199	time	2.55	3.57	4.53	5.47	6.42	7.34	8.29	9.27	10.24	11.22		12.30	4 / 2			
reaction time 0.206	interval		1.02	0.96	0.94	0.95	0.92	0.95	0.98	0.97	0.98	1.08			2.92	2.82	2.93
	velocity	5.10	8.33	8.85	9.04	8.95	9.24	8.95	8.67	8.76	8.67	9.31	8.13		8.73	9.04	8.70
Williams, Danielle (JAM) (1992	time	2.47	3.50	4.46	5.42	6.37	7.31	8.26	9.22	10.21	11.21		12.33	3 / 3			
reaction time 0.331	interval		1.03	0.96	0.96	0.95	0.94	0.95	0.96	0.99	1.00	1.12			2.95	2.84	2.95
	velocity	5.26	8.25	8.85	8.85	8.95	9.04	8.95	8.85	8.59	8.50	8.97	8.11		8.64	8.98	8.64
Hughes, Amber (USA) (1994)	time	2.57	3.57	4.59	5.58	6.55	7.54	8.52	9.52	10.51	11.51		12.64	2 / 4			
reaction time 0.147	interval		1.00	1.02	0.99	0.97	0.99	0.98	1.00	0.99	1.00	1.13			3.01	2.94	2.99
	velocity	5.06	8.50	8.33	8.59	8.76	8.59	8.67	8.50	8.59	8.50	8.89	7.91		8.47	8.67	8.53
Tapper, Megan (JAM) (1994)	time	2.53	3.57	4.55	5.53	6.51	7.49	8.48	9.49	10.51	11.53		12.68	6 / 5			
reaction time 0.216	interval		1.04	0.98	0.98	0.98	0.98	0.99	1.01	1.02	1.02	1.15			3.00	2.95	3.05
	velocity	5.14	8.17	8.67	8.67	8.67	8.67	8.59	8.42	8.33	8.33	8.74	7.89		8.50	8.64	8.36
Cunningham, Gabbi (USA) (1!	time	2.53	3.57	4.57	5.57	6.54	7.52	8.50	9.50	10.51	11.52		12.71	1 / 6			
reaction time 0.506	interval		1.04	1.00	1.00	0.97	0.98	0.98	1.00	1.01	1.01	1.19			3.04	2.93	3.02
	velocity	5.14	8.17	8.50	8.50	8.76	8.67	8.67	8.50	8.42	8.42	8.45	7.87		8.39	8.70	8.44
Bonds, Talie (USA) (1998)	time	2.58	3.64	4.64	5.64	6.64	7.64	8.62	9.64	10.66	11.69		12.84	8 / 7			
reaction time 0.164	interval		1.06	1.00	1.00	1.00	1.00	0.98	1.02	1.02	1.03	1.15			3.06	2.98	3.07
	velocity	5.04	8.02	8.50	8.50	8.50	8.50	8.67	8.33	8.33	8.25	8.74	7.79		8.33	8.56	8.31
Vazquez, Paola (PUR) (1998)	time	2.75	3.83	4.87	5.90	6.90	7.91	8.93	9.96	11.02	12.09		13.29	9 / 8			
reaction time 0.251	interval		1.08	1.04	1.03	1.00	1.01	1.02	1.03	1.06	1.07	1.20			3.15	3.03	3.16
	velocity	4.73	7.87	8.17	8.25	8.50	8.42	8.33	8.25	8.02	7.94	8.38	7.52		8.10	8.42	8.07
Sember, Cindy (GBR) (1994)	time	2.60	3.63	4.67	5.67	6.65	7.65	8.67	9.76	11.08			dnf	7 / --			
reaction time 0.201	interval		1.03	1.04	1.00	0.98	1.00	1.02	1.09	1.32					3.07	3.00	
	velocity	5.00	8.25	8.17	8.50	8.67	8.50	8.33	7.80	6.44					8.31	8.50	

2023 NCAA Championships (Austin, TX) (TV Analysis)

FINAL date 10-Jun-23 wind 3.8 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nugent, Ackera (JAM) (2002)	time	2.44	3.42	4.39	5.32	6.27	7.20	8.15	9.10	10.09	11.08		12.25	6 / 1			
reaction time	interval		0.98	0.97	0.93	0.95	0.93	0.95	0.95	0.99	0.99	1.17			2.88	2.83	2.93
	velocity	5.33	8.67	8.76	9.14	8.95	9.14	8.95	8.95	8.59	8.59	8.59	8.16		8.85	9.01	8.70
Russell, Masai (USA) (2000)	time	2.44	3.44	4.47	5.45	6.40	7.35	8.30	9.26	10.22	11.20		12.32	4 / 2			
reaction time	interval		1.00	1.03	0.98	0.95	0.95	0.95	0.96	0.96	0.98	1.12			3.01	2.85	2.90

	velocity	5.33	8.50	8.25	8.67	8.95	8.95	8.95	8.85	8.85	8.67	8.97	8.12		8.47	8.95	8.79
Armstrong, Alia (USA) (2000)	time	2.44	3.44	4.41	5.36	6.32	7.29	8.32	9.34	10.36	11.36		12.49	5 / 3			
reaction time	interval		1.00	0.97	0.95	0.96	0.97	1.03	1.02	1.02	1.00	1.13			2.92	2.96	3.04
	velocity	5.33	8.50	8.76	8.95	8.85	8.76	8.25	8.33	8.33	8.50	8.89	8.01		8.73	8.61	8.39
Bonds, Talie (USA) (1998)	time	2.50	3.50	4.52	5.49	6.49	7.47	8.45	9.47	10.49	11.53		12.71	7 / 4			
reaction time	interval		1.00	1.02	0.97	1.00	0.98	0.98	1.02	1.02	1.04	1.18			2.99	2.96	3.08
	velocity	5.20	8.50	8.33	8.76	8.50	8.67	8.67	8.33	8.33	8.17	8.52	7.87		8.53	8.61	8.28
Stark, Grace (USA) (2001)	time	2.50	3.52	4.54	5.50	6.52	7.52	8.50	9.49	10.51	11.53		12.72	2 / 5			
reaction time	interval		1.02	1.02	0.96	1.02	1.00	0.98	0.99	1.02	1.02	1.19			3.00	3.00	3.03
	velocity	5.20	8.33	8.33	8.85	8.33	8.50	8.67	8.59	8.33	8.33	8.45	7.86		8.50	8.50	8.42
Glasco, Alexis (USA) (2002)	time	2.50	3.49	4.50	5.49	6.49	7.47	8.47	9.47	10.51	11.53		12.74	3 / 6			
reaction time	interval		0.99	1.01	0.99	1.00	0.98	1.00	1.00	1.04	1.02	1.21			2.99	2.98	3.06
	velocity	5.20	8.59	8.42	8.59	8.50	8.67	8.50	8.50	8.17	8.33	8.31	7.85		8.53	8.56	8.33
Laurencin, Aasia (USA) (2002)	time	2.54	3.62	4.67	5.70	6.69	7.66	8.63	9.61	10.59	11.61		12.82	9 / 7			
reaction time	interval		1.08	1.05	1.03	0.99	0.97	0.97	0.98	0.98	1.02	1.21			3.16	2.93	2.98
	velocity	5.12	7.87	8.10	8.25	8.59	8.76	8.76	8.67	8.67	8.33	8.31	7.80		8.07	8.70	8.56
Salmon, Paula (USA) (1999)	time	2.57	3.57	4.57	5.55	6.55	7.55	8.56	9.59	10.63	11.69		12.92	1 / 8			
reaction time	interval		1.00	1.00	0.98	1.00	1.00	1.01	1.03	1.04	1.06	1.23			2.98	3.01	3.13
	velocity	5.06	8.50	8.50	8.67	8.50	8.50	8.42	8.25	8.17	8.02	8.17	7.74		8.56	8.47	8.15
Jones, Rayniah (USA) (2001)	time	2.47	3.49	4.49	5.49	6.47	7.46	8.49	9.53	10.63	11.71		13.00	8 / 9			
reaction time	interval		1.02	1.00	1.00	0.98	0.99	1.03	1.04	1.10	1.08	1.29			3.02	3.00	3.22
	velocity	5.26	8.33	8.50	8.50	8.67	8.59	8.25	8.17	7.73	7.87	7.79	7.69		8.44	8.50	7.92

2023 FBK Games (Hengelo, NED)

FINAL date 04-Jun-23 wind 0.2 m/s *Omega Timing (2023) - continental tour race analysis*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ali, Nia (USA) (1988)		time	2.40	3.45	4.45	5.45	6.43	7.41	8.39	9.38	10.37	11.37		12.61	5 / 1			
reaction time	0.156	interval		1.05	1.00	1.00	0.98	0.98	0.98	0.99	0.99	1.00	1.24			3.05	2.94	2.98
		velocity	5.42	8.10	8.50	8.50	8.67	8.67	8.67	8.59	8.59	8.50	8.10	7.93		8.36	8.67	8.56
Visser, Nadine (NED) (1995)		time	2.39	3.43	4.42	5.40	6.38	7.36	8.35	9.35	10.36	11.41		12.71	4 / 2			
reaction time	0.133	interval		1.04	0.99	0.98	0.98	0.98	0.99	1.00	1.01	1.05	1.30			3.01	2.95	3.06
		velocity	5.44	8.17	8.59	8.67	8.67	8.67	8.59	8.50	8.42	8.10	7.73	7.87		8.47	8.64	8.33
Kambundji, Ditaji (SUI) (2002)		time	2.41	3.45	4.45	5.44	6.42	7.41	8.40	9.40	10.43	11.47		12.78	7 / 3			
reaction time	0.134	interval		1.04	1.00	0.99	0.98	0.99	0.99	1.00	1.03	1.04	1.31			3.03	2.96	3.07
		velocity	5.39	8.17	8.50	8.59	8.67	8.59	8.59	8.50	8.25	8.17	7.67	7.82		8.42	8.61	8.31
Fourie, Marione (RSA) (2002)		time	2.43	3.48	4.50	5.50	6.49	7.50	8.50	9.52	10.54	11.57		12.86	8 / 4			
reaction time	0.143	interval		1.05	1.02	1.00	0.99	1.01	1.00	1.02	1.02	1.03	1.29	=PB		3.07	3.00	3.07
		velocity	5.35	8.10	8.33	8.50	8.59	8.42	8.50	8.33	8.33	8.25	7.79	7.78		8.31	8.50	8.31
Lavin, Sarah (IRL) (1994)		time	2.46	3.51	4.54	5.55	6.56	7.56	8.57	9.59	10.61	11.65		12.91	1 / 5			
reaction time	0.139	interval		1.05	1.03	1.01	1.01	1.00	1.01	1.02	1.02	1.04	1.26			3.09	3.02	3.08
		velocity	5.28	8.10	8.25	8.42	8.42	8.50	8.42	8.33	8.33	8.17	7.98	7.75		8.25	8.44	8.28
Charlton, Devynne (BAH) (19		time	2.41	3.45	4.46	5.46	6.45	7.45	8.46	9.49	10.53	11.60		12.93	6 / 6			
reaction time	0.155	interval		1.04	1.01	1.00	0.99	1.00	1.01	1.03	1.04	1.07	1.33			3.05	3.00	3.14
		velocity	5.39	8.17	8.42	8.50	8.59	8.50	8.42	8.25	8.17	7.94	7.56	7.73		8.36	8.50	8.12
Tjin-A-Lim, Maayke (NED) (19		time	2.50	3.58	4.62	5.65	6.67	7.69	8.72	9.76	10.81	11.87		13.16	2 / 7			
reaction time	0.149	interval		1.08	1.04	1.03	1.02	1.02	1.03	1.04	1.05	1.06	1.29			3.15	3.07	3.15
		velocity	5.20	7.87	8.17	8.25	8.33	8.33	8.25	8.17	8.10	8.02	7.79	7.60		8.10	8.31	8.10
Nelvis, Sharika (USA) (1990)		time	2.49	3.54	4.55	5.55	6.56	7.57	8.59	9.63	10.70	11.80		13.17	9 / 8			
reaction time	0.142	interval	7 steps	1.05	1.01	1.00	1.01	1.01	1.02	1.04	1.07	1.10	1.37			3.06	3.04	3.21
		velocity	5.22	8.10	8.42	8.50	8.42	8.42	8.33	8.17	7.94	7.73	7.34	7.59		8.33	8.39	7.94
Graversgaard, Mette (DEN) (1		time	2.48	3.55	4.58	5.61	6.63	7.65	8.69	9.73	10.79	11.86		13.18	3 / 9			
reaction time	0.132	interval		1.07	1.03	1.03	1.02	1.02	1.04	1.04	1.06	1.07	1.32			3.13	3.08	3.17
		velocity	5.24	7.94	8.25	8.25	8.33	8.33	8.17	8.17	8.02	7.94	7.61	7.59		8.15	8.28	8.04

2023 USATF Los Angeles Grand Prix (Westwood, CA) (TV Analysis)

FINAL date 27-May-23 wind -0.2 m/s *Henson (2023) - Athlete First: 2023 year end hurdle report*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU		time	2.50	3.52	4.50	5.44	6.38	7.32	8.28	9.24	10.19	11.16		12.31	5 / 1			
reaction time	0.158	interval		1.02	0.98	0.94	0.94	0.94	0.96	0.96	0.95	0.97	1.15			2.94	2.84	2.88
		velocity	5.20	8.33	8.67	9.04	9.04	9.04	8.85	8.85	8.95	8.76	8.74	8.12		8.67	8.98	8.85
Harrison, Kendra (USA) 1992)		time	2.57	3.57	4.54	5.48	6.42	7.38	8.34	9.30	10.26	11.26		12.35	6 / 2			

reaction time 0.207	interval		1.00	0.97	0.94	0.94	0.96	0.96	0.96	0.96	1.00	1.09				2.91	2.86	2.92
	velocity	5.06	8.50	8.76	9.04	9.04	8.85	8.85	8.85	8.85	8.50	9.22	8.10			8.76	8.92	8.73
Jones, Tia (USA) (2000)	time	2.58	3.60	4.60	5.57	6.54	7.48	8.44	9.42	10.40	11.41		12.50	7 / 3				
reaction time 0.186	interval		1.02	1.00	0.97	0.97	0.94	0.96	0.98	0.98	1.01	1.09				2.99	2.87	2.97
	velocity	5.04	8.33	8.50	8.76	8.76	9.04	8.85	8.67	8.67	8.42	9.22	8.00			8.53	8.89	8.59
Johnson, Alaysha (USA) (199(	time	2.57	3.60	4.60	5.58	6.54	7.50	8.48	9.46	10.44	11.42		12.52	2 / 4				
reaction time 0.178	interval		1.03	1.00	0.98	0.96	0.96	0.98	0.98	0.98	0.98	1.10				3.01	2.90	2.94
	velocity	5.06	8.25	8.50	8.67	8.85	8.85	8.67	8.67	8.67	8.67	9.14	7.99			8.47	8.79	8.67
Marshall, Tonea (USA) (1998)	time	2.48	3.52	4.50	5.48	6.46	7.44	8.42	9.40	10.41	11.42		12.55	8 / 5				
reaction time 0.202	interval		1.04	0.98	0.98	0.98	0.98	0.98	0.98	1.01	1.01	1.13				3.00	2.94	3.00
	velocity	5.24	8.17	8.67	8.67	8.67	8.67	8.67	8.67	8.42	8.42	8.89	7.97			8.50	8.67	8.50
Williams, Danielle (JAM) (1992	time	2.53	3.53	4.52	5.48	6.44	7.40	8.40	9.38	10.40	11.42		12.59	1 / 6				
reaction time 0.437	interval		1.00	0.99	0.96	0.96	0.96	1.00	0.98	1.02	1.02	1.17				2.95	2.92	3.02
	velocity	5.14	8.50	8.59	8.85	8.85	8.85	8.50	8.67	8.33	8.33	8.59	7.94			8.64	8.73	8.44
Ali, Nia (USA) (1988)	time	2.58	3.62	4.60	5.58	6.58	7.54	8.52	9.52	10.52	11.52		12.65	3 / 7				
reaction time 0.185	interval		1.04	0.98	0.98	1.00	0.96	0.98	1.00	1.00	1.00	1.13				3.00	2.94	3.00
	velocity	5.04	8.17	8.67	8.67	8.50	8.85	8.67	8.50	8.50	8.50	8.89	7.91			8.50	8.67	8.50
Amusan, Tobi (NGR) (1997)	time	2.56	3.58	4.58	5.54	6.52	7.49	8.47	9.50	10.52	11.56		12.69	4 / 8				
reaction time 0.184	interval		1.02	1.00	0.96	0.98	0.97	0.98	1.03	1.02	1.04	1.13				2.98	2.93	3.09
	velocity	5.08	8.33	8.50	8.85	8.67	8.76	8.67	8.25	8.33	8.17	8.89	7.88			8.56	8.70	8.25

2023 USATF Bermuda Grand Prix (Devonshire, BER) (TV Analysis)

FINAL date 21-May-23 wind 3.5 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.50	3.52	4.46	5.40	6.32	7.25	8.19	9.13	10.10	11.06		12.17	5 / 1			
reaction time 0.153	interval		1.02	0.94	0.94	0.92	0.93	0.94	0.94	0.97	0.96	1.11			2.90	2.79	2.87
	velocity	5.20	8.33	9.04	9.04	9.24	9.14	9.04	9.04	8.76	8.85	9.05	8.22		8.79	9.14	8.89
Williams, Danielle (JAM) (1992	time	2.53	3.54	4.50	5.46	6.39	7.34	8.29	9.27	10.25	11.26		12.38	4 / 2			
reaction time 0.521	interval		1.01	0.96	0.96	0.93	0.95	0.95	0.98	0.98	1.01	1.12			2.93	2.83	2.97
	velocity	5.14	8.42	8.85	8.85	9.14	8.95	8.95	8.67	8.67	8.42	8.97	8.08		8.70	9.01	8.59
Marshall, Tonea (USA) (1998)	time	2.50	3.52	4.49	5.46	6.42	7.37	8.32	9.29	10.26	11.26		12.39	3 / 3			
reaction time 0.176	interval		1.02	0.97	0.97	0.96	0.95	0.95	0.97	0.97	1.00	1.13			2.96	2.86	2.94
	velocity	5.20	8.33	8.76	8.76	8.85	8.95	8.95	8.76	8.76	8.50	8.89	8.07		8.61	8.92	8.67
Tapper, Megan (JAM) (1994)	time	2.53	3.54	4.49	5.44	6.39	7.37	8.34	9.32	10.33	11.35		12.47	6 / 4			
reaction time 0.183	interval		1.01	0.95	0.95	0.95	0.98	0.97	0.98	1.01	1.02	1.12			2.91	2.90	3.01
	velocity	5.14	8.42	8.95	8.95	8.95	8.67	8.76	8.67	8.42	8.33	8.97	8.02		8.76	8.79	8.47

2023 Doha Diamond League (Doha, QAT) (TV Analysis)

FINAL date 05-May-23 wind 1.1 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.56	3.60	4.58	5.56	6.50	7.46	8.42	9.40	10.36	11.36		12.48	4 / 1			
reaction time 0.148	interval		1.04	0.98	0.98	0.94	0.96	0.96	0.98	0.96	1.00	1.12			3.00	2.86	2.94
	velocity	5.08	8.17	8.67	8.67	9.04	8.85	8.85	8.67	8.85	8.50	8.97	8.01		8.50	8.92	8.67
Johnson, Alaysha (USA) (199(	time	2.60	3.64	4.64	5.60	6.58	7.54	8.50	9.48	10.50	11.50		12.66	5 / 2			
reaction time 0.165	interval		1.04	1.00	0.96	0.98	0.96	0.96	0.98	1.02	1.00	1.16			3.00	2.90	3.00
	velocity	5.00	8.17	8.50	8.85	8.67	8.85	8.85	8.67	8.33	8.50	8.66	7.90		8.50	8.79	8.50
Ali, Nia (USA) (1988)	time	2.56	3.60	4.58	5.56	6.52	7.50	8.48	9.46	10.46	11.48		12.69	3 / 3			
reaction time 0.167	interval		1.04	0.98	0.98	0.96	0.98	0.98	0.98	1.00	1.02	1.21			3.00	2.92	3.00
	velocity	5.08	8.17	8.67	8.67	8.85	8.67	8.67	8.67	8.50	8.33	8.31	7.88		8.50	8.73	8.50
Tapper, Megan (JAM) (1994)	time	2.60	3.60	4.60	5.60	6.56	7.58	8.58	9.58	10.58	11.62		12.76	8 / 4			
reaction time 0.163	interval		1.00	1.00	1.00	0.96	1.02	1.00	1.00	1.00	1.04	1.14			3.00	2.98	3.04
	velocity	5.00	8.50	8.50	8.50	8.85	8.33	8.50	8.50	8.50	8.17	8.82	7.84		8.50	8.56	8.39
Marshall, Tonea (USA) (1998)	time	2.56	3.60	4.60	5.58	6.56	7.56	8.54	9.52	10.52	11.60		12.79	2 / 5			
reaction time 0.129	interval		1.04	1.00	0.98	0.98	1.00	0.98	0.98	1.00	1.08	1.19			3.02	2.96	3.06
	velocity	5.08	8.17	8.50	8.67	8.67	8.50	8.67	8.67	8.50	7.87	8.45	7.82		8.44	8.61	8.33
Hurske, Reetta (FIN) (1995)	time	2.54	3.56	4.56	5.54	6.52	7.58	8.60	9.64	10.68	11.74		12.92	6 / 6			
reaction time 0.132	interval		1.02	1.00	0.98	0.98	1.06	1.02	1.04	1.04	1.06	1.18			3.00	3.06	3.14
	velocity	5.12	8.33	8.50	8.67	8.67	8.02	8.33	8.17	8.17	8.02	8.52	7.74		8.50	8.33	8.12
Jenneke, Michelle (AUS) (1993	time	2.58	3.60	4.62	5.60	6.60	7.60	8.62	9.64	10.68	11.74		13.00	1 / 7			
reaction time 0.154	interval		1.02	1.02	0.98	1.00	1.00	1.02	1.02	1.04	1.06	1.26			3.02	3.02	3.12
	velocity	5.04	8.33	8.33	8.67	8.50	8.50	8.33	8.33	8.17	8.02	7.98	7.69		8.44	8.44	8.17

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lavin, Sarah (IRL) (1994)		time	2.66	3.72	4.76	5.78	6.78	7.82	8.84	9.86	10.90	11.94		13.08	7 / 8			
reaction time 0.137		interval		1.06	1.04	1.02	1.00	1.04	1.02	1.02	1.04	1.04	1.14			3.12	3.06	3.10
		velocity	4.89	8.02	8.17	8.33	8.50	8.17	8.33	8.33	8.17	8.17	8.82	7.65		8.17	8.33	8.23

2023 UNF East Coast Relays (Jacksonville, FL)

FINAL date 29-Apr-23 wind 3.2 m/s

Henson (2023) - Athlete First: 2023 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.56	3.60	4.56	5.50	6.43	7.35	8.30	9.25	10.20	11.20		12.29	5 / 1			
reaction time	interval		1.04	0.96	0.94	0.93	0.92	0.95	0.95	0.95	1.00	1.09			2.94	2.80	2.90
	velocity	5.08	8.17	8.85	9.04	9.14	9.24	8.95	8.95	8.95	8.50	9.22	8.14		8.67	9.11	8.79
Jones, Rayniah (USA) (2001)	time	2.58	3.60	4.58	5.56	6.54	7.51	8.50	9.50	10.50	11.51		12.63	6 / 2			
reaction time	interval		1.02	0.98	0.98	0.98	0.97	0.99	1.00	1.00	1.01	1.12			2.98	2.94	3.01
	velocity	5.04	8.33	8.67	8.67	8.67	8.76	8.59	8.50	8.50	8.42	8.97	7.92		8.56	8.67	8.47
Lin Yuwei (CHN) (1999)	time	2.60	3.65	4.65	5.67	6.67	7.67	8.69	9.69	10.70	11.73		12.82	4 / 3			
reaction time	interval		1.05	1.00	1.02	1.00	1.00	1.02	1.00	1.01	1.03	1.09			3.07	3.02	3.04
	velocity	5.00	8.10	8.50	8.33	8.50	8.50	8.33	8.50	8.42	8.25	9.22	7.80		8.31	8.44	8.39
Glasco, Alexis (USA) (2002)	time	2.63	3.63	4.63	5.66	6.64	7.62	8.62	9.63	10.64	11.72		12.83	3 / 4			
reaction time	interval		1.00	1.00	1.03	0.98	0.98	1.00	1.01	1.01	1.08	1.11			3.03	2.96	3.10
	velocity	4.94	8.50	8.50	8.25	8.67	8.67	8.50	8.42	8.42	7.87	9.05	7.79		8.42	8.61	8.23

2022 Weltklasse (Zürich, SUI) (TV Analysis)

FINAL date 08-Sep-22 wind -0.3 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.47	3.47	4.43	5.37	6.31	7.24	8.19	9.14	10.12	11.10		12.29	4 / 1			
reaction time 0.163	interval		1.00	0.96	0.94	0.94	0.93	0.95	0.95	0.98	0.98	1.19			2.90	2.82	2.91
	velocity	5.26	8.50	8.85	9.04	9.04	9.14	8.95	8.95	8.67	8.67	8.45	8.14		8.79	9.04	8.76
Jones, Tia (USA) (2000)	time	2.48	3.48	4.44	5.40	6.36	7.31	8.26	9.21	10.20	11.19		12.40	8 / 2			
reaction time 0.173	interval		1.00	0.96	0.96	0.96	0.95	0.95	0.95	0.99	0.99	1.21			2.92	2.86	2.93
	velocity	5.24	8.50	8.85	8.85	8.85	8.95	8.95	8.95	8.59	8.59	8.31	8.06		8.73	8.92	8.70
Anderson, Britany (JAM) (200	time	2.47	3.47	4.44	5.40	6.36	7.31	8.27	9.24	10.21	11.22		12.42	6 / 3			
reaction time 0.166	interval		1.00	0.97	0.96	0.96	0.95	0.96	0.97	0.97	1.01	1.20			2.93	2.87	2.95
	velocity	5.26	8.50	8.76	8.85	8.85	8.95	8.85	8.76	8.76	8.42	8.38	8.05		8.70	8.89	8.64
Camacho-Quinn, Jasmine (PU	time	2.50	3.50	4.50	5.47	6.41	7.37	8.32	9.29	10.27	11.28		12.49	5 / 4			
reaction time 0.186	interval		1.00	1.00	0.97	0.94	0.96	0.95	0.97	0.98	1.01	1.21			2.97	2.85	2.96
	velocity	5.20	8.50	8.50	8.76	9.04	8.85	8.95	8.76	8.67	8.42	8.31	8.01		8.59	8.95	8.61
Charlton, Devynne (BAH) (19	time	2.45	3.47	4.45	5.43	6.40	7.39	8.37	9.37	10.39	11.41		12.66	2 / 5			
reaction time 0.147	interval		1.02	0.98	0.98	0.97	0.99	0.98	1.00	1.02	1.02	1.25			2.98	2.94	3.04
	velocity	5.31	8.33	8.67	8.67	8.76	8.59	8.67	8.50	8.33	8.33	8.04	7.90		8.56	8.67	8.39
Ali, Nia (USA) (1988)	time	2.47	3.50	4.50	5.47	6.44	7.44	8.41	9.41	10.42	11.44		12.67	3 / 6			
reaction time 0.163	interval		1.03	1.00	0.97	0.97	1.00	0.97	1.00	1.01	1.02	1.23			3.00	2.94	3.03
	velocity	5.26	8.25	8.50	8.76	8.76	8.50	8.76	8.50	8.42	8.33	8.17	7.89		8.50	8.67	8.42
Skrzyszowska, Pia (POL) (2001	time	2.47	3.50	4.47	5.45	6.41	7.39	8.37	9.35	10.37	11.41		12.72	9 / 7			
reaction time 0.162	interval		1.03	0.97	0.98	0.96	0.98	0.98	0.98	1.02	1.04	1.31			2.98	2.92	3.04
	velocity	5.26	8.25	8.76	8.67	8.85	8.67	8.67	8.67	8.33	8.17	7.67	7.86		8.56	8.73	8.39
Harrison, Kendra (USA) (1992	time	2.47	3.60	4.67	5.67	6.67	7.67	8.64	9.64	10.67	11.71		13.02	7 / 8			
reaction time 0.163	interval		1.13	1.07	1.00	1.00	1.00	0.97	1.00	1.03	1.04	1.31			3.20	2.97	3.07
	velocity	5.26	7.52	7.94	8.50	8.50	8.50	8.76	8.50	8.25	8.17	7.67	7.68		7.97	8.59	8.31
Kambundji, Ditaji (SUI) (2002)	time	2.57	3.60	4.64	5.67	6.67	7.67	8.67	9.71	10.81	11.94		13.22	1 / 9			
reaction time 0.161	interval		1.03	1.04	1.03	1.00	1.00	1.00	1.04	1.10	1.13	1.28			3.10	3.00	3.27
	velocity	5.06	8.25	8.17	8.25	8.50	8.50	8.50	8.17	7.73	7.52	7.85	7.56		8.23	8.50	7.80

2022 ISTAF (Berlin, GER) (TV Analysis)

FINAL date 04-Sep-22 wind -0.3 m/s

Henson (2022) - Athlete First: 2022 Tobi Amusan 100m hurdles world record season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.48	3.52	4.48	5.44	6.38	7.32	8.28	9.28	10.26	11.26		12.45	4 / 1			
reaction time 0.133	interval		1.04	0.96	0.96	0.94	0.94	0.96	1.00	0.98	1.00	1.19			2.96	2.84	2.98
	velocity	5.24	8.17	8.85	8.85	9.04	9.04	8.85	8.50	8.67	8.50	8.45	8.03		8.61	8.98	8.56
Jones, Tia (USA) (2000)	time	2.54	3.56	4.58	5.54	6.52	7.50	8.46	9.46	10.44	11.44		12.58	5 / 2			
reaction time 0.151	interval		1.02	1.02	0.96	0.98	0.98	0.96	1.00	0.98	1.00	1.14			3.00	2.92	2.98
	velocity	5.12	8.33	8.33	8.85	8.67	8.67	8.85	8.50	8.67	8.50	8.82	7.95		8.50	8.73	8.56
Tapper, Megan (JAM) (1994)	time	2.52	3.54	4.52	5.48	6.44	7.44	8.44	9.44	10.42	11.46		12.66	6 / 3			
reaction time 0.146	interval		1.02	0.98	0.96	0.96	1.00	1.00	1.00	0.98	1.04	1.20			2.96	2.96	3.02
	velocity	5.16	8.33	8.67	8.85	8.85	8.50	8.50	8.50	8.67	8.17	8.38	7.90		8.61	8.61	8.44

Zbären, Noemi (SUI) (1994)	time	2.72	3.76	4.80	5.80	6.80	7.80	8.80	9.84	10.86	11.90		13.09	3 / 4			
reaction time 0.232	interval		1.04	1.04	1.00	1.00	1.00	1.00	1.04	1.02	1.04	1.19			3.08	3.00	3.10
	velocity	4.78	8.17	8.17	8.50	8.50	8.50	8.50	8.17	8.33	8.17	8.45	7.64		8.28	8.50	8.23
Mayer, Isabel (GER) (1993)	time	2.60	3.68	4.72	5.72	6.76	7.78	8.82	9.88	10.94	12.02		13.24	1 / 5			
reaction time 0.153	interval		1.08	1.04	1.00	1.04	1.02	1.04	1.06	1.06	1.08	1.22	PB		3.12	3.10	3.20
	velocity	5.00	7.87	8.17	8.50	8.17	8.33	8.17	8.02	8.02	7.87	8.24	7.55		8.17	8.23	7.97
Wojtunik, Klaudia (POL) (1999	time	2.64	3.68	4.74	5.76	6.80	7.82	8.86	9.92	11.00	12.04		13.27	7 / 6			
reaction time 0.127	interval		1.04	1.06	1.02	1.04	1.02	1.04	1.06	1.08	1.04	1.23			3.12	3.10	3.18
	velocity	4.92	8.17	8.02	8.33	8.17	8.33	8.17	8.02	7.87	8.17	8.17	7.54		8.17	8.23	8.02
Töth, Anna (HUN) (2003)	time	2.68	3.76	4.80	5.84	6.88	7.92	8.96	10.00	11.08	12.16		13.43	8 / 7			
reaction time 0.165	interval		1.08	1.04	1.04	1.04	1.04	1.04	1.04	1.08	1.08	1.27			3.16	3.12	3.20
	velocity	4.85	7.87	8.17	8.17	8.17	8.17	8.17	8.17	7.87	7.87	7.91	7.45		8.07	8.17	7.97
Hjørnevik, Martine (NOR) (200	time	2.76	3.84	4.92	5.96	7.00	8.08	9.12	10.24	11.32	12.44		13.70	2 / 8			
reaction time 0.166	interval		1.08	1.08	1.04	1.04	1.08	1.04	1.12	1.08	1.12	1.26			3.20	3.16	3.32
	velocity	4.71	7.87	7.87	8.17	8.17	7.87	8.17	7.59	7.87	7.59	7.98	7.30		7.97	8.07	7.68
Rooth, Andrea (NOR) (2002	time	2.68	3.80	4.92	6.00	7.08	8.16	9.24	10.40	11.52	12.64		13.87	9 / 9			
reaction time 0.139	interval		1.12	1.12	1.08	1.08	1.08	1.08	1.16	1.12	1.12	1.23			3.32	3.24	3.40
	velocity	4.85	7.59	7.59	7.87	7.87	7.87	7.87	7.33	7.59	7.59	8.17	7.21		7.68	7.87	7.50

2022 Memorial van Damme (Brussels, BEL) (TV Analysis)

FINAL date 02-Sep-22 wind 0.1 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.44	3.44	4.40	5.35	6.28	7.22	8.19	9.13	10.09	11.07		12.27	4 / 1			
reaction time 0.166	interval		1.00	0.96	0.95	0.93	0.94	0.97	0.94	0.96	0.98	1.20			2.91	2.84	2.88
	velocity	5.33	8.50	8.85	8.95	9.14	9.04	8.76	9.04	8.85	8.67	8.38	8.15		8.76	8.98	8.85
Jones, Tia (USA) (2000)	time	2.50	3.50	4.47	5.44	6.38	7.32	8.28	9.24	10.21	11.21		12.38	3 / 2			
reaction time 0.165	interval		1.00	0.97	0.97	0.94	0.94	0.96	0.96	0.97	1.00	1.17	PB		2.94	2.84	2.93
	velocity	5.20	8.50	8.76	8.76	9.04	9.04	8.85	8.85	8.76	8.50	8.59	8.08		8.67	8.98	8.70
Harrison, Kendra (USA) (1992)	time	2.44	3.45	4.44	5.37	6.32	7.30	8.25	9.21	10.18	11.18		12.40	5 / 3			
reaction time 0.163	interval		1.01	0.99	0.93	0.95	0.98	0.95	0.96	0.97	1.00	1.22			2.93	2.88	2.93
	velocity	5.33	8.42	8.59	9.14	8.95	8.67	8.95	8.85	8.76	8.50	8.24	8.06		8.70	8.85	8.70
Anderson, Britany (JAM) (200	time	2.47	3.47	4.45	5.42	6.37	7.34	8.29	9.26	10.23	11.26		12.44	6 / 4			
reaction time 0.145	interval		1.00	0.98	0.97	0.95	0.97	0.95	0.97	0.97	1.03	1.18			2.95	2.87	2.97
	velocity	5.26	8.50	8.67	8.76	8.95	8.76	8.95	8.76	8.76	8.25	8.52	8.04		8.64	8.89	8.59
Tapper, Megan (JAM) (1994)	time	2.47	3.47	4.44	5.42	6.40	7.37	8.34	9.31	10.31	11.31		12.51	2 / 5			
reaction time 0.163	interval		1.00	0.97	0.98	0.98	0.97	0.97	0.97	1.00	1.00	1.20	PB		2.95	2.92	2.97
	velocity	5.26	8.50	8.76	8.67	8.67	8.76	8.76	8.76	8.50	8.50	8.38	7.99		8.64	8.73	8.59
Charlton, Devynne (BAH) (19	time	2.44	3.47	4.47	5.47	6.44	7.40	8.40	9.40	10.41	11.41		12.66	1 / 6			
reaction time 0.160	interval		1.03	1.00	1.00	0.97	0.96	1.00	1.00	1.01	1.00	1.25			3.03	2.93	3.01
	velocity	5.33	8.25	8.50	8.50	8.76	8.85	8.50	8.50	8.42	8.50	8.04	7.90		8.42	8.70	8.47
Skrzyszowska, Pia (POL) (2001	time	2.47	3.50	4.50	5.50	6.47	7.47	8.47	9.50	10.54	11.58		12.81	7 / 7			
reaction time 0.136	interval		1.03	1.00	1.00	0.97	1.00	1.00	1.03	1.04	1.04	1.23			3.03	2.97	3.11
	velocity	5.26	8.25	8.50	8.50	8.76	8.50	8.50	8.25	8.17	8.17	8.17	7.81		8.42	8.59	8.20
Visser, Nadine (NED) (1995)	time	2.50	3.53	4.50	5.47	6.47	7.47	8.47	9.50	10.57	11.64		12.88	8 / 8			
reaction time 0.174	interval		1.03	0.97	0.97	1.00	1.00	1.00	1.03	1.07	1.07	1.24			2.97	3.00	3.17
	velocity	5.20	8.25	8.76	8.76	8.50	8.50	8.50	8.25	7.94	7.94	8.10	7.76		8.59	8.50	8.04

2022 Athletissima (Lausanne, SUI) (TV Analysis)

FINAL date 26-Aug-22 wind -0.9 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.43	3.47	4.44	5.40	6.34	7.27	8.24	9.20	10.17	11.14		12.34	4 / 1			
reaction time 0.152	interval		1.04	0.97	0.96	0.94	0.93	0.97	0.96	0.97	0.97	1.20			2.97	2.84	2.90
	velocity	5.35	8.17	8.76	8.85	9.04	9.14	8.76	8.85	8.76	8.76	8.38	8.10		8.59	8.98	8.79
Amusan, Tobi (NGR) (1997)	time	2.43	3.44	4.44	5.40	6.34	7.27	8.27	9.25	10.25	11.27		12.45	5 / 2			
reaction time 0.151	interval		1.01	1.00	0.96	0.94	0.93	1.00	0.98	1.00	1.02	1.18			2.97	2.87	3.00
	velocity	5.35	8.42	8.50	8.85	9.04	9.14	8.50	8.67	8.50	8.33	8.52	8.03		8.59	8.89	8.50
Jones, Tia (USA) (2000)	time	2.47	3.50	4.47	5.44	6.41	7.37	8.34	9.31	10.28	11.27		12.47	8 / 3			
reaction time 0.161	interval		1.03	0.97	0.97	0.97	0.96	0.97	0.97	0.97	0.99	1.20	PB		2.97	2.90	2.93
	velocity	5.26	8.25	8.76	8.76	8.76	8.85	8.76	8.76	8.76	8.59	8.37	8.02		8.59	8.79	8.70
Ali, Nia (USA) (1988)	time	2.47	3.50	4.50	5.49	6.44	7.41	8.39	9.37	10.35	11.37		12.59	7 / 4			
reaction time 0.182	interval		1.03	1.00	0.99	0.95	0.97	0.98	0.98	0.98	1.02	1.22			3.02	2.90	2.98
	velocity	5.26	8.25	8.50	8.59	8.95	8.76	8.67	8.67	8.67	8.33	8.24	7.94		8.44	8.79	8.56

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

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Anderson, Britany (JAM) (200	time		2.45	3.47	4.44	5.40	6.37	7.35	8.33	9.31	10.31	11.34		12.59	3 / 5			
reaction time 0.155	interval			1.02	0.97	0.96	0.97	0.98	0.98	0.98	1.00	1.03	1.25			2.95	2.93	3.01
	velocity		5.31	8.33	8.76	8.85	8.76	8.67	8.67	8.67	8.50	8.25	8.04	7.94		8.64	8.70	8.47
Harrison, Kendra (USA) (1992)	time		2.47	3.50	4.50	5.47	6.44	7.42	8.39	9.37	10.34	11.36		12.59	6 / 6			
reaction time 0.171	interval			1.03	1.00	0.97	0.97	0.98	0.97	0.98	0.97	1.02	1.23			3.00	2.92	2.97
	velocity		5.26	8.25	8.50	8.76	8.76	8.67	8.76	8.67	8.76	8.33	8.17	7.94		8.50	8.73	8.59
Visser, Nadine (NED) (1995)	time		2.50	3.53	4.53	5.53	6.51	7.51	8.51	9.51	10.53	11.58		12.81	1 / 7			
reaction time 0.171	interval			1.03	1.00	1.00	0.98	1.00	1.00	1.00	1.02	1.05	1.23			3.03	2.98	3.07
	velocity		5.20	8.25	8.50	8.50	8.67	8.50	8.50	8.50	8.33	8.10	8.17	7.81		8.42	8.56	8.31
Kambundji, Ditaji (SUI) (2002)	time		2.50	3.50	4.50	5.50	6.51	7.51	8.51	9.54	10.57	11.63		12.83	2 / 8			
reaction time 0.129	interval			1.00	1.00	1.00	1.01	1.00	1.00	1.03	1.03	1.06	1.20			3.00	3.01	3.12
	velocity		5.20	8.50	8.50	8.50	8.42	8.50	8.50	8.25	8.25	8.02	8.38	7.79		8.50	8.47	8.17

2022 European Athletics Championships (Munich, GER) (TV Analysis

FINAL date 21-Aug-22 wind -0.1 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Skrzyszowska, Pia (POL) (2001	time		2.52	3.52	4.52	5.48	6.45	7.41	8.39	9.35	10.33	11.33		12.53	6 / 1			
reaction time 0.134	interval			1.00	1.00	0.96	0.97	0.96	0.98	0.96	0.98	1.00	1.20			2.96	2.91	2.94
	velocity		5.16	8.50	8.50	8.85	8.76	8.85	8.67	8.85	8.67	8.50	8.38	7.98		8.61	8.76	8.67
Kozák, Luca (HUN) (1996)	time		2.56	3.56	4.56	5.54	6.50	7.48	8.46	9.45	10.45	11.47		12.69	5 / 2			
reaction time 0.155	interval			1.00	1.00	0.98	0.96	0.98	0.98	0.99	1.00	1.02	1.22	**=NR =PB**		2.98	2.92	3.01
	velocity		5.08	8.50	8.50	8.67	8.85	8.67	8.67	8.59	8.50	8.33	8.24	7.88		8.56	8.73	8.47
Kambundji, Ditaji (SUI) (2002)	time		2.56	3.58	4.57	5.56	6.55	7.54	8.53	9.52	10.52	11.57		12.74	8 / 3			
reaction time 0.169	interval			1.02	0.99	0.99	0.99	0.99	0.99	0.99	1.00	1.05	1.17			3.00	2.97	3.04
	velocity		5.08	8.33	8.59	8.59	8.59	8.59	8.59	8.59	8.50	8.10	8.59	7.85		8.50	8.59	8.39
Visser, Nadine (NED) (1995)	time		2.56	3.58	4.57	5.56	6.53	7.50	8.50	9.48	10.49	11.55		12.75	4 / 4			
reaction time 0.156	interval			1.02	0.99	0.99	0.97	0.97	1.00	0.98	1.01	1.06	1.20			3.00	2.94	3.05
	velocity		5.08	8.33	8.59	8.59	8.76	8.76	8.50	8.67	8.42	8.02	8.38	7.84		8.50	8.67	8.36
Lavin, Sarah (IRL) (1994)	time		2.60	3.64	4.67	5.67	6.65	7.65	8.65	9.62	10.65	11.67		12.86	1 / 5			
reaction time 0.171	interval			1.04	1.03	1.00	0.98	1.00	1.00	0.97	1.03	1.02	1.19			3.07	2.98	3.02
	velocity		5.00	8.17	8.25	8.50	8.67	8.50	8.50	8.76	8.25	8.33	8.45	7.78		8.31	8.56	8.44
Graversgaard, Mette (DEN) (19	time		2.56	3.60	4.62	5.62	6.61	7.61	8.61	9.61	10.69	11.77		12.99	2 / 6			
reaction time 0.154	interval			1.04	1.02	1.00	0.99	1.00	1.00	1.00	1.08	1.08	1.22			3.06	2.99	3.16
	velocity		5.08	8.17	8.33	8.50	8.59	8.50	8.50	8.50	7.87	7.87	8.24	7.70		8.33	8.53	8.07
Samba-Mayela, Cyréna (FRA)	time		2.56	3.58	4.58	5.60	6.63	7.66	8.69	9.69	10.73	11.81		13.05	7 / 7			
reaction time 0.152	interval			1.02	1.00	1.02	1.03	1.03	1.03	1.00	1.04	1.08	1.24			3.04	3.09	3.12
	velocity		5.08	8.33	8.50	8.33	8.25	8.25	8.25	8.50	8.17	7.87	8.10	7.66		8.39	8.25	8.17
Sember, Cindy (GBR) (1994)	time		2.54	3.58	4.74	5.80	6.85	7.81	8.85	9.81	10.83	11.89		13.16	3 / 8			
reaction time 0.175	interval			1.04	1.16	1.06	1.05	0.96	1.04	0.96	1.02	1.06	1.27			3.26	3.05	3.04
	velocity		5.12	8.17	7.33	8.02	8.10	8.85	8.17	8.85	8.33	8.02	7.91	7.60		7.82	8.36	8.39

2022 Gyulai István Memorial (Székesfehérvár, HUN) (TV Analysis)

FINAL date 08-Aug-22 wind 2.4 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time		2.47	3.50	4.47	5.43	6.35	7.30	8.25	9.20	10.13	11.13		12.27	5 / 1			
reaction time 0.114	interval			1.03	0.97	0.96	0.92	0.95	0.95	0.95	0.93	1.00	1.14			2.96	2.82	2.88
	velocity		5.26	8.25	8.76	8.85	9.24	8.95	8.95	8.95	9.14	8.50	8.82	8.15		8.61	9.04	8.85
Harrison, Kendra (USA) (1992)	time		2.47	3.50	4.50	5.46	6.43	7.40	8.34	9.32	10.30	11.32		12.49	4 / 2			
reaction time 0.140	interval			1.03	1.00	0.96	0.97	0.97	0.94	0.98	0.98	1.02	1.17			2.99	2.88	2.98
	velocity		5.26	8.25	8.50	8.85	8.76	8.76	9.04	8.67	8.67	8.33	8.59	8.01		8.53	8.85	8.56
Ali, Nia (USA) (1988)	time		2.47	3.50	4.52	5.50	6.46	7.43	8.43	9.43	10.43	11.43		12.60	6 / 3			
reaction time 0.138	interval			1.03	1.02	0.98	0.96	0.97	1.00	1.00	1.00	1.00	1.17			3.03	2.93	3.00
	velocity		5.26	8.25	8.33	8.67	8.85	8.76	8.50	8.50	8.50	8.50	8.59	7.94		8.42	8.70	8.50
Johnson, Alaysha (USA) (199	time		2.60	3.65	4.63	5.66	6.66	7.63	8.60	9.57	10.53	11.50		12.62	7 / 4			
reaction time 0.173	interval			1.05	0.98	1.03	1.00	0.97	0.97	0.97	0.96	0.97	1.12			3.06	2.94	2.90
	velocity		5.00	8.10	8.67	8.25	8.50	8.76	8.76	8.76	8.85	8.76	8.97	7.92		8.33	8.67	8.79
Brissett, Chanel (USA) (1999)	time		2.56	3.60	4.63	5.60	6.60	7.60	8.60	9.60	10.63	11.66		12.87	1 / 5			
reaction time 0.148	interval			1.04	1.03	0.97	1.00	1.00	1.00	1.00	1.03	1.03	1.21			3.04	3.00	3.06
	velocity		5.08	8.17	8.25	8.76	8.50	8.50	8.50	8.50	8.25	8.25	8.31	7.77		8.39	8.50	8.33
Cunningham, Gabriele (USA)	time		2.56	3.60	4.60	5.63	6.63	7.65	8.65	9.67	10.73	11.83		13.09	2 / 6			
reaction time 0.160	interval			1.04	1.00	1.03	1.00	1.02	1.00	1.02	1.06	1.10	1.26			3.07	3.02	3.18

	velocity	5.08	8.17	8.50	8.25	8.50	8.33	8.50	8.33	8.02	7.73	7.98	7.64		8.31	8.44	8.02
Kerekes, Gréta (HUN) (1992)	time	2.66	3.73	4.83	5.86	6.93	8.00	9.06	10.13	11.23	12.35		13.60	8 / 7			
reaction time 0.140	interval		1.07	1.10	1.03	1.07	1.07	1.06	1.07	1.10	1.12	1.25			3.20	3.20	3.29
	velocity	4.89	7.94	7.73	8.25	7.94	7.94	8.02	7.94	7.73	7.59	8.04	7.35		7.97	7.97	7.75
Kozák, Luca (HUN) (1996)	time	2.58	3.63	4.63	5.60	6.60	7.60	8.60	9.60				dnf	3 / --			
reaction time 0.165	interval		1.05	1.00	0.97	1.00	1.00	1.00	1.00				DQ		3.02	3.00	
	velocity	5.04	8.10	8.50	8.76	8.50	8.50	8.50	8.50						8.44	8.50	

2022 Commonwealth Games (Birmingham, GBR) (TV Analysis)

FINAL

date 07-Aug-22 wind -0.2 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.48	3.48	4.44	5.38	6.34	7.28	8.22	9.18	10.16	11.16		12.30	5 / 1			
reaction time 0.126	interval		1.00	0.96	0.94	0.96	0.94	0.94	0.96	0.98	1.00	1.14			2.90	2.84	2.94
	velocity	5.24	8.50	8.85	9.04	8.85	9.04	9.04	8.85	8.67	8.50	8.82	8.13		8.79	8.98	8.67
Charlton, Devynne (BAH) (19	time	2.48	3.48	4.46	5.42	6.40	7.38	8.36	9.36	10.36	11.40		12.58	7 / 2			
reaction time 0.144	interval		1.00	0.98	0.96	0.98	0.98	0.98	1.00	1.00	1.04	1.18			2.94	2.94	3.04
	velocity	5.24	8.50	8.67	8.85	8.67	8.67	8.67	8.50	8.50	8.17	8.52	7.95		8.67	8.67	8.39
Sember, Cindy (GBR) (1994)	time	2.52	3.52	4.52	5.52	6.48	7.44	8.40	9.40	10.38	11.40		12.59	3 / 3			
reaction time 0.145	interval		1.00	1.00	1.00	0.96	0.96	0.96	1.00	0.98	1.02	1.19			3.00	2.88	3.00
	velocity	5.16	8.50	8.50	8.50	8.85	8.85	8.85	8.50	8.67	8.33	8.45	7.94		8.50	8.85	8.50
Tapper, Megan (JAM) (1994)	time	2.52	3.52	4.48	5.44	6.40	7.38	8.36	9.36	10.40	11.44		12.67	4 / 4			
reaction time 0.154	interval		1.00	0.96	0.96	0.96	0.98	0.98	1.00	1.04	1.04	1.23			2.92	2.92	3.08
	velocity	5.16	8.50	8.85	8.85	8.85	8.67	8.67	8.50	8.17	8.17	8.17	7.89		8.73	8.73	8.28
Jenneke, Michelle (AUS) (1993	time	2.48	3.48	4.48	5.44	6.42	7.40	8.38	9.40	10.40	11.46		12.68	6 / 5			
reaction time 0.154	interval		1.00	1.00	0.96	0.98	0.98	0.98	1.02	1.00	1.06	1.22			2.96	2.94	3.08
	velocity	5.24	8.50	8.50	8.85	8.67	8.67	8.67	8.33	8.50	8.02	8.24	7.89		8.61	8.67	8.28
Williams, Danielle (JAM) (1992	time	2.48	3.48	4.48	5.46	6.44	7.44	8.44	9.44	10.46	11.48		12.69	8 / 6			
reaction time 0.128	interval		1.00	1.00	0.98	0.98	1.00	1.00	1.00	1.02	1.02	1.21			2.98	2.98	3.04
	velocity	5.24	8.50	8.50	8.67	8.67	8.50	8.50	8.50	8.33	8.33	8.31	7.88		8.56	8.56	8.39
Mucci, Celeste (AUS) (1999)	time	2.60	3.62	4.62	5.62	6.62	7.64	8.66	9.68	10.76	11.80		13.03	1 / 7			
reaction time 0.151	interval		1.02	1.00	1.00	1.00	1.02	1.02	1.02	1.08	1.04	1.23			3.02	3.04	3.14
	velocity	5.00	8.33	8.50	8.50	8.50	8.33	8.33	8.33	7.87	8.17	8.17	7.67		8.44	8.39	8.12
Harrison, Michelle (CAN) (199	time	2.60	3.62	4.64	5.66	6.68	7.66	8.66	9.70	10.76	11.82		25.13	2 / 8			
reaction time 0.126	interval		1.02	1.02	1.02	1.02	0.98	1.00	1.04	1.06	1.06	13.31			3.06	3.00	3.16
	velocity	5.00	8.33	8.33	8.33	8.33	8.67	8.50	8.17	8.02	8.02	0.76	3.98		8.33	8.50	8.07

Heat 3

date 05-Aug-22 wind 2.4 m/s

Henson (2022) - Athlete First: 2022 Tobi Amusan 100m hurdles world record season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.50	3.50	4.48	5.43	6.37	7.33	8.28	9.23	10.23	11.23		12.40	3 / 1			
reaction time 0.150	interval		1.00	0.98	0.95	0.94	0.96	0.95	0.95	1.00	1.00	1.17			2.93	2.85	2.95
	velocity	5.20	8.50	8.67	8.95	9.04	8.85	8.95	8.95	8.50	8.50	8.59	8.06		8.70	8.95	8.64
Jenneke, Michelle (AUS) (1993	time	2.53	3.53	4.51	5.48	6.45	7.43	8.40	9.40	10.40	11.43		12.63	5 / 2			
reaction time 0.153	interval		1.00	0.98	0.97	0.97	0.98	0.97	1.00	1.00	1.03	1.20			2.95	2.92	3.03
	velocity	5.14	8.50	8.67	8.76	8.76	8.67	8.76	8.50	8.50	8.25	8.37	7.92		8.64	8.73	8.42
Harrison, Michelle (CAN) (199	time	2.60	3.63	4.63	5.60	6.60	7.60	8.58	9.60	10.63	11.67		12.85	6 / 3			
reaction time 0.137	interval		1.03	1.00	0.97	1.00	1.00	0.98	1.02	1.03	1.04	1.18			3.00	2.98	3.09
	velocity	5.00	8.25	8.50	8.76	8.50	8.50	8.67	8.33	8.25	8.17	8.52	7.78		8.50	8.56	8.25

2022 Japanese National High School Championships (Naruto, JPN)

FINAL

date 07-Aug-22 wind -1.5 m/s

Kishima (2022) - national high school championships biomechanics data collection

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Hayashi, Miki (JPN) (2005)	time	2.62	3.71	4.78	5.84	6.90	7.96	9.03	10.14	11.24	12.40		13.65	4 / 1			
reaction time 0.125	interval		1.09	1.07	1.06	1.06	1.06	1.07	1.11	1.10	1.16	1.25			3.22	3.19	3.37
	velocity	4.96	7.80	7.94	8.02	8.02	8.02	7.94	7.66	7.73	7.33	8.04	7.33		7.92	7.99	7.57
Takahashi, Ami (JPN) (2005)	time	2.64	3.76	4.87	5.96	7.06	8.15	9.26	10.36	11.47	12.61		13.85	6 / 2			
reaction time 0.141	interval		1.12	1.11	1.09	1.10	1.09	1.11	1.10	1.11	1.14	1.24			3.32	3.30	3.35
	velocity	4.92	7.59	7.66	7.80	7.73	7.80	7.66	7.73	7.66	7.46	8.10	7.22		7.68	7.73	7.61
Nagai, Mahiro (JPN) (2004)	time	2.71	3.81	4.90	5.99	7.07	8.17	9.26	10.37	11.52	12.66		13.91	7 / 3			
reaction time 0.187	interval		1.10	1.09	1.09	1.08	1.10	1.09	1.11	1.15	1.14	1.25			3.28	3.27	3.40
	velocity	4.80	7.73	7.80	7.80	7.87	7.73	7.80	7.66	7.39	7.46	8.04	7.19		7.77	7.80	7.50
Maeda, Mitsuki (JPN) (2004)	time	2.69	3.78	4.88	5.99	7.09	8.20	9.31	10.44	11.57	12.72		13.96	9 / 4			
reaction time 0.169	interval		1.09	1.10	1.11	1.10	1.11	1.11	1.13	1.13	1.15	1.24			3.30	3.32	3.41
	velocity	4.83	7.80	7.73	7.66	7.73	7.66	7.66	7.52	7.52	7.39	8.10	7.16		7.73	7.68	7.48

Fujiwara, Karen (JPN) (2004)	time	2.69	3.79	4.88	5.97	7.07	8.15	9.25	10.37	11.52	12.69		14.00	3 / 5			
reaction time 0.173	interval		1.10	1.09	1.09	1.10	1.08	1.10	1.12	1.15	1.17	1.31			3.28	3.28	3.44
	velocity	4.83	7.73	7.80	7.80	7.73	7.87	7.73	7.59	7.39	7.26	7.67	7.14		7.77	7.77	7.41
Moriwaki, Kanami (JPN) (2004)	time	2.70	3.81	4.90	6.00	7.09	8.18	9.28	10.42	11.57	12.74		14.04	2 / 6			
reaction time 0.144	interval		1.11	1.09	1.10	1.09	1.09	1.10	1.14	1.15	1.17	1.30			3.30	3.28	3.46
	velocity	4.81	7.66	7.80	7.73	7.80	7.80	7.73	7.46	7.39	7.26	7.73	7.12		7.73	7.77	7.37
Taninaka, Tennka (JPN) (2006)	time	2.64	3.74	4.82	5.89	6.97	8.06	9.16	10.29	11.40	12.59		14.11	5 / 7			
reaction time 0.147	interval		1.10	1.08	1.07	1.08	1.09	1.10	1.13	1.11	1.19	1.52			3.25	3.27	3.43
	velocity	4.92	7.73	7.87	7.94	7.87	7.80	7.73	7.52	7.66	7.14	6.61	7.09		7.85	7.80	7.43
Miyamatsu, Shiki (JPN) (2005)	time	2.71	3.82	4.95	6.05	7.17	8.28	9.41	10.56	11.70	12.88		14.15	8 / 8			
reaction time 0.151	interval		1.11	1.13	1.10	1.12	1.11	1.13	1.15	1.14	1.18	1.27			3.34	3.36	3.47
	velocity	4.80	7.66	7.52	7.73	7.59	7.66	7.52	7.39	7.46	7.20	7.91	7.07		7.63	7.59	7.35

2022 World Athletics Championships (Eugene, OR)

Aoki (2023) - domestic & foreign first-class women's 100m hurdles in the 2022 season

FINAL

date 24-Jul-22 wind 2.5 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report (TV Analysis)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.50	3.50	4.43	5.37	6.27	7.20	8.12	9.07	10.02	11.01		12.06	4 / 1			*Aoki (2023)*
reaction time 0.130	interval		1.00	0.93	0.94	0.90	0.93	0.92	0.95	0.95	0.99	1.05			2.87	2.75	2.89
	velocity	5.20	8.50	9.14	9.04	9.44	9.14	9.24	8.95	8.95	8.59	9.57	8.29		8.89	9.27	8.82
Anderson, Britany (JAM) (200	time	2.49	3.48	4.43	5.36	6.31	7.24	8.20	9.18	10.15	11.15		12.23	5 / 2			*Aoki (2023)*
reaction time 0.129	interval		0.99	0.95	0.93	0.95	0.93	0.96	0.98	0.97	1.00	1.08			2.87	2.84	2.95
	velocity	5.22	8.59	8.95	9.14	8.95	9.14	8.85	8.67	8.76	8.50	9.31	8.18		8.89	8.98	8.64
Camacho-Quinn, Jasmine (PU	time	2.52	3.55	4.52	5.45	6.37	7.31	8.24	9.19	10.13	11.11		12.23	7 / 3			*Aoki (2023)*
reaction time 0.127	interval		1.03	0.97	0.93	0.92	0.94	0.93	0.95	0.94	0.98	1.12			2.93	2.79	2.87
	velocity	5.16	8.25	8.76	9.14	9.24	9.04	9.14	8.95	9.04	8.67	8.97	8.18		8.70	9.14	8.89
Armstrong, Alia (USA) (2000)	time	2.44	3.45	4.42	5.36	6.30	7.25	8.21	9.21	10.20	11.23		12.31	6 / 4			*Aoki (2023)*
reaction time 0.125	interval		1.01	0.97	0.94	0.94	0.95	0.96	1.00	0.99	1.03	1.08			2.92	2.85	3.02
	velocity	5.33	8.42	8.76	9.04	9.04	8.95	8.85	8.50	8.59	8.25	9.31	8.12		8.73	8.95	8.44
Sember, Cindy (GBR) (1994)	time	2.57	3.58	4.53	5.51	6.44	7.37	8.33	9.29	10.27	11.27		12.38	1 / 5			*Aoki (2023)*
reaction time 0.158	interval		1.01	0.95	0.98	0.93	0.93	0.96	0.96	0.98	1.00	1.11			2.94	2.82	2.94
	velocity	5.06	8.42	8.95	8.67	9.14	9.14	8.85	8.85	8.67	8.50	9.05	8.08		8.67	9.04	8.67
Williams, Danielle (JAM) (1992	time	2.49	3.47	4.43	5.38	6.33	7.27	8.27	9.25	10.26	11.30		12.44	2 / 6			*Aoki (2023)*
reaction time 0.105	interval		0.98	0.96	0.95	0.95	0.94	1.00	0.98	1.01	1.04	1.14			2.89	2.89	3.03
	velocity	5.22	8.67	8.85	8.95	8.95	9.04	8.50	8.67	8.42	8.17	8.82	8.04		8.82	8.82	8.42
Charlton, Devynne (BAH) (19	time	2.52	3.51	4.47	5.41	6.35	7.35	8.34	9.34	10.37	11.39		12.53	8 / 7			*Aoki (2023)*
reaction time 0.129	interval		0.99	0.96	0.94	0.94	1.00	0.99	1.00	1.03	1.02	1.14			2.89	2.93	3.05
	velocity	5.16	8.59	8.85	9.04	9.04	8.50	8.59	8.50	8.25	8.33	8.82	7.98		8.82	8.70	8.36
Harrison, Kendra (USA) (1992)	time	2.45	3.47	4.47	5.40	6.36	7.30	8.26	9.27				dnf	3 / --			*Henson (2022)*
reaction time 0.145	interval		1.02	1.00	0.93	0.96	0.94	0.96	1.01				DQ		2.95	2.86	
	velocity	5.31	8.33	8.50	9.14	8.85	9.04	8.85	8.42						8.64	8.92	

Semi-Final 3 (TV A

date 24-Jul-22 wind 0.3 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Anderson, Britany (JAM) (200	time	2.50	3.50	4.46	5.42	6.34	7.30	8.26	9.23	10.20	11.20		12.31	3 / 1			
reaction time 0.143	interval		1.00	0.96	0.96	0.92	0.96	0.96	0.97	0.97	1.00	1.11	NR PB		2.92	2.84	2.94
	velocity	5.20	8.50	8.85	8.85	9.24	8.85	8.85	8.76	8.76	8.50	9.05	8.12		8.73	8.98	8.67
Camacho-Quinn, Jasmine (PU	time	2.53	3.53	4.53	5.46	6.43	7.38	8.32	9.26	10.23	11.21		12.32	5 / 2			
reaction time 0.126	interval		1.00	1.00	0.93	0.97	0.95	0.94	0.94	0.97	0.98	1.11			2.93	2.86	2.89
	velocity	5.14	8.50	8.50	9.14	8.76	8.95	9.04	9.04	8.76	8.67	9.05	8.12		8.70	8.92	8.82
Visser, Nadine (NED) (1995)	time	2.53	3.53	4.53	5.52	6.48	7.46	8.44	9.46	10.46	11.52		12.66	6 / 3			
reaction time 0.125	interval		1.00	1.00	0.99	0.96	0.98	0.98	1.02	1.00	1.06	1.14			2.99	2.92	3.08
	velocity	5.14	8.50	8.50	8.59	8.85	8.67	8.67	8.33	8.50	8.02	8.82	7.90		8.53	8.73	8.28
Harrison, Michelle (CAN) (199	time	2.60	3.60	4.60	5.56	6.53	7.53	8.53	9.53	10.53	11.57		12.74	4 / 4			
reaction time 0.106	interval		1.00	1.00	0.96	0.97	1.00	1.00	1.00	1.00	1.04	1.17	PB		2.96	2.97	3.04
	velocity	5.00	8.50	8.50	8.85	8.76	8.50	8.50	8.50	8.50	8.17	8.59	7.85		8.61	8.59	8.39
Lavin, Sarah (IRL) (1994)	time	2.62	3.64	4.66	5.66	6.66	7.66	8.66	9.68	10.70	11.73		12.87	7 / 5			
reaction time 0.117	interval		1.02	1.02	1.00	1.00	1.00	1.00	1.02	1.02	1.03	1.14			3.04	3.00	3.07
	velocity	4.96	8.33	8.33	8.50	8.50	8.50	8.50	8.33	8.33	8.25	8.82	7.77		8.39	8.50	8.31
Bapté, Laeticia (FRA) (1999)	time	2.53	3.60	4.58	5.58	6.53	7.51	8.51	9.53	10.63	11.68		12.93	1 / 6			
reaction time 0.157	interval	7 steps	1.07	0.98	1.00	0.95	0.98	1.00	1.02	1.10	1.05	1.25			3.05	2.93	3.17
	velocity	5.14	7.94	8.67	8.50	8.95	8.67	8.50	8.33	7.73	8.10	8.04	7.73		8.36	8.70	8.04

Zbären, Noemi (SUI) (1994)	time	2.66	3.72	4.72	5.70	6.72	7.72	8.72	9.74	10.74	11.78		12.94	8 / 7			
reaction time 0.164	interval		1.06	1.00	0.98	1.02	1.00	1.00	1.02	1.00	1.04	1.16			3.04	3.02	3.06
	velocity	4.89	8.02	8.50	8.67	8.33	8.50	8.50	8.33	8.50	8.17	8.66	7.73		8.39	8.44	8.33
Hurske, Reetta (FIN) (1995)	time	2.53	3.60	4.60	5.60	6.60	7.60	8.62	9.63	10.70	11.82		13.15	2 / 8			
reaction time 0.113	interval		1.07	1.00	1.00	1.00	1.00	1.02	1.01	1.07	1.12	1.33			3.07	3.02	3.20
	velocity	5.14	7.94	8.50	8.50	8.50	8.50	8.33	8.42	7.94	7.59	7.56	7.60		8.31	8.44	7.97

Aoki (2023) - domestic & foreign first-class women's 100m hurdles in the 2022 season

Semi-Final 2

date 24-Jul-22 wind -0.1 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report (TV Analysis)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Armstrong, Alia (USA) (2000)	time	2.43	3.42	4.37	5.36	6.32	7.28	8.24	9.22	10.22	11.23		12.43	5 / 1			*Henson (2022)*
reaction time 0.153	interval		0.99	0.95	0.99	0.96	0.96	0.96	0.98	1.00	1.01	1.20	PB		2.93	2.88	2.99
	velocity	5.35	8.59	8.95	8.59	8.85	8.85	8.85	8.67	8.50	8.42	8.38	8.05		8.70	8.85	8.53
Charlton, Devynne (BAH) (19	time	2.43	3.43	4.42	5.38	6.32	7.28	8.26	9.24	10.24	11.26		12.46	3 / 2			*Henson (2022)*
reaction time 0.138	interval		1.00	0.99	0.96	0.94	0.96	0.98	0.98	1.00	1.02	1.20	NR PB		2.95	2.88	3.00
	velocity	5.35	8.50	8.59	8.85	9.04	8.85	8.67	8.67	8.50	8.33	8.37	8.03		8.64	8.85	8.50
Tapper, Megan (JAM) (1994)	time	2.46	3.46	4.44	5.42	6.38	7.32	8.30	9.27	10.29	11.32		12.52	4 / 3			*Henson (2022)*
reaction time 0.173	interval		1.00	0.98	0.98	0.96	0.94	0.98	0.97	1.02	1.03	1.20	PB		2.96	2.88	3.02
	velocity	5.28	8.50	8.67	8.67	8.85	9.04	8.67	8.76	8.33	8.25	8.38	7.99		8.61	8.85	8.44
Skrzyszowska, Pia (POL) (2001	time	2.46	3.46	4.44	5.44	6.43	7.40	8.40	9.40	10.40	11.42		12.62	6 / 4			*Henson (2022)*
reaction time 0.119	interval		1.00	0.98	1.00	0.99	0.97	1.00	1.00	1.00	1.02	1.20	PB		2.98	2.96	3.02
	velocity	5.28	8.50	8.67	8.50	8.59	8.76	8.50	8.50	8.50	8.33	8.38	7.92		8.56	8.61	8.44
Fourie, Marione (RSA) (2002)	time	2.50	3.54	4.62	5.62	6.60	7.58	8.58	9.62	10.64	11.68		12.93	7 / 5			*Henson (2022)*
reaction time 0.128	interval		1.04	1.08	1.00	0.98	0.98	1.00	1.04	1.02	1.04	1.25	PB		3.12	2.96	3.10
	velocity	5.20	8.17	7.87	8.50	8.67	8.67	8.50	8.17	8.33	8.17	8.04	7.73		8.17	8.61	8.23
Aoki, Masumi (JPN) (1994)	time	2.59	3.65	4.68	5.69	6.69	7.70	8.76	9.81	10.88	11.95		13.04	2 / 6			*Aoki (2023)*
reaction time 0.123	interval		1.06	1.03	1.01	1.00	1.01	1.06	1.05	1.07	1.07	1.09			3.10	3.07	3.19
	velocity	5.02	8.02	8.25	8.42	8.50	8.42	8.02	8.10	7.94	7.94	9.22	7.67		8.23	8.31	7.99
Graversgaard, Mette (DEN) (1	time	2.52	3.62	4.63	5.65	6.66	7.66	8.68	9.72	10.75	11.82		13.05	8 / 7			*Henson (2022)*
reaction time 0.134	interval		1.10	1.01	1.02	1.01	1.00	1.02	1.04	1.03	1.07	1.23			3.13	3.03	3.14
	velocity	5.16	7.73	8.42	8.33	8.42	8.50	8.33	8.17	8.25	7.94	8.17	7.66		8.15	8.42	8.12
Mucci, Celeste (AUS) (1999)	time	2.54	3.63	4.65	5.63	6.63	7.63	8.63	9.66	10.70			dnf	1 / --			*Henson (2022)*
reaction time 0.143	interval		1.09	1.02	0.98	1.00	1.00	1.00	1.03	1.04			DQ		3.09	3.00	
	velocity	5.12	7.80	8.33	8.67	8.50	8.50	8.50	8.25	8.17					8.25	8.50	

Aoki (2023) - domestic & foreign first-class women's 100m hurdles in the 2022 season

Semi-Final 1

date 24-Jul-22 wind 0.9 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report (TV Analysis)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.54	3.50	4.48	5.40	6.31	7.22	8.18	9.13	10.09	11.06		12.12	4 / 1			*Aoki (2023)*
reaction time 0.144	interval		0.96	0.98	0.92	0.91	0.91	0.96	0.95	0.96	0.97	1.06	WR		2.86	2.78	2.88
	velocity	5.12	8.85	8.67	9.24	9.34	9.34	8.85	8.95	8.85	8.76	9.48	8.25		8.92	9.17	8.85
Harrison, Kendra (USA) (1992	time	2.46	3.48	4.43	5.36	6.30	7.23	8.15	9.13	10.10	11.08		12.27	6 / 2			*Henson (2022)*
reaction time 0.155	interval		1.02	0.95	0.93	0.94	0.93	0.92	0.98	0.97	0.98	1.19			2.90	2.79	2.93
	velocity	5.28	8.33	8.95	9.14	9.04	9.14	9.24	8.67	8.76	8.67	8.45	8.15		8.79	9.14	8.70
Williams, Danielle (JAM) (1992	time	2.43	3.43	4.40	5.33	6.30	7.26	8.23	9.23	10.23	11.23		12.41	3 / 3			*Henson (2022)*
reaction time 0.105	interval		1.00	0.97	0.93	0.97	0.96	0.97	1.00	1.00	1.00	1.18			2.90	2.90	3.00
	velocity	5.35	8.50	8.76	9.14	8.76	8.85	8.76	8.50	8.50	8.50	8.52	8.06		8.79	8.79	8.50
Sember, Cindy (GBR) (1994)	time	2.50	3.50	4.47	5.45	6.42	7.37	8.33	9.30	10.30	11.30		12.50	5 / 4			*Henson (2022)*
reaction time 0.158	interval		1.00	0.97	0.98	0.97	0.95	0.96	0.97	1.00	1.00	1.20	NR PB		2.95	2.88	2.97
	velocity	5.20	8.50	8.76	8.67	8.76	8.95	8.85	8.76	8.50	8.50	8.38	8.00		8.64	8.85	8.59
Jenneke, Michelle (AUS) (1993	time	2.45	3.46	4.44	5.41	6.36	7.36	8.33	9.33	10.36	11.42		12.66	7 / 5			*Henson (2022)*
reaction time 0.120	interval		1.01	0.98	0.97	0.95	1.00	0.97	1.00	1.03	1.06	1.24	PB		2.96	2.92	3.09
	velocity	5.31	8.42	8.67	8.76	8.95	8.50	8.76	8.50	8.25	8.02	8.10	7.90		8.61	8.73	8.25
Kambundji, Ditaji (SUI) (2002)	time	2.52	3.52	4.50	5.48	6.48	7.48	8.45	9.45	10.48	11.53		12.70	2 / 6			*Henson (2022)*
reaction time 0.134	interval		1.00	0.98	0.98	1.00	1.00	0.97	1.00	1.03	1.05	1.17	PB		2.96	2.97	3.08
	velocity	5.16	8.50	8.67	8.67	8.50	8.50	8.76	8.50	8.25	8.10	8.59	7.87		8.61	8.59	8.28
Vargas, Andrea Carolina (CRC	time	2.60	3.62	4.62	5.60	6.53	7.50	8.52	9.54	10.54	11.62		12.82	8 / 7			*Henson (2022)*
reaction time 0.154	interval		1.02	1.00	0.98	0.93	0.97	1.02	1.02	1.00	1.08	1.20			3.00	2.92	3.10
	velocity	5.00	8.33	8.50	8.67	9.14	8.76	8.33	8.33	8.50	7.87	8.37	7.80		8.50	8.73	8.23
Fukube, Mako (JPN) (1995)	time	2.61	3.64	4.64	5.63	6.63	7.62	8.63	9.64	10.66	11.70		12.82	1 / 8			*Aoki (2023)*
reaction time 0.119	interval		1.03	1.00	0.99	1.00	0.99	1.01	1.01	1.02	1.04	1.12	NR PB		3.02	3.00	3.07
	velocity	4.98	8.25	8.50	8.59	8.50	8.59	8.42	8.42	8.33	8.17	8.97	7.80		8.44	8.50	8.31

Heat 6 (TV Analysis)

date 23-Jul-22 wind -0.4 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)		time	2.50	3.53	4.53	5.50	6.46	7.40	8.36	9.36	10.33	11.36		12.60	4 / 1			
reaction time 0.182		interval		1.03	1.00	0.97	0.96	0.94	0.96	1.00	0.97	1.03	1.24			3.00	2.86	3.00
		velocity	5.20	8.25	8.50	8.76	8.85	9.04	8.85	8.50	8.76	8.25	8.10	7.94		8.50	8.92	8.50
Sember, Cindy (GBR) (1994)		time	2.47	3.52	4.50	5.46	6.46	7.40	8.40	9.38	10.38	11.40		12.67	5 / 2			
reaction time 0.149		interval		1.05	0.98	0.96	1.00	0.94	1.00	0.98	1.00	1.02	1.27			2.99	2.94	3.00
		velocity	5.26	8.10	8.67	8.85	8.50	9.04	8.50	8.67	8.50	8.33	7.91	7.89		8.53	8.67	8.50
Jenneke, Michelle (AUS) (1993		time	2.45	3.47	4.47	5.47	6.45	7.40	8.43	9.46	10.50	11.53		12.84	3 / 3			
reaction time 0.131		interval		1.02	1.00	1.00	0.98	0.95	1.03	1.03	1.04	1.03	1.31			3.02	2.96	3.10
		velocity	5.31	8.33	8.50	8.50	8.67	8.95	8.25	8.25	8.17	8.25	7.67	7.79		8.44	8.61	8.23
Hurske, Reetta (FIN) (1995)		time	2.50	3.54	4.56	5.58	6.60	7.63	8.66	9.70	10.73	11.80		13.09	7 / 4			
reaction time 0.129		interval		1.04	1.02	1.02	1.02	1.03	1.03	1.04	1.03	1.07	1.29			3.08	3.08	3.14
		velocity	5.20	8.17	8.33	8.33	8.33	8.25	8.25	8.17	8.25	7.94	7.79	7.64		8.28	8.28	8.12

Heat 5 (TV Analysis)

date 23-Jul-22 wind 0.5 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Armstrong, Alia (USA) (2000)		time	2.46	3.46	4.43	5.38	6.35	7.33	8.33	9.30	10.30	11.30		12.48	3 / 1			
reaction time 0.149		interval		1.00	0.97	0.95	0.97	0.98	1.00	0.97	1.00	1.00	1.18			2.92	2.95	2.97
		velocity	5.28	8.50	8.76	8.95	8.76	8.67	8.50	8.76	8.50	8.50	8.52	8.01		8.73	8.64	8.59
Tapper, Megan (JAM) (1994)		time	2.53	3.53	4.53	5.50	6.50	7.47	8.47	9.47	10.50	11.50		12.73	2 / 2			
reaction time 0.166		interval		1.00	1.00	0.97	1.00	0.97	1.00	1.00	1.03	1.00	1.23			2.97	2.97	3.03
		velocity	5.14	8.50	8.50	8.76	8.50	8.76	8.50	8.50	8.25	8.50	8.17	7.86		8.59	8.59	8.42
Fourie, Marione (RSA) (2002)		time	2.56	3.63	4.66	5.66	6.66	7.66	8.66	9.68	10.72	11.74		12.94	6 / 3			
reaction time 0.140		interval		1.07	1.03	1.00	1.00	1.00	1.00	1.02	1.04	1.02	1.20			3.10	3.00	3.08
		velocity	5.08	7.94	8.25	8.50	8.50	8.50	8.50	8.33	8.17	8.33	8.38	7.73		8.23	8.50	8.28
Fukube, Mako (JPN) (1995)		time	2.53	3.56	4.60	5.60	6.60	7.60	8.63	9.66	10.70	11.76		12.96	7 / 4			
reaction time 0.108		interval		1.03	1.04	1.00	1.00	1.00	1.03	1.03	1.04	1.06	1.20			3.07	3.03	3.13
		velocity	5.14	8.25	8.17	8.50	8.50	8.50	8.25	8.25	8.17	8.02	8.37	7.72		8.31	8.42	8.15

Heat 4 (TV Analysis)

date 23-Jul-22 wind 0.7 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Skrzyszowska, Pia (POL) (2001		time	2.46	3.50	4.50	5.50	6.50	7.46	8.44	9.46	10.46	11.50		12.70	7 / 1			
reaction time 0.131		interval		1.04	1.00	1.00	1.00	0.96	0.98	1.02	1.00	1.04	1.20			3.04	2.94	3.06
		velocity	5.28	8.17	8.50	8.50	8.50	8.85	8.67	8.33	8.50	8.17	8.38	7.87		8.39	8.67	8.33
Visser, Nadine (NED) (1995)		time	2.52	3.53	4.53	5.53	6.50	7.50	8.50	9.50	10.53	11.56		12.76	8 / 2			
reaction time 0.136		interval		1.01	1.00	1.00	0.97	1.00	1.00	1.00	1.03	1.03	1.20			3.01	2.97	3.06
		velocity	5.16	8.42	8.50	8.50	8.76	8.50	8.50	8.50	8.25	8.25	8.38	7.84		8.47	8.59	8.33
Vargas, Andrea Carolina (CRC		time	2.56	3.66	4.70	5.72	6.72	7.74	8.76	9.83	10.86	11.93		13.12	5 / 3			
reaction time 0.122		interval		1.10	1.04	1.02	1.00	1.02	1.02	1.07	1.03	1.07	1.19			3.16	3.04	3.17
		velocity	5.08	7.73	8.17	8.33	8.50	8.33	8.33	7.94	8.25	7.94	8.45	7.62		8.07	8.39	8.04

Heat 3 (TV Analysis)

date 23-Jul-22 wind 1.5 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)		time	2.50	3.50	4.48	5.43	6.36	7.30	8.26	9.23	10.20	11.20		12.40	3 / 1			
reaction time 0.135		interval		1.00	0.98	0.95	0.93	0.94	0.96	0.97	0.97	1.00	1.20	**AR PB**		2.93	2.83	2.94
		velocity	5.20	8.50	8.67	8.95	9.14	9.04	8.85	8.76	8.76	8.50	8.37	8.06		8.70	9.01	8.67
Williams, Danielle (JAM) (1992		time	2.53	3.56	4.56	5.54	6.53	7.53	8.53	9.53	10.53	11.63		12.87	8 / 2			
reaction time 0.194		interval		1.03	1.00	0.98	0.99	1.00	1.00	1.00	1.00	1.10	1.24			3.01	2.99	3.10
		velocity	5.14	8.25	8.50	8.67	8.59	8.50	8.50	8.50	8.50	7.73	8.10	7.77		8.47	8.53	8.23
Lavin, Sarah (IRL) (1994)		time	2.53	3.56	4.63	5.63	6.63	7.66	8.66	9.70	10.73	11.76		12.99	4 / 3			
reaction time 0.117		interval		1.03	1.07	1.00	1.00	1.03	1.00	1.04	1.03	1.03	1.23			3.10	3.03	3.10
		velocity	5.14	8.25	7.94	8.50	8.50	8.25	8.50	8.17	8.25	8.25	8.17	7.70		8.23	8.42	8.23
Mucci, Celeste (AUS) (1999)		time	2.55	3.60	4.63	5.63	6.65	7.66	8.66	9.70	10.73	11.76		13.01	5 / 4			
reaction time 0.163		interval		1.05	1.03	1.00	1.02	1.01	1.00	1.04	1.03	1.03	1.25			3.08	3.03	3.10
		velocity	5.10	8.10	8.25	8.50	8.33	8.42	8.50	8.17	8.25	8.25	8.04	7.69		8.28	8.42	8.23
Kambundji, Ditaji (SUI) (2002)		time	2.50	3.53	4.55	5.57	6.63	7.66	8.66	9.70	10.83	11.90		13.12	7 / 5			
reaction time 0.137		interval		1.03	1.02	1.02	1.06	1.03	1.00	1.04	1.13	1.07	1.22			3.07	3.09	3.24
		velocity	5.20	8.25	8.33	8.33	8.02	8.25	8.50	8.17	7.52	7.94	8.24	7.62		8.31	8.25	7.87

Heat 2 (TV Analysis)

date 23-Jul-22 wind -0.4 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU		time	2.52	3.56	4.53	5.50	6.46	7.40	8.36	9.34	10.32	11.32		12.52	7 / 1			
reaction time 0.185		interval		1.04	0.97	0.97	0.96	0.94	0.96	0.98	0.98	1.00	1.20			2.98	2.86	2.96
		velocity	5.16	8.17	8.76	8.76	8.85	9.04	8.85	8.67	8.67	8.50	8.38	7.99		8.56	8.92	8.61

Charlton, Devynne (BAH) (19	time	2.46	3.48	4.48	5.46	6.44	7.40	8.38	9.38	10.40	11.46		12.69	8 / 2				
reaction time 0.124	interval		1.02	1.00	0.98	0.98	0.96	0.98	1.00	1.02	1.06	1.23			3.00	2.92	3.08	
	velocity	5.28	8.33	8.50	8.67	8.67	8.85	8.67	8.50	8.33	8.02	8.17	7.88		8.50	8.73	8.28	
Zbären, Noemi (SUI) (1994)	time	2.60	3.66	4.66	5.66	6.66	7.66	8.66	9.68	10.70	11.74		13.00	6 / 3				
reaction time 0.162	interval		1.06	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.04	1.26			3.06	3.00	3.08	
	velocity	5.00	8.02	8.50	8.50	8.50	8.50	8.50	8.33	8.33	8.17	7.98	7.69		8.33	8.50	8.28	
Samba-Mayela, Cyréna (FRA)	time	2.50	3.56	4.56	5.56	6.60	7.64	8.70	9.74	10.80	11.90		13.15	2 / 4				
reaction time 0.108	interval		1.06	1.00	1.00	1.04	1.04	1.06	1.04	1.06	1.10	1.25			3.06	3.14	3.20	
	velocity	5.20	8.02	8.50	8.50	8.17	8.17	8.02	8.17	8.02	7.73	8.04	7.60		8.33	8.12	7.97	

Heat 1 (TV Analysis date 23-Jul-22 wind -0.3 m/s *Henson (2022) - Athlete First: 2022 year end hurdle report*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Anderson, Britany (JAM) (200	time	2.56	3.56	4.55	5.50	6.46	7.43	8.40	9.38	10.36	11.36		12.59	4 / 1			
reaction time 0.153	interval		1.00	0.99	0.95	0.96	0.97	0.97	0.98	0.98	1.00	1.23			2.94	2.90	2.96	
	velocity	5.08	8.50	8.59	8.95	8.85	8.76	8.76	8.67	8.67	8.50	8.17	7.94		8.67	8.79	8.61	
Harrison, Michelle (CAN) (199	time	2.60	3.63	4.63	5.63	6.63	7.63	8.63	9.63	10.66	11.70		12.95	2 / 2			
reaction time 0.137	interval		1.03	1.00	1.00	1.00	1.00	1.00	1.00	1.03	1.04	1.25			3.03	3.00	3.07	
	velocity	5.00	8.25	8.50	8.50	8.50	8.50	8.50	8.50	8.25	8.17	8.04	7.72		8.42	8.50	8.31	
Graversgaard, Mette (DEN) (1	time	2.56	3.63	4.63	5.65	6.67	7.67	8.67	9.70	10.78	11.83		13.04	3 / 3			
reaction time 0.130	interval		1.07	1.00	1.02	1.02	1.00	1.00	1.03	1.08	1.05	1.21			3.09	3.02	3.16	
	velocity	5.08	7.94	8.50	8.33	8.33	8.50	8.50	8.25	7.87	8.10	8.31	7.67		8.25	8.44	8.07	
Ali, Nia (USA) (1988)	time	2.46	3.46	4.46	5.44	6.42	7.40	8.38	9.36	10.34	11.53		dnf	5 / --			
reaction time 0.130	interval		1.00	1.00	0.98	0.98	0.98	0.98	0.98	0.98	1.19		DQ		2.98	2.94	3.15	
	velocity	5.28	8.50	8.50	8.67	8.67	8.67	8.67	8.67	8.67	7.14				8.56	8.67	8.10	

2022 Bauhaus Galan (Stockholm, SWE) (TV Analysis)

FINAL date 30-Jun-22 wind -0.5 m/s *Henson (2022) - Athlete First: 2022 year end hurdle report*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.48	3.48	4.47	5.44	6.38	7.33	8.30	9.27	10.27	11.27		12.46	5 / 1			
reaction time 0.143	interval		1.00	0.99	0.97	0.94	0.95	0.97	0.97	1.00	1.00	1.19			2.96	2.86	2.97	
	velocity	5.24	8.50	8.59	8.76	9.04	8.95	8.76	8.76	8.50	8.50	8.45	8.03		8.61	8.92	8.59	
Amusan, Tobi (NGR) (1997)	time	2.50	3.50	4.50	5.46	6.43	7.37	8.34	9.33	10.33	11.33		12.50	4 / 2			
reaction time 0.147	interval		1.00	1.00	0.96	0.97	0.94	0.97	0.99	1.00	1.00	1.17			2.96	2.88	2.99	
	velocity	5.20	8.50	8.50	8.85	8.76	9.04	8.76	8.59	8.50	8.50	8.59	8.00		8.61	8.85	8.53	
Ali, Nia (USA) (1988)	time	2.48	3.50	4.47	5.43	6.43	7.40	8.37	9.33	10.34	11.34		12.53	6 / 3			
reaction time 0.160	interval		1.02	0.97	0.96	1.00	0.97	0.97	0.96	1.01	1.00	1.19			2.95	2.94	2.97	
	velocity	5.24	8.33	8.76	8.85	8.50	8.76	8.76	8.85	8.42	8.50	8.45	7.98		8.64	8.67	8.59	
Williams, Danielle (JAM) (1992	time	2.46	3.46	4.44	5.41	6.36	7.33	8.33	9.33	10.33	11.40		12.59	2 / 4			
reaction time 0.130	interval		1.00	0.98	0.97	0.95	0.97	1.00	1.00	1.00	1.07	1.19			2.95	2.92	3.07	
	velocity	5.28	8.50	8.67	8.76	8.95	8.76	8.50	8.50	8.50	7.94	8.45	7.94		8.64	8.73	8.31	
Charlton, Devynne (BAH) (19	time	2.48	3.50	4.48	5.46	6.43	7.41	8.37	9.37	10.37	11.45		12.65	7 / 5			
reaction time 0.145	interval		1.02	0.98	0.98	0.97	0.98	0.96	1.00	1.00	1.08	1.20			2.98	2.91	3.08	
	velocity	5.24	8.33	8.67	8.67	8.76	8.67	8.85	8.50	8.50	7.87	8.37	7.91		8.56	8.76	8.28	
Visser, Nadine (NED) (1995)	time	2.50	3.52	4.50	5.50	6.46	7.46	8.46	9.46	10.50	11.55		12.76	1 / 6			
reaction time 0.136	interval		1.02	0.98	1.00	0.96	1.00	1.00	1.00	1.04	1.05	1.21			3.00	2.96	3.09	
	velocity	5.20	8.33	8.67	8.50	8.85	8.50	8.50	8.50	8.17	8.10	8.31	7.84		8.50	8.61	8.25	
Skrzyszowska, Pia (POL) (2001	time	2.50	3.53	4.53	5.56	6.56	7.56	8.56	9.62	10.65	11.70		12.91	8 / 7			
reaction time 0.132	interval		1.03	1.00	1.03	1.00	1.00	1.00	1.06	1.03	1.05	1.21			3.06	3.00	3.14	
	velocity	5.20	8.25	8.50	8.25	8.50	8.50	8.50	8.02	8.25	8.10	8.31	7.75		8.33	8.50	8.12	
Jones, Tia (USA) (2000)	time	2.53	3.56	4.56	5.63	6.66	7.66	8.66	9.66	10.70	11.73		12.98	3 / 8			
reaction time 0.166	interval		1.03	1.00	1.07	1.03	1.00	1.00	1.00	1.04	1.03	1.25			3.10	3.03	3.07	
	velocity	5.14	8.25	8.50	7.94	8.25	8.50	8.50	8.50	8.17	8.25	8.04	7.70		8.23	8.42	8.31	

2022 USATF National Championships (Eugene, OR) (TV Analysis)

FINAL date 25-Jun-22 wind -1.4 m/s *Henson (2022) - Athlete First: 2022 year end hurdle report*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992	time	2.53	3.53	4.51	5.45	6.40	7.35	8.31	9.28	10.26	11.24		12.34	5 / 1			
reaction time	interval		1.00	0.98	0.94	0.95	0.95	0.96	0.97	0.98	0.98	1.10			2.92	2.86	2.93	
	velocity	5.14	8.50	8.67	9.04	8.95	8.95	8.85	8.76	8.67	8.67	9.14	8.10		8.73	8.92	8.70	
Johnson, Alaysha (USA) (199	time	2.57	3.60	4.60	5.57	6.52	7.46	8.42	9.39	10.34	11.31		12.35	7 / 2			
reaction time	interval		1.03	1.00	0.97	0.95	0.94	0.96	0.97	0.95	0.97	1.04	PB		3.00	2.85	2.89	
	velocity	5.06	8.25	8.50	8.76	8.95	9.04	8.85	8.76	8.95	8.76	9.66	8.10		8.50	8.95	8.82	

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

Armstrong, Alia (USA) (2000)	time	2.50	3.52	4.52	5.49	6.46	7.42	8.39	9.39	10.38	11.40		12.47	8 / 3			
reaction time	interval		1.02	1.00	0.97	0.97	0.96	0.97	1.00	0.99	1.02	1.07	PB		2.99	2.90	3.01
	velocity	5.20	8.33	8.50	8.76	8.76	8.85	8.76	8.50	8.59	8.33	9.39	8.02		8.53	8.79	8.47
Marshall, Tonea (USA) (1998)	time	2.50	3.50	4.48	5.45	6.42	7.40	8.40	9.38	10.38	11.40		12.55	3 / 4			
reaction time	interval		1.00	0.98	0.97	0.97	0.98	1.00	0.98	1.00	1.02	1.15			2.95	2.95	3.00
	velocity	5.20	8.50	8.67	8.76	8.76	8.67	8.50	8.67	8.50	8.33	8.74	7.97		8.64	8.64	8.50
Jones, Tia (USA) (2000)	time	2.60	3.62	4.60	5.58	6.56	7.52	8.49	9.49	10.47	11.48		12.59	4 / 5			
reaction time	interval		1.02	0.98	0.98	0.98	0.96	0.97	1.00	0.98	1.01	1.11			2.98	2.91	2.99
	velocity	5.00	8.33	8.67	8.67	8.67	8.85	8.76	8.50	8.67	8.42	9.05	7.94		8.56	8.76	8.53
Salmon, Paula (USA) (1999)	time	2.65	3.65	4.65	5.63	6.61	7.60	8.59	9.60	10.62	11.65		12.78	2 / 6			
reaction time	interval		1.00	1.00	0.98	0.98	0.99	0.99	1.01	1.02	1.03	1.13			2.98	2.96	3.06
	velocity	4.91	8.50	8.50	8.67	8.67	8.59	8.59	8.42	8.33	8.25	8.89	7.82		8.56	8.61	8.33
Cunningham, Gabriele (USA)	time	2.55	3.57	4.57	5.57	6.57	7.59	8.62	9.65	10.68	11.74		13.00	9 / 7			
reaction time	interval		1.02	1.00	1.00	1.00	1.02	1.03	1.03	1.03	1.06	1.26			3.02	3.05	3.12
	velocity	5.10	8.33	8.50	8.50	8.50	8.33	8.25	8.25	8.25	8.02	7.98	7.69		8.44	8.36	8.17

2022 Nigerian National Championships (Benin City, NGR) (TV Analysis)

FINAL

date 25-Jun-22 wind -0.4 m/s

Henson (2022) - Athlete First: 2022 Tobi Amusan 100m hurdles world record season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.52	3.53	4.52	5.49	6.45	7.42	8.39	9.36	10.36	11.36		12.54	4 / 1			
reaction time	interval		1.01	0.99	0.97	0.96	0.97	0.97	0.97	1.00	1.00	1.18			2.97	2.90	2.97
	velocity	5.16	8.42	8.59	8.76	8.85	8.76	8.76	8.76	8.50	8.50	8.52	7.97		8.59	8.79	8.59

Heat 2

date 25-Jun-22 wind 0.0 m/s

Henson (2022) - Athlete First: 2022 Tobi Amusan 100m hurdles world record season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.52	3.55	4.55	5.52	6.49	7.46	8.44	9.41	10.41	11.43		12.67	3 / 1			
reaction time	interval		1.03	1.00	0.97	0.97	0.97	0.98	0.97	1.00	1.02	1.24			3.00	2.92	2.99
	velocity	5.16	8.25	8.50	8.76	8.76	8.76	8.67	8.76	8.50	8.33	8.10	7.89		8.50	8.73	8.53

2022 Meeting de Paris (Paris, FRA) (TV Analysis)

FINAL

date 18-Jun-22 wind -0.4 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.50	3.52	4.48	5.45	6.39	7.33	8.28	9.25	10.23	11.21		12.41	5 / 1			
reaction time 0.159	interval		1.02	0.96	0.97	0.94	0.94	0.95	0.97	0.98	0.98	1.20	NR PB		2.95	2.83	2.93
	velocity	5.20	8.33	8.85	8.76	9.04	9.04	8.95	8.76	8.67	8.67	8.38	8.06		8.64	9.01	8.70
Charlton, Devynne (BAH) (19	time	2.45	3.47	4.47	5.45	6.42	7.39	8.38	9.38	10.38	11.41		12.63	7 / 2			
reaction time 0.153	interval		1.02	1.00	0.98	0.97	0.97	0.99	1.00	1.00	1.03	1.22			3.00	2.93	3.03
	velocity	5.31	8.33	8.50	8.67	8.76	8.76	8.59	8.50	8.50	8.25	8.24	7.92		8.50	8.70	8.42
Sember, Cindy (GBR) (1994)	time	2.52	3.54	4.52	5.52	6.49	7.47	8.47	9.45	10.47	11.50		12.73	3 / 3			
reaction time 0.161	interval		1.02	0.98	1.00	0.97	0.98	1.00	0.98	1.02	1.03	1.23			3.00	2.95	3.03
	velocity	5.16	8.33	8.67	8.50	8.76	8.67	8.50	8.67	8.33	8.25	8.17	7.86		8.50	8.64	8.42
Samba-Mayela, Cyréna (FRA)	time	2.44	3.44	4.44	5.42	6.42	7.40	8.40	9.42	10.44	11.50		12.76	4 / 4			
reaction time 0.123	interval		1.00	1.00	0.98	1.00	0.98	1.00	1.02	1.02	1.06	1.26			2.98	2.98	3.10
	velocity	5.33	8.50	8.50	8.67	8.50	8.67	8.50	8.33	8.33	8.02	7.98	7.84		8.56	8.56	8.23
Clay, Liz (AUS) (1995)	time	2.50	3.53	4.53	5.51	6.52	7.52	8.53	9.56	10.59	11.62		12.89	6 / 5			
reaction time 0.149	interval		1.03	1.00	0.98	1.01	1.00	1.01	1.03	1.03	1.03	1.27			3.01	3.02	3.09
	velocity	5.20	8.25	8.50	8.67	8.42	8.50	8.42	8.25	8.25	8.25	7.91	7.76		8.47	8.44	8.25
Kambundji, Ditaji (SUI) (2002)	time	2.48	3.52	4.54	5.54	6.55	7.57	8.58	9.61	10.64	11.68		12.90	1 / 6			
reaction time 0.145	interval		1.04	1.02	1.00	1.01	1.02	1.01	1.03	1.03	1.04	1.22			3.06	3.04	3.10
	velocity	5.24	8.17	8.33	8.50	8.42	8.33	8.42	8.25	8.25	8.17	8.24	7.75		8.33	8.39	8.23
Bapté, Laeticia (FRA) (1999)	time	2.50	3.57	4.60	5.60	6.59	7.60	8.61	9.64	10.69	11.76		13.05	2 / 7			
reaction time 0.157	interval	7 steps	1.07	1.03	1.00	0.99	1.01	1.01	1.03	1.05	1.07	1.29			3.10	3.01	3.15
	velocity	5.20	7.94	8.25	8.50	8.59	8.42	8.42	8.25	8.10	7.94	7.79	7.66		8.23	8.47	8.10

2022 Paavo Nurmi Games (Turku, FIN) (TV Analysis)

FINAL

date 14-Jun-22 wind 0.2 m/s

Henson (2022) - Athlete First: 2022 Tobi Amusan 100m hurdles world record season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.54	3.58	4.56	5.54	6.50	7.46	8.44	9.40	10.42	11.44		12.57	6 / 1			
reaction time 0.164	interval		1.04	0.98	0.98	0.96	0.96	0.98	0.96	1.02	1.02	1.13			3.00	2.90	3.00
	velocity	5.12	8.17	8.67	8.67	8.85	8.85	8.67	8.85	8.33	8.33	8.89	7.96		8.50	8.79	8.50
Anderson, Britany (JAM) (200	time	2.60	3.62	4.62	5.58	6.54	7.50	8.48	9.44	10.44	11.44		12.59	4 / 2			
reaction time 0.223	interval		1.02	1.00	0.96	0.96	0.96	0.98	0.96	1.00	1.00	1.15			2.98	2.90	2.96
	velocity	5.00	8.33	8.50	8.85	8.85	8.85	8.67	8.85	8.50	8.50	8.74	7.94		8.56	8.79	8.61
Visser, Nadine (NED) (1995)	time	2.56	3.60	4.56	5.56	6.52	7.50	8.48	9.48	10.50	11.54		12.72	5 / 3			
reaction time 0.167	interval		1.04	0.96	1.00	0.96	0.98	0.98	1.00	1.02	1.04	1.18			3.00	2.92	3.06

	velocity	5.08	8.17	8.85	8.50	8.85	8.67	8.67	8.50	8.33	8.17	8.52	7.86		8.50	8.73	8.33
Clay, Liz (AUS) (1995)	time	2.56	3.58	4.58	5.58	6.56	7.54	8.56	9.58	10.62	11.66		12.85	3 / 4			
reaction time 0.122	interval		1.02	1.00	1.00	0.98	0.98	1.02	1.02	1.04	1.04	1.19			3.02	2.98	3.10
	velocity	5.08	8.33	8.50	8.50	8.67	8.67	8.33	8.33	8.17	8.17	8.45	7.78		8.44	8.56	8.23
Hurske, Reetta (FIN) (1995)	time	2.54	3.58	4.60	5.60	6.60	7.60	8.62	9.64	10.68	11.74		13.01	8 / 5			
reaction time 0.169	interval		1.04	1.02	1.00	1.00	1.00	1.02	1.02	1.04	1.06	1.27			3.06	3.02	3.12
	velocity	5.12	8.17	8.33	8.50	8.50	8.50	8.33	8.33	8.17	8.02	7.91	7.69		8.33	8.44	8.17
Bogliolo, Luminosa (ITA) (199	time	2.64	3.68	4.68	5.68	6.68	7.68	8.70	9.74	10.76	11.82		13.04	2 / 6			
reaction time 0.195	interval		1.04	1.00	1.00	1.00	1.00	1.02	1.04	1.02	1.06	1.22			3.04	3.02	3.12
	velocity	4.92	8.17	8.50	8.50	8.50	8.50	8.33	8.17	8.33	8.02	8.24	7.67		8.39	8.44	8.17
Kozák, Luca (HUN) (1996)	time	2.60	3.68	4.70	5.72	6.72	7.74	8.76	9.78	10.80	11.82		13.05	1 / 7			
reaction time 0.147	interval		1.08	1.02	1.02	1.00	1.02	1.02	1.02	1.02	1.02	1.23			3.12	3.04	3.06
	velocity	5.00	7.87	8.33	8.33	8.50	8.33	8.33	8.33	8.33	8.33	8.17	7.66		8.17	8.39	8.33
Sedney, Zoë (NED) (2001)	time	2.56	3.60	4.62	5.64	6.64	7.64	8.66	9.68	10.74	11.84		13.07	7 / 8			
reaction time 0.165	interval		1.04	1.02	1.02	1.00	1.00	1.02	1.02	1.06	1.10	1.23			3.08	3.02	3.18
	velocity	5.08	8.17	8.33	8.33	8.50	8.50	8.33	8.33	8.02	7.73	8.17	7.65		8.28	8.44	8.02

2022 New York Grand Prix (New York, NY) (TV Analysis)

FINAL date 12-Jun-22 wind 2.0 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Johnson, Alaysha (USA) (199	time	2.50	3.50	4.50	5.47	6.43	7.40	8.35	9.30	10.28	11.28		12.40	4 / 1			
reaction time 0.153	interval		1.00	1.00	0.97	0.96	0.97	0.95	0.95	0.98	1.00	1.12	PB		2.97	2.88	2.93
	velocity	5.20	8.50	8.50	8.76	8.85	8.76	8.95	8.95	8.67	8.50	8.97	8.06		8.59	8.85	8.70
Jones, Tia (USA) (2000)	time	2.53	3.53	4.53	5.50	6.47	7.43	8.40	9.35	10.33	11.35		12.53	6 / 2			
reaction time 0.161	interval		1.00	1.00	0.97	0.97	0.96	0.97	0.95	0.98	1.02	1.18	PB		2.97	2.90	2.95
	velocity	5.14	8.50	8.50	8.76	8.76	8.85	8.76	8.95	8.67	8.33	8.52	7.98		8.59	8.79	8.64
Cunningham, Gabriele (USA)	time	2.47	3.47	4.43	5.42	6.40	7.38	8.33	9.30	10.32	11.36		12.56	5 / 3			
reaction time 0.160	interval		1.00	0.96	0.99	0.98	0.98	0.95	0.97	1.02	1.04	1.20			2.95	2.91	3.03
	velocity	5.26	8.50	8.82	8.62	8.67	8.67	8.95	8.76	8.33	8.17	8.37	7.96		8.64	8.76	8.42
Brissett, Chanel (USA) (1999)	time	2.58	3.62	4.60	5.60	6.56	7.52	8.50	9.48	10.48	11.50		12.66	8 / 4			
reaction time 0.160	interval		1.04	0.98	1.00	0.96	0.96	0.98	0.98	1.00	1.02	1.16			3.02	2.90	3.00
	velocity	5.04	8.17	8.67	8.50	8.85	8.85	8.67	8.67	8.50	8.33	8.66	7.90		8.44	8.79	8.50
Vargas, Andrea Carolina (CRC	time	2.53	3.58	4.62	5.63	6.65	7.63	8.63	9.65	10.67	11.70		12.90	7 / 5			
reaction time 0.124	interval		1.05	1.04	1.01	1.02	0.98	1.00	1.02	1.02	1.03	1.20			3.10	3.00	3.07
	velocity	5.14	8.10	8.17	8.42	8.33	8.67	8.50	8.33	8.33	8.25	8.37	7.75		8.23	8.50	8.31
Clemons, Christina (USA) (19	time	2.47	3.50	4.50	5.50	6.47	7.48	8.50	9.53	10.60	11.67		13.02	3 / 6			
reaction time 0.127	interval		1.03	1.00	1.00	0.97	1.01	1.02	1.03	1.07	1.07	1.35			3.03	3.00	3.17
	velocity	5.26	8.25	8.50	8.50	8.76	8.42	8.33	8.25	7.94	7.94	7.44	7.68		8.42	8.50	8.04
Chadwick, Payton (USA) (199	time	2.53	3.57	4.60	5.63	6.67	7.67	8.70	9.70	10.73	11.80		13.03	2 / 7			
reaction time 0.159	interval		1.04	1.03	1.03	1.04	1.00	1.03	1.00	1.03	1.07	1.23			3.10	3.07	3.10
	velocity	5.14	8.17	8.25	8.25	8.17	8.50	8.25	8.50	8.25	7.94	8.17	7.67		8.23	8.31	8.23
Vazquez, Paolo (PUR) (1998)	time	2.60	3.70	4.73	5.80	6.83	7.83	8.86	9.90	10.93	12.03		13.29	1 / 8			
reaction time 0.179	interval		1.10	1.03	1.07	1.03	1.00	1.03	1.04	1.03	1.10	1.26			3.20	3.06	3.17
	velocity	5.00	7.73	8.25	7.94	8.25	8.50	8.25	8.17	8.25	7.73	7.98	7.52		7.97	8.33	8.04

2022 NCAA Championships (Eugene, OR) (TV Analysis)

FINAL date 11-Jun-22 wind -0.2 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Armstrong, Alia (USA) (2000)	time	2.44	3.44	4.44	5.42	6.40	7.38	8.36	9.36	10.36	11.40		12.57	5 / 1			
reaction time	interval		1.00	1.00	0.98	0.98	0.98	0.98	1.00	1.00	1.04	1.17			2.98	2.94	3.04
	velocity	5.33	8.50	8.50	8.67	8.67	8.67	8.67	8.50	8.50	8.17	8.59	7.96		8.56	8.67	8.39
Jones, Jasmine (USA) (2001)	time	2.47	3.51	4.52	5.49	6.47	7.45	8.44	9.44	10.46	11.46		12.66	7 / 2			
reaction time	interval		1.04	1.01	0.97	0.98	0.98	0.99	1.00	1.02	1.00	1.20	PB		3.02	2.95	3.02
	velocity	5.26	8.17	8.42	8.76	8.67	8.67	8.59	8.50	8.33	8.50	8.38	7.90		8.44	8.64	8.44
Russell, Masai (USA) (2000)	time	2.52	3.57	4.62	5.61	6.59	7.59	8.59	9.57	10.57	11.57		12.81	4 / 3			
reaction time	interval		1.05	1.05	0.99	0.98	1.00	1.00	0.98	1.00	1.00	1.24			3.09	2.98	2.98
	velocity	5.16	8.10	8.10	8.59	8.67	8.50	8.50	8.67	8.50	8.50	8.10	7.81		8.25	8.56	8.56
Salmon, Paula (USA) (1999)	time	2.55	3.55	4.59	5.57	6.57	7.57	8.57	9.57	10.57	11.60		12.85	6 / 4			
reaction time	interval		1.00	1.04	0.98	1.00	1.00	1.00	1.00	1.00	1.03	1.25			3.02	3.00	3.03
	velocity	5.10	8.50	8.17	8.67	8.50	8.50	8.50	8.50	8.50	8.25	8.04	7.78		8.44	8.50	8.42
Robinson, Kaylah (USA) (199	time	2.50	3.55	4.57	5.59	6.59	7.59	8.57	9.57	10.59	11.62		12.86	3 / 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	interval		1.05	1.02	1.02	1.00	1.00	0.98	1.00	1.02	1.03	1.24			3.09	2.98	3.05
	velocity	5.20	8.10	8.33	8.33	8.50	8.50	8.67	8.50	8.33	8.25	8.10	7.78		8.25	8.56	8.36
Huven, Destiny (USA) (2001)	time	2.52	3.57	4.60	5.60	6.61	7.60	8.59	9.61	10.63	11.66		12.92	2 / 6			
reaction time	interval		1.05	1.03	1.00	1.01	0.99	0.99	1.02	1.02	1.03	1.26			3.08	2.99	3.07
	velocity	5.16	8.10	8.25	8.50	8.42	8.59	8.59	8.33	8.33	8.25	7.98	7.74		8.28	8.53	8.31
Roswell, Demisha (JAM) (1998	time	2.48	3.54	4.54	5.56	6.56	7.59	8.59	9.61	10.63	11.69		12.94	8 / 7			
reaction time	interval		1.06	1.00	1.02	1.00	1.03	1.00	1.02	1.02	1.06	1.25			3.08	3.03	3.10
	velocity	5.24	8.02	8.50	8.33	8.50	8.25	8.50	8.33	8.33	8.02	8.04	7.73		8.28	8.42	8.23
Jones, Rayniah (USA) (2001)	time	2.48	3.52	4.57	5.59	6.62	7.64	8.67	9.69	10.74	11.81		13.04	9 / ~~8~~			
reaction time	interval		1.04	1.05	1.02	1.03	1.02	1.03	1.02	1.05	1.07	1.23	DQ		3.11	3.08	3.14
	velocity	5.24	8.17	8.10	8.33	8.25	8.33	8.25	8.33	8.10	7.94	8.17	7.67		8.20	8.28	8.12
Rocker, Destinee (USA) (1999)	time	2.55	3.60	4.62	5.64	6.62	7.62	8.64	9.67	10.71	11.79		13.07	1 / ~~9~~ 8			
reaction time	interval		1.05	1.02	1.02	0.98	1.00	1.02	1.03	1.04	1.08	1.28			3.09	3.00	3.15
	velocity	5.10	8.10	8.33	8.33	8.67	8.50	8.33	8.25	8.17	7.87	7.85	7.65		8.25	8.50	8.10

2022 Japanese National Championsips (Osaka, JPN)

FINAL date 11-Jun-22 wind 0.8 m/s

Aoki (2023) - domestic & foreign first-class women's 100m hurdles in the 2022 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Fukube, Mako (JPN) (1995)	time	2.63	3.70	4.77	5.78	6.79	7.82	8.83	9.86	10.90	11.95		13.10	4 / 1			
reaction time 0.136	interval		1.07	1.07	1.01	1.01	1.03	1.01	1.03	1.04	1.05	1.15			3.15	3.05	3.12
	velocity	4.94	7.94	7.94	8.42	8.42	8.25	8.42	8.25	8.17	8.10	8.74	7.63		8.10	8.36	8.17
Aoki, Masumi (JPN) (1994)	time	2.64	3.72	4.75	5.80	6.86	7.90	8.96	10.01	11.08	12.16		13.28	7 / 2			
reaction time 0.143	interval		1.08	1.03	1.05	1.06	1.04	1.06	1.05	1.07	1.08	1.12			3.16	3.16	3.20
	velocity	4.92	7.87	8.25	8.10	8.02	8.17	8.02	8.10	7.94	7.87	8.97	7.53		8.07	8.07	7.97
Tanaka, Yumi (JPN) (1998)	time	2.69	3.75	4.81	5.86	6.88	7.93	8.95	10.01	11.09	12.17		13.35	3 / 3			
reaction time 0.175	interval		1.06	1.06	1.05	1.02	1.05	1.02	1.06	1.08	1.08	1.18			3.17	3.09	3.22
	velocity	4.83	8.02	8.02	8.10	8.33	8.10	8.33	8.02	7.87	7.87	8.52	7.49		8.04	8.25	7.92
Nakajima, Hitomi (JPN) (1995)	time	2.67	3.75	4.81	5.85	6.88	7.91	8.96	10.01	11.09	12.20		13.37	8 / 4			
reaction time 0.145	interval		1.08	1.06	1.04	1.03	1.03	1.05	1.05	1.08	1.11	1.17			3.18	3.11	3.24
	velocity	4.87	7.87	8.02	8.17	8.25	8.25	8.10	8.10	7.87	7.66	8.59	7.48		8.02	8.20	7.87
Kiyoyama, Chisato (JPN) (199	time	2.69	3.78	4.85	5.88	6.91	7.95	9.00	10.05	11.13	12.22		13.37	5 / 5			
reaction time 0.146	interval		1.09	1.07	1.03	1.03	1.04	1.05	1.05	1.08	1.09	1.15			3.19	3.12	3.22
	velocity	4.83	7.80	7.94	8.25	8.25	8.17	8.10	8.10	7.87	7.80	8.74	7.48		7.99	8.17	7.92
Tanaka, Kiyono (JPN) (2002)	time	2.60	3.69	4.75	5.78	6.82	7.87	8.92	10.00	11.07	12.18		13.42	2 / 6			
reaction time 0.148	interval		1.09	1.06	1.03	1.04	1.05	1.05	1.08	1.07	1.11	1.24			3.18	3.14	3.26
	velocity	5.00	7.80	8.02	8.25	8.17	8.10	8.10	7.87	7.94	7.66	8.10	7.45		8.02	8.12	7.82
Suzuki, Miho (JPN) (1996)	time	2.74	3.82	4.86	5.92	6.98	8.02	9.09	10.14	11.24	12.34		13.52	9 / 7			
reaction time 0.171	interval		1.08	1.04	1.06	1.06	1.04	1.07	1.05	1.10	1.10	1.18			3.18	3.17	3.25
	velocity	4.74	7.87	8.17	8.02	8.02	8.17	7.94	8.10	7.73	7.73	8.52	7.40		8.02	8.04	7.85

2022 Japanese Multi-Event National Championsips (Akita, JPN)

Heptathlon - Heat 3 date 04-Jun-22 wind 0.4 m/s

Takefu (2023) - performance analysis of heptathletes in the 2022 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Hemphill, Meg (JPN) (1996)	time	2.72	3.79	4.83	5.87	6.92	7.96	9.00	10.06	11.13	12.21		13.45	6 / 1			
reaction time	interval		1.07	1.04	1.04	1.05	1.04	1.04	1.06	1.07	1.08	1.24			3.15	3.13	3.21
	velocity	4.78	7.94	8.17	8.17	8.10	8.17	8.17	8.02	7.94	7.87	8.10	7.43		8.10	8.15	7.94
Odama, Karin (JPN) (1999)	time	2.77	3.85	4.93	6.02	7.09	8.18	9.26	10.37	11.47	12.60		13.85	4 / 3			
reaction time	interval		1.08	1.08	1.09	1.07	1.09	1.08	1.11	1.10	1.13	1.25			3.25	3.24	3.34
	velocity	4.69	7.87	7.87	7.80	7.94	7.80	7.87	7.66	7.73	7.52	8.04	7.22		7.85	7.87	7.63
Yamasaki, Yuki (JPN) (1995)	time	2.74	3.85	4.93	6.00	7.12	8.20	9.28	10.39	11.50	12.62		13.86	7 / 4			
reaction time	interval		1.11	1.08	1.07	1.12	1.08	1.08	1.11	1.11	1.12	1.24			3.26	3.28	3.34
	velocity	4.74	7.66	7.87	7.94	7.59	7.87	7.87	7.66	7.66	7.59	8.10	7.22		7.82	7.77	7.63
Rito, Nonoka (JPN) (1995)	time	2.77	3.90	5.03	6.18	7.30	8.46	9.61	10.76	11.94	13.16		14.49	9 / 7			
reaction time	interval		1.13	1.13	1.15	1.12	1.16	1.15	1.15	1.18	1.22	1.33			3.41	3.43	3.55
	velocity	4.69	7.52	7.52	7.39	7.59	7.33	7.39	7.39	7.20	6.97	7.56	6.90		7.48	7.43	7.18

2022 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis)

FINAL date 09-Jun-22 wind 0.1 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.47	3.48	4.47	5.43	6.37	7.30	8.26	9.23	10.20	11.18		12.37	5 / 1			
reaction time 0.149	interval		1.01	0.99	0.96	0.94	0.93	0.96	0.97	0.97	0.98	1.19			2.96	2.83	2.92
	velocity	5.26	8.42	8.59	8.85	9.04	9.14	8.85	8.76	8.76	8.67	8.45	8.08		8.61	9.01	8.73
Anderson, Britany (JAM) (200	time	2.50	3.51	4.48	5.45	6.41	7.34	8.28	9.25	10.23	11.26		12.50	4 / 2			

reaction time	0.182	interval		1.01	0.97	0.97	0.96	0.93	0.94	0.97	0.98	1.03	1.24			2.95	2.83	2.98
		velocity	5.20	8.42	8.76	8.76	8.85	9.14	9.04	8.76	8.67	8.25	8.10	8.00		8.64	9.01	8.56
Ali, Nia (USA) (1988)		time	2.49	3.50	4.50	5.48	6.46	7.45	8.44	9.43	10.43	11.47		12.71	6 / 3			
reaction time	0.153	interval		1.01	1.00	0.98	0.98	0.99	0.99	0.99	1.00	1.04	1.24			2.99	2.96	3.03
		velocity	5.22	8.42	8.50	8.67	8.67	8.59	8.59	8.59	8.50	8.17	8.10	7.87		8.53	8.61	8.42
Skrzyszowska, Pia (POL) (2001		time	2.47	3.52	4.48	5.45	6.43	7.41	8.39	9.40	10.43	11.47		12.74	1 / 4			
reaction time	0.132	interval		1.05	0.96	0.97	0.98	0.98	0.98	1.01	1.03	1.04	1.27			2.98	2.94	3.08
		velocity	5.26	8.10	8.85	8.76	8.67	8.67	8.67	8.42	8.25	8.17	7.91	7.85		8.56	8.67	8.28
Williams, Danielle (JAM) (1992		time	2.47	3.48	4.48	5.50	6.48	7.48	8.50	9.52	10.60	11.65		12.90	7 / 5			
reaction time	0.131	interval		1.01	1.00	1.02	0.98	1.00	1.02	1.02	1.08	1.05	1.25			3.03	3.00	3.15
		velocity	5.26	8.42	8.50	8.33	8.67	8.50	8.33	8.33	7.87	8.10	8.04	7.75		8.42	8.50	8.10
Visser, Nadine (NED) (1995)		time	2.50	3.53	4.53	5.51	6.51	7.51	8.53	9.60	10.65	11.72		12.98	8 / 6			
reaction time	0.146	interval		1.03	1.00	0.98	1.00	1.00	1.02	1.07	1.05	1.07	1.26			3.01	3.02	3.19
		velocity	5.20	8.25	8.50	8.67	8.50	8.50	8.33	7.94	8.10	7.94	7.98	7.70		8.47	8.44	7.99
Tapper, Megan (JAM) (1994)		time	2.50	3.53	4.53	5.53	6.53	7.53	8.57	9.60	10.67	11.80		13.08	3 / 7			
reaction time	0.155	interval		1.03	1.00	1.00	1.00	1.00	1.04	1.03	1.07	1.13	1.28			3.03	3.04	3.23
		velocity	5.20	8.25	8.50	8.50	8.50	8.50	8.17	8.25	7.94	7.52	7.85	7.65		8.42	8.39	7.89
Bogliolo, Luminosa (ITA) (199		time	2.53	3.60	4.63	5.63	6.63	7.63	8.63	9.67	10.73	11.83		13.10	2 / 8			
reaction time	0.163	interval		1.07	1.03	1.00	1.00	1.00	1.00	1.04	1.06	1.10	1.27			3.10	3.00	3.20
		velocity	5.14	7.94	8.25	8.50	8.50	8.50	8.50	8.17	8.02	7.73	7.91	7.63		8.23	8.50	7.97
di Lazzaro, Elisa Maria (ITA) (1		time	2.53	3.63	4.63	5.65	6.65	7.67	8.67	9.70	10.73	11.83		13.10	9 / 9			
reaction time	0.143	interval		1.10	1.00	1.02	1.00	1.02	1.00	1.03	1.03	1.10	1.27			3.12	3.02	3.16
		velocity	5.14	7.73	8.50	8.33	8.50	8.33	8.50	8.25	8.25	7.73	7.91	7.63		8.17	8.44	8.07

2022 African Championships (St. Pierre, MRI) (TV Analysis)

FINAL date 09-Jun-22 wind 4.0 m/s

Henson (2022) - Athlete First: 2022 Tobi Amusan 100m hurdles world record season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.50	3.52	4.54	5.48	6.42	7.40	8.38	9.34	10.34	11.40		12.57	5 / 1			
reaction time	interval		1.02	1.02	0.94	0.94	0.98	0.98	0.96	1.00	1.06	1.17			2.98	2.90	3.02
	velocity	5.20	8.33	8.33	9.04	9.04	8.67	8.67	8.85	8.50	8.02	8.59	7.96		8.56	8.79	8.44
Morrison, Ebony (LBR) (1994)	time	2.54	3.54	4.60	5.58	6.54	7.54	8.55	9.55	10.55	11.61		12.77	4 / 2			
reaction time	interval		1.00	1.06	0.98	0.96	1.00	1.01	1.00	1.00	1.06	1.16			3.04	2.97	3.06
	velocity	5.12	8.50	8.02	8.67	8.85	8.50	8.42	8.50	8.50	8.02	8.66	7.83		8.39	8.59	8.33

2022 Irena Szewinska Memorial (Bydgoszcz, POL) (TV Analysis)

FINAL date 03-Jun-22 wind 0.2 m/s

Henson (2022) - Athlete First: 2022 Tobi Amusan 100m hurdles world record season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Jones, Tia (USA) (2000)	time	2.56	3.60	4.60	5.58	6.54	7.52	8.52	9.52	10.56	11.60		12.79	5 / 1			
reaction time	interval		1.04	1.00	0.98	0.96	0.98	1.00	1.00	1.04	1.04	1.19			3.02	2.94	3.08
	velocity	5.08	8.17	8.50	8.67	8.85	8.67	8.50	8.50	8.17	8.17	8.45	7.82		8.44	8.67	8.28
Amusan, Tobi (NGR) (1997)	time	2.58	3.60	4.60	5.60	6.56	7.56	8.54	9.56	10.60	11.64		12.80	6 / 2			
reaction time	interval		1.02	1.00	1.00	0.96	1.00	0.98	1.02	1.04	1.04	1.16			3.02	2.94	3.10
	velocity	5.04	8.33	8.50	8.50	8.85	8.50	8.67	8.33	8.17	8.17	8.66	7.81		8.44	8.67	8.23
Barber, Jade (USA) (1993)	time	2.60	3.66	4.68	5.68	6.64	7.66	8.66	9.68	10.70	11.76		12.98	8 / 3			
reaction time	interval		1.06	1.02	1.00	0.96	1.02	1.00	1.02	1.02	1.06	1.22			3.08	2.98	3.10
	velocity	5.00	8.02	8.33	8.50	8.85	8.33	8.50	8.33	8.33	8.02	8.24	7.70		8.28	8.56	8.23
Lavin, Sarah (IRL) (1994)	time	2.60	3.64	4.66	5.66	6.64	7.66	8.68	9.70	10.74	11.78		13.00	4 / 4			
reaction time	interval		1.04	1.02	1.00	0.98	1.02	1.02	1.02	1.04	1.04	1.22			3.06	3.02	3.10
	velocity	5.00	8.17	8.33	8.50	8.67	8.33	8.33	8.33	8.17	8.17	8.24	7.69		8.33	8.44	8.23
Kozák, Luca (HUN) (1996)	time	2.60	3.66	4.68	5.70	6.70	7.70	8.74	9.76	10.78	11.82		13.05	9 / 5			
reaction time	interval		1.06	1.02	1.02	1.00	1.00	1.04	1.02	1.02	1.04	1.23			3.10	3.04	3.08
	velocity	5.00	8.02	8.33	8.33	8.50	8.50	8.17	8.33	8.33	8.17	8.17	7.66		8.23	8.39	8.28
Siciarz, Klaudia (POL) (1998)	time	2.56	3.60	4.64	5.66	6.68	7.68	8.68	9.72	10.76	11.84		13.08	7 / 6			
reaction time	interval	7 steps	1.04	1.04	1.02	1.02	1.00	1.00	1.04	1.04	1.08	1.24			3.10	3.02	3.16
	velocity	5.08	8.17	8.17	8.33	8.33	8.50	8.50	8.17	8.17	7.87	8.10	7.65		8.23	8.44	8.07
Kiepura, Monika (POL) (2000)	time	2.56	3.62	4.66	5.68	6.70	7.74	8.80	9.86	10.90	11.98		13.24	3 / 7			
reaction time	interval		1.06	1.04	1.02	1.02	1.04	1.06	1.06	1.04	1.08	1.26			3.12	3.12	3.18
	velocity	5.08	8.02	8.17	8.33	8.33	8.17	8.02	8.02	8.17	7.87	7.98	7.55		8.17	8.17	8.02
Nagięć, Weronika (POL) (2002)	time	2.64	3.70	4.74	5.78	6.80	7.84	8.92	9.96				dnf	2 / --			
reaction time	interval		1.06	1.04	1.04	1.02	1.04	1.08	1.04				DQ		3.14	3.14	
	velocity	4.92	8.02	8.17	8.17	8.33	8.17	7.87	8.17						8.12	8.12	

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

2022 Prefontaine Classic (Eugene, OR) (TV Analysis)

FINAL date 28-May-22 wind -0.7 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU		time	2.50	3.53	4.51	5.48	6.43	7.37	8.33	9.31	10.30	11.29		12.45	5 / 1			
reaction time	0.132	interval		1.03	0.98	0.97	0.95	0.94	0.96	0.98	0.99	0.99	1.16			2.98	2.85	2.96
		velocity	5.20	8.25	8.67	8.76	8.95	9.04	8.85	8.67	8.59	8.59	8.66	8.03		8.56	8.95	8.61
Amusan, Tobi (NGR) (1997)		time	2.50	3.53	4.53	5.50	6.48	7.45	8.43	9.40	10.40	11.43		12.58	8 / 2			
reaction time	0.150	interval		1.03	1.00	0.97	0.98	0.97	0.98	0.97	1.00	1.03	1.15			3.00	2.93	3.00
		velocity	5.20	8.25	8.50	8.76	8.67	8.76	8.67	8.76	8.50	8.25	8.74	7.95		8.50	8.70	8.50
Marshall, Tonea (USA) (1998)		time	2.46	3.49	4.49	5.48	6.47	7.45	8.43	9.43	10.43	11.47		12.66	4 / 3			
reaction time	0.127	interval		1.03	1.00	0.99	0.99	0.98	0.98	1.00	1.00	1.04	1.19			3.02	2.95	3.04
		velocity	5.28	8.25	8.50	8.59	8.59	8.67	8.67	8.50	8.50	8.17	8.45	7.90		8.44	8.64	8.39
Sember, Cindy (GBR) (1994)		time	2.53	3.57	4.56	5.55	6.53	7.50	8.50	9.50	10.50	11.52		12.69	2 / 4			
reaction time	0.149	interval		1.04	0.99	0.99	0.98	0.97	1.00	1.00	1.00	1.02	1.17			3.02	2.95	3.02
		velocity	5.14	8.17	8.59	8.59	8.67	8.76	8.50	8.50	8.50	8.33	8.59	7.88		8.44	8.64	8.44
Williams, Danielle (JAM) (1992		time	2.48	3.50	4.50	5.48	6.48	7.46	8.44	9.46	10.48	11.51		12.71	3 / 5			
reaction time	0.139	interval		1.02	1.00	0.98	1.00	0.98	0.98	1.02	1.02	1.03	1.20			3.00	2.96	3.07
		velocity	5.24	8.33	8.50	8.67	8.50	8.67	8.67	8.33	8.33	8.25	8.37	7.87		8.50	8.61	8.31
Cunningham, Gabbi (USA) (1!		time	2.38	3.50	4.49	5.46	6.44	7.42	8.42	9.42	10.46	11.52		12.75	1 / 6			
reaction time	0.170	interval		1.12	0.99	0.97	0.98	0.98	1.00	1.00	1.04	1.06	1.23			3.08	2.96	3.10
		velocity	5.46	7.59	8.59	8.76	8.67	8.67	8.50	8.50	8.17	8.02	8.17	7.84		8.28	8.61	8.23
Ali, Nia (USA) (1988)		time	2.46	3.48	4.50	5.50	6.50	7.50	8.50	9.52	10.52	11.55		12.77	7 / 7			
reaction time	0.144	interval		1.02	1.02	1.00	1.00	1.00	1.00	1.02	1.00	1.03	1.22			3.04	3.00	3.05
		velocity	5.28	8.33	8.33	8.50	8.50	8.50	8.50	8.33	8.50	8.25	8.24	7.83		8.39	8.50	8.36
Harrison, Kendra (USA) (1992		time	2.50	3.53	4.51	5.52	6.52	7.50	8.52	9.52	10.53	11.57		12.78	6 / 8			
reaction time	0.144	interval		1.03	0.98	1.01	1.00	0.98	1.02	1.00	1.01	1.04	1.21			3.02	3.00	3.05
		velocity	5.20	8.25	8.67	8.42	8.50	8.67	8.33	8.50	8.42	8.17	8.31	7.82		8.44	8.50	8.36
Cockrell, Anna (USA) (1997)		time	2.53	3.56	4.56	5.56	6.56	7.55	8.56	9.56	10.58	11.68		12.84	9 / 9			
reaction time	0.115	interval		1.03	1.00	1.00	1.00	0.99	1.01	1.00	1.02	1.10	1.16			3.03	3.00	3.12
		velocity	5.14	8.25	8.50	8.50	8.50	8.59	8.42	8.50	8.33	7.73	8.66	7.79		8.42	8.50	8.17

2022 Doha Diamond League (Doha, QAT) (TV Analysis)

FINAL date 13-May-22 wind 3.8 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992		time	2.50	3.53	4.51	5.45	6.40	7.34	8.29	9.25	10.23	11.25		12.43	4 / 1			
reaction time	0.159	interval		1.03	0.98	0.94	0.95	0.94	0.95	0.96	0.98	1.02	1.18			2.95	2.84	2.96
		velocity	5.20	8.25	8.67	9.04	8.95	9.04	8.95	8.85	8.67	8.33	8.52	8.05		8.64	8.98	8.61
Amusan, Tobi (NGR) (1997)		time	2.50	3.53	4.51	5.43	6.40	7.35	8.31	9.30	10.28	11.30		12.44	6 / 2			
reaction time	0.171	interval		1.03	0.98	0.92	0.97	0.95	0.96	0.99	0.98	1.02	1.14			2.93	2.88	2.99
		velocity	5.20	8.25	8.67	9.24	8.76	8.95	8.85	8.59	8.67	8.33	8.82	8.04		8.70	8.85	8.53
Anderson, Britany (JAM) (200		time	2.48	3.52	4.49	5.46	6.40	7.35	8.31	9.30	10.28	11.28		12.44	2 / 2			
reaction time	0.154	interval		1.04	0.97	0.97	0.94	0.95	0.96	0.99	0.98	1.00	1.16			2.98	2.85	2.97
		velocity	5.24	8.17	8.76	8.76	9.04	8.95	8.85	8.59	8.67	8.50	8.66	8.04		8.56	8.95	8.59
Charlton, Devynne (BAH) (19!		time	2.45	3.47	4.45	5.43	6.39	7.34	8.34	9.34	10.36	11.40		12.61	7 / 4			
reaction time	0.154	interval		1.02	0.98	0.98	0.96	0.95	1.00	1.00	1.02	1.04	1.21			2.98	2.91	3.06
		velocity	5.31	8.33	8.67	8.67	8.85	8.95	8.50	8.50	8.33	8.17	8.31	7.93		8.56	8.76	8.33
Samba-Mayela, Cyréna (FRA)		time	2.53	3.56	4.53	5.50	6.47	7.44	8.42	9.44	10.50	11.51		12.72	5 / 5			
reaction time	0.169	interval		1.03	0.97	0.97	0.97	0.97	0.98	1.02	1.06	1.01	1.21			2.97	2.92	3.09
		velocity	5.14	8.25	8.76	8.76	8.76	8.76	8.67	8.33	8.02	8.42	8.31	7.86		8.59	8.73	8.25
Cunningham, Gabriele (USA)		time	2.47	3.47	4.47	5.44	6.41	7.41	8.40	9.44	10.46	11.51		12.75	8 / 6			
reaction time	0.157	interval		1.00	1.00	0.97	0.97	1.00	0.99	1.04	1.02	1.05	1.24			2.97	2.96	3.11
		velocity	5.26	8.50	8.50	8.76	8.76	8.50	8.59	8.17	8.33	8.10	8.10	7.84		8.59	8.61	8.20
Chadwick, Payton (USA) (199!		time	2.54	3.56	4.57	5.55	6.55	7.55	8.55	9.55	10.58	11.64		12.86	1 / 7			
reaction time	0.156	interval		1.02	1.01	0.98	1.00	1.00	1.00	1.00	1.03	1.06	1.22			3.01	3.00	3.09
		velocity	5.12	8.33	8.42	8.67	8.50	8.50	8.50	8.50	8.25	8.02	8.24	7.78		8.47	8.50	8.25
Tapper, Megan (JAM) (1994)		time	2.52	3.58	4.60	5.60	6.58	7.57	8.56	9.58	10.61	11.67		12.92	3 / 8			
reaction time	0.153	interval		1.06	1.02	1.00	0.98	0.99	0.99	1.02	1.03	1.06	1.25			3.08	2.96	3.11
		velocity	5.16	8.02	8.33	8.50	8.67	8.59	8.59	8.33	8.25	8.02	8.04	7.74		8.28	8.61	8.20

2022 Puerto Rico International Athletics Classic (Ponce, PUR) (TV Analysis)

FINAL date 12-May-22 wind 0.3 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

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

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

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Johnson, Alaysha (USA) (199(		time	2.52	3.54	4.53	5.50	6.45	7.40	8.37	9.34	10.36	11.34		12.50	2 / 1			
reaction time 0.155		interval		1.02	0.99	0.97	0.95	0.95	0.97	0.97	1.02	0.98	1.16	PB		2.98	2.87	2.97
		velocity	5.16	8.33	8.59	8.76	8.95	8.95	8.76	8.76	8.33	8.67	8.66	8.00		8.56	8.89	8.59
Camacho-Quinn, Jasmine (PU		time	2.65	3.67	4.63	5.58	6.52	7.48	8.42	9.37	10.36	11.34		12.52	5 / 2			
reaction time 0.367		interval		1.02	0.96	0.95	0.94	0.96	0.94	0.95	0.99	0.98	1.18			2.93	2.84	2.92
		velocity	4.91	8.33	8.85	8.95	9.04	8.85	9.04	8.95	8.59	8.67	8.52	7.99		8.70	8.98	8.73
Williams, Danielle (JAM) (1992		time	2.46	3.48	4.47	5.46	6.44	7.42	8.40	9.38	10.42	11.47		12.67	4 / 3			
reaction time 0.172		interval		1.02	0.99	0.99	0.98	0.98	0.98	0.98	1.04	1.05	1.20			3.00	2.94	3.07
		velocity	5.28	8.33	8.59	8.59	8.67	8.67	8.67	8.67	8.17	8.10	8.38	7.89		8.50	8.67	8.31

2022 Seiko Golden Grand Prix (Tokyo, JPN)

FINAL date 08-May-22 wind -0.1 m/s

Aoki (2023) - domestic & foreign first-class women's 100m hurdles in the 2022 season

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)		time	2.53	3.60	4.62	5.60	6.58	7.58	8.56	9.55	10.56	11.61		12.76	4 / 1			
reaction time 0.156		interval		1.07	1.02	0.98	0.98	1.00	0.98	0.99	1.01	1.05	1.15			3.07	2.96	3.05
		velocity	5.14	7.94	8.33	8.67	8.67	8.50	8.67	8.59	8.42	8.10	8.74	7.84		8.31	8.61	8.36
Fukube, Mako (JPN) (1995)		time	2.59	3.65	4.67	5.68	6.69	7.72	8.74	9.78	10.84	11.91		13.05	7 / 2			
reaction time 0.122		interval		1.06	1.02	1.01	1.01	1.03	1.02	1.04	1.06	1.07	1.14	PB		3.09	3.06	3.17
		velocity	5.02	8.02	8.33	8.42	8.42	8.25	8.33	8.17	8.02	7.94	8.82	7.66		8.25	8.33	8.04
Cunningham, Gabriel (USA) 1		time	2.58	3.59	4.60	5.62	6.60	7.61	8.61	9.62	10.74	11.84		13.07	2 / 3			
reaction time 0.162		interval		1.01	1.01	1.02	0.98	1.01	1.00	1.01	1.12	1.10	1.23			3.04	2.99	3.23
		velocity	5.04	8.42	8.42	8.33	8.67	8.42	8.50	8.42	7.59	7.73	8.17	7.65		8.39	8.53	7.89
Terada, Asuka (JPN) (1990)		time	2.59	3.66	4.70	5.72	6.73	7.75	8.75	9.80	10.84	11.92		13.07	3 / 4			
reaction time 0.152		interval		1.07	1.04	1.02	1.01	1.02	1.00	1.05	1.04	1.08	1.15			3.13	3.03	3.17
		velocity	5.02	7.94	8.17	8.33	8.42	8.33	8.50	8.10	8.17	7.87	8.74	7.65		8.15	8.42	8.04
Tapper, Megan (JAM) (1994)		time	2.66	3.71	4.73	5.73	6.76	7.78	8.80	9.86	10.92	12.02		13.30	6 / 5			
reaction time 0.186		interval		1.05	1.02	1.00	1.03	1.02	1.02	1.06	1.06	1.10	1.28			3.07	3.07	3.22
		velocity	4.89	8.10	8.33	8.50	8.25	8.33	8.33	8.02	8.02	7.73	7.85	7.52		8.31	8.31	7.92
Shimura, Hitomi (JPN) (1990)		time	2.66	3.72	4.75	5.79	6.83	7.85	8.89	9.96	11.04	12.13		13.31	9 / 6			
reaction time 0.140		interval		1.06	1.03	1.04	1.04	1.02	1.04	1.07	1.08	1.09	1.18			3.13	3.10	3.24
		velocity	4.89	8.02	8.25	8.17	8.17	8.33	8.17	7.94	7.87	7.80	8.52	7.51		8.15	8.23	7.87
Tanaka, Yumi (JPN) (1998)		time	2.67	3.79	4.84	5.89	6.92	7.97	9.01	10.06	11.13	12.20		13.39	8 / 7			
reaction time 0.175		interval		1.12	1.05	1.05	1.03	1.05	1.04	1.05	1.07	1.07	1.19			3.22	3.12	3.19
		velocity	4.87	7.59	8.10	8.10	8.25	8.10	8.17	8.10	7.94	7.94	8.45	7.47		7.92	8.17	7.99
Suzuki, Miho (JPN) (1996)		time	2.72	3.80	4.85	5.90	6.93	7.98	9.04	10.11	11.19	12.29		13.48	1 / 8			
reaction time 0.168		interval		1.08	1.05	1.05	1.03	1.05	1.06	1.07	1.08	1.10	1.19			3.18	3.14	3.25
		velocity	4.78	7.87	8.10	8.10	8.25	8.10	8.02	7.94	7.87	7.73	8.45	7.42		8.02	8.12	7.85
Aoki, Masumi (JPN) (1994)		time	2.63	3.71	4.75	5.78	6.82	7.87	8.91	10.09	11.27	12.49		13.91	5 / 9			
reaction time 0.144		interval		1.08	1.04	1.03	1.04	1.05	1.04	1.18	1.18	1.22	1.42			3.15	3.13	3.58
		velocity	4.94	7.87	8.17	8.25	8.17	8.10	8.17	7.20	7.20	6.97	7.08	7.19		8.10	8.15	7.12

2022 Michitaka Kinami Memorial (Osaka, JPN)

FINAL date 01-May-22 wind -0.6 m/s

Aoki (2023) - domestic & foreign first-class women's 100m hurdles in the 2022 season

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Mucci, Celeste (AUS) (1999)		time	2.64	3.69	4.71	5.71	6.74	7.75	8.78	9.82	10.86	11.92		13.08	4 / 1			
reaction time 0.158		interval		1.05	1.02	1.00	1.03	1.01	1.03	1.04	1.04	1.06	1.16			3.07	3.07	3.14
		velocity	4.92	8.10	8.33	8.50	8.25	8.42	8.25	8.17	8.17	8.02	8.66	7.65		8.31	8.31	8.12
Shimura, Hitomi (JPN) (1990)		time	2.64	3.71	4.74	5.77	6.79	7.82	8.86	9.91	10.98	12.05		13.23	5 / 2			
reaction time 0.153		interval		1.07	1.03	1.03	1.02	1.03	1.04	1.05	1.07	1.07	1.18			3.13	3.09	3.19
		velocity	4.92	7.94	8.25	8.25	8.33	8.25	8.17	8.10	7.94	7.94	8.52	7.56		8.15	8.25	7.99
Suzuki, Miho (JPN) (1996)		time	2.70	3.74	4.77	5.80	6.82	7.85	8.89	9.96	11.03	12.12		13.33	3 / 3			
reaction time 0.183		interval		1.04	1.03	1.03	1.02	1.03	1.04	1.07	1.07	1.09	1.21			3.10	3.09	3.23
		velocity	4.81	8.17	8.25	8.25	8.33	8.25	8.17	7.94	7.94	7.80	8.31	7.50		8.23	8.25	7.89
Tanaka, Yumi (JPN) (1998)		time	2.68	3.75	4.80	5.84	6.87	7.90	8.98	10.05	11.13	12.25		13.49	7 / 4			
reaction time 0.172		interval		1.07	1.05	1.04	1.03	1.03	1.08	1.07	1.08	1.12	1.24			3.16	3.14	3.27
		velocity	4.85	7.94	8.10	8.17	8.25	8.25	7.87	7.94	7.87	7.59	8.10	7.41		8.07	8.12	7.80
Tamaoki, Nanako (JPN) (2000)		time	2.64	3.73	4.80	5.84	6.87	7.95	9.00	10.10	11.19	12.29		13.52	2 / 5			
reaction time 0.143		interval		1.09	1.07	1.04	1.03	1.08	1.05	1.10	1.09	1.10	1.23			3.20	3.16	3.29
		velocity	4.92	7.80	7.94	8.17	8.25	7.87	8.10	7.73	7.80	7.73	8.17	7.40		7.97	8.07	7.75
Nakajima, Hitomi (JPN) (1995)		time	2.67	3.74	4.80	5.85	6.92	7.98	9.07	10.15	11.26	12.38		13.62	6 / 6			
reaction time 0.135		interval		1.07	1.06	1.05	1.07	1.06	1.09	1.08	1.11	1.12	1.24			3.18	3.22	3.31
		velocity	4.87	7.94	8.02	8.10	7.94	8.02	7.80	7.87	7.66	7.59	8.10	7.34		8.02	7.92	7.70

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

Kamada, Saki (JPN) (1997)	time	2.67	3.75	4.83	5.86	6.97	8.05	9.17	10.26	11.37	12.51		13.76	9 / 7				
reaction time 0.144	interval		1.08	1.08	1.03	1.11	1.08	1.12	1.09	1.11	1.14	1.25			3.19	3.31	3.34	
	velocity	4.87	7.87	7.87	8.25	7.66	7.87	7.59	7.80	7.66	7.46	8.04	7.27		7.99	7.70	7.63	
Omura, Mika (JPN) (1995)	time	2.72	3.80	4.87	5.96	7.01	8.09	9.20	10.30	11.42	12.55		13.77	8 / 8				
reaction time 0.125	interval		1.08	1.07	1.09	1.05	1.08	1.11	1.10	1.12	1.13	1.22			3.24	3.24	3.35	
	velocity	4.78	7.87	7.94	7.80	8.10	7.87	7.66	7.73	7.59	7.52	8.24	7.26		7.87	7.87	7.61	

Heptathlon - Heat 2

date 30-Apr-22 wind 1.0 m/s

Takefu (2023) - performance analysis of heptathletes in the 2022 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Yamasaki, Yuki (JPN) (1995)	time	2.78	3.91	5.03	6.13	7.23	8.35	9.48	10.63	11.80	12.99		14.26	6 / =2			
reaction time 0.167	interval		1.13	1.12	1.10	1.10	1.12	1.13	1.15	1.17	1.19	1.27			3.35	3.35	3.51	
	velocity	4.68	7.52	7.59	7.73	7.73	7.59	7.52	7.39	7.26	7.14	7.91	7.01		7.61	7.61	7.26	

Heptathlon - Heat 1

date 30-Apr-22 wind -0.6 m/s

Takefu (2023) - performance analysis of heptathletes in the 2022 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Hemphill, Meg (JPN) (1996)	time	2.75	3.85	4.92	5.97	7.03	8.08	9.15	10.23	11.34	12.47		13.76	3 / 1			
reaction time 0.159	interval		1.10	1.07	1.05	1.06	1.05	1.07	1.08	1.11	1.13	1.29			3.22	3.18	3.32	
	velocity	4.73	7.73	7.94	8.10	8.02	8.10	7.94	7.87	7.66	7.52	7.79	7.27		7.92	8.02	7.68	

2022 Penn Relays (Philadelphia, PA) (TV Analysis)

FINAL

date 30-Apr-22 wind 0.0 m/s

Henson (2022) - Athlete First: 2022 Sydney McLaughlin 400m hurdles world record season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
McLaughlin, Sydney (USA) (1!	time	2.50	3.54	4.58	5.58	6.58	7.55	8.55	9.55	10.55	11.55		12.75	4 / 1			
reaction time	interval	7 steps	1.04	1.04	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.20			3.08	2.97	3.00	
	velocity	5.20	8.17	8.17	8.50	8.50	8.76	8.50	8.50	8.50	8.50	8.38	7.84		8.28	8.59	8.50	

2022 Mikio Oda Memorial (Hiroshima, JPN)

FINAL

date 29-Apr-22 wind -2.8 m/s

Aoki (2023) - domestic & foreign first-class women's 100m hurdles in the 2022 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Mucci, Celeste (AUS) (1999)	time	2.67	3.74	4.76	5.80	6.85	7.87	8.92	9.96	11.01	12.07		13.21	3 / 1			
reaction time 0.179	interval		1.07	1.02	1.04	1.05	1.02	1.05	1.04	1.05	1.06	1.14			3.13	3.12	3.15	
	velocity	4.87	7.94	8.33	8.17	8.10	8.33	8.10	8.17	8.10	8.02	8.82	7.57		8.15	8.17	8.10	
Fukube, Mako (JPN) (1995)	time	2.62	3.69	4.74	5.78	6.81	7.85	8.92	9.98	11.04	12.10		13.21	5 / 2			
reaction time 0.143	interval		1.07	1.05	1.04	1.03	1.04	1.07	1.06	1.06	1.06	1.11			3.16	3.14	3.18	
	velocity	4.96	7.94	8.10	8.17	8.25	8.17	7.94	8.02	8.02	8.02	9.05	7.57		8.07	8.12	8.02	
Aoki, Masumi (JPN) (1994)	time	2.62	3.70	4.77	5.83	6.87	7.91	8.96	10.01	11.07	12.12		13.25	4 / 3			
reaction time 0.138	interval		1.08	1.07	1.06	1.04	1.04	1.05	1.05	1.06	1.05	1.13			3.21	3.13	3.16	
	velocity	4.96	7.87	7.94	8.02	8.17	8.17	8.10	8.10	8.02	8.10	8.89	7.55		7.94	8.15	8.07	
Shimura, Hitomi (JPN) (1990)	time	2.67	3.73	4.82	5.88	6.96	8.04	9.11	10.20	11.27	12.34		13.49	6 / 4			
reaction time 0.147	interval		1.06	1.09	1.06	1.08	1.08	1.07	1.09	1.07	1.07	1.15			3.21	3.23	3.23	
	velocity	4.87	8.02	7.80	8.02	7.87	7.87	7.94	7.80	7.94	7.94	8.74	7.41		7.94	7.89	7.89	
Tanaka, Yumi (JPN) (1998)	time	2.66	3.73	4.80	5.84	6.89	7.95	9.00	10.11	11.20	12.28		13.52	7 / 5			
reaction time 0.154	interval		1.07	1.07	1.04	1.05	1.06	1.05	1.11	1.09	1.08	1.24			3.18	3.16	3.28	
	velocity	4.89	7.94	7.94	8.17	8.10	8.02	8.10	7.66	7.80	7.87	8.10	7.40		8.02	8.07	7.77	
Tamaoki, Nanako (JPN) (2000)	time	2.68	3.78	4.87	5.95	7.04	8.11	9.20	10.28	11.37	12.48		13.66	8 / 6			
reaction time 0.161	interval		1.10	1.09	1.08	1.09	1.07	1.09	1.08	1.09	1.11	1.18			3.27	3.25	3.28	
	velocity	4.85	7.73	7.80	7.87	7.80	7.94	7.80	7.87	7.80	7.66	8.52	7.32		7.80	7.85	7.77	
Suzuki, Miho (JPN) (1996)	time	2.76	3.87	4.93	6.02	7.09	8.17	9.26	10.35	11.44	12.54		13.72	2 / 7			
reaction time 0.266	interval		1.11	1.06	1.09	1.07	1.08	1.09	1.09	1.09	1.10	1.18			3.26	3.24	3.28	
	velocity	4.71	7.66	8.02	7.80	7.94	7.87	7.80	7.80	7.80	7.73	8.52	7.29		7.82	7.87	7.77	
Nakajima, Hitomi (JPN) (1995)	time	2.70	3.81	4.90	5.99	7.10	8.20	9.31	10.41	11.50	12.63		13.82	1 / 8			
reaction time 0.144	interval		1.11	1.09	1.09	1.11	1.10	1.11	1.10	1.09	1.13	1.19			3.29	3.32	3.32	
	velocity	4.81	7.66	7.80	7.80	7.66	7.73	7.66	7.73	7.80	7.52	8.45	7.24		7.75	7.68	7.68	

B FINAL

date 29-Apr-22 wind 0.3 m/s

Aoki (2023) - domestic & foreign first-class women's 100m hurdles in the 2022 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kiyoyama, Chisato (JPN) (199	time	2.74	3.84	4.91	5.96	7.02	8.07	9.14	10.21	11.31	12.40		13.63	5 / 1			
reaction time 0.162	interval		1.10	1.07	1.05	1.06	1.05	1.07	1.07	1.10	1.09	1.23			3.22	3.18	3.26	
	velocity	4.74	7.73	7.94	8.10	8.02	8.10	7.94	7.94	7.73	7.80	8.17	7.34		7.92	8.02	7.82	
Fujimori, Nana (JPN) (1997)	time	2.72	3.81	4.87	5.93	6.98	8.04	9.13	10.26	11.37	12.50		13.65	6 / 2			
reaction time 0.164	interval		1.09	1.06	1.06	1.05	1.06	1.09	1.13	1.11	1.13	1.15			3.21	3.20	3.37	
	velocity	4.78	7.80	8.02	8.02	8.10	8.02	7.80	7.52	7.66	7.52	8.74	7.33		7.94	7.97	7.57	
Tezuka, Mai (JPN) (2001)	time	2.75	3.85	4.93	6.01	7.09	8.15	9.24	10.33	11.42	12.55		13.75	1 / 3			
reaction time 0.171	interval		1.10	1.08	1.08	1.08	1.06	1.09	1.09	1.09	1.13	1.20			3.26	3.23	3.31	
	velocity	4.73	7.73	7.87	7.87	7.87	8.02	7.80	7.80	7.80	7.52	8.38	7.27		7.82	7.89	7.70	

Takeuchi, Maya (JPN) (1998)	time	2.70	3.84	4.95	6.03	7.09	8.18	9.25	10.34	11.47	12.59		13.79	3 / 4			
reaction time 0.179	interval		1.14	1.11	1.08	1.06	1.09	1.07	1.09	1.13	1.12	1.20			3.33	3.22	3.34
	velocity	4.81	7.46	7.66	7.87	8.02	7.80	7.94	7.80	7.52	7.59	8.38	7.25		7.66	7.92	7.63
Okubo, Yuri (JPN) (1997)	time	2.74	3.86	4.96	6.04	7.10	8.16	9.24	10.32	11.45	12.58		13.83	7 / 5			
reaction time 0.169	interval		1.12	1.10	1.08	1.06	1.06	1.08	1.08	1.13	1.13	1.25			3.30	3.20	3.34
	velocity	4.74	7.59	7.73	7.87	8.02	8.02	7.87	7.87	7.52	7.52	8.04	7.23		7.73	7.97	7.63
Omatso, Yuki (JPN) (1996)	time	2.70	3.80	4.90	6.00	7.07	8.16	9.24	10.34	11.48	12.61		13.84	4 / 6			
reaction time 0.153	interval		1.10	1.10	1.10	1.07	1.09	1.08	1.10	1.14	1.13	1.23			3.30	3.24	3.37
	velocity	4.81	7.73	7.73	7.73	7.94	7.80	7.87	7.73	7.46	7.52	8.17	7.23		7.73	7.87	7.57
Tanaka, Hikari (JPN) (1998)	time	2.72	3.85	4.93	6.01	7.08	8.15	9.25	10.36	11.48	12.62		13.87	8 / 7			
reaction time 0.185	interval	7 steps	1.13	1.08	1.08	1.07	1.07	1.10	1.11	1.12	1.14	1.25			3.29	3.24	3.37
	velocity	4.78	7.52	7.87	7.87	7.94	7.94	7.73	7.66	7.59	7.46	8.04	7.21		7.75	7.87	7.57

2022 Golden Games (Walnut, CA) (TV Analysis)

FINAL

date 22-Apr-22 wind 0.8 m/s

Henson (2022) - Athlete First: 2022 Tobi Amusan 100m hurdles world record season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Marshall, Tonea (USA) (1998)	time	2.50	3.50	4.50	5.46	6.42	7.38	8.34	9.32	10.30	11.30		12.46	6 / 1			
reaction time	interval		1.00	1.00	0.96	0.96	0.96	0.96	0.98	0.98	1.00	1.16			2.96	2.88	2.96
	velocity	5.20	8.50	8.50	8.85	8.85	8.85	8.85	8.67	8.67	8.50	8.66	8.03		8.61	8.85	8.61
Harrison, Kendra (USA) (1992)	time	2.50	3.54	4.54	5.50	6.46	7.42	8.38	9.36	10.38	11.38		12.56	4 / 2			
reaction time	interval		1.04	1.00	0.96	0.96	0.96	0.96	0.98	1.02	1.00	1.18			3.00	2.88	3.00
	velocity	5.20	8.17	8.50	8.85	8.85	8.85	8.85	8.67	8.33	8.50	8.52	7.96		8.50	8.85	8.50
Jones, Tia (USA) (2000)	time	2.58	3.63	4.63	5.61	6.57	7.54	8.51	9.47	10.47	11.47		12.59	9 / 3			
reaction time	interval		1.05	1.00	0.98	0.96	0.97	0.97	0.96	1.00	1.00	1.12	PB		3.03	2.90	2.96
	velocity	5.04	8.10	8.50	8.67	8.85	8.76	8.76	8.85	8.50	8.50	8.97	7.94		8.42	8.79	8.61
Amusan, Tobi (NGR) (1997)	time	2.58	3.63	4.61	5.59	6.55	7.51	8.47	9.47	10.47	11.49		12.61	5 / 4			
reaction time	interval		1.05	0.98	0.98	0.96	0.96	0.96	1.00	1.00	1.02	1.12			3.01	2.88	3.02
	velocity	5.04	8.10	8.67	8.67	8.85	8.85	8.85	8.50	8.50	8.33	8.97	7.93		8.47	8.85	8.44
Sember, Cindy (GBR) (1994)	time	2.60	3.63	4.63	5.61	6.59	7.55	8.53	9.51	10.51	11.51		12.63	3 / 5			
reaction time	interval		1.03	1.00	0.98	0.98	0.96	0.98	0.98	1.00	1.00	1.12			3.01	2.92	2.98
	velocity	5.00	8.25	8.50	8.67	8.67	8.85	8.67	8.67	8.50	8.50	8.97	7.92		8.47	8.73	8.56
Clemons, Christina (USA) (19	time	2.54	3.56	4.56	5.54	6.53	7.51	8.49	9.47	10.47	11.49		12.68	7 / 6			
reaction time	interval		1.02	1.00	0.98	0.99	0.98	0.98	0.98	1.00	1.02	1.19			3.00	2.95	3.00
	velocity	5.12	8.33	8.50	8.67	8.59	8.67	8.67	8.67	8.50	8.33	8.45	7.89		8.50	8.64	8.50
Castlin, Kristi (USA) (1988)	time	2.63	3.67	4.65	5.63	6.61	7.59	8.57	9.57	10.59	11.59		12.77	2 / 7			
reaction time	interval		1.04	0.98	0.98	0.98	0.98	0.98	1.00	1.02	1.00	1.18			3.00	2.94	3.02
	velocity	4.94	8.17	8.67	8.67	8.67	8.67	8.67	8.50	8.33	8.50	8.52	7.83		8.50	8.67	8.44
Brissett, Chanel (USA) (1999)	time	2.63	3.63	4.63	5.61	6.59	7.59	8.59	9.59	10.59	11.63		12.79	8 / 8			
reaction time	interval		1.00	1.00	0.98	0.98	1.00	1.00	1.00	1.00	1.04	1.16			2.98	2.98	3.04
	velocity	4.94	8.50	8.50	8.67	8.67	8.50	8.50	8.50	8.50	8.17	8.66	7.82		8.56	8.56	8.39
Cockrell, Anna (USA) (1997)	time	2.63	3.63	4.63	5.63	6.63	7.63	8.65	9.67	10.70	11.76		12.92	1 / 9			
reaction time	interval		1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.03	1.06	1.16			3.00	3.02	3.11
	velocity	4.94	8.50	8.50	8.50	8.50	8.50	8.33	8.33	8.25	8.02	8.66	7.74		8.50	8.44	8.20

2022 Texas Relays (Austin, TX) (TV Analysis)

Invitational FINAL

date 26-Mar-22 wind 3.9 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.54	3.52	4.45	5.40	6.34	7.27	8.24	9.21	10.18	11.18		12.32	5 / 1			
reaction time	interval		0.98	0.93	0.95	0.94	0.93	0.97	0.97	0.97	1.00	1.14			2.86	2.84	2.94
	velocity	5.12	8.67	9.14	8.95	9.04	9.14	8.76	8.76	8.76	8.50	8.82	8.12		8.92	8.98	8.67
Clemons, Christina (USA) (19	time	2.54	3.54	4.50	5.47	6.42	7.37	8.34	9.31	10.31	11.29		12.45	7 / 2			
reaction time	interval		1.00	0.96	0.97	0.95	0.95	0.97	0.97	1.00	0.98	1.16			2.93	2.87	2.95
	velocity	5.12	8.50	8.85	8.76	8.95	8.95	8.76	8.76	8.50	8.67	8.66	8.03		8.70	8.89	8.64
Marshall, Tonea (USA) (1998)	time	2.50	3.50	4.47	5.42	6.36	7.32	8.29	9.29	10.28	11.29		12.45	6 / 3			
reaction time	interval		1.00	0.97	0.95	0.94	0.96	0.97	1.00	0.99	1.01	1.16			2.92	2.87	3.00
	velocity	5.20	8.50	8.76	8.95	9.04	8.85	8.76	8.50	8.59	8.42	8.66	8.03		8.73	8.89	8.50

University FINAL

date 26-Mar-22 wind 2.5 m/s

Henson (2022) - Athlete First: 2022 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Armstrong, Alia (USA) (2000)	time	2.47	3.45	4.43	5.37	6.33	7.30	8.26	9.23	10.20	11.18		12.33	4 / 1			
reaction time	interval		0.98	0.98	0.94	0.96	0.97	0.96	0.97	0.97	0.98	1.15			2.90	2.89	2.92
	velocity	5.26	8.67	8.67	9.04	8.85	8.76	8.85	8.76	8.76	8.67	8.74	8.11		8.79	8.82	8.73
Robinson, Kaylah (USA) (199	time	2.50	3.50	4.50	5.47	6.43	7.40	8.36	9.30	10.28	11.27		12.49	5 / 2			

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	interval		1.00	1.00	0.97	0.96	0.97	0.96	0.94	0.98	0.99	1.22			2.97	2.89	2.91
	velocity	5.20	8.50	8.50	8.76	8.85	8.76	8.85	9.04	8.67	8.59	8.24	8.01		8.59	8.82	8.76
Nugent, Ackera (JAM) (2002)	time	2.50	3.53	4.53	5.50	6.47	7.43	8.40	9.40	10.43	11.46		12.72	6 / 3			
reaction time	interval		1.03	1.00	0.97	0.97	0.96	0.97	1.00	1.03	1.03	1.26			3.00	2.90	3.06
	velocity	5.20	8.25	8.50	8.76	8.76	8.85	8.76	8.50	8.25	8.25	7.98	7.86		8.50	8.79	8.33

2022 World Athletics Indoor Championships (Belgrade, SRB) (TV Analysis)

FINAL date 19-Mar-22

Henson (2022) - Athlete First: 2022 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Samba-Mayela, Cyréna (FRA)	time	2.42	3.44	4.44	5.40	6.36							7.78	5 / 1			
reaction time 0.119	interval		1.02	1.00	0.96	0.96						1.42	NR		2.98		
	velocity	5.37	8.33	8.50	8.85	8.85						9.15	7.71		8.56		
Charlton, Devynne (BAH) (19	time	2.44	3.44	4.44	5.40	6.38							7.81	4 / 2			
reaction time 0.157	interval		1.00	1.00	0.96	0.98						1.43	NR		2.96		
	velocity	5.33	8.50	8.50	8.85	8.67						9.09	7.68		8.61		
Cunningham, Gabriele (USA)	time	2.46	3.46	4.46	5.44	6.42							7.87	2 / 3			
reaction time 0.164	interval		1.00	1.00	0.98	0.98						1.45			2.98		
	velocity	5.28	8.50	8.50	8.67	8.67						8.97	7.62		8.56		
Anderson, Britany (JAM) (200	time	2.50	3.52	4.54	5.54	6.52							7.96	3 / 4			
reaction time 0.140	interval		1.02	1.02	1.00	0.98						1.44			3.04		
	velocity	5.20	8.33	8.33	8.50	8.67						9.03	7.54		8.39		
Mota, Yoveinny (VEN) (2000)	time	2.56	3.58	4.60	5.58	6.60							8.05	1 / 5			
reaction time 0.147	interval		1.02	1.02	0.98	1.02						1.45	NR		3.02		
	velocity	5.08	8.33	8.33	8.67	8.33						8.97	7.45		8.44		
Sedney, Zoë (NED) (2001)	time	2.54	3.58	4.60	5.62	6.64							8.07	6 / 6			
reaction time 0.169	interval		1.04	1.02	1.02	1.02						1.43			3.08		
	velocity	5.12	8.17	8.33	8.33	8.33						9.09	7.43		8.28		
Lavin, Sarah (IRL) (1994)	time	2.54	3.58	4.62	5.64	6.64							8.09	7 / 7			
reaction time 0.152	interval		1.04	1.04	1.02	1.00						1.45			3.10		
	velocity	5.12	8.17	8.17	8.33	8.50						8.97	7.42		8.23		
Kambundji, Ditaji (SUI) (2002)	time	2.44	3.46										dnf	8 / --			
reaction time 0.108	interval		1.02														
	velocity	5.33	8.33														

2021 Chinese National Games (Xi'an, CHN)

FINAL date 22-Sep-21 wind 0.1 m/s

CAA Hurdle Development (2021)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lin Yuwei (CHN) (1999)	time	2.50	3.53	4.56	5.56	6.56	7.56	8.58	9.60	10.63	11.67		12.88	6 / 1			
reaction time 0.146	interval		1.03	1.03	1.00	1.00	1.00	1.02	1.02	1.03	1.04	1.21			3.06	3.02	3.09
	velocity	5.20	8.25	8.25	8.50	8.50	8.50	8.33	8.33	8.25	8.17	8.31	7.76		8.33	8.44	8.25
Wu Yanni (CHN) (1997)	time	2.50	3.53	4.56	5.56	6.56	7.56	8.56	9.60	10.60	11.67		12.91	5 / 2			
reaction time 0.131	interval		1.03	1.03	1.00	1.00	1.00	1.00	1.04	1.00	1.07	1.24			3.06	3.00	3.11
	velocity	5.20	8.25	8.25	8.50	8.50	8.50	8.50	8.17	8.50	7.94	8.10	7.75		8.33	8.50	8.20
Wang Dou (CHN) (1993)	time	2.56	3.60	4.63	5.63	6.65	7.67	8.69	9.71	10.73	11.80		13.00	7 / 3			
reaction time 0.152	interval		1.04	1.03	1.00	1.02	1.02	1.02	1.02	1.02	1.07	1.20	PB		3.07	3.06	3.11
	velocity	5.08	8.17	8.25	8.50	8.33	8.33	8.33	8.33	8.33	7.94	8.38	7.69		8.31	8.33	8.20
Dai Yiru (CHN) (2001)	time	2.50	3.56	4.60	5.60	6.63	7.67	8.73	9.80	10.87	11.94		13.22	3 / 4			
reaction time 0.132	interval		1.06	1.04	1.00	1.03	1.04	1.06	1.07	1.07	1.07	1.28			3.10	3.13	3.21
	velocity	5.20	8.02	8.17	8.50	8.25	8.17	8.02	7.94	7.94	7.94	7.85	7.56		8.23	8.15	7.94
Luo Xianyan (CHN) (1997)	time	2.53	3.60	4.64	5.68	6.70	7.73	8.77	9.83	10.90	11.97		13.25	2 / 5			
reaction time 0.149	interval		1.07	1.04	1.04	1.02	1.03	1.04	1.06	1.07	1.07	1.28	PB		3.15	3.09	3.20
	velocity	5.14	7.94	8.17	8.17	8.33	8.25	8.17	8.02	7.94	7.94	7.85	7.55		8.10	8.25	7.97
Wang Li (CHN) (1999)	time	2.53	3.63	4.70	5.73	6.76	7.80	8.83	9.86	10.96	12.03		13.29	4 / 6			
reaction time 0.175	interval		1.10	1.07	1.03	1.03	1.04	1.03	1.03	1.10	1.07	1.26			3.20	3.10	3.20
	velocity	5.14	7.73	7.94	8.25	8.25	8.17	8.25	8.25	7.73	7.94	7.98	7.52		7.97	8.23	7.97
You Na (CHN) (1993)	time	2.56	3.60	4.66	5.68	6.72	7.76	8.83	9.87	10.93	12.03		13.30	8 / 7			
reaction time 0.153	interval		1.04	1.06	1.02	1.04	1.04	1.07	1.04	1.06	1.10	1.27			3.12	3.15	3.20
	velocity	5.08	8.17	8.02	8.33	8.17	8.17	7.94	8.17	8.02	7.73	7.91	7.52		8.17	8.10	7.97
Chen Yinfeng (CHN) (1998)	time	2.56	3.66	4.73	5.77	6.83	7.93	9.00	10.06	11.16	12.26		13.53	9 / 8			
reaction time 0.161	interval		1.10	1.07	1.04	1.06	1.10	1.07	1.06	1.10	1.10	1.27			3.21	3.23	3.26
	velocity	5.08	7.73	7.94	8.17	8.02	7.73	7.94	8.02	7.73	7.73	7.91	7.39		7.94	7.89	7.82

Semi-Final 3

date 21-Sep-21 wind 0.1 m/s

CAA Hurdle Development (2021)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lin Yuwei (CHN) (1999)	time	2.49	3.51	4.51	5.52	6.50	7.49	8.49	9.51	10.53	11.60		12.85	6 / 1			
reaction time 0.147	interval		1.02	1.00	1.01	0.98	0.99	1.00	1.02	1.02	1.07	1.25	PB		3.03	2.97	3.11
	velocity	5.22	8.33	8.50	8.42	8.67	8.59	8.50	8.33	8.33	7.94	8.04	7.78		8.42	8.59	8.20
Wu Yanni (CHN) (1997)	time	2.53	3.54	4.55	5.53	6.53	7.52	8.54	9.56	10.58	11.65		12.96	5 / 2			
reaction time 0.144	interval		1.01	1.01	0.98	1.00	0.99	1.02	1.02	1.02	1.07	1.31			3.00	3.01	3.11
	velocity	5.14	8.42	8.42	8.67	8.50	8.59	8.33	8.33	8.33	7.94	7.67	7.72		8.50	8.47	8.20
Dai Yiru (CHN) (2001)	time	2.53	3.54	4.58	5.60	6.61	7.62	8.67	9.74	10.83	11.92		13.24	7 / 3			
reaction time 0.147	interval		1.01	1.04	1.02	1.01	1.01	1.05	1.07	1.09	1.09	1.32			3.07	3.07	3.25
	velocity	5.14	8.42	8.17	8.33	8.42	8.42	8.10	7.94	7.80	7.80	7.61	7.55		8.31	8.31	7.85
Luo Xianyan (CHN) (1997)	time	2.53	3.61	4.66	5.68	6.70	7.72	8.78	9.84	10.89	12.00		13.31	3 / 4			
reaction time 0.143	interval		1.08	1.05	1.02	1.02	1.02	1.06	1.06	1.05	1.11	1.31	PB		3.15	3.10	3.22
	velocity	5.14	7.87	8.10	8.33	8.33	8.33	8.02	8.02	8.10	7.66	7.67	7.51		8.10	8.23	7.92
Yu Jiaru (CHN) (1999)	time	2.62	3.66	4.72	5.77	6.81	7.87	8.95	10.03	11.13	12.23		13.55	8 / 5			
reaction time 0.175	interval		1.04	1.06	1.05	1.04	1.06	1.08	1.08	1.10	1.10	1.32			3.15	3.18	3.28
	velocity	4.96	8.17	8.02	8.10	8.17	8.02	7.87	7.87	7.73	7.73	7.61	7.38		8.10	8.02	7.77
Qin Hongyan (CHN) (2001)	time	2.62	3.66	4.79	5.85	6.94	7.99	9.09	10.22	11.34	12.50		13.85	4 / 6			
reaction time 0.158	interval		1.04	1.13	1.06	1.09	1.05	1.10	1.13	1.12	1.16	1.35			3.23	3.24	3.41
	velocity	4.96	8.17	7.52	8.02	7.80	8.10	7.73	7.52	7.59	7.33	7.44	7.22		7.89	7.87	7.48

2021 Weltklasse (Zürich, SUI) (TV Analysis)

FINAL

date 09-Sep-21 wind 0.4 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.50	3.50	4.48	5.42	6.36	7.32	8.26	9.24	10.22	11.26		12.42	3 / 1			
reaction time 0.134	interval		1.00	0.98	0.94	0.94	0.96	0.94	0.98	0.98	1.04	1.16	AR		2.92	2.84	3.00
	velocity	5.20	8.50	8.67	9.04	9.04	8.85	9.04	8.67	8.67	8.17	8.66	8.05		8.73	8.98	8.50
Visser, Nadine (NED) (1995)	time	2.50	3.52	4.48	5.44	6.40	7.36	8.32	9.30	10.30	11.34		12.51	4 / 2			
reaction time 0.141	interval		1.02	0.96	0.96	0.96	0.96	0.96	0.98	1.00	1.04	1.17	NR PB		2.94	2.88	3.02
	velocity	5.20	8.33	8.85	8.85	8.85	8.85	8.85	8.67	8.50	8.17	8.59	7.99		8.67	8.85	8.44
Tapper, Megan (JAM) (1994)	time	2.48	3.50	4.48	5.44	6.40	7.36	8.32	9.30	10.30	11.32		12.55	5 / 3			
reaction time 0.151	interval		1.02	0.98	0.96	0.96	0.96	0.96	0.98	1.00	1.02	1.23			2.96	2.88	3.00
	velocity	5.24	8.33	8.67	8.85	8.85	8.85	8.85	8.67	8.50	8.33	8.17	7.97		8.61	8.85	8.50
Chadwick, Payton (USA) (199	time	2.50	3.52	4.52	5.50	6.46	7.44	8.40	9.40	10.38	11.42		12.62	7 / 4			
reaction time 0.132	interval		1.02	1.00	0.98	0.96	0.98	0.96	1.00	0.98	1.04	1.20	PB		3.00	2.90	3.02
	velocity	5.20	8.33	8.50	8.67	8.85	8.67	8.85	8.50	8.67	8.17	8.38	7.92		8.50	8.79	8.44
Sember, Cindy (GBR) (1994)	time	2.54	3.56	4.54	5.52	6.50	7.50	8.48	9.46	10.48	11.52		12.71	6 / 5			
reaction time 0.161	interval		1.02	0.98	0.98	0.98	1.00	0.98	0.98	1.02	1.04	1.19			2.98	2.96	3.04
	velocity	5.12	8.33	8.67	8.67	8.67	8.50	8.67	8.67	8.33	8.17	8.45	7.87		8.56	8.61	8.39
Cunningham, Gabriele (USA)	time	2.46	3.50	4.50	5.48	6.46	7.44	8.44	9.46	10.50	11.54		12.79	2 / 6			
reaction time 0.140	interval		1.04	1.00	0.98	0.98	0.98	1.00	1.02	1.04	1.04	1.25			3.02	2.96	3.10
	velocity	5.28	8.17	8.50	8.67	8.67	8.67	8.50	8.33	8.17	8.17	8.04	7.82		8.44	8.61	8.23
Kozák, Luca (HUN) (1996)	time	2.56	3.60	4.58	5.58	6.56	7.58	8.58	9.58	10.60	11.64		12.90	8 / 7			
reaction time 0.187	interval		1.04	0.98	1.00	0.98	1.02	1.00	1.00	1.02	1.04	1.26			3.02	3.00	3.06
	velocity	5.08	8.17	8.67	8.50	8.67	8.33	8.50	8.50	8.33	8.17	7.98	7.75		8.44	8.50	8.33
Kambundji, Ditaji (SUI) (2002)	time	2.50	3.54	4.58	5.58	6.60	7.60	8.60	9.66	10.70	11.74		13.01	9 / 8			
reaction time 0.142	interval		1.04	1.04	1.00	1.02	1.00	1.00	1.06	1.04	1.04	1.27			3.08	3.02	3.14
	velocity	5.20	8.17	8.17	8.50	8.33	8.50	8.50	8.02	8.17	8.17	7.91	7.69		8.28	8.44	8.12
Robinson, TeJyrica (USA) (19	time	2.52	3.60	4.66	5.72	6.80	7.88	8.96	10.00	11.10	12.28		13.70	1 / 9			
reaction time 0.134	interval		1.08	1.06	1.06	1.08	1.08	1.08	1.04	1.10	1.18	1.42			3.20	3.24	3.32
	velocity	5.16	7.87	8.02	8.02	7.87	7.87	7.87	8.17	7.73	7.20	7.08	7.30		7.97	7.87	7.68

2021 Memorial van Damme (Brussels, BEL) (TV Analysis)

FINAL

date 03-Sep-21 wind 0.7 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Visser, Nadine (NED) (1995)	time	2.54	3.56	4.54	5.52	6.50	7.46	8.44	9.44	10.46	11.50		12.69	7 / 1			
reaction time 0.141	interval		1.02	0.98	0.98	0.98	0.96	0.98	1.00	1.02	1.04	1.19			2.98	2.92	3.06
	velocity	5.12	8.33	8.67	8.67	8.67	8.85	8.67	8.50	8.33	8.17	8.45	7.88		8.56	8.73	8.33
Amusan, Tobi (NGR) (1997)	time	2.52	3.58	4.58	5.56	6.54	7.50	8.48	9.46	10.46	11.50		12.69	5 / 2			
reaction time 0.163	interval		1.06	1.00	0.98	0.98	0.96	0.98	0.98	1.00	1.04	1.19			3.04	2.92	3.02
	velocity	5.16	8.02	8.50	8.67	8.67	8.85	8.67	8.67	8.50	8.17	8.45	7.88		8.39	8.73	8.44
Tapper, Megan (JAM) (1994)	time	2.52	3.54	4.52	5.48	6.46	7.44	8.44	9.46	10.48	11.54		12.77	6 / 3			

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 0.154	interval		1.02	0.98	0.96	0.98	0.98	1.00	1.02	1.02	1.06	1.23			2.96	2.96	3.10
	velocity	5.16	8.33	8.67	8.85	8.67	8.67	8.50	8.33	8.33	8.02	8.17	7.83		8.61	8.61	8.23
Sember, Cindy (GBR) (1994)	time	2.56	3.62	4.62	5.60	6.60	7.58	8.56	9.54	10.58	11.62		12.79	2 / 4			
reaction time 0.174	interval		1.06	1.00	0.98	1.00	0.98	0.98	0.98	1.04	1.04	1.17			3.04	2.96	3.06
	velocity	5.08	8.02	8.50	8.67	8.50	8.67	8.67	8.67	8.17	8.17	8.59	7.82		8.39	8.61	8.33
Cunningham, Gabriele (USA)	time	2.48	3.52	4.52	5.50	6.50	7.54	8.54	9.58	10.60	11.66		12.89	4 / 5			
reaction time 0.166	interval		1.04	1.00	0.98	1.00	1.04	1.00	1.04	1.02	1.06	1.23			3.02	3.04	3.12
	velocity	5.24	8.17	8.50	8.67	8.50	8.17	8.50	8.17	8.33	8.02	8.17	7.76		8.44	8.39	8.17
Zagré, Anne (BEL) (1990)	time	2.60	3.62	4.64	5.62	6.60	7.60	8.60	9.64	10.66	11.70		12.96	8 / 6			
reaction time 0.153	interval		1.02	1.02	0.98	0.98	1.00	1.00	1.04	1.02	1.04	1.26			3.02	2.98	3.10
	velocity	5.00	8.33	8.33	8.67	8.67	8.50	8.50	8.17	8.33	8.17	7.98	7.72		8.44	8.56	8.23
Vidts, Noor (BEL) (1996)	time	2.66	3.78	4.84	5.90	6.90	7.96	9.02	10.08	11.18	12.28		13.55	1 / 7			
reaction time 0.150	interval		1.12	1.06	1.06	1.00	1.06	1.06	1.06	1.10	1.10	1.27			3.24	3.12	3.26
	velocity	4.89	7.59	8.02	8.02	8.50	8.02	8.02	8.02	7.73	7.73	7.91	7.38		7.87	8.17	7.82
Williams, Danielle (JAM) (1992	time	2.48	3.52	4.52	5.50	6.52	7.60	8.64	9.80					3 / --			
reaction time 0.129	interval		1.04	1.00	0.98	1.02	1.08	1.04	1.16				DQ		3.02	3.14	
	velocity	5.24	8.17	8.50	8.67	8.33	7.87	8.17	7.33						8.44	8.12	

2021 Meeting de Paris (Paris, FRA) (TV Analysis)

FINAL date 28-Aug-21 wind 1.7 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Williams, Danielle (JAM) (1992	time	2.44	3.44	4.44	5.42	6.40	7.36	8.32	9.30	10.30	11.32		12.50	2 / 1			
reaction time 0.137	interval		1.00	1.00	0.98	0.98	0.96	0.96	0.98	1.00	1.02	1.18			2.98	2.90	3.00
	velocity	5.33	8.50	8.50	8.67	8.67	8.85	8.85	8.67	8.50	8.33	8.52	8.00		8.56	8.79	8.50
Visser, Nadine (NED) (1995)	time	2.52	3.52	4.52	5.50	6.46	7.42	8.40	9.38	10.38	11.40		12.58	3 / 2			
reaction time 0.152	interval		1.00	1.00	0.98	0.96	0.96	0.98	0.98	1.00	1.02	1.18	NR PB		2.98	2.90	3.00
	velocity	5.16	8.50	8.50	8.67	8.85	8.85	8.67	8.67	8.50	8.33	8.52	7.95		8.56	8.79	8.50
Tapper, Megan (JAM) (1994)	time	2.52	3.52	4.52	5.50	6.46	7.42	8.40	9.40	10.40	11.44		12.66	5 / 3			
reaction time 0.152	interval		1.00	1.00	0.98	0.96	0.96	0.98	1.00	1.00	1.04	1.22			2.98	2.90	3.04
	velocity	5.16	8.50	8.50	8.67	8.85	8.85	8.67	8.50	8.50	8.17	8.24	7.90		8.56	8.79	8.39
Amusan, Tobi (NGR) (1997)	time	2.54	3.58	4.58	5.56	6.54	7.50	8.48	9.48	10.48	11.48		12.69	4 / 4			
reaction time 0.155	interval		1.04	1.00	0.98	0.98	0.96	0.98	1.00	1.00	1.00	1.21			3.02	2.92	3.00
	velocity	5.12	8.17	8.50	8.67	8.67	8.85	8.67	8.50	8.50	8.50	8.31	7.88		8.44	8.73	8.50
Cunningham, Gabriele (USA)	time	2.46	3.48	4.48	5.48	6.48	7.46	8.46	9.48	10.54	11.58		12.86	6 / 5			
reaction time 0.169	interval		1.02	1.00	1.00	1.00	0.98	1.00	1.02	1.06	1.04	1.28			3.02	2.98	3.12
	velocity	5.28	8.33	8.50	8.50	8.50	8.67	8.50	8.33	8.02	8.17	7.85	7.78		8.44	8.56	8.17
Clemons, Christina (USA) (19	time	2.48	3.52	4.56	5.58	6.58	7.58	8.58	9.60	10.64	11.68		12.96	7 / 6			
reaction time 0.150	interval		1.04	1.04	1.02	1.00	1.00	1.00	1.02	1.04	1.04	1.28			3.10	3.00	3.10
	velocity	5.24	8.17	8.17	8.33	8.50	8.50	8.50	8.33	8.17	8.17	7.85	7.72		8.23	8.50	8.23

2020 Olympic Games (Tokyo, JPN) (TV Analysis)

FINAL date 02-Aug-21 wind -0.3 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.44	3.44	4.42	5.38	6.32	7.26	8.20	9.14	10.10	11.14		12.37	5 / 1			
reaction time 0.149	interval		1.00	0.98	0.96	0.94	0.94	0.94	0.94	0.96	1.04	1.23			2.94	2.82	2.94
	velocity	5.33	8.50	8.67	8.85	9.04	9.04	9.04	9.04	8.85	8.17	8.17	8.08		8.67	9.04	8.67
Harrison, Kendra (USA) (1992	time	2.44	3.48	4.46	5.42	6.38	7.36	8.30	9.28	10.26	11.28		12.52	4 / 2			
reaction time 0.158	interval		1.04	0.98	0.96	0.96	0.98	0.94	0.98	0.98	1.02	1.24			2.98	2.88	2.98
	velocity	5.33	8.17	8.67	8.85	8.85	8.67	9.04	8.67	8.67	8.33	8.10	7.99		8.56	8.85	8.56
Tapper, Megan (JAM) (1994)	time	2.48	3.48	4.46	5.42	6.38	7.34	8.30	9.30	10.30	11.32		12.55	9 / 3			
reaction time 0.166	interval		1.00	0.98	0.96	0.96	0.96	0.96	1.00	1.00	1.02	1.23			2.94	2.88	3.02
	velocity	5.24	8.50	8.67	8.85	8.85	8.85	8.85	8.50	8.50	8.33	8.17	7.97		8.67	8.85	8.44
Amusan, Tobi (NGR) (1997)	time	2.50	3.54	4.54	5.52	6.48	7.44	8.42	9.38	10.38	11.42		12.60	6 / 4			
reaction time 0.161	interval		1.04	1.00	0.98	0.96	0.96	0.98	0.96	1.00	1.04	1.18	PB		3.02	2.90	3.00
	velocity	5.20	8.17	8.50	8.67	8.85	8.85	8.67	8.85	8.50	8.17	8.52	7.94		8.44	8.79	8.50
Visser, Nadine (NED) (1995)	time	2.50	3.52	4.50	5.48	6.46	7.44	8.44	9.44	10.46	11.54		12.73	3 / 5			
reaction time 0.152	interval		1.02	0.98	0.98	0.98	0.98	1.00	1.00	1.02	1.08	1.19			2.98	2.96	3.10
	velocity	5.20	8.33	8.67	8.67	8.67	8.67	8.50	8.50	8.33	7.87	8.45	7.86		8.56	8.61	8.23
Charlton, Devynne (BAH) (19	time	2.48	3.50	4.50	5.48	6.46	7.46	8.46	9.46	10.48	11.50		12.74	8 / 6			
reaction time 0.144	interval		1.02	1.00	0.98	0.98	1.00	1.00	1.00	1.02	1.02	1.24			3.00	2.98	3.04
	velocity	5.24	8.33	8.50	8.67	8.67	8.50	8.50	8.50	8.33	8.33	8.10	7.85		8.50	8.56	8.39

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Cunningham, Gabriele (USA)		time	2.46	3.48	4.50	5.52	6.52	7.52	8.52	9.54	10.62	11.72		13.01	2 / 7			
reaction time 0.172		interval		1.02	1.02	1.02	1.00	1.00	1.00	1.02	1.08	1.10	1.29			3.06	3.00	3.20
		velocity	5.28	8.33	8.33	8.33	8.50	8.50	8.50	8.33	7.87	7.73	7.79	7.69		8.33	8.50	7.97
Anderson, Britany (JAM) (200		time	2.48	3.50	4.50	5.50	6.48	7.44	8.46	9.48	10.64	11.80		13.24	7 / 8			
reaction time 0.164		interval		1.02	1.00	1.00	0.98	0.96	1.02	1.02	1.16	1.16	1.44			3.02	2.96	3.34
		velocity	5.24	8.33	8.50	8.50	8.67	8.85	8.33	8.33	7.33	7.33	6.98	7.55		8.44	8.61	7.63

Semi-Final 3

date 01-Aug-21 wind -0.2 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU		time	2.47	3.47	4.44	5.37	6.31	7.24	8.19	9.14	10.10	11.10		12.26	7 / 1			
reaction time 0.175		interval		1.00	0.97	0.93	0.94	0.93	0.95	0.95	0.96	1.00	1.16	OR AR PB		2.90	2.82	2.91
		velocity	5.26	8.50	8.76	9.14	9.04	9.14	8.95	8.95	8.85	8.50	8.66	8.16		8.79	9.04	8.76

Heat 5

date 31-Jul-21 wind 0.3 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU		time	2.47	3.47	4.47	5.44	6.38	7.34	8.29	9.25	10.23	11.23		12.41	2 / 1			
reaction time 0.153		interval		1.00	1.00	0.97	0.94	0.96	0.95	0.96	0.98	1.00	1.18			2.97	2.85	2.94
		velocity	5.26	8.50	8.50	8.76	9.04	8.85	8.95	8.85	8.67	8.50	8.52	8.06		8.59	8.95	8.67
Tapper, Megan (JAM) (1994)		time	2.53	3.54	4.50	5.47	6.44	7.39	8.34	9.34	10.32	11.34		12.53	5 / 2			
reaction time 0.152		interval		1.01	0.96	0.97	0.97	0.95	0.95	1.00	0.98	1.02	1.19	PB		2.94	2.87	3.00
		velocity	5.14	8.42	8.85	8.76	8.76	8.95	8.95	8.50	8.67	8.33	8.45	7.98		8.67	8.89	8.50

2021 Japanese High School National Championships (Fukui, JPN)

FINAL

date 01-Aug-21 wind 1.8 m/s

Shibayama (2021) - national high school and U20 national championhsips

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Taguchi, Mayu (JPN) (2003)		time	2.70	3.78	4.84	5.89	6.93	7.98	9.03	10.10	11.19	12.29		13.52	5 / 1			
reaction time 0.138		interval		1.08	1.06	1.05	1.04	1.05	1.05	1.07	1.09	1.10	1.23	PB		3.19	3.14	3.26
		velocity	4.81	7.87	8.02	8.10	8.17	8.10	8.10	7.94	7.80	7.73	8.17	7.40		7.99	8.12	7.82
Asagi, Tsukiha (JPN) (2003)		time	2.65	3.72	4.78	5.83	6.89	7.95	9.03	10.08	11.20	12.30		13.53	4 / 2			
reaction time 0.134		interval		1.07	1.06	1.05	1.06	1.06	1.08	1.05	1.12	1.10	1.23	PB		3.18	3.20	3.27
		velocity	4.91	7.94	8.02	8.10	8.02	8.02	7.87	8.10	7.59	7.73	8.17	7.39		8.02	7.97	7.80
Takami, Towa (JPN) (2004)		time	2.66	3.72	4.78	5.84	6.94	8.02	9.11	10.21	11.33	12.44		13.64	1 / 3			
reaction time 0.158		interval		1.06	1.06	1.06	1.10	1.08	1.09	1.10	1.12	1.11	1.20	PB		3.18	3.27	3.33
		velocity	4.89	8.02	8.02	8.02	7.73	7.87	7.80	7.73	7.59	7.66	8.37	7.33		8.02	7.80	7.66
Fujiwara, Karen (JPN) (2004)		time	2.67	3.76	4.85	5.91	6.99	8.05	9.12	10.20	11.30	12.41		13.66	3 / 4			
reaction time 0.185		interval		1.09	1.09	1.06	1.08	1.06	1.07	1.08	1.10	1.11	1.25			3.24	3.21	3.29
		velocity	4.87	7.80	7.80	8.02	7.87	8.02	7.94	7.87	7.73	7.66	8.04	7.32		7.87	7.94	7.75
Yoshida, Erika (JPN) (2004)		time	2.72	3.82	4.92	5.97	7.04	8.11	9.17	10.25	11.33	12.44		13.72	6 / 5			
reaction time 0.167		interval		1.10	1.10	1.05	1.07	1.07	1.06	1.08	1.08	1.11	1.28			3.25	3.20	3.27
		velocity	4.78	7.73	7.73	8.10	7.94	7.94	8.02	7.87	7.87	7.66	7.85	7.29		7.85	7.97	7.80
Takahashi, Ami (JPN) (2005)		time	2.69	3.81	4.89	5.97	7.05	8.15	9.22	10.33	11.42	12.54		13.75	7 / 6			
reaction time 0.151		interval		1.12	1.08	1.08	1.08	1.10	1.07	1.11	1.09	1.12	1.21	PB		3.28	3.25	3.32
		velocity	4.83	7.59	7.87	7.87	7.87	7.73	7.94	7.66	7.80	7.59	8.31	7.27		7.77	7.85	7.68
Otani, Sumire (JPN) (2005)		time	2.71	3.82	4.90	5.98	7.06	8.13	9.20	10.30	11.42	12.56		13.81	8 / 7			
reaction time 0.185		interval		1.11	1.08	1.08	1.08	1.07	1.07	1.10	1.12	1.14	1.25			3.27	3.22	3.36
		velocity	4.80	7.66	7.87	7.87	7.87	7.94	7.94	7.73	7.59	7.46	8.04	7.24		7.80	7.92	7.59
Nishijima, Mai (JPN) (2004)		time	2.65	3.76	4.83	5.91	7.00	8.09	9.20	10.33	11.46	12.61		13.88	2 / 8			
reaction time 0.137		interval		1.11	1.07	1.08	1.09	1.09	1.11	1.13	1.13	1.15	1.27			3.26	3.29	3.41
		velocity	4.91	7.66	7.94	7.87	7.80	7.80	7.66	7.52	7.52	7.39	7.91	7.20		7.82	7.75	7.48

2021 Chinese Student Games (Qingdao, CHN)

FINAL

date 14-Jul-21 wind -0.7 m/s

CAA Hurdle Development (2021)

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lin Yuwei (CHN) (1999)		time	2.53	3.60	4.63	5.67	6.68	7.67	8.70	9.70	10.75	11.79		12.93	5 / 1			
reaction time		interval		1.07	1.03	1.04	1.01	0.99	1.03	1.00	1.05	1.04	1.14	PB		3.14	3.03	3.09
		velocity	5.14	7.94	8.25	8.17	8.42	8.59	8.25	8.50	8.10	8.17	8.82	7.73		8.12	8.42	8.25
Dai Yiru (CHN) (2001)		time	2.53	3.57	4.60	5.67	6.67	7.73	8.77	9.80	10.90	11.97		13.28	6 / 2			
reaction time		interval		1.04	1.03	1.07	1.00	1.06	1.04	1.03	1.10	1.07	1.31			3.14	3.10	3.20
		velocity	5.14	8.17	8.25	7.94	8.50	8.02	8.17	8.25	7.73	7.94	7.67	7.53		8.12	8.23	7.97
Wang Li (CHN) (1999)		time	2.62	3.67	4.70	5.77	6.81	7.84	8.90	9.97	11.07	12.17		13.42	4 / 3			
reaction time		interval		1.05	1.03	1.07	1.04	1.03	1.06	1.07	1.10	1.10	1.25			3.15	3.13	3.27
		velocity	4.96	8.10	8.25	7.94	8.17	8.25	8.02	7.94	7.73	7.73	8.04	7.45		8.10	8.15	7.80
Chen Yifeng (CHN) (1998)		time	2.60	3.63	4.73	5.77	6.81	7.87	8.94	10.03	11.10	12.23		13.46	3 / 4			
reaction time		interval		1.03	1.10	1.04	1.04	1.06	1.07	1.09	1.07	1.13	1.23			3.17	3.17	3.29
		velocity	5.00	8.25	7.73	8.17	8.17	8.02	7.94	7.80	7.94	7.52	8.17	7.43		8.04	8.04	7.75

2021 Müller British Grand Prix (Gateshead, GBR) (TV Analysis)

FINAL date 13-Jul-21 wind 1.5 m/s *Henson (2021) - Athlete First: 2021 year end hurdle report*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Sember, Cindy (GBR) (1994)		time	2.54	3.57	4.57	5.55	6.51	7.47	8.45	9.45	10.46	11.48		12.69	4 / 1			
reaction time 0.195		interval		1.03	1.00	0.98	0.96	0.96	0.98	1.00	1.01	1.02	1.21			3.01	2.90	3.03
		velocity	5.12	8.25	8.50	8.67	8.85	8.85	8.67	8.50	8.42	8.33	8.31	7.88		8.47	8.79	8.42
Chadwick, Payton (USA) (199		time	2.52	3.54	4.56	5.54	6.54	7.52	8.50	9.50	10.51	11.53		12.75	3 / 2			
reaction time 0.172		interval		1.02	1.02	0.98	1.00	0.98	0.98	1.00	1.01	1.02	1.22			3.02	2.96	3.03
		velocity	5.16	8.33	8.33	8.67	8.50	8.67	8.67	8.50	8.42	8.33	8.24	7.84		8.44	8.61	8.42
Visser, Nadine (NED) (1995)		time	2.57	3.60	4.58	5.56	6.54	7.51	8.49	9.49	10.51	11.58		12.78	7 / 3			
reaction time 0.180		interval		1.03	0.98	0.98	0.98	0.97	0.98	1.00	1.02	1.07	1.20			2.99	2.93	3.09
		velocity	5.06	8.25	8.67	8.67	8.67	8.76	8.67	8.50	8.33	7.94	8.38	7.82		8.53	8.70	8.25
Williams, Danielle (JAM) (1992		time	2.50	3.54	4.57	5.55	6.54	7.51	8.48	9.49	10.51	11.54		12.78	6 / 4			
reaction time 0.158		interval		1.04	1.03	0.98	0.99	0.97	0.97	1.01	1.02	1.03	1.24			3.05	2.93	3.06
		velocity	5.20	8.17	8.25	8.67	8.59	8.76	8.76	8.42	8.33	8.25	8.10	7.82		8.36	8.70	8.33
Anderson, Britany (JAM) (200		time	2.56	3.57	4.57	5.56	6.55	7.52	8.49	9.54	10.54	11.61		12.81	5 / 5			
reaction time 0.191		interval		1.01	1.00	0.99	0.99	0.97	0.97	1.05	1.00	1.07	1.20			3.00	2.93	3.12
		velocity	5.08	8.42	8.50	8.59	8.59	8.76	8.76	8.10	8.50	7.94	8.37	7.81		8.50	8.70	8.17
Robinson, TeJyrica (USA) (19		time	2.50	3.57	4.57	5.59	6.57	7.59	8.64	9.71	10.77	11.84		13.14	2 / 6			
reaction time 0.147		interval		1.07	1.00	1.02	0.98	1.02	1.05	1.07	1.06	1.07	1.30			3.09	3.05	3.20
		velocity	5.20	7.94	8.50	8.33	8.67	8.33	8.10	7.94	8.02	7.94	7.73	7.61		8.25	8.36	7.97
Jones, Hannah (AUS) (1995)		time	2.60	3.67	4.73	5.80	6.87	7.94	9.00	10.02	11.07	12.12		13.39	8 / 7			
reaction time 0.175		interval		1.07	1.06	1.07	1.07	1.07	1.06	1.02	1.05	1.05	1.27			3.20	3.20	3.12
		velocity	5.00	7.94	8.02	7.94	7.94	7.94	8.02	8.33	8.10	8.10	7.91	7.47		7.97	7.97	8.17
Barrett, Alicia (GBR) (1998)		time	2.63	3.77	4.82									dnf	1 / --			
reaction time 0.180		interval		1.14	1.05													
		velocity	4.94	7.46	8.10													

2021 Flavour Hangzhou Athletics Meeting (Hangzhou, CHN)

FINAL date 09-Jul-21 wind -0.3 m/s *CAA Hurdle Development (2021)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lin Yuwei (CHN) (1999)		time	2.62	3.67	4.74	5.77	6.81	7.82	8.86	9.91	10.96	12.05		13.24	4 / 1			
reaction time 0.142		interval		1.05	1.07	1.03	1.04	1.01	1.04	1.05	1.05	1.09	1.19			3.15	3.09	3.19
		velocity	4.96	8.10	7.94	8.25	8.17	8.42	8.17	8.10	8.10	7.80	8.45	7.55		8.10	8.25	7.99

2021 István Gyulai Memorial (Székesfehérvár, HUN) (TV Analysis)

FINAL date 06-Jul-21 wind 0.2 m/s *Henson (2021) - Athlete First: 2021 year end hurdle report*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU		time	2.48	3.50	4.47	5.43	6.37	7.30	8.24	9.21	10.18	11.14		12.34	4 / 1			
reaction time 0.178		interval		1.02	0.97	0.96	0.94	0.93	0.94	0.97	0.97	0.96	1.20			2.95	2.81	2.90
		velocity	5.24	8.33	8.76	8.85	9.04	9.14	9.04	8.76	8.76	8.85	8.38	8.10		8.64	9.07	8.79
Herman, Elvira (BLR) (1997)		time	2.58	3.60	4.58	5.57	6.54	7.51	8.49	9.47	10.47	11.49		12.67	3 / 2			
reaction time 0.152		interval		1.02	0.98	0.99	0.97	0.97	0.98	0.98	1.00	1.02	1.18			2.99	2.92	3.00
		velocity	5.04	8.33	8.67	8.59	8.76	8.76	8.67	8.67	8.50	8.33	8.52	7.89		8.53	8.73	8.50
Cunningham, Gabriele (USA)		time	2.47	3.49	4.50	5.50	6.47	7.44	8.41	9.44	10.47	11.51		12.75	7 / 3			
reaction time 0.171		interval		1.02	1.01	1.00	0.97	0.97	0.97	1.03	1.03	1.04	1.24			3.03	2.91	3.10
		velocity	5.26	8.33	8.42	8.50	8.76	8.76	8.76	8.25	8.25	8.17	8.10	7.84		8.42	8.76	8.23
Nelvis, Sharika (USA) (1990)		time	2.57	3.60	4.58	5.56	6.52	7.50	8.48	9.50	10.51	11.54		12.80	1 / 4			
reaction time 0.152		interval	7 steps	1.03	0.98	0.98	0.96	0.98	0.98	1.02	1.01	1.03	1.26			2.99	2.92	3.06
		velocity	5.06	8.25	8.67	8.67	8.85	8.67	8.67	8.33	8.42	8.25	7.98	7.81		8.53	8.73	8.33
Anderson, Britany (JAM) (200		time	2.48	3.50	4.53	5.50	6.48	7.47	8.46	9.50	10.51	11.56		12.80	2 / 4			
reaction time 0.134		interval		1.02	1.03	0.97	0.98	0.99	0.99	1.04	1.01	1.05	1.24			3.02	2.96	3.10
		velocity	5.24	8.33	8.25	8.76	8.67	8.59	8.59	8.17	8.42	8.10	8.10	7.81		8.44	8.61	8.23
Visser, Nadine (NED) (1995)		time	2.57	3.58	4.58	5.54	6.54	7.54	8.54	9.54	10.57	11.62		12.85	5 / 6			
reaction time 0.152		interval		1.01	1.00	0.96	1.00	1.00	1.00	1.00	1.03	1.05	1.23			2.97	3.00	3.08
		velocity	5.06	8.42	8.50	8.85	8.50	8.50	8.50	8.50	8.25	8.10	8.17	7.78		8.59	8.50	8.28
Kozák, Luca (HUN) (1996)		time	2.50	3.54	4.57	5.54	6.54	7.54	8.54	9.54	10.57	11.64		12.85	6 / 7			
reaction time 0.150		interval		1.04	1.03	0.97	1.00	1.00	1.00	1.00	1.03	1.07	1.21			3.04	3.00	3.10
		velocity	5.20	8.17	8.25	8.76	8.50	8.50	8.50	8.50	8.25	7.94	8.31	7.78		8.39	8.50	8.23

2021 Japanese National Championships (Osaka, JPN)

FINAL date 27-Jun-21 wind 0.0 m/s *Onishi (2021) - race analysis of the domestic first-class women's 100m hurdles in the 2021 season*

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

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

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tereda, Asuka (JPN) (1990)	time	2.61	3.67	4.69	5.71	6.72	7.74	8.78	9.81	10.87	11.96		13.09	6 / 1			
reaction time 0.147	interval		1.06	1.02	1.02	1.01	1.02	1.04	1.03	1.06	1.09	1.13			3.10	3.07	3.18
	velocity	4.98	8.02	8.33	8.33	8.42	8.33	8.17	8.25	8.02	7.80	8.89	7.64		8.23	8.31	8.02
Kiyoyama, Chisato (JPN) (199	time	2.69	3.75	4.80	5.81	6.82	7.85	8.87	9.91	10.98	12.05		13.22	7 / 2			
reaction time 0.146	interval		1.06	1.05	1.01	1.01	1.03	1.02	1.04	1.07	1.07	1.17			3.12	3.06	3.18
	velocity	4.83	8.02	8.10	8.42	8.42	8.25	8.33	8.17	7.94	7.94	8.59	7.56		8.17	8.33	8.02
Suzuki, Miho (JPN) (1996)	time	2.70	3.79	4.83	5.87	6.90	7.92	8.98	10.03	11.10	12.18		13.35	4 / 3			
reaction time 0.170	interval		1.09	1.04	1.04	1.03	1.02	1.06	1.05	1.07	1.08	1.17			3.17	3.11	3.20
	velocity	4.81	7.80	8.17	8.17	8.25	8.33	8.02	8.10	7.94	7.87	8.59	7.49		8.04	8.20	7.97
Takeuchi, Maya (JPN) 1998)	time	2.61	3.69	4.76	5.81	6.86	7.91	9.00	10.07	11.17	12.26		13.42	8 / 4			
reaction time 0.143	interval		1.08	1.07	1.05	1.05	1.05	1.09	1.07	1.10	1.09	1.16	PB		3.20	3.19	3.26
	velocity	4.98	7.87	7.94	8.10	8.10	8.10	7.80	7.94	7.73	7.80	8.66	7.45		7.97	7.99	7.82
Okubo, Yuri (JPN) (1997)	time	2.67	3.74	4.80	5.84	6.89	7.91	8.97	10.03	11.11	12.20		13.44	5 / 5			
reaction time 0.132	interval		1.07	1.06	1.04	1.05	1.02	1.06	1.06	1.08	1.09	1.24			3.17	3.13	3.23
	velocity	4.87	7.94	8.02	8.17	8.10	8.33	8.02	8.02	7.87	7.80	8.10	7.44		8.04	8.15	7.89
Tanaka, Yumi (JPN) (1998)	time	2.64	3.72	4.78	5.83	6.86	7.92	8.98	10.07	11.17	12.30		13.57	9 / 6			
reaction time 0.127	interval		1.08	1.06	1.05	1.03	1.06	1.06	1.09	1.10	1.13	1.27			3.19	3.15	3.32
	velocity	4.92	7.87	8.02	8.10	8.25	8.02	8.02	7.80	7.73	7.52	7.91	7.37		7.99	8.10	7.68
Fujiwara, Miku (JPN) (1992)	time	2.67	3.74	4.82	5.88	6.94	8.00	9.07	10.15	11.24	12.36		13.58	2 / 7			
reaction time 0.140	interval		1.07	1.08	1.06	1.06	1.06	1.07	1.08	1.09	1.12	1.22			3.21	3.19	3.29
	velocity	4.87	7.94	7.87	8.02	8.02	8.02	7.94	7.87	7.80	7.59	8.24	7.36		7.94	7.99	7.75
Shibata, Manaka (JPN) (2001)	time	2.69	3.78	4.88	5.93	6.97	8.02	9.07	10.16	11.26	12.38		13.59	3 / 8			
reaction time 0.139	interval		1.09	1.10	1.05	1.04	1.05	1.05	1.09	1.10	1.12	1.21			3.24	3.14	3.31
	velocity	4.83	7.80	7.73	8.10	8.17	8.10	8.10	7.80	7.73	7.59	8.31	7.36		7.87	8.12	7.70

2021 Japanese U20 National Championships (Osaka, JPN)

FINAL date 26-Jun-21 wind 0.2 m/s

Onishi (2021) - race analysis of the domestic first-class women's 100m hurdles in the 2021 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Iwasa, Mayuko (JPN) (2002)	time	2.68	3.77	4.83	5.89	6.94	8.00	9.05	10.15	11.26	12.37		13.59	5 / 1			
reaction time 0.140	interval		1.09	1.06	1.06	1.05	1.06	1.05	1.10	1.11	1.11	1.22			3.21	3.16	3.32
	velocity	4.85	7.80	8.02	8.02	8.10	8.02	8.10	7.73	7.66	7.66	8.24	7.36		7.94	8.07	7.68
Yoshida, Erika (JPN) (2004)	time	2.69	3.80	4.90	5.97	7.03	8.10	9.19	10.29	11.39	12.53		13.77	9 / 2			
reaction time 0.172	interval		1.11	1.10	1.07	1.06	1.07	1.09	1.10	1.10	1.14	1.24	PB		3.28	3.22	3.34
	velocity	4.83	7.66	7.73	7.94	8.02	7.94	7.80	7.73	7.73	7.46	8.10	7.26		7.77	7.92	7.63
Fujiwara, Karen (JPN) (2004)	time	2.66	3.78	4.86	5.92	6.99	8.06	9.13	10.26	11.39	12.53		13.83	4 / 3			
reaction time 0.177	interval		1.12	1.08	1.06	1.07	1.07	1.07	1.13	1.13	1.14	1.30	PB		3.26	3.21	3.40
	velocity	4.89	7.59	7.87	8.02	7.94	7.94	7.94	7.52	7.52	7.46	7.73	7.23		7.82	7.94	7.50
Otani, Sumire (JPN) (2005)	time	2.74	3.85	4.96	6.05	7.14	8.23	9.33	10.43	11.56	12.72		13.92	7 / 4			
reaction time 0.199	interval		1.11	1.11	1.09	1.09	1.09	1.10	1.10	1.13	1.16	1.20			3.31	3.28	3.39
	velocity	4.74	7.66	7.66	7.80	7.80	7.80	7.73	7.73	7.52	7.33	8.38	7.18		7.70	7.77	7.52
Nakatsu, Haruha (JPN) (2003)	time	2.69	3.84	4.96	6.08	7.16	8.25	9.35	10.44	11.58	12.73		13.93	6 / 5			
reaction time 0.148	interval		1.15	1.12	1.12	1.08	1.09	1.10	1.09	1.14	1.15	1.20			3.39	3.27	3.38
	velocity	4.83	7.39	7.59	7.59	7.87	7.80	7.73	7.80	7.46	7.39	8.38	7.18		7.52	7.80	7.54
Taguchi, Mayu (JPN) (2003)	time	2.72	3.85	4.94	6.01	7.08	8.17	9.28	10.39	11.54	12.70		13.96	2 / 6			
reaction time 0.153	interval		1.13	1.09	1.07	1.07	1.09	1.11	1.11	1.15	1.16	1.26	PB		3.29	3.27	3.42
	velocity	4.78	7.52	7.80	7.94	7.94	7.80	7.66	7.66	7.39	7.33	7.98	7.16		7.75	7.80	7.46
Asagi, Tsukiha (JPN) (2003)	time	2.72	3.82	4.93	6.05	7.17	8.31	9.43	10.58	11.73	12.90		14.21	3 / 7			
reaction time 0.148	interval		1.10	1.11	1.12	1.12	1.14	1.12	1.15	1.15	1.17	1.31			3.33	3.38	3.47
	velocity	4.78	7.73	7.66	7.59	7.59	7.46	7.59	7.39	7.39	7.26	7.67	7.04		7.66	7.54	7.35

2021 Chinese National Championships (Chongqing, CHN)

FINAL date 25-Jun-21 wind 1.7 m/s

CAA Hurdle Development (2021)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Yanni (CHN) (1997)	time	2.63	3.67	4.67	5.67	6.66	7.67	8.67	9.67	10.69	11.73		12.87	6 / 1			
reaction time 0.134	interval		1.04	1.00	1.00	0.99	1.01	1.00	1.00	1.02	1.04	1.14	PB		3.04	3.00	3.06
	velocity	4.94	8.17	8.50	8.50	8.59	8.42	8.50	8.50	8.33	8.17	8.82	7.77		8.39	8.50	8.33
Chen Jiamin (CHN) (1996)	time	2.63	3.67	4.71	5.72	6.74	7.76	8.77	9.80	10.83	11.89		13.01	7 / 2			
reaction time 0.170	interval		1.04	1.04	1.01	1.02	1.02	1.01	1.03	1.03	1.06	1.12	PB		3.09	3.05	3.12
	velocity	4.94	8.17	8.17	8.42	8.33	8.33	8.42	8.25	8.25	8.02	8.97	7.69		8.25	8.36	8.17
Wang Dou (CHN) (1993)	time	2.70	3.73	4.75	5.75	6.75	7.77	8.79	9.81	10.86	11.91		13.02	5 / 3			
reaction time 0.235	interval		1.03	1.02	1.00	1.00	1.02	1.02	1.02	1.05	1.05	1.11	PB		3.05	3.04	3.12
	velocity	4.81	8.25	8.33	8.50	8.50	8.33	8.33	8.33	8.10	8.10	9.05	7.68		8.36	8.39	8.17

Deng Xuelin (CHN) (1998)		time	2.72	3.75	4.79	5.82	6.84	7.86	8.89	9.93	10.98	12.06		13.24	2 / 4			
reaction time	0.219	interval		1.03	1.04	1.03	1.02	1.02	1.03	1.04	1.05	1.08	1.18	PB		3.10	3.07	3.17
		velocity	4.78	8.25	8.17	8.25	8.33	8.33	8.25	8.17	8.10	7.87	8.52	7.55		8.23	8.31	8.04
Shi Jiali (CHN) (1997)		time	2.63	3.70	4.76	5.80	6.82	7.84	8.87	9.93	10.97	12.04		13.24	8 / 5			
reaction time	0.172	interval		1.07	1.06	1.04	1.02	1.02	1.03	1.06	1.04	1.07	1.20			3.17	3.07	3.17
		velocity	4.94	7.94	8.02	8.17	8.33	8.33	8.25	8.02	8.17	7.94	8.37	7.55		8.04	8.31	8.04
Dai Yiru (CHN) (2001)		time	2.61	3.67	4.69	5.72	6.72	7.74	8.77	9.86	10.96	12.06		13.29	4 / 6			
reaction time	0.163	interval		1.06	1.02	1.03	1.00	1.02	1.03	1.09	1.10	1.10	1.23			3.11	3.05	3.29
		velocity	4.98	8.02	8.33	8.25	8.50	8.33	8.25	7.80	7.73	7.73	8.17	7.52		8.20	8.36	7.75
Chen Yifeng (CHN) (1998)		time	2.63	3.70	4.77	5.81	6.82	7.87	8.91	9.98	11.06	12.14		13.33	3 / 7			
reaction time	0.166	interval		1.07	1.07	1.04	1.01	1.05	1.04	1.07	1.08	1.08	1.19	PB		3.18	3.10	3.23
		velocity	4.94	7.94	7.94	8.17	8.42	8.10	8.17	7.94	7.87	7.87	8.45	7.50		8.02	8.23	7.89

Heat 4

date 25-Jun-21 wind -1.8 m/s *CAA Hurdle Development (2021)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lin Yuwei (CHN) (1999)		time	2.67	3.75	4.82	5.87	6.92	7.99	9.06	10.13	11.21	12.33		13.53	5 / 1			
reaction time	0.160	interval		1.08	1.07	1.05	1.05	1.07	1.07	1.07	1.08	1.12	1.20			3.20	3.19	3.27
		velocity	4.87	7.87	7.94	8.10	8.10	7.94	7.94	7.94	7.87	7.59	8.38	7.39		7.97	7.99	7.80
You Na (CHN) (1993)		time	2.72	3.79	4.85	5.90	6.96	8.02	9.10	10.17	11.28	12.39		13.59	3 / 2			
reaction time	0.190	interval		1.07	1.06	1.05	1.06	1.06	1.08	1.07	1.11	1.11	1.20			3.18	3.20	3.29
		velocity	4.78	7.94	8.02	8.10	8.02	8.02	7.87	7.94	7.66	7.66	8.38	7.36		8.02	7.97	7.75
Luo Xianyan (CHN) (1997)		time	2.70	3.84	4.89	5.95	7.01	8.07	9.14	10.21	11.30	12.39		13.63	4 / 3			
reaction time	0.175	interval		1.14	1.05	1.06	1.06	1.06	1.07	1.07	1.09	1.09	1.24			3.25	3.19	3.25
		velocity	4.81	7.46	8.10	8.02	8.02	8.02	7.94	7.94	7.80	7.80	8.10	7.34		7.85	7.99	7.85
Qin Hongyan (CHN) (2001)		time	2.73	3.84	4.96	6.05	7.14	8.25	9.36	10.48	11.65	12.83		14.15	7 / 4			
reaction time	0.230	interval		1.11	1.12	1.09	1.09	1.11	1.11	1.12	1.17	1.18	1.32			3.32	3.31	3.47
		velocity	4.76	7.66	7.59	7.80	7.80	7.66	7.66	7.59	7.26	7.20	7.61	7.07		7.68	7.70	7.35
Chen Yuyang (CHN) (2002)		time	2.77	3.90	5.04	6.17	7.27	8.38	9.52	10.68	11.84	13.00		14.32	6 / 5			
reaction time	0.189	interval		1.13	1.14	1.13	1.10	1.11	1.14	1.16	1.16	1.16	1.32			3.40	3.35	3.48
		velocity	4.69	7.52	7.46	7.52	7.73	7.66	7.46	7.33	7.33	7.33	7.61	6.98		7.50	7.61	7.33
Yin Xiaoxia (CHN) (2000)		time	2.85	4.02	5.17	6.34	7.48	8.66	9.84	11.04	12.24	13.51		14.81	8 / 6			
reaction time	0.239	interval		1.17	1.15	1.17	1.14	1.18	1.18	1.20	1.20	1.27	1.30			3.49	3.50	3.67
		velocity	4.56	7.26	7.39	7.26	7.46	7.20	7.20	7.08	7.08	6.69	7.73	6.75		7.31	7.29	6.95

Heat 3

date 25-Jun-21 wind -1.6 m/s *CAA Hurdle Development (2021)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Dai Yiru (CHN) (2001)		time	2.63	3.70	4.74	5.77	6.81	7.87	8.92	10.02	11.13	12.24		13.46	5 / 1			
reaction time	0.171	interval		1.07	1.04	1.03	1.04	1.06	1.05	1.10	1.11	1.11	1.22			3.14	3.15	3.32
		velocity	4.94	7.94	8.17	8.25	8.17	8.02	8.10	7.73	7.66	7.66	8.24	7.43		8.12	8.10	7.68
Shi Jiali (CHN) (1997)		time	2.62	3.68	4.75	5.79	6.82	7.89	8.96	10.03	11.13	12.24		13.51	6 / 2			
reaction time	0.161	interval		1.06	1.07	1.04	1.03	1.07	1.07	1.07	1.10	1.11	1.27			3.17	3.17	3.28
		velocity	4.96	8.02	7.94	8.17	8.25	7.94	7.94	7.94	7.73	7.66	7.91	7.40		8.04	8.04	7.77
Wang Li (CHN) (1999)		time	2.67	3.75	4.80	5.87	6.94	7.99	9.06	10.13	11.28	12.41		13.65	3 / 3			
reaction time	0.173	interval		1.08	1.05	1.07	1.07	1.05	1.07	1.07	1.15	1.13	1.24			3.20	3.19	3.35
		velocity	4.87	7.87	8.10	7.94	7.94	8.10	7.94	7.94	7.39	7.52	8.10	7.33		7.97	7.99	7.61
Yu Jiaru (CHN) (1999)		time	2.72	3.78	4.85	5.92	6.99	8.07	9.16	10.24	11.36	12.46		13.65	4 / 4			
reaction time	0.186	interval		1.06	1.07	1.07	1.07	1.08	1.09	1.08	1.12	1.10	1.19			3.20	3.24	3.30
		velocity	4.78	8.02	7.94	7.94	7.94	7.87	7.80	7.87	7.59	7.73	8.45	7.33		7.97	7.87	7.73
Gong Qiudan (CHN) (2003)		time	2.75	3.90	5.10	6.24	7.39	8.54	9.69	10.88	12.04	13.20		14.52	7 / 5			
reaction time	0.198	interval		1.15	1.20	1.14	1.15	1.15	1.15	1.19	1.16	1.16	1.32			3.49	3.45	3.51
		velocity	4.73	7.39	7.08	7.46	7.39	7.39	7.39	7.14	7.33	7.33	7.61	6.89		7.31	7.39	7.26
Ge Ge (CHN) (2000)		time	2.85	3.98	5.14	6.28	7.39	8.56	9.72	10.93	12.14	13.40		14.80	8 / 6			
reaction time	0.298	interval		1.13	1.16	1.14	1.11	1.17	1.16	1.21	1.21	1.26	1.40			3.43	3.44	3.68
		velocity	4.56	7.52	7.33	7.46	7.66	7.26	7.33	7.02	7.02	6.75	7.18	6.76		7.43	7.41	6.93

Heat 2

date 25-Jun-21 wind -0.3 m/s *CAA Hurdle Development (2021)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Chen Jiamin (CHN) (1996)		time	2.63	3.69	4.77	5.82	6.86	7.89	8.94	10.01	11.06	12.14		13.34	4 / 1			
reaction time	0.146	interval		1.06	1.08	1.05	1.04	1.03	1.05	1.07	1.05	1.08	1.20			3.19	3.12	3.20
		velocity	4.94	8.02	7.87	8.10	8.17	8.25	8.10	7.94	8.10	7.87	8.38	7.50		7.99	8.17	7.97
Wang Dou (CHN) (1993)		time	2.75	3.81	4.87	5.91	6.93	7.97	9.02	10.09	11.16	12.25		13.41	5 / 2			
reaction time	0.202	interval		1.06	1.06	1.04	1.02	1.04	1.05	1.07	1.07	1.09	1.16			3.16	3.11	3.23

	velocity	4.73	8.02	8.02	8.17	8.33	8.17	8.10	7.94	7.94	7.80	8.66	7.46		8.07	8.20	7.89
Xia Sining (CHN) (2003)	time	2.74	3.84	4.90	5.95	7.04	8.10	9.19	10.26	11.38	12.50		13.75	6 / 3			
reaction time 0.216	interval		1.10	1.06	1.05	1.09	1.06	1.09	1.07	1.12	1.12	1.25			3.21	3.24	3.31
	velocity	4.74	7.73	8.02	8.10	7.80	8.02	7.80	7.94	7.59	7.59	8.04	7.27		7.94	7.87	7.70
Lin Yuqian (CHN) (2003)	time	2.75	3.85	4.94	6.00	7.07	8.12	9.22	10.31	11.43	12.56		13.77	3 / 4			
reaction time 0.201	interval		1.10	1.09	1.06	1.07	1.05	1.10	1.09	1.12	1.13	1.21			3.25	3.22	3.34
	velocity	4.73	7.73	7.80	8.02	7.94	8.10	7.73	7.80	7.59	7.52	8.31	7.26		7.85	7.92	7.63
Liu Xinyu (CHN) (2002)	time	2.78	3.90	5.00	6.10	7.20	8.31	9.41	10.56	11.71	12.88		14.18	8 / 5			
reaction time 0.216	interval	7 steps	1.12	1.10	1.10	1.10	1.11	1.10	1.15	1.15	1.17	1.30			3.32	3.31	3.47
	velocity	4.68	7.59	7.73	7.73	7.73	7.66	7.73	7.39	7.39	7.26	7.73	7.05		7.68	7.70	7.35
Lun Xinyu (CHN) (1998)	time	2.75	3.89	5.02	6.15	7.26	8.39	9.53	10.68	11.86	13.06		14.38	7 / 6			
reaction time 0.170	interval		1.14	1.13	1.13	1.11	1.13	1.14	1.15	1.18	1.20	1.32			3.40	3.38	3.53
	velocity	4.73	7.46	7.52	7.52	7.66	7.52	7.46	7.39	7.20	7.08	7.61	6.95		7.50	7.54	7.22

Heat 1

date 25-Jun-21 wind -0.3 m/s *CAA Hurdle Development (2021)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Yanni (CHN) (1997)	time	2.68	3.75	4.79	5.82	6.84	7.87	8.89	9.93	10.99	12.04		13.23	3 / 1			
reaction time 0.149	interval		1.07	1.04	1.03	1.02	1.03	1.02	1.04	1.06	1.05	1.19			3.14	3.07	3.15
	velocity	4.85	7.94	8.17	8.25	8.33	8.25	8.33	8.17	8.02	8.10	8.45	7.56		8.12	8.31	8.10
Chen Yifeng (CHN) (1998)	time	2.68	3.75	4.84	5.89	6.94	7.99	9.04	10.13	11.23	12.33		13.56	5 / 2			
reaction time 0.202	interval		1.07	1.09	1.05	1.05	1.05	1.05	1.09	1.10	1.10	1.23			3.21	3.15	3.29
	velocity	4.85	7.94	7.80	8.10	8.10	8.10	8.10	7.80	7.73	7.73	8.17	7.37		7.94	8.10	7.75
Deng Xuelin (CHN) (1998)	time	2.72	3.79	4.87	5.92	6.96	8.00	9.06	10.13	11.21	12.33		13.56	6 / 3			
reaction time 0.209	interval		1.07	1.08	1.05	1.04	1.04	1.06	1.07	1.08	1.12	1.23			3.20	3.14	3.27
	velocity	4.78	7.94	7.87	8.10	8.17	8.17	8.02	7.94	7.87	7.59	8.17	7.37		7.97	8.12	7.80
Xaio Juxiu (CHN) (1998)	time	2.65	3.75	4.84	5.89	6.96	8.01	9.11	10.19	11.29	12.36		13.58	4 / 4			
reaction time 0.169	interval		1.10	1.09	1.05	1.07	1.05	1.10	1.08	1.10	1.07	1.22	PB		3.24	3.22	3.25
	velocity	4.91	7.73	7.80	8.10	7.94	8.10	7.73	7.87	7.73	7.94	8.24	7.36		7.87	7.92	7.85
Wei Yuhui (CHN) (2002)	time	2.77	3.90	5.02	6.12	7.22	8.33	9.44	10.58	11.74	12.96		14.31	8 / 5			
reaction time 0.167	interval		1.13	1.12	1.10	1.10	1.11	1.11	1.14	1.16	1.22	1.35			3.35	3.32	3.52
	velocity	4.69	7.52	7.59	7.73	7.73	7.66	7.66	7.46	7.33	6.97	7.44	6.99		7.61	7.68	7.24
Yao Hui (CHN) (2000)	time	2.80	3.94	5.06	6.20	7.31	8.44	9.56	10.73	11.88	13.09		14.43	7 / 6			
reaction time 0.211	interval		1.14	1.12	1.14	1.11	1.13	1.12	1.17	1.15	1.21	1.34			3.40	3.36	3.53
	velocity	4.64	7.46	7.59	7.46	7.66	7.52	7.59	7.26	7.39	7.02	7.50	6.93		7.50	7.59	7.22
Zhuang Dongmei (CHN) (200(	time	2.75	3.92	5.09	6.24	7.39	8.54	9.74	10.94	12.14	13.38		14.73	9 / 7			
reaction time 0.195	interval		1.17	1.17	1.15	1.15	1.15	1.20	1.20	1.20	1.24	1.35			3.49	3.50	3.64
	velocity	4.73	7.26	7.26	7.39	7.39	7.39	7.08	7.08	7.08	6.85	7.44	6.79		7.31	7.29	7.01

Heptathlon - Heat 3

date 24-Jun-21 wind 0.2 m/s *CAA Hurdle Development (2021)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ren Shimei (CHN) (1996)	time	2.73	3.87	5.00	6.15	7.29	8.44	9.59	10.76	11.93	13.11		14.35	4 / 1			
reaction time 0.167	interval		1.14	1.13	1.15	1.14	1.15	1.15	1.17	1.17	1.18	1.24			3.42	3.44	3.52
	velocity	4.76	7.46	7.52	7.39	7.46	7.39	7.39	7.26	7.26	7.20	8.10	6.97		7.46	7.41	7.24
Wu Zheng (CHN) (2001)	time	2.75	3.90	5.04	6.16	7.29	8.39	9.52	10.71	11.89	13.09		14.44	5 / 2			
reaction time 0.201	interval		1.15	1.14	1.12	1.13	1.10	1.13	1.19	1.18	1.20	1.35			3.41	3.36	3.57
	velocity	4.73	7.39	7.46	7.59	7.52	7.73	7.52	7.14	7.20	7.08	7.44	6.93		7.48	7.59	7.14
Zhou Jingjing (CHN) (1998)	time	2.82	3.97	5.15	6.29	7.44	8.61	9.77	10.98	12.18	13.44		14.81	8 / 3			
reaction time 0.292	interval		1.15	1.18	1.14	1.15	1.17	1.16	1.21	1.20	1.26	1.37			3.47	3.48	3.67
	velocity	4.61	7.39	7.20	7.46	7.39	7.26	7.33	7.02	7.08	6.75	7.34	6.75		7.35	7.33	6.95
Jin Donghua (CHN) (1999)	time	2.77	3.94	5.10	6.25	7.42	8.62	9.81	11.04	12.24	13.51		14.83	7 / 4			
reaction time 0.207	interval		1.17	1.16	1.15	1.17	1.20	1.19	1.23	1.20	1.27	1.32			3.48	3.56	3.70
	velocity	4.69	7.26	7.33	7.39	7.26	7.08	7.14	6.91	7.08	6.69	7.61	6.74		7.33	7.16	6.89
Yang Hua (CHN)	time	2.80	3.99	5.17	6.35	7.52	8.72	9.91	11.11	12.31	13.53		14.89	6 / 5			
reaction time 0.199	interval		1.19	1.18	1.18	1.17	1.20	1.19	1.20	1.20	1.22	1.36			3.55	3.56	3.62
	velocity	4.64	7.14	7.20	7.20	7.26	7.08	7.14	7.08	7.08	6.97	7.39	6.72		7.18	7.16	7.04

Heptathlon - Heat 2

date 24-Jun-21 wind 0.6 m/s *CAA Hurdle Development (2021)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wang Qingling (CHN) (1993)	time	2.73	3.80	4.90	5.97	7.06	8.14	9.22	10.34	11.46	12.59		13.84	8 / 1			
reaction time 0.200	interval		1.07	1.10	1.07	1.09	1.08	1.08	1.12	1.12	1.13	1.25			3.24	3.25	3.37
	velocity	4.76	7.94	7.73	7.94	7.80	7.87	7.87	7.59	7.59	7.52	8.04	7.23		7.87	7.85	7.57
Shen Muhan (CHN) (1997)	time	2.78	3.94	5.07	6.19	7.31	8.44	9.59	10.76	11.94	13.16		14.48	4 / 2			

reaction time 0.195	interval		1.16	1.13	1.12	1.12	1.13	1.15	1.17	1.18	1.22	1.32			3.41	3.40	3.57
	velocity	4.68	7.33	7.52	7.59	7.59	7.52	7.39	7.26	7.20	6.97	7.61	6.91		7.48	7.50	7.14
Yin Xinyi (CHN) (2000)	time	2.87	4.02	5.19	6.32	7.49	8.69	9.91	11.09	12.31	13.55		14.86	5 / 3			
reaction time 0.195	interval		1.15	1.17	1.13	1.17	1.20	1.22	1.18	1.22	1.24	1.31	PB		3.45	3.59	3.64
	velocity	4.53	7.39	7.26	7.52	7.26	7.08	6.97	7.20	6.97	6.85	7.67	6.73		7.39	7.10	7.01
Kong Rui (CHN) (2001)	time	3.02	4.19	5.37	6.52	7.67	8.88	10.01	11.18	12.40	13.58		14.86	3 / 4			
reaction time 0.266	interval		1.17	1.18	1.15	1.15	1.21	1.13	1.17	1.22	1.18	1.28			3.50	3.49	3.57
	velocity	4.30	7.26	7.20	7.39	7.39	7.01	7.54	7.26	6.97	7.20	7.85	6.73		7.29	7.31	7.14
Du Yan (CHN) (2000)	time	3.02	4.24	5.47	6.72	7.96	9.21	10.44	11.76	13.03	14.31		15.67	6 / 5			
reaction time 0.259	interval		1.22	1.23	1.25	1.24	1.25	1.23	1.32	1.27	1.28	1.36			3.70	3.72	3.87
	velocity	4.30	6.97	6.91	6.80	6.85	6.80	6.91	6.44	6.69	6.64	7.39	6.38		6.89	6.85	6.59
Sun Lan (CHN) (2002)	time	2.93	4.14	5.35	6.59	7.80	9.06	10.29	11.60	12.91	14.25		15.70	7 / 6			
reaction time 0.203	interval		1.21	1.21	1.24	1.21	1.26	1.23	1.31	1.31	1.34	1.45			3.66	3.70	3.96
	velocity	4.44	7.02	7.02	6.85	7.02	6.75	6.91	6.49	6.49	6.34	6.93	6.37		6.97	6.89	6.44

Heptathlon - Heat 1

date 24-Jun-21 wind 0.3 m/s *CAA Hurdle Development (2021)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wang Meiqing (CHN) (1996)	time	2.77	3.92	5.07	6.20	7.33	8.47	9.64	10.79	11.96	13.16		14.42	8 / 1			
reaction time 0.216	interval		1.15	1.15	1.13	1.13	1.14	1.17	1.15	1.17	1.20	1.26			3.43	3.44	3.52
	velocity	4.69	7.39	7.39	7.52	7.52	7.46	7.26	7.39	7.26	7.08	7.98	6.93		7.43	7.41	7.24
Zhang Xuhui (CHN) (2000)	time	2.80	3.97	5.12	6.27	7.41	8.54	9.73	10.91	12.09	13.33		14.62	7 / 2			
reaction time 0.218	interval		1.17	1.15	1.15	1.14	1.13	1.19	1.18	1.18	1.24	1.29	PB		3.47	3.46	3.60
	velocity	4.64	7.26	7.39	7.39	7.46	7.52	7.14	7.20	7.20	6.85	7.79	6.84		7.35	7.37	7.08
Gao Miao (CHN) (2001)	time	2.88	4.04	5.19	6.32	7.49	8.65	9.84	11.03	12.23	13.43		14.73	3 / 3			
reaction time 0.213	interval		1.16	1.15	1.13	1.17	1.16	1.19	1.19	1.20	1.20	1.30			3.44	3.52	3.59
	velocity	4.51	7.33	7.39	7.52	7.26	7.33	7.14	7.14	7.08	7.08	7.73	6.79		7.41	7.24	7.10
Liu Jingyi (CHN) (2000)	time	2.83	3.97	5.12	6.27	7.42	8.56	9.72	10.91	12.11	13.36		14.75	5 / 4			
reaction time	interval		1.14	1.15	1.15	1.15	1.14	1.16	1.19	1.20	1.25	1.39	PB		3.44	3.45	3.64
	velocity	4.59	7.46	7.39	7.39	7.39	7.46	7.33	7.14	7.08	6.80	7.23	6.78		7.41	7.39	7.01
Wang Huiqiong (CHN) (1990)	time	2.95	4.15	5.35	6.55	7.76	8.97	10.19	11.42	12.74	14.06		15.72	4 / 5			
reaction time 0.217	interval		1.20	1.20	1.20	1.21	1.21	1.22	1.23	1.32	1.32	1.66			3.60	3.64	3.87
	velocity	4.41	7.08	7.08	7.08	7.02	7.02	6.97	6.91	6.44	6.44	6.05	6.36		7.08	7.01	6.59
Liu Miao (CHN) (2003)	time	3.00	4.24	5.48	6.72	7.97	9.24	10.49	11.78	13.11	14.45		15.95	6 / 6			
reaction time 0.258	interval		1.24	1.24	1.24	1.25	1.27	1.25	1.29	1.33	1.34	1.50			3.72	3.77	3.96
	velocity	4.33	6.85	6.85	6.85	6.80	6.69	6.80	6.59	6.39	6.34	6.70	6.27		6.85	6.76	6.44

2020 USA Olympic Trials (Eugene, OR) (TV Analysis)

FINAL

date 20-Jun-21 wind 0.8 m/s *Henson (2021) - Athlete First: 2021 year end hurdle report*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992	time	2.45	3.45	4.43	5.39	6.34	7.30	8.26	9.22	10.22	11.24		12.47	4 / 1			
reaction time 0.186	interval		1.00	0.98	0.96	0.95	0.96	0.96	0.96	1.00	1.02	1.23			2.94	2.87	2.98
	velocity	5.31	8.50	8.67	8.85	8.95	8.85	8.85	8.85	8.50	8.33	8.17	8.02		8.67	8.89	8.56
McNeal, Brianna (USA) (1991)	time	2.42	3.43	4.42	5.38	6.34	7.32	8.29	9.26	10.27	11.28		12.51	2 / 2			
reaction time 0.152	interval		1.01	0.99	0.96	0.96	0.98	0.97	0.97	1.01	1.01	1.23			2.96	2.91	2.99
	velocity	5.37	8.42	8.59	8.85	8.85	8.67	8.76	8.76	8.42	8.42	8.17	7.99		8.61	8.76	8.53
Clemons, Christina (USA) (19	time	2.44	3.44	4.45	5.42	6.37	7.34	8.30	9.27	10.29	11.31		12.53	6 / 3			
reaction time 0.139	interval		1.00	1.01	0.97	0.95	0.97	0.96	0.97	1.02	1.02	1.22			2.98	2.88	3.01
	velocity	5.33	8.50	8.42	8.76	8.95	8.76	8.85	8.76	8.33	8.33	8.24	7.98		8.56	8.85	8.47
Cunningham, Gabriele (USA)	time	2.45	3.46	4.44	5.40	6.37	7.34	8.30	9.28	10.29	11.30		12.53	8 / 4			
reaction time 0.153	interval		1.01	0.98	0.96	0.97	0.97	0.96	0.98	1.01	1.01	1.23	PB		2.95	2.90	3.00
	velocity	5.31	8.42	8.67	8.85	8.76	8.76	8.85	8.67	8.42	8.42	8.17	7.98		8.64	8.79	8.50
Cockrell, Anna (USA) (1997)	time	2.50	3.51	4.49	5.45	6.42	7.39	8.36	9.35	10.36	11.38		12.58	3 / 5			
reaction time 0.147	interval		1.01	0.98	0.96	0.97	0.97	0.97	0.99	1.01	1.02	1.20			2.95	2.91	3.02
	velocity	5.20	8.42	8.67	8.85	8.76	8.76	8.76	8.59	8.42	8.33	8.38	7.95		8.64	8.76	8.44
Marshall, Tonea (USA) (1998)	time	2.40	3.42	4.40	5.39	6.37	7.34	8.32	9.32	10.32	11.36		12.63	5 / 6			
reaction time 0.130	interval		1.02	0.98	0.99	0.98	0.97	0.98	1.00	1.00	1.04	1.27			2.99	2.93	3.04
	velocity	5.42	8.33	8.67	8.59	8.67	8.76	8.67	8.50	8.50	8.17	7.91	7.92		8.53	8.70	8.39
Chadwick, Payton (USA) (199	time	2.50	3.53	4.52	5.52	6.50	7.47	8.45	9.44	10.44	11.47		12.66	7 / 7			
reaction time 0.190	interval		1.03	0.99	1.00	0.98	0.97	0.98	0.99	1.00	1.03	1.19			3.02	2.93	3.02
	velocity	5.20	8.25	8.59	8.50	8.67	8.76	8.67	8.59	8.50	8.25	8.45	7.90		8.44	8.70	8.44
Armstrong, Alia (USA) (2000)	time	2.43	3.45	4.45	5.47	6.47	7.47	8.47	9.49	10.54	11.59		12.84	1 / 8			

reaction time 0.153	interval		1.02	1.00	1.02	1.00	1.00	1.00	1.02	1.05	1.05	1.25			3.04	3.00	3.12
	velocity	5.35	8.33	8.50	8.33	8.50	8.50	8.50	8.33	8.10	8.10	8.04	7.79		8.39	8.50	8.17
Robinson, TeJyrica (USA) (19	time	2.48	3.57	4.59	5.59	6.59	7.59	8.61	9.63	10.66	11.71		12.99	9 / 9			
reaction time 0.143	interval		1.09	1.02	1.00	1.00	1.00	1.02	1.02	1.03	1.05	1.28			3.11	3.02	3.10
	velocity	5.24	7.80	8.33	8.50	8.50	8.50	8.33	8.33	8.25	8.10	7.85	7.70		8.20	8.44	8.23

Semi Final 2

date 20-Jun-21 wind 1.3 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.43	3.46	4.44	5.40	6.36	7.32	8.27	9.25	10.23	11.26		12.50	5 / 1			
reaction time 0.211	interval		1.03	0.98	0.96	0.96	0.96	0.95	0.98	0.98	1.03	1.24			2.97	2.87	2.99
	velocity	5.35	8.25	8.67	8.85	8.85	8.85	8.95	8.67	8.67	8.25	8.10	8.00		8.59	8.89	8.53
Cockrell, Anna (USA) (1997)	time	2.53	3.53	4.53	5.50	6.47	7.43	8.41	9.39	10.37	11.42		12.59	4 / 2			
reaction time 0.172	interval		1.00	1.00	0.97	0.97	0.96	0.98	0.98	0.98	1.05	1.17			2.97	2.91	3.01
	velocity	5.14	8.50	8.50	8.76	8.76	8.85	8.67	8.67	8.67	8.10	8.59	7.94		8.59	8.76	8.47
Chadwick, Payton (USA) (199	time	2.47	3.50	4.50	5.47	6.44	7.42	8.40	9.40	10.40	11.43		12.64	7 / 3			
reaction time 0.175	interval		1.03	1.00	0.97	0.97	0.98	0.98	1.00	1.00	1.03	1.21	PB		3.00	2.93	3.03
	velocity	5.26	8.25	8.50	8.76	8.76	8.67	8.67	8.50	8.50	8.25	8.31	7.91		8.50	8.70	8.42
Robinson, TeJyrica (USA) (19	time	2.43	3.47	4.47	5.44	6.40	7.37	8.37	9.37	10.39	11.42		12.65	1 / 4			
reaction time 0.173	interval		1.04	1.00	0.97	0.96	0.97	1.00	1.00	1.02	1.03	1.23	PB		3.01	2.93	3.05
	velocity	5.35	8.17	8.50	8.76	8.85	8.76	8.50	8.50	8.33	8.25	8.17	7.91		8.47	8.70	8.36
Jones, Rayniah (USA) (2001)	time	2.43	3.45	4.47	5.47	6.43	7.40	8.40	9.40	10.40	11.46		12.68	6 / 5			
reaction time 0.141	interval		1.02	1.02	1.00	0.96	0.97	1.00	1.00	1.00	1.06	1.22			3.04	2.93	3.06
	velocity	5.35	8.33	8.33	8.50	8.85	8.76	8.50	8.50	8.50	8.02	8.24	7.89		8.39	8.70	8.33
Brissett, Chanel (USA) (1999)	time	2.47	3.50	4.53	5.53	6.50	7.47	8.47	9.45	10.45	11.50		12.71	8 / 6			
reaction time 0.192	interval		1.03	1.03	1.00	0.97	0.97	1.00	0.98	1.00	1.05	1.21			3.06	2.94	3.03
	velocity	5.26	8.25	8.25	8.50	8.76	8.76	8.50	8.67	8.50	8.10	8.31	7.87		8.33	8.67	8.42
Claye, Queen (USA) (1988)	time	2.50	3.53	4.53	5.50	6.47	7.47	8.45	9.45	10.47	11.56		12.78	2 / 7			
reaction time 0.174	interval		1.03	1.00	0.97	0.97	1.00	0.98	1.00	1.02	1.09	1.22			3.00	2.95	3.11
	velocity	5.20	8.25	8.50	8.76	8.76	8.50	8.67	8.50	8.33	7.80	8.24	7.82		8.50	8.64	8.20
Stark, Grace (USA) (2001)	time	2.50	3.50	4.50	5.50	6.47	7.47	8.50	9.50	10.50	11.58		12.79	3 / 8			
reaction time 0.193	interval		1.00	1.00	1.00	0.97	1.00	1.03	1.00	1.00	1.08	1.21			3.00	3.00	3.08
	velocity	5.20	8.50	8.50	8.50	8.76	8.50	8.25	8.50	8.50	7.87	8.31	7.82		8.50	8.50	8.28

Semi Final 1

date 20-Jun-21 wind 1.2 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Marshall, Tonea (USA) (1998)	time	2.38	3.38	4.36	5.33	6.29	7.25	8.23	9.20	10.21	11.23		12.50	2 / 1			
reaction time 0.137	interval		1.00	0.98	0.97	0.96	0.96	0.98	0.97	1.01	1.02	1.27			2.95	2.90	3.00
	velocity	5.46	8.50	8.67	8.76	8.85	8.85	8.67	8.76	8.42	8.33	7.91	8.00		8.64	8.79	8.50
Clemons, Christina (USA) (19	time	2.41	3.43	4.41	5.37	6.33	7.28	8.24	9.23	10.23	11.26		12.51	3 / 2			
reaction time 0.142	interval		1.02	0.98	0.96	0.96	0.95	0.96	0.99	1.00	1.03	1.25	PB		2.96	2.87	3.02
	velocity	5.39	8.33	8.67	8.85	8.85	8.95	8.85	8.59	8.50	8.25	8.04	7.99		8.61	8.89	8.44
McNeal, Brianna (USA) (1991)	time	2.46	3.46	4.43	5.40	6.36	7.33	8.31	9.29	10.29	11.32		12.56	4 / 3			
reaction time 0.173	interval		1.00	0.97	0.97	0.96	0.97	0.98	0.98	1.00	1.03	1.24			2.94	2.91	3.01
	velocity	5.28	8.50	8.76	8.76	8.85	8.76	8.67	8.67	8.50	8.25	8.10	7.96		8.67	8.76	8.47
Cunningham, Gabriele (USA)	time	2.43	3.46	4.44	5.40	6.37	7.34	8.33	9.32	10.32	11.36		12.61	6 / 4			
reaction time 0.158	interval		1.03	0.98	0.96	0.97	0.97	0.99	0.99	1.00	1.04	1.25	PB		2.97	2.93	3.03
	velocity	5.35	8.25	8.67	8.85	8.76	8.76	8.59	8.59	8.50	8.17	8.04	7.93		8.59	8.70	8.42
Armstrong, Alia (USA) (2000)	time	2.43	3.43	4.43	5.43	6.40	7.38	8.36	9.36	10.40	11.43		12.65	1 / 5			
reaction time 0.154	interval		1.00	1.00	1.00	0.97	0.98	0.98	1.00	1.04	1.03	1.22	PB		3.00	2.93	3.07
	velocity	5.35	8.50	8.50	8.50	8.76	8.67	8.67	8.50	8.17	8.25	8.24	7.91		8.50	8.70	8.31
Brooks, Taliyah (USA) (1995)	time	2.46	3.48	4.46	5.43	6.40	7.40	8.38	9.38	10.38	11.46		12.70	5 / 6			
reaction time 0.156	interval	7 steps	1.02	0.98	0.97	0.97	1.00	0.98	1.00	1.00	1.08	1.24			2.97	2.95	3.08
	velocity	5.28	8.33	8.67	8.76	8.76	8.50	8.67	8.50	8.50	7.87	8.10	7.87		8.59	8.64	8.28
Nelvis, Sharika (USA) (1990)	time	2.46	3.52	4.50	5.48	6.46	7.44	8.44	9.44	10.46	11.52		12.81	7 / 7			
reaction time 0.160	interval	7 steps	1.06	0.98	0.98	0.98	0.98	1.00	1.00	1.02	1.06	1.29			3.02	2.96	3.08
	velocity	5.28	8.02	8.67	8.67	8.67	8.67	8.50	8.50	8.33	8.02	7.79	7.81		8.44	8.61	8.28
Castlin, Kristi (USA) (1988)	time	2.56	3.62	4.60	5.58	6.56	7.54	8.53	9.53	10.53	11.56		12.84	8 / 8			
reaction time 0.162	interval		1.06	0.98	0.98	0.98	0.98	0.99	1.00	1.00	1.03	1.28			3.02	2.95	3.03
	velocity	5.08	8.02	8.67	8.67	8.67	8.67	8.59	8.50	8.50	8.25	7.85	7.79		8.44	8.64	8.42
Britton, Evonne (USA) (1991)	time	2.48	3.52	4.52	5.52	6.52	7.52	8.52	9.55	10.58	11.63		12.95	9 / 9			
reaction time 0.144	interval		1.04	1.00	1.00	1.00	1.00	1.00	1.03	1.03	1.05	1.32			3.04	3.00	3.11
	velocity	5.24	8.17	8.50	8.50	8.50	8.50	8.50	8.25	8.25	8.10	7.61	7.72		8.39	8.50	8.20

Heat 4

date 19-Jun-21 wind 0.1 m/s *Henson (2021) - Athlete First: 2021 year end hurdle report*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
McNeal, Brianna (USA) (1991)		time	2.43	3.46	4.42	5.38	6.34	7.30	8.26	9.26	10.26	11.26		12.50	1 / 1			
reaction time 0.162		interval		1.03	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	1.24			2.95	2.88	3.00
		velocity	5.35	8.25	8.85	8.85	8.85	8.85	8.85	8.50	8.50	8.50	8.10	8.00		8.64	8.85	8.50
Cunningham, Gabriele (USA)		time	2.43	3.46	4.44	5.42	6.40	7.36	8.36	9.36	10.40	11.42		12.67	7 / 2			
reaction time 0.162		interval		1.03	0.98	0.98	0.98	0.96	1.00	1.00	1.04	1.02	1.25	PB		2.99	2.94	3.06
		velocity	5.35	8.25	8.67	8.67	8.67	8.85	8.50	8.50	8.17	8.33	8.04	7.89		8.53	8.67	8.33

Heat 3

date 19-Jun-21 wind 1.0 m/s *Henson (2021) - Athlete First: 2021 year end hurdle report*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Cockrell, Anna (USA) (1997)		time	2.50	3.53	4.53	5.53	6.50	7.46	8.43	9.43	10.43	11.46		12.63	4 / 1			
reaction time 0.163		interval		1.03	1.00	1.00	0.97	0.96	0.97	1.00	1.00	1.03	1.17			3.03	2.90	3.03
		velocity	5.20	8.25	8.50	8.50	8.76	8.85	8.76	8.50	8.50	8.25	8.59	7.92		8.42	8.79	8.42
Jones, Rayniah (USA) (2001)		time	2.43	3.45	4.46	5.46	6.43	7.43	8.40	9.40	10.40	11.43		12.64	2 / 2			
reaction time 0.142		interval		1.02	1.01	1.00	0.97	1.00	0.97	1.00	1.00	1.03	1.21	PB		3.03	2.94	3.03
		velocity	5.35	8.33	8.42	8.50	8.76	8.50	8.76	8.50	8.50	8.25	8.31	7.91		8.42	8.67	8.42
Chadwick, Payton (USA) (199		time	2.46	3.52	4.54	5.53	6.50	7.47	8.43	9.43	10.43	11.43		12.66	6 / 3			
reaction time 0.182		interval		1.06	1.02	0.99	0.97	0.97	0.96	1.00	1.00	1.00	1.23	PB		3.07	2.90	3.00
		velocity	5.28	8.02	8.33	8.59	8.76	8.76	8.85	8.50	8.50	8.50	8.17	7.90		8.31	8.79	8.50

Heat 2

date 19-Jun-21 wind 0.8 m/s *Henson (2021) - Athlete First: 2021 year end hurdle report*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Brooks, Taliyah (USA) (1995)		time	2.46	3.46	4.43	5.41	6.41	7.38	8.38	9.36	10.36	11.40		12.61	7 / 1			
reaction time 0.167		interval	7 steps	1.00	0.97	0.98	1.00	0.97	1.00	0.98	1.00	1.04	1.21	PB		2.95	2.97	3.02
		velocity	5.28	8.50	8.76	8.67	8.50	8.76	8.50	8.67	8.50	8.17	8.31	7.93		8.64	8.59	8.44
Clemons, Christina (USA) (19		time	2.46	3.46	4.46	5.46	6.43	7.40	8.36	9.36	10.36	11.40		12.64	4 / 2			
reaction time 0.143		interval		1.00	1.00	1.00	0.97	0.97	0.96	1.00	1.00	1.04	1.24			3.00	2.90	3.04
		velocity	5.28	8.50	8.50	8.50	8.76	8.76	8.85	8.50	8.50	8.17	8.10	7.91		8.50	8.79	8.39

Heat 1

date 19-Jun-21 wind -0.3 m/s *Henson (2021) - Athlete First: 2021 year end hurdle report*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)		time	2.56	3.58	4.54	5.50	6.46	7.42	8.38	9.36	10.36	11.39		12.49	2 / 1			
reaction time 0.291		interval		1.02	0.96	0.96	0.96	0.96	0.96	0.98	1.00	1.03	1.10			2.94	2.88	3.01
		velocity	5.08	8.33	8.85	8.85	8.85	8.85	8.85	8.67	8.50	8.25	9.14	8.01		8.67	8.85	8.47

2020 Chinese Olympic Trials (Shaoxing, CHN)

FINAL

date 12-Jun-21 wind 1.0 m/s *CAA Hurdle Development (2021)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Yanni (CHN) (1997)		time	2.66	3.70	4.70	5.70	6.72	7.72	8.72	9.74	10.78	11.84		12.98	6 / 1			
reaction time 0.162		interval		1.04	1.00	1.00	1.02	1.00	1.00	1.02	1.04	1.06	1.14	PB		3.04	3.02	3.12
		velocity	4.89	8.17	8.50	8.50	8.33	8.50	8.50	8.33	8.17	8.02	8.82	7.70		8.39	8.44	8.17
Chen Jiamin (CHN) (1996)		time	2.63	3.65	4.68	5.70	6.72	7.72	8.76	9.79	10.84	11.90		13.04	5 / 2			
reaction time 0.153		interval		1.02	1.03	1.02	1.02	1.00	1.04	1.03	1.05	1.06	1.14	PB		3.07	3.06	3.14
		velocity	4.94	8.33	8.25	8.33	8.33	8.50	8.17	8.25	8.10	8.02	8.82	7.67		8.31	8.33	8.12
Shi Jiali (CHN) (1997)		time	2.58	3.64	4.68	5.69	6.71	7.72	8.78	9.82	10.88	11.98		13.22	7 / 3			
reaction time 0.107		interval		1.06	1.04	1.01	1.02	1.01	1.06	1.04	1.06	1.10	1.24	PB		3.11	3.09	3.20
		velocity	5.04	8.02	8.17	8.42	8.33	8.42	8.02	8.17	8.02	7.73	8.10	7.56		8.20	8.25	7.97
You Na (CHN) (1993)		time	2.68	3.74	4.76	5.80	6.83	7.87	8.94	9.99	11.06	12.16		13.34	4 / 4			
reaction time 0.161		interval		1.06	1.02	1.04	1.03	1.04	1.07	1.05	1.07	1.10	1.18	=PB		3.12	3.14	3.22
		velocity	4.85	8.02	8.33	8.17	8.25	8.17	7.94	8.10	7.94	7.73	8.52	7.50		8.17	8.12	7.92
Chen Yinfeng (CHN) (1998)		time	2.66	3.70	4.76	5.80	6.84	7.88	8.93	10.02	11.08	12.18		13.42	2 / 5			
reaction time 0.156		interval		1.04	1.06	1.04	1.04	1.04	1.05	1.09	1.06	1.10	1.24			3.14	3.13	3.25
		velocity	4.89	8.17	8.02	8.17	8.17	8.17	8.10	7.80	8.02	7.73	8.10	7.45		8.12	8.15	7.85
Yu Jiaru (CHN) (1999)		time	2.72	3.77	4.83	5.88	6.92	7.96	9.01	10.09	11.18	12.26		13.44	1 / 6			
reaction time 0.169		interval		1.05	1.06	1.05	1.04	1.04	1.05	1.08	1.09	1.08	1.18			3.16	3.13	3.25
		velocity	4.78	8.10	8.02	8.10	8.17	8.17	8.10	7.87	7.80	7.87	8.52	7.44		8.07	8.15	7.85
Dai Yiru (CHN) (2001)		time	2.62	3.68	4.74	5.78	6.82	7.87	8.90	10.00	11.12	12.28		13.55	8 / 7			
reaction time 0.159		interval		1.06	1.06	1.04	1.04	1.05	1.03	1.10	1.12	1.16	1.27			3.16	3.12	3.38
		velocity	4.96	8.02	8.02	8.17	8.17	8.10	8.25	7.73	7.59	7.33	7.91	7.38		8.07	8.17	7.54

Heat 2

date 12-Jun-21 wind 2.2 m/s *CAA Hurdle Development (2021)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lin Yuwei (CHN) (1999)		time	2.47	3.50	4.54	5.57	6.61	7.61	8.64	9.69	10.73	11.79		13.00	4 / 1			
reaction time 0.133		interval		1.03	1.04	1.03	1.04	1.00	1.03	1.05	1.04	1.06	1.21			3.10	3.07	3.15
		velocity	5.26	8.25	8.17	8.25	8.17	8.50	8.25	8.10	8.17	8.02	8.31	7.69		8.23	8.31	8.10

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

Chen Jiamin (CHN) (1996)	time	2.58	3.63	4.67	5.71	6.74	7.77	8.79	9.83	10.88	11.94		13.16	3 / 2			
reaction time 0.145	interval		1.05	1.04	1.04	1.03	1.03	1.02	1.04	1.05	1.06	1.22			3.13	3.08	3.15
	velocity	5.04	8.10	8.17	8.17	8.25	8.25	8.33	8.17	8.10	8.02	8.24	7.60		8.15	8.28	8.10
Shi Jiali (CHN) (1997)	time	2.57	3.64	4.70	5.74	6.79	7.83	8.89	9.96	11.01	12.09		13.39	5 / 3			
reaction time 0.164	interval		1.07	1.06	1.04	1.05	1.04	1.06	1.07	1.05	1.08	1.30			3.17	3.15	3.20
	velocity	5.06	7.94	8.02	8.17	8.10	8.17	8.02	7.94	8.10	7.87	7.73	7.47		8.04	8.10	7.97
Yu Jiaru (CHN) (1999)	time	2.65	3.70	4.77	5.84	6.87	7.91	8.96	10.01	11.08	12.14		13.40	7 / 4			
reaction time 0.319	interval		1.05	1.07	1.07	1.03	1.04	1.05	1.05	1.07	1.06	1.26			3.19	3.12	3.18
	velocity	4.91	8.10	7.94	7.94	8.25	8.17	8.10	8.10	7.94	8.02	7.98	7.46		7.99	8.17	8.02
Xia Sining (CHN) (2003)	time	2.62	3.70	4.77	5.86	6.92	7.99	9.05	10.13	11.23	12.34		13.67	6 / 5			
reaction time 0.159	interval		1.08	1.07	1.09	1.06	1.07	1.06	1.08	1.10	1.11	1.33			3.24	3.19	3.29
	velocity	4.96	7.87	7.94	7.80	8.02	7.94	8.02	7.87	7.73	7.66	7.56	7.32		7.87	7.99	7.75

Heat 1

date 12-Jun-21 wind -0.2 m/s

CAA Hurdle Development (2021)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Yanni (CHN) (1997)	time	2.57	3.60	4.65	5.69	6.72	7.76	8.81	9.87	10.94	12.06		13.44	6 / 1			
reaction time 0.135	interval		1.03	1.05	1.04	1.03	1.04	1.05	1.06	1.07	1.12	1.38			3.12	3.12	3.25
	velocity	5.06	8.25	8.10	8.17	8.25	8.17	8.10	8.02	7.94	7.59	7.28	7.44		8.17	8.17	7.85
You Na (CHN) (1993)	time	2.57	3.63	4.67	5.72	6.77	7.79	8.86	9.93	11.02	12.11		13.45	4 / 2			
reaction time 0.150	interval		1.06	1.04	1.05	1.05	1.02	1.07	1.07	1.09	1.09	1.34			3.15	3.14	3.25
	velocity	5.06	8.02	8.17	8.10	8.10	8.33	7.94	7.94	7.80	7.80	7.50	7.43		8.10	8.12	7.85
Dai Yiru (CHN) (2001)	time	2.48	3.55	4.63	5.67	6.74	7.76	8.86	9.96	11.06	12.20		13.55	5 / 3			
reaction time 0.147	interval		1.07	1.08	1.04	1.07	1.02	1.10	1.10	1.10	1.14	1.35			3.19	3.19	3.34
	velocity	5.24	7.94	7.87	8.17	7.94	8.33	7.73	7.73	7.73	7.46	7.44	7.38		7.99	7.99	7.63
Chen Yinfeng (CHN) (1998)	time	2.58	3.64	4.72	5.76	6.82	7.87	8.95	10.03	11.14	12.26		13.57	8 / 4			
reaction time 0.148	interval		1.06	1.08	1.04	1.06	1.05	1.08	1.08	1.11	1.12	1.31			3.18	3.19	3.31
	velocity	5.04	8.02	7.87	8.17	8.02	8.10	7.87	7.87	7.66	7.59	7.67	7.37		8.02	7.99	7.70
Luo Xianyan (CHN) (1997)	time	2.57	3.65	4.74	5.77	6.84	7.92	8.99	10.08	11.19	12.31		13.69	3 / 5			
reaction time 0.140	interval		1.08	1.09	1.03	1.07	1.08	1.07	1.09	1.11	1.12	1.38			3.20	3.22	3.32
	velocity	5.06	7.87	7.80	8.25	7.94	7.87	7.94	7.80	7.66	7.59	7.28	7.30		7.97	7.92	7.68
Lin Yuqian (CHN) (2003)	time	2.62	3.70	4.78	5.86	6.92	8.01	9.11	10.23	11.33	12.50		13.83	7 / 6			
reaction time 0.196	interval		1.08	1.08	1.08	1.06	1.09	1.10	1.12	1.10	1.17	1.33			3.24	3.25	3.39
	velocity	4.96	7.87	7.87	7.87	8.02	7.80	7.73	7.59	7.73	7.26	7.56	7.23		7.87	7.85	7.52

2021 Japanese Multi-Event National Championships (Nagano, JPN)

Heptathlon - Heat 3

date 12-Jun-21 wind 1.4 m/s

Matsubayashi (2021) - 100m hurdles race analysis of heptathletes in the 2021 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Yamasaki, Yuki (JPN) (1995)	time	2.67	3.73	4.80	5.84	6.91	7.97	9.04	10.12	11.24	12.35		13.58	5 / 2			
reaction time 0.175	interval		1.06	1.07	1.04	1.07	1.06	1.07	1.08	1.12	1.11	1.23			3.17	3.20	3.31
	velocity	4.87	8.02	7.94	8.17	7.94	8.02	7.94	7.87	7.59	7.66	8.17	7.36		8.04	7.97	7.70
Odama, Karin (JPN) (1999)	time	2.72	3.82	4.89	5.96	7.02	8.07	9.14	10.21	11.29	12.42		13.66	6 / 3			
reaction time 0.189	interval		1.10	1.07	1.07	1.06	1.05	1.07	1.07	1.08	1.13	1.24			3.24	3.18	3.28
	velocity	4.78	7.73	7.94	7.94	8.02	8.10	7.94	7.94	7.87	7.52	8.10	7.32		7.87	8.02	7.77
Rito, Nonoka (JPN) (1995)	time	2.72	3.82	4.93	6.02	7.12	8.23	9.33	10.48	11.62	12.80		14.05	3 / 6			
reaction time 0.169	interval		1.10	1.11	1.09	1.10	1.11	1.10	1.15	1.14	1.18	1.25			3.30	3.31	3.47
	velocity	4.78	7.73	7.66	7.80	7.73	7.66	7.73	7.39	7.46	7.20	8.04	7.12		7.73	7.70	7.35

2021 NCAA Championships (Eugene, OR) (TV Analysis)

FINAL

date 12-Jun-21 wind 0.4 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Cockrell, Anna (USA) (1997)	time	2.53	3.54	4.54	5.51	6.47	7.44	8.41	9.39	10.38	11.41		12.58	7 / 1			
reaction time 0.159	interval		1.01	1.00	0.97	0.96	0.97	0.97	0.98	0.99	1.03	1.17			2.98	2.90	3.00
	velocity	5.14	8.42	8.50	8.76	8.85	8.76	8.76	8.67	8.59	8.25	8.59	7.95		8.56	8.79	8.50
Jones, Rayniah (USA) (2001)	time	2.50	3.54	4.54	5.54	6.54	7.54	8.55	9.54	10.57	11.61		12.82	2 / 2			
reaction time 0.138	interval		1.04	1.00	1.00	1.00	1.00	1.01	0.99	1.03	1.04	1.21			3.04	3.01	3.06
	velocity	5.20	8.17	8.50	8.50	8.50	8.50	8.42	8.59	8.25	8.17	8.31	7.80		8.39	8.47	8.33
Nugent, Ackera (JAM) (2002)	time	2.53	3.57	4.58	5.57	6.56	7.54	8.54	9.56	10.58	11.66		12.84	4 / 3			
reaction time 0.148	interval		1.04	1.01	0.99	0.99	0.98	1.00	1.02	1.02	1.08	1.18			3.04	2.97	3.12
	velocity	5.14	8.17	8.42	8.59	8.59	8.67	8.50	8.33	8.33	7.87	8.52	7.79		8.39	8.59	8.17
Stark, Grace (USA) (2001)	time	2.57	3.60	4.60	5.60	6.61	7.59	8.57	9.57	10.60	11.63		12.89	6 / 4			
reaction time 0.207	interval		1.03	1.00	1.00	1.01	0.98	0.98	1.00	1.03	1.03	1.26			3.03	2.97	3.06
	velocity	5.06	8.25	8.50	8.50	8.42	8.67	8.67	8.50	8.25	8.25	7.98	7.76		8.42	8.59	8.33

Akobundu, Madeleine (USA) (	time	2.53	3.57	4.57	5.57	6.56	7.54	8.54	9.54	10.58	11.64		12.90	1 / 5			
reaction time 0.196	interval		1.04	1.00	1.00	0.99	0.98	1.00	1.00	1.04	1.06	1.26			3.04	2.97	3.10
	velocity	5.14	8.17	8.50	8.50	8.59	8.67	8.50	8.50	8.17	8.02	7.98	7.75		8.39	8.59	8.23
Russell, Masai (USA) (2000)	time	2.52	3.60	4.64	5.67	6.71	7.67	8.67	9.71	10.71	11.71		12.97	9 / 6			
reaction time 0.233	interval		1.08	1.04	1.03	1.04	0.96	1.00	1.04	1.00	1.00	1.26			3.15	3.00	3.04
	velocity	5.16	7.87	8.17	8.25	8.17	8.85	8.50	8.17	8.50	8.50	7.98	7.71		8.10	8.50	8.39
Rothwell, Cha'mia (USA) (199	time	2.60	3.64	4.70	5.74	6.77	7.77	8.77	9.80	10.84	11.91		13.14	8 / 7			
reaction time 0.175	interval		1.04	1.06	1.04	1.03	1.00	1.00	1.03	1.04	1.07	1.23			3.14	3.03	3.14
	velocity	5.00	8.17	8.02	8.17	8.25	8.50	8.50	8.25	8.17	7.94	8.17	7.61		8.12	8.42	8.12
Robinson, TeJyrica (USA) (19	time	2.48	3.50	4.50	5.47	6.47	7.47	8.50	9.51	10.60	11.68		29.11	3 / 8			
reaction time 0.152	interval		1.02	1.00	0.97	1.00	1.00	1.03	1.01	1.09	1.08	17.43			2.99	3.03	3.18
	velocity	5.24	8.33	8.50	8.76	8.50	8.50	8.25	8.42	7.80	7.87	0.58	3.44		8.53	8.42	8.02

Semi Final 2

date 10-Jun-21 wind -0.5 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Marshall, Tonea (USA) (1998)	time	2.40	3.40	4.40	5.37	6.33	7.30	8.29	9.27	10.27	11.27		12.48	5 / 1			
reaction time 0.114	interval		1.00	1.00	0.97	0.96	0.97	0.99	0.98	1.00	1.00	1.21			2.97	2.92	2.98
	velocity	5.42	8.50	8.50	8.76	8.85	8.76	8.59	8.67	8.50	8.50	8.31	8.01		8.59	8.73	8.56
Cockrell, Anna (USA) (1997)	time	2.53	3.53	4.50	5.47	6.43	7.40	8.37	9.33	10.33	11.37		12.54	6 / 2			
reaction time 0.138	interval		1.00	0.97	0.97	0.96	0.97	0.97	0.96	1.00	1.04	1.17	PB		2.94	2.90	3.00
	velocity	5.14	8.50	8.76	8.76	8.85	8.76	8.76	8.85	8.50	8.17	8.59	7.97		8.67	8.79	8.50

2021 Golden Gala Pietro Mennea (Florence, ITA) (TV Analysis)

FINAL

date 10-Jun-21 wind -0.8 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.46	3.46	4.44	5.40	6.34	7.28	8.22	9.20	10.18	11.18		12.38	5 / 1			
reaction time 0.153	interval		1.00	0.98	0.96	0.94	0.94	0.94	0.98	0.98	1.00	1.20			2.94	2.82	2.96
	velocity	5.28	8.50	8.67	8.85	9.04	9.04	9.04	8.67	8.67	8.50	8.37	8.08		8.67	9.04	8.61
Charlton, Devynne (BAH) (19	time	2.48	3.50	4.50	5.50	6.48	7.46	8.46	9.46	10.50	11.54		12.80	2 / 2			
reaction time 0.147	interval		1.02	1.00	1.00	0.98	0.98	1.00	1.00	1.04	1.04	1.26			3.02	2.96	3.08
	velocity	5.24	8.33	8.50	8.50	8.67	8.67	8.50	8.50	8.17	8.17	7.98	7.81		8.44	8.61	8.28
Herman, Elvira (BLR) (1997)	time	2.60	3.66	4.64	5.64	6.62	7.60	8.60	9.60	10.62	11.64		12.85	3 / 3			
reaction time 0.132	interval		1.06	0.98	1.00	0.98	0.98	1.00	1.00	1.02	1.02	1.21			3.04	2.96	3.04
	velocity	5.00	8.02	8.67	8.50	8.67	8.67	8.50	8.50	8.33	8.33	8.31	7.78		8.39	8.61	8.39
Tapper, Megan (JAM) (1994)	time	2.52	3.56	4.56	5.56	6.56	7.58	8.58	9.60	10.64	11.70		12.94	4 / 4			
reaction time 0.170	interval		1.04	1.00	1.00	1.00	1.02	1.00	1.02	1.04	1.06	1.24			3.04	3.02	3.12
	velocity	5.16	8.17	8.50	8.50	8.50	8.33	8.50	8.33	8.17	8.02	8.10	7.73		8.39	8.44	8.17
Bogliolo, Luminosa (ITA) (199	time	2.56	3.60	4.60	5.58	6.58	7.58	8.60	9.66	10.70	11.76		12.99	6 / 5			
reaction time 0.161	interval		1.04	1.00	0.98	1.00	1.00	1.02	1.06	1.04	1.06	1.23			3.02	3.02	3.16
	velocity	5.08	8.17	8.50	8.67	8.50	8.50	8.33	8.02	8.17	8.02	8.17	7.70		8.44	8.44	8.07
Skrzyszowska, Pia (POL) (2001	time	2.54	3.58	4.62	5.64	6.64	7.68	8.68	9.70	10.76	11.80		13.03	7 / 6			
reaction time 0.151	interval		1.04	1.04	1.02	1.00	1.04	1.00	1.02	1.06	1.04	1.23			3.10	3.04	3.12
	velocity	5.12	8.17	8.17	8.33	8.50	8.17	8.50	8.33	8.02	8.17	8.17	7.67		8.23	8.39	8.17
Seymour, Pedrya (BAH) (1995)	time	2.56	3.62	4.72	5.80	6.84	7.88	8.94	10.02	11.08	12.18		13.51	1 / 7			
reaction time 0.168	interval		1.06	1.10	1.08	1.04	1.04	1.06	1.08	1.06	1.10	1.33			3.24	3.14	3.24
	velocity	5.08	8.02	7.73	7.87	8.17	8.17	8.02	7.87	8.02	7.73	7.56	7.40		7.87	8.12	7.87
di Lazzaro, Elisa Maria (ITA) (1	time	2.54	3.58	4.62	5.62	6.60							dnf	8 / --			
reaction time 0.143	interval		1.04	1.04	1.00	0.98									3.08		
	velocity	5.12	8.17	8.17	8.50	8.67									8.28		

2021 Fanny Blankers Koen Games (Hengelo, NED) (TV Analysis)

FINAL

date 06-Jun-21 wind 0.5 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.43	3.46	4.44	5.40	6.35	7.31	8.27	9.24	10.20	11.18		12.44	5 / 1			
reaction time	interval		1.03	0.98	0.96	0.95	0.96	0.96	0.97	0.96	0.98	1.26			2.97	2.87	2.91
	velocity	5.35	8.25	8.67	8.85	8.95	8.85	8.85	8.76	8.85	8.67	7.98	8.04		8.59	8.89	8.76

2021 Fuse Sprint (Tottori, JPN)

FINAL

date 06-Jun-21 wind 1.8 m/s

Onishi (2021) - race analysis of the domestic first-class women's 100m hurdles in the 2021 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Aoki, Masumi (JPN) (1994)	time	2.62	3.67	4.69	5.68	6.68	7.68	8.69	9.70	10.74	11.77		12.87	4 / 1			
reaction time 0.131	interval		1.05	1.02	0.99	1.00	1.00	1.01	1.01	1.04	1.03	1.10	=NR PB		3.06	3.01	3.08
	velocity	4.96	8.10	8.33	8.59	8.50	8.50	8.42	8.42	8.17	8.25	9.14	7.77		8.33	8.47	8.28
Tereda, Asuka (JPN) (1990)	time	2.56	3.60	4.58	5.63	6.64	7.63	8.65	9.67	10.71	11.74		12.89	7 / 2			
reaction time 0.133	interval		1.04	0.98	1.05	1.01	0.99	1.02	1.02	1.04	1.03	1.15			3.07	3.02	3.09

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

	velocity	5.08	8.17	8.67	8.10	8.42	8.59	8.33	8.33	8.17	8.25	8.74	7.76		8.31	8.44	8.25
Suzuki, Miho (JPN) (1996)	time	2.68	3.72	4.75	5.75	6.76	7.77	8.78	9.79	10.83	11.89		13.01	6 / 3			
reaction time 0.163	interval		1.04	1.03	1.00	1.01	1.01	1.01	1.01	1.04	1.06	1.12			3.07	3.03	3.11
	velocity	4.85	8.17	8.25	8.50	8.42	8.42	8.42	8.42	8.17	8.02	8.97	7.69		8.31	8.42	8.20
Kimura, Ayako (JPN) (1988)	time	2.59	3.65	4.67	5.68	6.70	7.71	8.74	9.81	10.88	11.97		13.18	5 / 4			
reaction time 0.148	interval		1.06	1.02	1.01	1.02	1.01	1.03	1.07	1.07	1.09	1.21			3.09	3.06	3.23
	velocity	5.02	8.02	8.33	8.42	8.33	8.42	8.25	7.94	7.94	7.80	8.31	7.59		8.25	8.33	7.89
Kiyoyama, Chisato (JPN) (199	time	2.69	3.75	4.77	5.78	6.81	7.82	8.85	9.90	10.97	12.03		13.20	3 / 5			
reaction time 0.138	interval		1.06	1.02	1.01	1.03	1.01	1.03	1.05	1.07	1.06	1.17			3.09	3.07	3.18
	velocity	4.83	8.02	8.33	8.42	8.25	8.42	8.25	8.10	7.94	8.02	8.59	7.58		8.25	8.31	8.02
Okubo, Yuri (JPN) (1997)	time	2.67	3.72	4.75	5.78	6.79	7.81	8.83	9.88	10.93	12.00		13.21	8 / 6			
reaction time 0.152	interval		1.05	1.03	1.03	1.01	1.02	1.02	1.05	1.05	1.07	1.21	PB		3.11	3.05	3.17
	velocity	4.87	8.10	8.25	8.25	8.42	8.33	8.33	8.10	8.10	7.94	8.31	7.57		8.20	8.36	8.04
Fujiwara, Miku (JPN) (1992)	time	2.64	3.68	4.73	5.74	6.77	7.80	8.83	9.88	10.95	12.05		13.26	2 / 7			
reaction time 0.134	interval		1.04	1.05	1.01	1.03	1.03	1.03	1.05	1.07	1.10	1.21			3.10	3.09	3.22
	velocity	4.92	8.17	8.10	8.42	8.25	8.25	8.25	8.10	7.94	7.73	8.31	7.54		8.23	8.25	7.92
Shimura, Hitomi (JPN) (1990)	time	2.71	3.78	4.82	5.85	6.87	7.90	8.95	9.98	11.04	12.12		13.29	9 / 8			
reaction time 0.158	interval		1.07	1.04	1.03	1.02	1.03	1.05	1.03	1.06	1.08	1.17			3.14	3.10	3.17
	velocity	4.80	7.94	8.17	8.25	8.33	8.25	8.10	8.25	8.02	7.87	8.59	7.52		8.12	8.23	8.04

2021 Michitaka Kinami Memorial (Osaka, JPN)

FINAL

date 01-Jun-21 wind 0.3 m/s

Onishi (2021) - race analysis of the domestic first-class women's 100m hurdles in the 2021 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tereda, Asuka (JPN) (1990)	time	2.60	3.62	4.63	5.61	6.61	7.60	8.63	9.67	10.69	11.76		12.89	6 / 1			
reaction time 0.168	interval		1.02	1.01	0.98	1.00	0.99	1.03	1.04	1.02	1.07	1.13			3.01	3.02	3.13
	velocity	5.00	8.33	8.42	8.67	8.50	8.59	8.25	8.17	8.33	7.94	8.89	7.76		8.47	8.44	8.15
Suzuki, Miho (JPN) (1996)	time	2.70	3.76	4.79	5.82	6.82	7.84	8.87	9.91	10.97	12.02		13.15	7 / 2			
reaction time 0.199	interval		1.06	1.03	1.03	1.00	1.02	1.03	1.04	1.06	1.05	1.13	=PB		3.12	3.05	3.15
	velocity	4.81	8.02	8.25	8.25	8.50	8.33	8.25	8.17	8.02	8.10	8.89	7.60		8.17	8.36	8.10
Tanaka, Yumi (JPN) (1998)	time	2.64	3.67	4.73	5.77	6.79	7.82	8.84	9.90	10.97	12.05		13.23	5 / 3			
reaction time 0.157	interval		1.03	1.06	1.04	1.02	1.03	1.02	1.06	1.07	1.08	1.18			3.13	3.07	3.21
	velocity	4.92	8.25	8.02	8.17	8.33	8.25	8.33	8.02	7.94	7.87	8.52	7.56		8.15	8.31	7.94
Kimura, Ayako (JPN) (1988)	time	2.62	3.67	4.70	5.71	6.74	7.77	8.81	9.86	10.93	12.04		13.29	4 / 4			
reaction time 0.174	interval		1.05	1.03	1.01	1.03	1.03	1.04	1.05	1.07	1.11	1.25			3.09	3.10	3.23
	velocity	4.96	8.10	8.25	8.42	8.25	8.25	8.17	8.10	7.94	7.66	8.04	7.52		8.25	8.23	7.89
Fujiwara, Miku (JPN) (1992)	time	2.67	3.70	4.76	5.79	6.84	7.87	8.94	10.01	11.09	12.18		13.37	3 / 5			
reaction time 0.146	interval		1.03	1.06	1.03	1.05	1.03	1.07	1.07	1.08	1.09	1.19			3.12	3.15	3.24
	velocity	4.87	8.25	8.02	8.25	8.10	8.25	7.94	7.94	7.87	7.80	8.45	7.48		8.17	8.10	7.87
Kiyoyama, Chisato (JPN) (199	time	2.74	3.83	4.86	5.89	6.92	7.95	9.00	10.06	11.12	12.21		13.39	9 / 6			
reaction time 0.190	interval		1.09	1.03	1.03	1.03	1.03	1.05	1.06	1.06	1.09	1.18			3.15	3.11	3.21
	velocity	4.74	7.80	8.25	8.25	8.25	8.25	8.10	8.02	8.02	7.80	8.52	7.47		8.10	8.20	7.94
Nakajima, Hitomi (JPN) (1995)	time	2.71	3.77	4.83	5.87	6.90	7.94	9.02	10.10	11.17	12.26		13.44	8 / 7			
reaction time 0.155	interval		1.06	1.06	1.04	1.03	1.04	1.08	1.08	1.07	1.09	1.18			3.16	3.15	3.24
	velocity	4.80	8.02	8.02	8.17	8.25	8.17	7.87	7.87	7.94	7.80	8.52	7.44		8.07	8.10	7.87
Tanaka, Kiyono (JPN) (2002)	time	2.64	3.72	4.76	5.82	6.86	7.93	8.99	10.08	11.17	12.27		13.49	2 / 8			
reaction time 0.171	interval		1.08	1.04	1.06	1.04	1.07	1.06	1.09	1.09	1.10	1.22	PB		3.18	3.17	3.28
	velocity	4.92	7.87	8.17	8.02	8.17	7.94	8.02	7.80	7.80	7.73	8.24	7.41		8.02	8.04	7.77

Heat 1

date 01-Jun-21 wind 0.6 m/s

Onishi (2021) - race analysis of the domestic first-class women's 100m hurdles in the 2021 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tereda, Asuka (JPN) (1990)	time	2.64	3.69	4.68	5.67	6.67	7.67	8.66	9.68	10.69	11.74		12.87	5 / 1			
reaction time 0.187	interval		1.05	0.99	0.99	1.00	1.00	0.99	1.02	1.01	1.05	1.13	NR PB		3.03	2.99	3.08
	velocity	4.92	8.10	8.59	8.59	8.50	8.50	8.59	8.33	8.42	8.10	8.89	7.77		8.42	8.53	8.28

2021 Shimane High School Championships (Honshu, JPN)

FINAL

date 30-May-21 wind 1.7 m/s

Shimizu (2021) - shimane high school championships 2021 - biomechanics data analysis

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
福本　智帆	time	2.78	3.93	5.12	6.27	7.42	8.60	9.78	10.97	12.18	13.42		14.74	3 / 1			
reaction time	interval		1.15	1.19	1.15	1.15	1.18	1.18	1.19	1.21	1.24	1.32			3.49	3.51	3.64
	velocity	4.68	7.39	7.14	7.39	7.39	7.20	7.20	7.14	7.02	6.85	7.61	6.78		7.31	7.26	7.01
松原　しほり	time	2.82	4.02	5.18	6.37	7.55	8.77	9.98	11.27	12.53	13.83		15.22	6 / 2			
reaction time	interval		1.20	1.16	1.19	1.18	1.22	1.21	1.29	1.26	1.30	1.39			3.55	3.61	3.85
	velocity	4.61	7.08	7.33	7.14	7.20	6.97	7.02	6.59	6.75	6.54	7.23	6.57		7.18	7.06	6.62

石橋 望美	time	2.90	4.13	5.38	6.60	7.85	9.08	10.35	11.65	12.98	14.32		15.70	4 / 3			
reaction time	interval		1.23	1.25	1.22	1.25	1.23	1.27	1.30	1.33	1.34	1.38			3.70	3.75	3.97
	velocity	4.48	6.91	6.80	6.97	6.80	6.91	6.69	6.54	6.39	6.34	7.28	6.37		6.89	6.80	6.42
松本 春佳	time	2.93	4.17	5.40	6.62	7.85	9.10	10.33	11.63	12.93	14.27		15.71	8 / 4			
reaction time	interval		1.24	1.23	1.22	1.23	1.25	1.23	1.30	1.30	1.34	1.44			3.69	3.71	3.94
	velocity	4.44	6.85	6.91	6.97	6.91	6.80	6.91	6.54	6.54	6.34	6.98	6.37		6.91	6.87	6.47
大崎 琴葉	time	2.95	4.20	5.45	6.72	7.95	9.22	10.47	11.77	13.08	14.40		15.80	7 / 5			
reaction time	interval		1.25	1.25	1.27	1.23	1.27	1.25	1.30	1.31	1.32	1.40			3.77	3.75	3.93
	velocity	4.41	6.80	6.80	6.69	6.91	6.69	6.80	6.54	6.49	6.44	7.18	6.33		6.76	6.80	6.49
松浦 ひか莉	time	2.88	4.12	5.35	6.62	7.88	9.17	10.47	11.83	13.23	14.68		16.18	5 / 6			
reaction time	interval		1.24	1.23	1.27	1.26	1.29	1.30	1.36	1.40	1.45	1.50			3.74	3.85	4.21
	velocity	4.51	6.85	6.91	6.69	6.75	6.59	6.54	6.25	6.07	5.86	6.70	6.18		6.82	6.62	6.06
代 悠乃	time	2.90	4.12	5.38	6.67	7.93	9.27	10.58	11.93	13.32	14.92		16.44	1 / 7			
reaction time	interval		1.22	1.26	1.29	1.26	1.34	1.31	1.35	1.39	1.60	1.52			3.77	3.91	4.34
	velocity	4.48	6.97	6.75	6.59	6.75	6.34	6.49	6.30	6.12	5.31	6.61	6.08		6.76	6.52	5.88
藤原 未歩	time	3.05	4.42	5.80	7.22	8.65	10.07	11.55	13.00	14.45	15.92		17.44	2 / 8			
reaction time	interval		1.37	1.38	1.42	1.43	1.42	1.48	1.45	1.45	1.47	1.52			4.17	4.33	4.37
	velocity	4.26	6.20	6.16	5.99	5.94	5.99	5.74	5.86	5.86	5.78	6.61	5.73		6.12	5.89	5.84

2021 NCAA Championships Preliminary East Round (Jacksonville, FL) (TV Analysis)

Quarter Final 1

date 29-May-21 wind 0.8 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Marshall, Tonea (USA) (1998)	time	2.40	3.40	4.36	5.32	6.30	7.27	8.23	9.20	10.22	11.24		12.44	5 / 1			
reaction time	interval		1.00	0.96	0.96	0.98	0.97	0.96	0.97	1.02	1.02	1.20	PB		2.92	2.91	3.01
	velocity	5.42	8.50	8.85	8.85	8.67	8.76	8.85	8.76	8.33	8.33	8.38	8.04		8.73	8.76	8.47
Salmon, Paula (USA) (1999)	time	2.57	3.57	4.55	5.53	6.50	7.53	8.55	9.57	10.63	11.68		12.89	4 / 2			
reaction time	interval		1.00	0.98	0.98	0.97	1.03	1.02	1.02	1.06	1.05	1.21	PB		2.96	3.02	3.13
	velocity	5.06	8.50	8.67	8.67	8.76	8.25	8.33	8.33	8.02	8.10	8.31	7.76		8.61	8.44	8.15
Rothwell, Cha'mia (USA) (199	time	2.57	3.63	4.67	5.67	6.65	7.67	8.69	9.70	10.73	11.77		12.95	3 / 3			
reaction time	interval		1.06	1.04	1.00	0.98	1.02	1.02	1.01	1.03	1.04	1.18	PB		3.10	3.02	3.08
	velocity	5.06	8.02	8.17	8.50	8.67	8.33	8.33	8.42	8.25	8.17	8.52	7.72		8.23	8.44	8.28

2021 Müller Grand Prix (Gateshead, GBR) (TV Analysis)

FINAL

date 23-May-21 wind -3.9 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Sember, Cindy (GBR) (1994)	time	2.56	3.66	4.72	5.76	6.78	7.80	8.82	9.86	10.94	12.02		13.28	5 / 1			
reaction time 0.159	interval		1.10	1.06	1.04	1.02	1.02	1.02	1.04	1.08	1.08	1.26			3.20	3.06	3.20
	velocity	5.08	7.73	8.02	8.17	8.33	8.33	8.33	8.17	7.87	7.87	7.98	7.53		7.97	8.33	7.97
Kozák, Luca (HUN) (1996)	time	2.60	3.70	4.74	5.78	6.82	7.84	8.90	9.94	11.00	12.08		13.37	6 / 2			
reaction time 0.161	interval		1.10	1.04	1.04	1.04	1.02	1.06	1.04	1.06	1.08	1.29			3.18	3.12	3.18
	velocity	5.00	7.73	8.17	8.17	8.17	8.33	8.02	8.17	8.02	7.87	7.79	7.48		8.02	8.17	8.02
Bogliolo, Luminosa (ITA) (199	time	2.62	3.70	4.76	5.80	6.84	7.88	8.94	10.00	11.08	12.18		13.45	3 / 3			
reaction time 0.155	interval		1.08	1.06	1.04	1.04	1.04	1.06	1.06	1.08	1.10	1.27			3.18	3.14	3.24
	velocity	4.96	7.87	8.02	8.17	8.17	8.17	8.02	8.02	7.87	7.73	7.91	7.43		8.02	8.12	7.87
Porter, Tiffany (GBR) (1987)	time	2.56	3.62	4.70	5.74	6.78	7.80	8.84	9.94	11.02	12.16		13.50	4 / 4			
reaction time 0.131	interval		1.06	1.08	1.04	1.04	1.02	1.04	1.10	1.08	1.14	1.34			3.18	3.10	3.32
	velocity	5.08	8.02	7.87	8.17	8.17	8.33	8.17	7.73	7.87	7.46	7.50	7.41		8.02	8.23	7.68
Tapper, Megan (JAM) (1994)	time	2.60	3.64	4.70	5.76	6.82	7.88	8.96	10.04	11.14	12.24		13.53	1 / 5			
reaction time 0.153	interval		1.04	1.06	1.06	1.06	1.06	1.08	1.08	1.10	1.10	1.29			3.16	3.20	3.28
	velocity	5.00	8.17	8.02	8.02	8.02	8.02	7.87	7.87	7.73	7.73	7.79	7.39		8.07	7.97	7.77
Sedney, Zoë (NED) (2001)	time	2.64	3.72	4.76	5.82	6.90	7.96	9.02	10.10	11.20	12.32		13.57	2 / 6			
reaction time 0.186	interval		1.08	1.04	1.06	1.08	1.06	1.06	1.08	1.10	1.12	1.25			3.18	3.20	3.30
	velocity	4.92	7.87	8.17	8.02	7.87	8.02	8.02	7.87	7.73	7.59	8.04	7.37		8.02	7.97	7.73
Seymour, Pedrya (BAH) (1995)	time	2.64	3.74	4.84	5.88	6.96	8.00	9.04	10.08	11.18	12.28		13.57	8 / 7			
reaction time 0.191	interval		1.10	1.10	1.04	1.08	1.04	1.04	1.04	1.10	1.10	1.29			3.24	3.16	3.24
	velocity	4.92	7.73	7.73	8.17	7.87	8.17	8.17	8.17	7.73	7.73	7.79	7.37		7.87	8.07	7.87
Valette, Laura (FRA) (1997)	time	2.64	3.74	4.80	5.88	6.94	7.98	9.04	10.10	11.20	12.32		13.59	7 / 8			
reaction time 0.142	interval		1.10	1.06	1.08	1.06	1.04	1.06	1.06	1.10	1.12	1.27			3.24	3.16	3.28
	velocity	4.92	7.73	8.02	7.87	8.02	8.17	8.02	8.02	7.73	7.59	7.91	7.36		7.87	8.07	7.77

2021 Chinese East Region Athletics Meeting (Fuzhou, CHN)

FINAL

date 23-May-21 wind -0.5 m/s

CAA Hurdle Development (2021)

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

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lin Yuwei (CHN) (1999)	time	2.60	3.63	4.65	5.67	6.68	7.70	8.70	9.73	10.77	11.84		12.99	7 / 1			
reaction time 0.174	interval		1.03	1.02	1.02	1.01	1.02	1.00	1.03	1.04	1.07	1.15	PB		3.07	3.03	3.14
	velocity	5.00	8.25	8.33	8.33	8.42	8.33	8.50	8.25	8.17	7.94	8.74	7.70		8.31	8.42	8.12
Luo Xianyan (CHN) (1997)	time	2.70	3.78	4.85	5.90	6.94	7.99	9.04	10.10	11.16	12.26		13.53	5 / 2			
reaction time 0.181	interval		1.08	1.07	1.05	1.04	1.05	1.05	1.06	1.06	1.10	1.27			3.20	3.14	3.22
	velocity	4.81	7.87	7.94	8.10	8.17	8.10	8.10	8.02	8.02	7.73	7.91	7.39		7.97	8.12	7.92
Zheng Ninali (CHN) (1998)	time	2.77	3.85	4.89	5.92	6.95	7.99	9.07	10.15	11.23	12.33		13.58	4 / 3			
reaction time 0.217	interval		1.08	1.04	1.03	1.03	1.04	1.08	1.08	1.08	1.10	1.25			3.15	3.15	3.26
	velocity	4.69	7.87	8.17	8.25	8.25	8.17	7.87	7.87	7.87	7.73	8.04	7.36		8.10	8.10	7.82
Yuxi Lin (CHN) (2003)	time	2.70	3.80	4.87	5.92	6.96	8.03	9.11	10.19	11.29	12.39		13.60	2 / 4			
reaction time 0.242	interval		1.10	1.07	1.05	1.04	1.07	1.08	1.08	1.10	1.10	1.21	PB		3.22	3.19	3.28
	velocity	4.81	7.73	7.94	8.10	8.17	7.94	7.87	7.87	7.73	7.73	8.31	7.35		7.92	7.99	7.77
Yu Jiaru (CHN) (1999)	time	2.77	3.83	4.89	5.94	6.98	8.05	9.12	10.19	11.27	12.37		13.60	6 / 5			
reaction time 0.216	interval		1.06	1.06	1.05	1.04	1.07	1.07	1.07	1.08	1.10	1.23			3.17	3.18	3.25
	velocity	4.69	8.02	8.02	8.10	8.17	7.94	7.94	7.94	7.87	7.73	8.17	7.35		8.04	8.02	7.85
Wang Li (CHN) (1999)	time	2.71	3.80	4.85	5.93	6.98	8.05	9.12	10.25	11.35	12.49		13.77	8 / 6			
reaction time 0.167	interval		1.09	1.05	1.08	1.05	1.07	1.07	1.13	1.10	1.14	1.28			3.22	3.19	3.37
	velocity	4.80	7.80	8.10	7.87	8.10	7.94	7.94	7.52	7.73	7.46	7.85	7.26		7.92	7.99	7.57
Qin Hongyan (CHN) (2001)	time	2.73	3.84	4.93	6.01	7.09	8.17	9.27	10.37	11.49	12.65		13.93	3 / 7			
reaction time 0.179	interval		1.11	1.09	1.08	1.08	1.08	1.10	1.10	1.12	1.16	1.28	PB		3.28	3.26	3.38
	velocity	4.76	7.66	7.80	7.87	7.87	7.87	7.73	7.73	7.59	7.33	7.85	7.18		7.77	7.82	7.54

2021 Philippe Cup Athletics Invitational (Wuhan, CHN)

FINAL date 19-May-21 wind 0.2 m/s *CAA Hurdle Development (2021)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Xia Sining (CHN) (2003)	time	2.75	3.85	4.91	5.97	7.00	8.04	9.09	10.16	11.21	12.31		13.53	7 / 1			
reaction time 0.259	interval		1.10	1.06	1.06	1.03	1.04	1.05	1.07	1.05	1.10	1.22	PB		3.22	3.12	3.22
	velocity	4.73	7.73	8.02	8.02	8.25	8.17	8.10	7.94	8.10	7.73	8.24	7.39		7.92	8.17	7.92
Shi Jiali (CHN) (1997)	time	2.71	3.78	4.84	5.90	6.95	8.00	9.06	10.14	11.21	12.34		13.61	6 / 2			
reaction time 0.198	interval		1.07	1.06	1.06	1.05	1.05	1.06	1.08	1.07	1.13	1.27			3.19	3.16	3.28
	velocity	4.80	7.94	8.02	8.02	8.10	8.10	8.02	7.87	7.94	7.52	7.91	7.35		7.99	8.07	7.77
Lin Yuqian (CHN) (2003)	time	2.75	3.84	4.92	6.00	7.06	8.14	9.23	10.32	11.44	12.56		13.75	1 / 3			
reaction time 0.206	interval		1.09	1.08	1.08	1.06	1.08	1.09	1.09	1.12	1.12	1.19	PB		3.25	3.23	3.33
	velocity	4.73	7.80	7.87	7.87	8.02	7.87	7.80	7.80	7.59	7.59	8.45	7.27		7.85	7.89	7.66
You Na (CHN) (1993)	time	2.95	4.10	5.16	6.24	7.30	8.36	9.44	10.52	11.62	12.74		13.98	2 / 4			
reaction time 0.427	interval		1.15	1.06	1.08	1.06	1.06	1.08	1.08	1.10	1.12	1.24			3.29	3.20	3.30
	velocity	4.41	7.39	8.02	7.87	8.02	8.02	7.87	7.87	7.73	7.59	8.10	7.15		7.75	7.97	7.73
Yin Xiaoxia (CHN) (2000)	time	2.78	3.90	5.00	6.12	7.24	8.38	9.49	10.63	11.81	12.99		14.28	5 / 5			
reaction time 0.216	interval		1.12	1.10	1.12	1.12	1.14	1.11	1.14	1.18	1.18	1.29			3.34	3.37	3.50
	velocity	4.68	7.59	7.73	7.59	7.59	7.46	7.66	7.46	7.20	7.20	7.79	7.00		7.63	7.57	7.29
Zhong Xiaoli (CHN) 2003	time	2.80	3.93	5.07	6.19	7.29	8.39	9.52	10.64	11.93	13.21		14.55	8 / 6			
reaction time 0.225	interval		1.13	1.14	1.12	1.10	1.10	1.13	1.12	1.29	1.28	1.34			3.39	3.33	3.69
	velocity	4.64	7.52	7.46	7.59	7.73	7.73	7.52	7.59	6.59	6.64	7.50	6.87		7.52	7.66	6.91
Liu Sihui (CHN)	time	2.88	4.08	5.26	6.47	7.67	8.85	10.09	11.34	12.59	13.89		15.25	3 / 7			
reaction time 0.211	interval		1.20	1.18	1.21	1.20	1.18	1.24	1.25	1.25	1.30	1.36			3.59	3.62	3.80
	velocity	4.51	7.08	7.20	7.02	7.08	7.20	6.85	6.80	6.80	6.54	7.39	6.56		7.10	7.04	6.71

2021 Happy Chengdu Meeting (Chengdu, CHN)

FINAL date 15-May-21 wind -0.1 m/s *CAA Hurdle Development (2021)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wang Dou (CHN) (1993)	time	2.67	3.74	4.79	5.86	6.87	7.90	8.93	9.96	11.00	12.04		13.16	4 / 1			
reaction time 0.152	interval		1.07	1.05	1.07	1.01	1.03	1.03	1.03	1.04	1.04	1.12			3.19	3.07	3.11
	velocity	4.87	7.94	8.10	7.94	8.42	8.25	8.25	8.25	8.17	8.17	8.97	7.60		7.99	8.31	8.20
Wu Yanni (CHN) (1997)	time	2.70	3.74	4.79	5.83	6.83	7.87	8.89	9.93	10.97	12.02		13.19	7 / 2			
reaction time 0.188	interval		1.04	1.05	1.04	1.00	1.04	1.02	1.04	1.04	1.05	1.17			3.13	3.06	3.13
	velocity	4.81	8.17	8.10	8.17	8.50	8.17	8.33	8.17	8.17	8.10	8.59	7.58		8.15	8.33	8.15

2021 USATF Golden Games (Walnut, CA) (TV Analysis)

FINAL date 09-May-21 wind 2.0 m/s *Henson (2021) - Athlete First: 2021 Sydney McLaughlin 400m hurdles world record season*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.50	3.50	4.46	5.41	6.36	7.31	8.29	9.26	10.24	11.26		12.48	4 / 1			
reaction time 0.185	interval		1.00	0.96	0.95	0.95	0.95	0.98	0.97	0.98	1.02	1.22			2.91	2.88	2.97
	velocity	5.20	8.50	8.85	8.95	8.95	8.95	8.67	8.76	8.67	8.33	8.24	8.01		8.76	8.85	8.59

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

Sember, Cindy (GBR) (1994)	time	2.53	3.54	4.53	5.50	6.47	7.43	8.39	9.38	10.37	11.37		12.53	3 / 2			
reaction time 0.173	interval		1.01	0.99	0.97	0.97	0.96	0.96	0.99	0.99	1.00	1.16	PB		2.97	2.89	2.98
	velocity	5.14	8.42	8.59	8.76	8.76	8.85	8.85	8.59	8.59	8.50	8.66	7.98		8.59	8.82	8.56
Amusan, Tobi (NGR) (1997)	time	2.53	3.57	4.57	5.54	6.50	7.47	8.46	9.45	10.44	11.44		12.61	7 / 3			
reaction time 0.172	interval		1.04	1.00	0.97	0.96	0.97	0.99	0.99	0.99	1.00	1.17			3.01	2.92	2.98
	velocity	5.14	8.17	8.50	8.76	8.85	8.76	8.59	8.59	8.59	8.50	8.59	7.93		8.47	8.73	8.56
Charlton, Devynne (BAH) (19	time	2.43	3.46	4.44	5.42	6.38	7.36	8.34	9.32	10.34	11.36		12.61	1 / 4			
reaction time 0.147	interval		1.03	0.98	0.98	0.96	0.98	0.98	0.98	1.02	1.02	1.25	NR PB		2.99	2.92	3.02
	velocity	5.35	8.25	8.67	8.67	8.85	8.67	8.67	8.67	8.33	8.33	8.04	7.93		8.53	8.73	8.44
McLaughlin, Sydney (USA) (1	time	2.50	3.52	4.54	5.54	6.52	7.50	8.47	9.47	10.47	11.50		12.65	2 / 4			
reaction time 0.175	interval	7 steps	1.02	1.02	1.00	0.98	0.98	0.97	1.00	1.00	1.03	1.15	PB		3.04	2.93	3.03
	velocity	5.20	8.33	8.33	8.50	8.67	8.67	8.76	8.50	8.50	8.25	8.74	7.91		8.39	8.70	8.42
Porter, Tiffany (GBR) (1987)	time	2.47	3.47	4.45	5.43	6.40	7.37	8.37	9.35	10.40	11.44		12.69	5 / 6			
reaction time 0.156	interval		1.00	0.98	0.98	0.97	0.97	1.00	0.98	1.05	1.04	1.25			2.96	2.94	3.07
	velocity	5.26	8.50	8.67	8.67	8.76	8.76	8.50	8.67	8.10	8.17	8.04	7.88		8.61	8.67	8.31

2021 Ready Steady Tokyo (Tokyo, JPN)

FINAL date 09-May-21 wind -0.8 m/s

Onishi (2021) - race analysis of the domestic first-class women's 100m hurdles in the 2021 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tereda, Asuka (JPN) (1990)	time	2.58	3.63	4.65	5.66	6.66	7.67	8.70	9.73	10.79	11.86		12.99	5 / 1			
reaction time 0.134	interval		1.05	1.02	1.01	1.00	1.01	1.03	1.03	1.06	1.07	1.13			3.08	3.04	3.16
	velocity	5.04	8.10	8.33	8.42	8.50	8.42	8.25	8.25	8.02	7.94	8.89	7.70		8.28	8.39	8.07
Aoki, Masumi (JPN) (1994)	time	2.59	3.64	4.68	5.71	6.72	7.74	8.76	9.82	10.87	11.94		13.06	6 / 2			
reaction time 0.129	interval		1.05	1.04	1.03	1.01	1.02	1.02	1.06	1.05	1.07	1.12			3.12	3.05	3.18
	velocity	5.02	8.10	8.17	8.25	8.42	8.33	8.33	8.02	8.10	7.94	8.97	7.66		8.17	8.36	8.02
Kimura, Ayako (JPN) (1988)	time	2.61	3.65	4.68	5.68	6.72	7.75	8.79	9.84	10.92	12.00		13.22	1 / 3			
reaction time 0.143	interval		1.04	1.03	1.00	1.04	1.03	1.04	1.05	1.08	1.08	1.22			3.07	3.11	3.21
	velocity	4.98	8.17	8.25	8.50	8.17	8.25	8.17	8.10	7.87	7.87	8.24	7.56		8.31	8.20	7.94
Suzuki, Miho (JPN) (1996)	time	2.71	3.76	4.80	5.84	6.85	7.89	8.93	9.97	11.04	12.23		13.52	4 / 4			
reaction time 0.160	interval		1.05	1.04	1.04	1.01	1.04	1.04	1.04	1.07	1.19	1.29			3.13	3.09	3.30
	velocity	4.80	8.10	8.17	8.17	8.42	8.17	8.17	8.17	7.94	7.14	7.79	7.40		8.15	8.25	7.73
Shimano, Mao (JPN) (2001)	time	2.69	3.77	4.82	5.87	6.92	7.97	9.06	10.14	11.23	12.37		13.57	9 / 5			
reaction time 0.141	interval		1.08	1.05	1.05	1.05	1.05	1.09	1.08	1.09	1.14	1.20			3.18	3.19	3.31
	velocity	4.83	7.87	8.10	8.10	8.10	8.10	7.80	7.87	7.80	7.46	8.37	7.37		8.02	7.99	7.70
Okubo, Yuri (JPN) (1997)	time	2.64	3.73	4.78	5.83	6.89	7.95	9.00	10.11	11.22	12.33		13.61	3 / 6			
reaction time 0.148	interval		1.09	1.05	1.05	1.06	1.06	1.05	1.11	1.11	1.11	1.28			3.19	3.17	3.33
	velocity	4.92	7.80	8.10	8.10	8.02	8.02	8.10	7.66	7.66	7.66	7.85	7.35		7.99	8.04	7.66
Shimura, Hitomi (JPN) (1990)	time	2.65	3.76	4.81	5.86	6.90	7.96	9.02	10.10	11.18	12.27		13.63	7 / 7			
reaction time 0.138	interval		1.11	1.05	1.05	1.04	1.06	1.06	1.08	1.08	1.09	1.36			3.21	3.16	3.25
	velocity	4.91	7.66	8.10	8.10	8.17	8.02	8.02	7.87	7.87	7.80	7.39	7.34		7.94	8.07	7.85
Takeuchi, Maya (JPN) (1998)	time	2.67	3.77	4.86	5.93	7.01	8.10	9.19	10.31	11.44	12.58		13.66	8 / 8			
reaction time 0.156	interval		1.10	1.09	1.07	1.08	1.09	1.09	1.12	1.13	1.14	1.08			3.26	3.26	3.39
	velocity	4.87	7.73	7.80	7.94	7.87	7.80	7.80	7.59	7.52	7.46	9.31	7.32		7.82	7.82	7.52
Tanaka, Hikari (JPN) (1998)	time	2.67	3.75	4.81	5.87	6.92	7.98	9.06	10.14	11.22	12.36		13.82	2 / 9			
reaction time 0.140	interval	7 steps	1.08	1.06	1.06	1.05	1.06	1.08	1.08	1.08	1.14	1.46			3.20	3.19	3.30
	velocity	4.87	7.87	8.02	8.02	8.10	8.02	7.87	7.87	7.87	7.46	6.88	7.24		7.97	7.99	7.73

2021 Central China Athletics Meeting (Ji'an, CHN)

FINAL date 11-May-21 wind -0.6 m/s

CAA Hurdle Development (2021)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
You Na (CHN) (1993)	time	2.77	3.84	4.93	5.99	7.06	8.13	9.17	10.24	11.35	12.46		13.68	6 / 1			
reaction time	interval		1.07	1.09	1.06	1.07	1.07	1.04	1.07	1.11	1.11	1.22			3.22	3.18	3.29
	velocity	4.69	7.94	7.80	8.02	7.94	7.94	8.17	7.94	7.66	7.66	8.24	7.31		7.92	8.02	7.75
Xiao Juxiu (CHN) (1998)	time	2.72	3.81	4.89	5.99	7.04	8.11	9.18	10.27	11.37	12.49		13.70	4 / 2			
reaction time	interval		1.09	1.08	1.10	1.05	1.07	1.07	1.09	1.10	1.12	1.21			3.27	3.19	3.31
	velocity	4.78	7.80	7.87	7.73	8.10	7.94	7.94	7.80	7.73	7.59	8.31	7.30		7.80	7.99	7.70
Shi Jiali (CHN) (1997)	time	2.72	3.81	4.90	5.97	7.02	8.09	9.16	10.25	11.36	12.49		13.78	5 / 3			
reaction time	interval		1.09	1.09	1.07	1.05	1.07	1.07	1.09	1.11	1.13	1.29			3.25	3.19	3.33
	velocity	4.78	7.80	7.80	7.94	8.10	7.94	7.94	7.80	7.66	7.52	7.79	7.26		7.85	7.99	7.66
Yin Xiaoxia (CHN) (2000)	time	2.82	3.99	5.14	6.29	7.45	8.61	9.79	10.99	12.21	13.41		14.69	3 / 4			
reaction time	interval		1.17	1.15	1.15	1.16	1.16	1.18	1.20	1.22	1.20	1.28			3.47	3.50	3.62

	velocity	4.61	7.26	7.39	7.39	7.33	7.33	7.20	7.08	6.97	7.08	7.85	6.81		7.35	7.29	7.04
Liu Jingyi (CHN) (2000)	time	2.87	4.00	5.19	6.34	7.52	8.70	9.89	11.11	12.34	13.61		15.01	8 / 5			
reaction time	interval		1.13	1.19	1.15	1.18	1.18	1.19	1.22	1.23	1.27	1.40			3.47	3.55	3.72
	velocity	4.53	7.52	7.14	7.39	7.20	7.20	7.14	6.97	6.91	6.69	7.18	6.66		7.35	7.18	6.85
Deng Mengying (CHN) (2004)	time	2.85	4.05	5.25	6.44	7.61	8.79	10.01	11.23	12.44	13.68		15.03	2 / 6			
reaction time	interval		1.20	1.20	1.19	1.17	1.18	1.22	1.22	1.21	1.24	1.35			3.59	3.57	3.67
	velocity	4.56	7.08	7.08	7.14	7.26	7.20	6.97	6.97	7.02	6.85	7.44	6.65		7.10	7.14	6.95
Wang Yingjie (CHN) (2003)	time	2.97	4.27						12.31	13.73	15.18		16.67	9 / 7			
reaction time	interval		1.30						8.04	1.42	1.45	1.49					
	velocity	4.38	6.54						5.29	5.99	5.86	6.74	6.00				

2021 Mikio Oda Memorial (Hiroshima, JPN)

FINAL date 29-Apr-21 wind 1.6 m/s

Onishi (2021) - race analysis of the domestic first-class women's 100m hurdles in the 2021 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tereda, Asuka (JPN) (1990)	time	2.59	3.65	4.65	5.64	6.64	7.62	8.68	9.72	10.76	11.81		12.96	5 / 1			
reaction time	interval		1.06	1.00	0.99	1.00	0.98	1.06	1.04	1.04	1.05	1.15	NR PB		3.05	3.04	3.13
	velocity	5.02	8.02	8.50	8.59	8.50	8.67	8.02	8.17	8.17	8.10	8.74	7.72		8.36	8.39	8.15
Suzuki, Miho (JPN) (1996)	time	2.72	3.78	4.82	5.86	6.89	7.90	8.93	9.96	11.00	12.06		13.22	6 / 2			
reaction time	interval		1.06	1.04	1.04	1.03	1.01	1.03	1.03	1.04	1.06	1.16			3.14	3.07	3.13
	velocity	4.78	8.02	8.17	8.17	8.25	8.42	8.25	8.25	8.17	8.02	8.66	7.56		8.12	8.31	8.15
Okubo, Yuri (JPN) (1997)	time	2.66	3.71	4.74	5.78	6.80	7.83	8.87	9.93	10.99	12.06		13.31	8 / 3			
reaction time	interval		1.05	1.03	1.04	1.02	1.03	1.04	1.06	1.06	1.07	1.25	PB		3.12	3.09	3.19
	velocity	4.89	8.10	8.25	8.17	8.33	8.25	8.17	8.02	8.02	7.94	8.04	7.51		8.17	8.25	7.99
Aoki, Masumi (JPN) (1994)	time	2.63	3.68	4.75	5.81	6.85	7.91	8.96	10.02	11.10	12.19		13.34	3 / 4			
reaction time	interval		1.05	1.07	1.06	1.04	1.06	1.05	1.06	1.08	1.09	1.15			3.18	3.15	3.23
	velocity	4.94	8.10	7.94	8.02	8.17	8.02	8.10	8.02	7.87	7.80	8.74	7.50		8.02	8.10	7.89
Shimura, Hitomi (JPN) (1990)	time	2.67	3.74	4.81	5.86	6.89	7.92	8.97	10.03	11.12	12.21		13.37	4 / 5			
reaction time	interval		1.07	1.07	1.05	1.03	1.03	1.05	1.06	1.09	1.09	1.16			3.19	3.11	3.24
	velocity	4.87	7.94	7.94	8.10	8.25	8.25	8.10	8.02	7.80	7.80	8.66	7.48		7.99	8.20	7.87
Shimano, Mao (JPN) (2001)	time	2.63	3.71	4.75	5.80	6.82	7.86	8.91	10.00	11.08	12.19		13.40	2 / 6			
reaction time	interval		1.08	1.04	1.05	1.02	1.04	1.05	1.09	1.08	1.11	1.21			3.17	3.11	3.28
	velocity	4.94	7.87	8.17	8.10	8.33	8.17	8.10	7.80	7.87	7.66	8.31	7.46		8.04	8.20	7.77
Takeuchi, Maya (JPN) (1998)	time	2.63	3.72	4.76	5.81	6.86	7.91	8.98	10.06	11.17	12.30		13.52	1 / 7			
reaction time	interval		1.09	1.04	1.05	1.05	1.05	1.07	1.08	1.11	1.13	1.22	=PB		3.18	3.17	3.32
	velocity	4.94	7.80	8.17	8.10	8.10	8.10	7.94	7.87	7.66	7.52	8.24	7.40		8.02	8.04	7.68
Tanaka, Hikari (JPN) (1998)	time	2.67	3.72	4.80	5.86	6.92	7.98	9.05	10.14	11.23	12.33		13.55	7 / 8			
reaction time	interval	7 steps	1.05	1.08	1.06	1.06	1.06	1.07	1.09	1.09	1.10	1.22			3.19	3.19	3.28
	velocity	4.87	8.10	7.87	8.02	8.02	8.02	7.94	7.80	7.80	7.73	8.24	7.38		7.99	7.99	7.77

2021 USATF Grand Prix (Eugene, OR) (TV Analysis)

FINAL date 24-Apr-21 wind -0.3 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.47	3.47	4.45	5.40	6.37	7.32	8.29	9.28	10.26	11.26		12.46	5 / 1			
reaction time	interval		1.00	0.98	0.95	0.97	0.95	0.97	0.99	0.98	1.00	1.20			2.93	2.89	2.97
	velocity	5.26	8.50	8.67	8.95	8.76	8.95	8.76	8.59	8.67	8.50	8.37	8.03		8.70	8.82	8.59
Anderson, Britany (JAM) (200	time	2.53	3.54	4.54	5.50	6.47	7.47	8.46	9.46	10.50	11.57		12.82	8 / 2			
reaction time	interval		1.01	1.00	0.96	0.97	1.00	0.99	1.00	1.04	1.07	1.25			2.97	2.96	3.11
	velocity	5.14	8.42	8.50	8.85	8.76	8.50	8.59	8.50	8.17	7.94	8.04	7.80		8.59	8.61	8.20
Brooks, Taliyah (USA) (1995)	time	2.50	3.52	4.50	5.50	6.50	7.50	8.49	9.52	10.56	11.62		12.83	6 / 3			
reaction time	interval	7 steps	1.02	0.98	1.00	1.00	1.00	0.99	1.03	1.04	1.06	1.21			3.00	2.99	3.13
	velocity	5.20	8.33	8.67	8.50	8.50	8.50	8.59	8.25	8.17	8.02	8.31	7.79		8.50	8.53	8.15
McLaughlin, Sydney (USA) (1!	time	2.57	3.63	4.65	5.65	6.65	7.65	8.65	9.65	10.67	11.71		12.86	2 / 4			
reaction time	interval	7 steps	1.06	1.02	1.00	1.00	1.00	1.00	1.00	1.02	1.04	1.15	PB		3.08	3.00	3.06
	velocity	5.06	8.02	8.33	8.50	8.50	8.50	8.50	8.50	8.33	8.17	8.74	7.78		8.28	8.50	8.33

2021 Tom Jones Invitational (Gainesville, FL) (TV Analysi

FINAL date 17-Apr-21 wind 1.7 m/s

Henson (2021) - Athlete First: 2021 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.43	3.43	4.43	5.40	6.37	7.30	8.24	9.20	10.17	11.17		12.32	6 / 1			
reaction time	interval		1.00	1.00	0.97	0.97	0.93	0.94	0.96	0.97	1.00	1.15	NR PB		2.97	2.84	2.93
	velocity	5.35	8.50	8.50	8.76	8.76	9.14	9.04	8.85	8.76	8.50	8.74	8.12		8.59	8.98	8.70

2021 Bryan Clay Invitational (Azuza, CA) (TV Analysis)

FINAL date 16-Apr-21 wind 0.2 m/s

Henson (2021) - Athlete First: 2021 Sydney McLaughlin 400m hurdles world record season

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

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
McLaughlin, Sydney (USA) (1!		time	2.53	3.57	4.60	5.60	6.61	7.61	8.63	9.67	10.71	11.76		12.92	4 / 1			
reaction time		interval	7 steps	1.04	1.03	1.00	1.01	1.00	1.02	1.04	1.04	1.05	1.16	PB		3.07	3.03	3.13
		velocity	5.14	8.17	8.25	8.50	8.42	8.50	8.33	8.17	8.17	8.10	8.66	7.74		8.31	8.42	8.15

2021 East China District Meeting (Zhaoqing, CHN)

FINAL

date 24-Apr-21 wind -0.8 m/s *CAA Hurdle Development (2021)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lin Yuwei (CHN) (1999)		time	2.59	3.64	4.68	5.70	6.73	7.73	8.75	9.80	10.84	11.89		13.03	2 / 1			
reaction time	0.137	interval		1.05	1.04	1.02	1.03	1.00	1.02	1.05	1.04	1.05	1.14	PB		3.11	3.05	3.14
		velocity	5.02	8.10	8.17	8.33	8.25	8.50	8.33	8.10	8.17	8.10	8.82	7.67		8.20	8.36	8.12
Dai Yiru (CHN) (2001)		time	2.60	3.64	4.67	5.69	6.71	7.72	8.76	9.81	10.86	11.96		13.13	5 / 2			
reaction time	0.178	interval		1.04	1.03	1.02	1.02	1.01	1.04	1.05	1.05	1.10	1.17	PB		3.09	3.07	3.20
		velocity	5.00	8.17	8.25	8.33	8.33	8.42	8.17	8.10	8.10	7.73	8.59	7.62		8.25	8.31	7.97
Chen Jiamin (CHN) (1996)		time	2.65	3.70	4.75	5.79	6.84	7.87	8.92	9.98	11.01	12.10		13.26	9 / 3			
reaction time	0.159	interval		1.05	1.05	1.04	1.05	1.03	1.05	1.06	1.03	1.09	1.16			3.14	3.13	3.18
		velocity	4.91	8.10	8.10	8.17	8.10	8.25	8.10	8.02	8.25	7.80	8.66	7.54		8.12	8.15	8.02
Deng Xuelin (CHN) (1998)		time	2.69	3.77	4.80	5.84	6.91	7.95	8.99	10.07	11.14	12.23		13.46	7 / 4			
reaction time	0.203	interval		1.08	1.03	1.04	1.07	1.04	1.04	1.08	1.07	1.09	1.23			3.15	3.15	3.24
		velocity	4.83	7.87	8.25	8.17	7.94	8.17	8.17	7.87	7.94	7.80	8.17	7.43		8.10	8.10	7.87
You Na (CHN) (1993)		time	2.68	3.83	4.90	5.98	7.05	8.12	9.18	10.26	11.34	12.42		13.62	4 / 5			
reaction time	0.157	interval		1.15	1.07	1.08	1.07	1.07	1.06	1.08	1.08	1.08	1.20			3.30	3.20	3.24
		velocity	4.85	7.39	7.94	7.87	7.94	7.94	8.02	7.87	7.87	7.87	8.38	7.34		7.73	7.97	7.87
Yu Jiaru (CHN) (1999)		time	2.70	3.80	4.87	5.94	7.00	8.06	9.14	10.23	11.31	12.42		13.62	8 / 6			
reaction time	0.243	interval		1.10	1.07	1.07	1.06	1.06	1.08	1.09	1.08	1.11	1.20			3.24	3.20	3.28
		velocity	4.81	7.73	7.94	7.94	8.02	8.02	7.87	7.80	7.87	7.66	8.38	7.34		7.87	7.97	7.77
Luo Xianyan (CHN) (1997)		time	2.69	3.80	4.90	5.95	7.02	8.07	9.16	10.23	11.31	12.40		13.63	3 / 7			
reaction time	0.178	interval		1.11	1.10	1.05	1.07	1.05	1.09	1.07	1.08	1.09	1.23			3.26	3.21	3.24
		velocity	4.83	7.66	7.73	8.10	7.94	8.10	7.80	7.94	7.87	7.80	8.17	7.34		7.82	7.94	7.87
Shi Jiali (CHN) (1997)		time	2.69	3.80	4.88	5.94	6.99	8.06	9.12	10.21	11.30	12.40		13.67	6 / 8			
reaction time	0.188	interval		1.11	1.08	1.06	1.05	1.07	1.06	1.09	1.09	1.10	1.27			3.25	3.18	3.28
		velocity	4.83	7.66	7.87	8.02	8.10	7.94	8.02	7.80	7.80	7.73	7.91	7.32		7.85	8.02	7.77

Heat 2

date 24-Apr-21 wind 0.6 m/s *CAA Hurdle Development (2021)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shi Jiali (CHN) (1997)		time	2.67	3.77	4.84	5.87	6.91	7.94	8.99	10.07	11.14	12.24		13.49	4 / 1			
reaction time	0.170	interval		1.10	1.07	1.03	1.04	1.03	1.05	1.08	1.07	1.10	1.25			3.20	3.12	3.25
		velocity	4.87	7.73	7.94	8.25	8.17	8.25	8.10	7.87	7.94	7.73	8.04	7.41		7.97	8.17	7.85
You Na (CHN) (1993)		time	2.72	3.82	4.87	5.93	7.00	8.04	9.07	10.15	11.21	12.30		13.51	6 / 2			
reaction time	0.167	interval		1.10	1.05	1.06	1.07	1.04	1.03	1.08	1.06	1.09	1.21			3.21	3.14	3.23
		velocity	4.78	7.73	8.10	8.02	7.94	8.17	8.25	7.87	8.02	7.80	8.31	7.40		7.94	8.12	7.89
Chen Jiamin (CHN) (1996)		time	2.67	3.75	4.81	5.89	6.96	8.00	9.07	10.14	11.24	12.36		13.56	7 / 3			
reaction time	0.165	interval		1.08	1.06	1.08	1.07	1.04	1.07	1.07	1.10	1.12	1.20			3.22	3.18	3.29
		velocity	4.87	7.87	8.02	7.87	7.94	8.17	7.94	7.94	7.73	7.59	8.37	7.37		7.92	8.02	7.75
Luo Xianyan (CHN) (1997)		time	2.71	3.84	4.92	5.99	7.04	8.11	9.17	10.22	11.30	12.39		13.67	8 / 4			
reaction time	0.192	interval		1.13	1.08	1.07	1.05	1.07	1.06	1.05	1.08	1.09	1.28			3.28	3.18	3.22
		velocity	4.80	7.52	7.87	7.94	8.10	7.94	8.02	8.10	7.87	7.80	7.85	7.32		7.77	8.02	7.92
Jiang Liyunzhe (CHN) (2002)		time	2.75	3.89	5.00	6.09	7.17	8.26	9.34	10.47	11.60	12.71		13.96	3 / 5			
reaction time		interval		1.14	1.11	1.09	1.08	1.09	1.08	1.13	1.13	1.11	1.25			3.34	3.25	3.37
		velocity	4.73	7.46	7.66	7.80	7.87	7.80	7.87	7.52	7.52	7.66	8.04	7.16		7.63	7.85	7.57
Zhang Yan (CHN) (2001)		time	2.80	3.96	5.10	6.24	7.39	8.52	9.67	10.84	12.03	13.25		14.58	5 / 6			
reaction time	0.195	interval		1.16	1.14	1.14	1.15	1.13	1.15	1.17	1.19	1.22	1.33			3.44	3.43	3.58
		velocity	4.64	7.33	7.46	7.46	7.39	7.52	7.39	7.26	7.14	6.97	7.56	6.86		7.41	7.43	7.12

Heat 1

date 24-Apr-21 wind 0.5 m/s *CAA Hurdle Development (2021)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Deng Xuelin (CHN) (1998)		time	2.72	3.79	4.82	5.87	6.91	7.97	9.03	10.11	11.19	12.31		13.54	7 / 1			
reaction time	0.216	interval		1.07	1.03	1.05	1.04	1.06	1.06	1.08	1.08	1.12	1.23			3.15	3.16	3.28
		velocity	4.78	7.94	8.25	8.10	8.17	8.02	8.02	7.87	7.87	7.59	8.17	7.39		8.10	8.07	7.77
Dai Yiru (CHN) (2001)		time	2.65	3.72	4.76	5.81	6.85	7.89	8.96	10.08	11.16	12.31		13.54	6 / 2			
reaction time	0.179	interval		1.07	1.04	1.05	1.04	1.04	1.07	1.12	1.08	1.15	1.23			3.16	3.15	3.35
		velocity	4.91	7.94	8.17	8.10	8.17	8.17	7.94	7.59	7.87	7.39	8.17	7.39		8.07	8.10	7.61
Yu Jiaru (CHN) (1999)		time	2.74	3.80	4.87	5.92	6.97	8.01	9.08	10.14	11.23	12.33		13.56	8 / 3			

reaction time 0.191	interval		1.06	1.07	1.05	1.05	1.04	1.07	1.06	1.09	1.10	1.23			3.18	3.16	3.25
	velocity	4.74	8.02	7.94	8.10	8.10	8.17	7.94	8.02	7.80	7.73	8.17	7.37		8.02	8.07	7.85
Lin Yuwei (CHN) (1999)	time	2.62	3.69	4.73	5.79	6.86	7.93	8.99	10.11	11.24	12.39		13.75	4 / 4			
reaction time 0.147	interval		1.07	1.04	1.06	1.07	1.07	1.06	1.12	1.13	1.15	1.36			3.17	3.20	3.40
	velocity	4.96	7.94	8.17	8.02	7.94	7.94	8.02	7.59	7.52	7.39	7.39	7.27		8.04	7.97	7.50
Liu Xinyu (CHN) (2002)	time	2.82	3.94	5.05	6.13	7.26	8.36	9.49	10.64	11.81	13.00		14.29	5 / 5			
reaction time 0.277	interval	7 steps	1.12	1.11	1.08	1.13	1.10	1.13	1.15	1.17	1.19	1.29	PB		3.31	3.36	3.51
	velocity	4.61	7.59	7.66	7.87	7.52	7.73	7.52	7.39	7.26	7.14	7.79	7.00		7.70	7.59	7.26

2021 Yangtze River Delta Athletics Meeting (Shaoxing, CHN)

FINAL date 08-Apr-21 wind -0.1 m/s *CAA Hurdle Development (2021)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lin Yuwei (CHN) (1999)	time	2.60	3.64	4.68	5.72	6.72	7.74	8.78	9.82	10.88	11.92		13.08	4 / 1			
reaction time	interval		1.04	1.04	1.04	1.00	1.02	1.04	1.04	1.06	1.04	1.16	PB		3.12	3.06	3.14
	velocity	5.00	8.17	8.17	8.17	8.50	8.33	8.17	8.17	8.02	8.17	8.66	7.65		8.17	8.33	8.12
Wang Dou (CHN) (1993)	time	2.72	3.80	4.84	5.88	6.92	7.96	9.00	10.06	11.12	12.16		13.27	3 / 2			
reaction time	interval		1.08	1.04	1.04	1.04	1.04	1.04	1.06	1.06	1.04	1.11			3.16	3.12	3.16
	velocity	4.78	7.87	8.17	8.17	8.17	8.17	8.17	8.02	8.02	8.17	9.05	7.54		8.07	8.17	8.07
Luo Xianyan (CHN) (1997)	time	2.72	3.82	4.88	5.94	7.00	8.06	9.12	10.20	11.28	12.40		13.60	6 / 3			
reaction time	interval		1.10	1.06	1.06	1.06	1.06	1.06	1.08	1.08	1.12	1.20			3.22	3.18	3.28
	velocity	4.78	7.73	8.02	8.02	8.02	8.02	8.02	7.87	7.87	7.59	8.38	7.35		7.92	8.02	7.77
Jiang Liyunzhe (CHN) (2002)	time	2.76	3.88	4.96	6.04	7.12	8.20	9.30	10.38	11.48	12.62		13.80	8 / 4			
reaction time	interval		1.12	1.08	1.08	1.08	1.08	1.10	1.08	1.10	1.14	1.18			3.28	3.26	3.32
	velocity	4.71	7.59	7.87	7.87	7.87	7.87	7.73	7.87	7.73	7.46	8.52	7.25		7.77	7.82	7.68
Yu Jiaru (CHN) (1999)	time	2.80	3.88	4.92	6.00	7.08	8.18	9.26	10.34	11.46	12.60		13.83	7 / 5			
reaction time	interval		1.08	1.04	1.08	1.08	1.10	1.08	1.08	1.12	1.14	1.23			3.20	3.26	3.34
	velocity	4.64	7.87	8.17	7.87	7.87	7.73	7.87	7.87	7.59	7.46	8.17	7.23		7.97	7.82	7.63
Wang Li (CHN) (1999)	time	2.72	3.80	4.88	6.00	7.08	8.20	9.32	10.44	11.60	12.76		14.05	5 / 6			
reaction time	interval		1.08	1.08	1.12	1.08	1.12	1.12	1.12	1.16	1.16	1.29			3.28	3.32	3.44
	velocity	4.78	7.87	7.87	7.59	7.87	7.59	7.59	7.59	7.33	7.33	7.79	7.12		7.77	7.68	7.41
Qin Hongyan (CHN) (2001)	time	2.76	3.88	5.00	6.14	7.24	8.38	9.50	10.64	11.78	12.94		14.24	1 / 7			
reaction time	interval		1.12	1.12	1.14	1.10	1.14	1.12	1.14	1.14	1.16	1.30			3.38	3.36	3.44
	velocity	4.71	7.59	7.59	7.46	7.73	7.46	7.59	7.46	7.46	7.33	7.73	7.02		7.54	7.59	7.41

2021 National Grand Prix (Chengdu, CHN)

FINAL date 02-Apr-21 wind 0.1 m/s *CAA Hurdle Development (2021)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Chen Jiamin (CHN) (1996)	time	2.63	3.70	4.74	5.78	6.80	7.82	8.88	9.92	10.97	12.04		13.20	8 / 1			
reaction time 0.201	interval		1.07	1.04	1.04	1.02	1.02	1.06	1.04	1.05	1.07	1.16	PB		3.15	3.10	3.16
	velocity	4.94	7.94	8.17	8.17	8.33	8.33	8.02	8.17	8.10	7.94	8.66	7.58		8.10	8.23	8.07
Wu Yanni (CHN) (1997)	time	2.72	3.77	4.84	5.86	6.87	7.90	8.92	9.96	11.01	12.07		13.25	5 / 2			
reaction time 0.212	interval		1.05	1.07	1.02	1.01	1.03	1.02	1.04	1.05	1.06	1.18			3.14	3.06	3.15
	velocity	4.78	8.10	7.94	8.33	8.42	8.25	8.33	8.17	8.10	8.02	8.52	7.55		8.12	8.33	8.10
Dai Yiru (CHN) (2001)	time	2.64	3.68	4.72	5.72	6.76	7.78	8.80	9.86	10.96	12.10		13.37	3 / 3			
reaction time 0.201	interval		1.04	1.04	1.00	1.04	1.02	1.02	1.06	1.10	1.14	1.27			3.08	3.08	3.30
	velocity	4.92	8.17	8.17	8.50	8.17	8.33	8.33	8.02	7.73	7.46	7.91	7.48		8.28	8.28	7.73
You Na (CHN) (1993)	time	2.72	3.80	4.85	5.88	6.90	7.94	9.02	10.10	11.19	12.30		13.50	4 / 4			
reaction time 0.208	interval		1.08	1.05	1.03	1.02	1.04	1.08	1.08	1.09	1.11	1.20			3.16	3.14	3.28
	velocity	4.78	7.87	8.10	8.25	8.33	8.17	7.87	7.87	7.80	7.66	8.38	7.41		8.07	8.12	7.77
Shi Jiali (CHN) (1997)	time	2.72	3.80	4.87	5.94	6.97	8.01	9.08	10.14	11.25	12.38		13.64	6 / 5			
reaction time 0.199	interval		1.08	1.07	1.07	1.03	1.04	1.07	1.06	1.11	1.13	1.26			3.22	3.14	3.30
	velocity	4.78	7.87	7.94	7.94	8.25	8.17	7.94	8.02	7.66	7.52	7.98	7.33		7.92	8.12	7.73
Xiao Juxiu (CHN) (1998)	time	2.69	3.82	4.92	6.00	7.08	8.17	9.27	10.36	11.50	12.62		13.87	7 / 6			
reaction time 0.202	interval		1.13	1.10	1.08	1.08	1.09	1.10	1.09	1.14	1.12	1.25			3.31	3.27	3.35
	velocity	4.83	7.52	7.73	7.87	7.87	7.80	7.73	7.80	7.46	7.59	8.04	7.21		7.70	7.80	7.61
Ren Shimei (CHN) (1996)	time	2.81	3.94	5.08	6.22	7.34	8.48	9.61	10.73	11.86	13.02		14.25	2 / 7			
reaction time 0.229	interval		1.13	1.14	1.14	1.12	1.14	1.13	1.12	1.13	1.16	1.23			3.41	3.39	3.41
	velocity	4.63	7.52	7.46	7.46	7.59	7.46	7.52	7.59	7.52	7.33	8.17	7.02		7.48	7.52	7.48
Chen Yuyang (CHN) (2002)	time	2.84	3.97	5.09	6.20	7.30	8.42	9.54	10.66	11.78	12.94		14.26	1 / 8			
reaction time 0.253	interval		1.13	1.12	1.11	1.10	1.12	1.12	1.12	1.12	1.16	1.32			3.36	3.34	3.40
	velocity	4.58	7.52	7.59	7.66	7.73	7.59	7.59	7.59	7.59	7.33	7.61	7.01		7.59	7.63	7.50

Heat 3

date 02-Apr-21 wind 1.0 m/s *CAA Hurdle Development (2021)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
You Na (CHN) (1993)		time	2.72	3.82	4.86	5.90	6.98	8.04	9.08	10.14	11.22	12.30		13.50	5 / 1			
reaction time	0.173	interval		1.10	1.04	1.04	1.08	1.06	1.04	1.06	1.08	1.08	1.20			3.18	3.18	3.22
		velocity	4.78	7.73	8.17	8.17	7.87	8.02	8.17	8.02	7.87	7.87	8.38	7.41		8.02	8.02	7.92
Dai Yiru (CHN) (2001)		time	2.64	3.72	4.78	5.82	6.90	7.96	9.02	10.08	11.18	12.26		13.51	4 / 2			
reaction time	0.198	interval		1.08	1.06	1.04	1.08	1.06	1.06	1.06	1.10	1.08	1.25			3.18	3.20	3.24
		velocity	4.92	7.87	8.02	8.17	7.87	8.02	8.02	8.02	7.73	7.87	8.04	7.40		8.02	7.97	7.87
Chen Yuyang (CHN) (2002)		time	2.78	3.88	4.98	6.06	7.12	8.22	9.28	10.38	11.50	12.66		13.91	3 / 3			
reaction time	0.200	interval		1.10	1.10	1.08	1.06	1.10	1.06	1.10	1.12	1.16	1.25	PB		3.28	3.22	3.38
		velocity	4.68	7.73	7.73	7.87	8.02	7.73	8.02	7.73	7.59	7.33	8.04	7.19		7.77	7.92	7.54
Wei Yuhui (CHN) (2002)		time	2.76	3.88	4.98	6.08	7.16	8.26	9.36	10.48	11.64	12.80		14.13	6 / 4			
reaction time	0.168	interval		1.12	1.10	1.10	1.08	1.10	1.10	1.12	1.16	1.16	1.33	PB		3.32	3.28	3.44
		velocity	4.71	7.59	7.73	7.73	7.87	7.73	7.73	7.59	7.33	7.33	7.56	7.08		7.68	7.77	7.41
Liu Xinyao (CHN) (2002)		time	2.92	4.14	5.44	6.72	7.98	9.24	10.50	11.78	13.10	14.42		15.90	7 / 5			
reaction time	0.183	interval		1.22	1.30	1.28	1.26	1.26	1.26	1.28	1.32	1.32	1.48			3.80	3.78	3.92
		velocity	4.45	6.97	6.54	6.64	6.75	6.75	6.75	6.64	6.44	6.44	6.79	6.29		6.71	6.75	6.51
Zhong Xiaoli (CHN) (2003)		time	2.92	4.20	5.46	6.74	8.04	9.36	10.68	12.08	13.52	14.96		nt	8 / 6			
reaction time		interval		1.28	1.26	1.28	1.30	1.32	1.32	1.40	1.44	1.44				3.82	3.94	4.28
		velocity	4.45	6.64	6.75	6.64	6.54	6.44	6.44	6.07	5.90	5.90				6.68	6.47	5.96

Heat 2

date 02-Apr-21 wind 0.4 m/s *CAA Hurdle Development (2021)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shi Jiali (CHN) (1997)		time	2.68	3.78	4.86	5.92	6.98	8.04	9.10	10.18	11.28	12.40		13.66	3 / 1			
reaction time	0.181	interval		1.10	1.08	1.06	1.06	1.06	1.06	1.08	1.10	1.12	1.26			3.24	3.18	3.30
		velocity	4.85	7.73	7.87	8.02	8.02	8.02	8.02	7.87	7.73	7.59	7.98	7.32		7.87	8.02	7.73
Ren Shimei (CHN) (1996)		time	2.74	3.86	4.98	6.10	7.20	8.30	9.42	10.56	11.68	12.82		14.09	4 / 2			
reaction time	0.195	interval		1.12	1.12	1.12	1.10	1.10	1.12	1.14	1.12	1.14	1.27			3.36	3.32	3.40
		velocity	4.74	7.59	7.59	7.59	7.73	7.73	7.59	7.46	7.59	7.46	7.91	7.10		7.59	7.68	7.50
Gong Qiudan (CHN) (2003)		time	2.74	3.90	5.06	6.20	7.34	8.46	9.60	10.76	11.90	13.08		14.35	5 / 3			
reaction time	0.164	interval		1.16	1.16	1.14	1.14	1.12	1.14	1.16	1.14	1.18	1.27			3.46	3.40	3.48
		velocity	4.74	7.33	7.33	7.46	7.46	7.59	7.46	7.33	7.46	7.20	7.91	6.97		7.37	7.50	7.33
Leng Xiping (CHN) (2001)		time	2.80	3.96	5.12	6.24	7.38	8.52	9.66	10.82	12.00	13.16		14.48	2 / 4			
reaction time	0.449	interval		1.16	1.16	1.12	1.14	1.14	1.14	1.16	1.18	1.16	1.32			3.44	3.42	3.50
		velocity	4.64	7.33	7.33	7.59	7.46	7.46	7.46	7.33	7.20	7.33	7.61	6.91		7.41	7.46	7.29
Li Shiyu (CHN) (2005)		time	2.90	4.12	5.32	6.54	7.72	8.92	10.12	11.32	12.54	13.76		15.10	6 / 5			
reaction time	0.178	interval		1.22	1.20	1.22	1.18	1.20	1.20	1.20	1.22	1.22	1.34			3.64	3.58	3.64
		velocity	4.48	6.97	7.08	6.97	7.20	7.08	7.08	7.08	6.97	6.97	7.50	6.62		7.01	7.12	7.01

Heat 1

date 02-Apr-21 wind 0.4 m/s *CAA Hurdle Development (2021)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Yanni (CHN) (1997)		time	2.68	3.74	4.80	5.82	6.84	7.86	8.88	9.94	11.00	12.12		13.42	5 / 1			
reaction time	0.153	interval		1.06	1.06	1.02	1.02	1.02	1.02	1.06	1.06	1.12	1.30			3.14	3.06	3.24
		velocity	4.85	8.02	8.02	8.33	8.33	8.33	8.33	8.02	8.02	7.59	7.73	7.45		8.12	8.33	7.87
Xiao Juxiu (CHN) (1998)		time	2.70	3.82	4.92	6.00	7.08	8.16	9.24	10.30	11.42	12.54		13.79	2 / 2			
reaction time	0.175	interval		1.12	1.10	1.08	1.08	1.08	1.08	1.06	1.12	1.12	1.25			3.30	3.24	3.30
		velocity	4.81	7.59	7.73	7.87	7.87	7.87	7.87	8.02	7.59	7.59	8.04	7.25		7.73	7.87	7.73
Chen Jiamin (CHN) (1996)		time	2.68	3.76	4.82	5.86	6.96	8.04	9.14	10.26	11.40	12.54		13.82	4 / 3			
reaction time	0.193	interval		1.08	1.06	1.04	1.10	1.08	1.10	1.12	1.14	1.14	1.28			3.18	3.28	3.40
		velocity	4.85	7.87	8.02	8.17	7.73	7.87	7.73	7.59	7.46	7.46	7.85	7.24		8.02	7.77	7.50
Kong Rui (CHN) (2001)		time	2.98	4.16	5.32	6.46	7.60	8.76	9.90	11.06	12.24	13.44		14.71	3 / 4			
reaction time	0.216	interval		1.18	1.16	1.14	1.14	1.16	1.14	1.16	1.18	1.20	1.27			3.48	3.44	3.54
		velocity	4.36	7.20	7.33	7.46	7.46	7.33	7.46	7.33	7.20	7.08	7.91	6.80		7.33	7.41	7.20
Chen Xianying (CHN) (2003)		time	2.74	3.90	5.04	6.20	7.40	8.64	9.86	11.12	12.46	13.88		15.48	6 / 5			
reaction time	0.171	interval		1.16	1.14	1.16	1.20	1.24	1.22	1.26	1.34	1.42	1.60			3.46	3.66	4.02
		velocity	4.74	7.33	7.46	7.33	7.08	6.85	6.97	6.75	6.34	5.99	6.28	6.46		7.37	6.97	6.34
Zhong Xiaoli (CHN) (2003)		time	2.78	4.38										dnf	7 / --			
reaction time	0.247	interval		1.60														
		velocity	4.68	5.31														

2021 National Indoor Grand Prix (Jinan, CHN)

FINAL

date 18-Mar-21 *CAA Hurdle Development (2021)*

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

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

Dai Yiru (CHN) (2001)	time	2.60	3.65	4.71	5.74	6.75							8.13	4 / 1			
reaction time 0.161	interval		1.05	1.06	1.03	1.01						1.38	PB		3.14		
	velocity	5.00	8.10	8.02	8.25	8.42						9.42	7.38		8.12		
Chen Jiamin (CHN) (1996)	time	2.59	3.65	4.69	5.73	6.77							8.14	3 / 2			
reaction time 0.133	interval		1.06	1.04	1.04	1.04						1.37	PB		3.14		
	velocity	5.02	8.02	8.17	8.17	8.17						9.49	7.37		8.12		
Luo Xianyan (CHN) (1997)	time	2.66	3.74	4.79	5.84	6.87							8.34	6 / 3			
reaction time 0.168	interval		1.08	1.05	1.05	1.03						1.47	PB		3.18		
	velocity	4.89	7.87	8.10	8.10	8.25						8.84	7.19		8.02		
Wang Qingling (CHN) (1993)	time	2.69	3.74	4.79	5.84	6.87							8.45	5 / 4			
reaction time 0.185	interval		1.05	1.05	1.05	1.03						1.58			3.15		
	velocity	4.83	8.10	8.10	8.10	8.25						8.23	7.10		8.10		
Lun Xinyu (CHN) (1998)	time	2.69	3.81	4.93	6.03	7.14							8.62	2 / 5			
reaction time 0.167	interval		1.12	1.12	1.10	1.11						1.48	PB		3.34		
	velocity	4.83	7.59	7.59	7.73	7.66						8.78	6.96		7.63		
Shen Muhan (CHN) (1997)	time	2.81	3.99	5.13	6.25	7.40							8.96	1 / 6			
reaction time 0.222	interval		1.18	1.14	1.12	1.15						1.56			3.44		
	velocity	4.63	7.20	7.46	7.59	7.39						8.33	6.70		7.41		

2021 National Indoor Grand Prix (Chengdu, CHN)

A FINAL

date 13-Mar-21

CAA Hurdle Development (2021)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lin Yuwei (CHN) (1999)	time	2.64	3.68	4.72	5.74	6.77							8.12	5 / 1			
reaction time 0.158	interval		1.04	1.04	1.02	1.03						1.35	PB		3.10		
	velocity	4.92	8.17	8.17	8.33	8.25						9.63	7.39		8.23		
Jiang Liyunzhe (CHN) (2002)	time	2.72	3.84	4.96	6.05	7.14							8.59	3 / 2			
reaction time 0.211	interval		1.12	1.12	1.09	1.09						1.45	PB		3.33		
	velocity	4.78	7.59	7.59	7.80	7.80						8.97	6.98		7.66		
Chen Yuyang (CHN) (2002)	time	2.77	3.87	4.96	6.08	7.16							8.65	4 / 3			
reaction time 0.201	interval		1.10	1.09	1.12	1.08						1.49	PB		3.31		
	velocity	4.69	7.73	7.80	7.59	7.87						8.72	6.94		7.70		
Gong Qiudan (CHN) (2003)	time	2.72	3.88	5.04	6.16	7.28							8.76	1 / 4			
reaction time 0.182	interval		1.16	1.16	1.12	1.12						1.48	PB		3.44		
	velocity	4.78	7.33	7.33	7.59	7.59						8.78	6.85		7.41		
Chen Xianying (CHN) (2003)	time	2.72	3.86	5.02	6.16	7.36							9.00	2 / 5			
reaction time 0.172	interval		1.14	1.16	1.14	1.20						1.64			3.44		
	velocity	4.78	7.46	7.33	7.46	7.08						7.93	6.67		7.41		

B FINAL

date 13-Mar-21

CAA Hurdle Development (2021)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Yanni (CHN) (1997)	time	2.67	3.73	4.78	5.80	6.82							8.18	4 / 1			
reaction time 0.140	interval		1.06	1.05	1.02	1.02						1.36	PB		3.13		
	velocity	4.87	8.02	8.10	8.33	8.33						9.56	7.33		8.15		
Chen Yinfeng (CHN) (1998)	time	2.67	3.78	4.84	5.87	6.92							8.34	6 / 2			
reaction time 0.159	interval		1.11	1.06	1.03	1.05						1.42	=PB		3.20		
	velocity	4.87	7.66	8.02	8.25	8.10						9.15	7.19		7.97		
Luo Xianyan (CHN) (1997)	time	2.69	3.78	4.86	5.90	6.94							8.38	3 / 3			
reaction time 0.171	interval		1.09	1.08	1.04	1.04						1.44			3.21		
	velocity	4.83	7.80	7.87	8.17	8.17						9.03	7.16		7.94		
Xiao Juxiu (CHN) (1998)	time	2.68	3.78	4.85	5.90	6.96							8.38	5 / 4			
reaction time 0.151	interval		1.10	1.07	1.05	1.06						1.42	PB		3.22		
	velocity	4.85	7.73	7.94	8.10	8.02						9.15	7.16		7.92		
Wei Yuhui (CHN) (2002)	time	2.75	3.85	4.94	6.04	7.14							8.68	2 / 5			
reaction time 0.160	interval		1.10	1.09	1.10	1.10						1.54			3.29		
	velocity	4.73	7.73	7.80	7.73	7.73						8.44	6.91		7.75		

Heat 3

date 13-Mar-21

CAA Hurdle Development (2021)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Yanni (CHN) (1997)	time	2.70	3.77	4.82	5.85	6.87							8.32	5 / 1			
reaction time 0.171	interval		1.07	1.05	1.03	1.02						1.45	PB		3.15		
	velocity	4.81	7.94	8.10	8.25	8.33						8.97	7.21		8.10		
Wei Yuhui (CHN) (2002)	time	2.77	3.87	4.95	6.02	7.09							8.64	4 / 2			
reaction time 0.171	interval		1.10	1.08	1.07	1.07						1.55	PB		3.25		

		velocity	4.69	7.73	7.87	7.94	7.94						8.39	6.94		7.85		
Lin Yuwei (CHN) (1999)		time	2.67	3.73	4.84	5.96	7.09							8.68	6 / 3			
reaction time	0.164	interval		1.06	1.11	1.12	1.13						1.59			3.29		
		velocity	4.87	8.02	7.66	7.59	7.52						8.18	6.91		7.75		
Wu Zheng (CHN) (2001)		time	2.73	3.87	4.99	6.09	7.22							8.74	1 / 4			
reaction time	0.206	interval		1.14	1.12	1.10	1.13						1.52	PB		3.36		
		velocity	4.76	7.46	7.59	7.73	7.52						8.55	6.86		7.59		
Li Xiangrong (CHN) (2002)		time	2.83	4.03	5.20	6.35	7.52							9.10	3 / 5			
reaction time	0.196	interval		1.20	1.17	1.15	1.17						1.58	PB		3.52		
		velocity	4.59	7.08	7.26	7.39	7.26						8.23	6.59		7.24		
Liu Miao (CHN) (2003)		time	3.00	4.27	5.52	6.77	8.04							9.75	2 / 6			
reaction time	0.245	interval		1.27	1.25	1.25	1.27						1.71	PB		3.77		
		velocity	4.33	6.69	6.80	6.80	6.69						7.60	6.15		6.76		

Heat 2

date 13-Mar-21

CAA Hurdle Development (2021)

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lou Xianyan (CHN) (1997)		time	2.72	3.82	4.89	5.94	6.99							8.45	4 / 1			
reaction time	0.174	interval		1.10	1.07	1.05	1.05						1.46			3.22		
		velocity	4.78	7.73	7.94	8.10	8.10						8.90	7.10		7.92		
Zhong Xiaoli (CHN) (2003)		time	2.74	3.85	4.94	6.02	7.11							8.59	6 / 2			
reaction time	0.179	interval		1.11	1.09	1.08	1.09						1.48	PB		3.28		
		velocity	4.74	7.66	7.80	7.87	7.80						8.78	6.98		7.77		
Chen Xianying (CHN) (2003)		time	2.69	3.82	4.95	6.09	7.24							8.84	2 / 3			
reaction time	0.163	interval		1.13	1.13	1.14	1.15						1.60	PB		3.40		
		velocity	4.83	7.52	7.52	7.46	7.39						8.13	6.79		7.50		
Yin Xiaoxia (CHN) (2000)		time	2.87	4.00	5.12	6.24	7.35							8.87	1 / 4			
reaction time	0.245	interval		1.13	1.12	1.12	1.11						1.52	PB		3.37		
		velocity	4.53	7.52	7.59	7.59	7.66						8.55	6.76		7.57		
Deng Mengying (CHN) (2004)		time	2.95	4.20	5.44	6.69	7.92							9.52	5 / 5			
reaction time	0.288	interval		1.25	1.24	1.25	1.23						1.60	PB		3.74		
		velocity	4.41	6.80	6.85	6.80	6.91						8.13	6.30		6.82		
Liu Xinyao (CHN) (2003)		time	2.93	4.22	5.47	6.72	7.99							9.68	3 / 6			
reaction time	0.201	interval		1.29	1.25	1.25	1.27						1.69	PB		3.79		
		velocity	4.44	6.59	6.80	6.80	6.69						7.69	6.20		6.73		

Heat 1

date 13-Mar-21

CAA Hurdle Development (2021)

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Xiao Juxiu (CHN) (1998)		time	2.72	3.85	4.93	5.99	7.04							8.47	3 / 1			
reaction time	0.180	interval		1.13	1.08	1.06	1.05						1.43			3.27		
		velocity	4.78	7.52	7.87	8.02	8.10						9.09	7.08		7.80		
Chen Yinfeng (CHN) (1998)		time	2.73	3.85	4.92	6.00	7.05							8.47	6 / 2			
reaction time	0.186	interval		1.12	1.07	1.08	1.05						1.42			3.27		
		velocity	4.76	7.59	7.94	7.87	8.10						9.15	7.08		7.80		
Jiang Liyunzhe (CHN) (2002)		time	2.77	3.90	5.02	6.10	7.21							8.65	2 / 3			
reaction time	0.197	interval		1.13	1.12	1.08	1.11						1.44	PB		3.33		
		velocity	4.69	7.52	7.59	7.87	7.66						9.03	6.94		7.66		
Chen Yuyang (CHN) (2002)		time	2.79	3.90	5.00	6.09	7.19							8.66	1 / 4			
reaction time	0.230	interval		1.11	1.10	1.09	1.10						1.47	PB		3.30		
		velocity	4.66	7.66	7.73	7.80	7.73						8.84	6.93		7.73		
Gong Qiudan (CHN) (2003)		time	2.77	3.90	5.05	6.16	7.27							8.76	5 / 5			
reaction time	0.194	interval		1.13	1.15	1.11	1.11						1.49			3.39		
		velocity	4.69	7.52	7.39	7.66	7.66						8.72	6.85		7.52		
Kong Rui (CHN) (2001)		time	2.92	4.09	5.27	6.42	7.59							9.12	4 / 6			
reaction time	0.211	interval		1.17	1.18	1.15	1.17						1.53	PB		3.50		
		velocity	4.45	7.26	7.20	7.39	7.26						8.50	6.58		7.29		

2021 European Indoor Championships (Toruń, POL) (TV Analysis)

FINAL

date 07-Mar-21

Henson (2021) - Athlete First: 2021 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Visser, Nadine (NED) (1995)		time	2.46	3.50	4.46	5.44	6.42							7.77	5 / 1			
reaction time	0.135	interval		1.04	0.96	0.98	0.98						1.35	NR PB		2.98		
		velocity	5.28	8.17	8.85	8.67	8.67						9.63	7.72		8.56		

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

Sember, Cindy (GBR) (1994)	time	2.48	3.54	4.52	5.48	6.44					7.89	6 / 2	
reaction time 0.165	interval		1.06	0.98	0.96	0.96				1.45	=PB		3.00
	velocity	5.24	8.02	8.67	8.85	8.85				8.97	7.60		8.50
Porter, Tiffany (GBR) (1987)	time	2.48	3.52	4.50	5.48	6.50					7.92	8 / 3	
reaction time 0.156	interval		1.04	0.98	0.98	1.02				1.42			3.00
	velocity	5.24	8.17	8.67	8.67	8.33				9.15	7.58		8.50
Neziri, Nooralotta (FIN) (1992)	time	2.48	3.52	4.52	5.50	6.48					7.93	3 / 4	
reaction time 0.133	interval		1.04	1.00	0.98	0.98				1.45			3.02
	velocity	5.24	8.17	8.50	8.67	8.67				8.97	7.57		8.44
Skrzyszowska, Pia (POL) (2001	time	2.48	3.54	4.58	5.58	6.56					7.95	4 / 5	
reaction time 0.147	interval		1.06	1.04	1.00	0.98				1.39			3.10
	velocity	5.24	8.02	8.17	8.50	8.67				9.35	7.55		8.23
Bogliolo, Luminosa (ITA) (199	time	2.54	3.56	4.58	5.56	6.54					7.99	7 / 6	
reaction time 0.160	interval		1.02	1.02	0.98	0.98				1.45	=PB		3.02
	velocity	5.12	8.33	8.33	8.67	8.67				8.97	7.51		8.44
Sedney, Zoë (NED) (2001)	time	2.48	3.54	4.56	5.58	6.58					8.00	2 / 7	
reaction time 0.171	interval		1.06	1.02	1.02	1.00				1.42			3.10
	velocity	5.24	8.02	8.33	8.33	8.50				9.15	7.50		8.23
Kozák, Luca (HUN) (1996)	time	2.54	3.56	4.58	5.58	6.58					8.01	1 / 8	
reaction time 0.195	interval		1.02	1.02	1.00	1.00				1.43			3.04
	velocity	5.12	8.33	8.33	8.50	8.50				9.09	7.49		8.39

2020 Michitaka Kinami Memorial (Osaka, JPN)

FINAL date 24-Oct-20 wind -1.4 m/s

Kijima (2020) - race analysis of 2020 top domestic japanese 100m hurdlers

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shimura, Hitomi (JPN) (1990)	time	2.66	3.73	4.77	5.83	6.88	7.94	9.01	10.08	11.19	12.29		13.29	6 / 1			
reaction time	interval		1.07	1.04	1.06	1.05	1.06	1.07	1.07	1.11	1.10	1.00			3.17	3.18	3.28
	velocity	4.89	7.94	8.17	8.02	8.10	8.02	7.94	7.94	7.66	7.73	10.05	7.52		8.04	8.02	7.77
Fujimori, Nana (JPN) (1997)	time	2.71	3.81	4.89	5.94	7.03	8.10	9.21	10.31	11.43	12.54		13.42	2 / 2			
reaction time	interval		1.10	1.08	1.05	1.09	1.07	1.11	1.10	1.12	1.11	0.88			3.23	3.27	3.33
	velocity	4.80	7.73	7.87	8.10	7.80	7.94	7.66	7.73	7.59	7.66	11.42	7.45		7.89	7.80	7.66
Aoki, Masumi (JPN) (1994)	time	2.72	3.80	4.86	5.91	6.97	8.04	9.10	10.20	11.32	12.44		13.48	7 / 3			
reaction time	interval		1.08	1.06	1.05	1.06	1.07	1.06	1.10	1.12	1.12	1.04			3.19	3.19	3.34
	velocity	4.78	7.87	8.02	8.10	8.02	7.94	8.02	7.73	7.59	7.59	9.66	7.42		7.99	7.99	7.63
Kanai, Marumi (JPN) (1997)	time	2.64	3.74	4.81	5.88	6.97	8.07	9.17	10.27	11.37	12.47		13.63	5 / 4			
reaction time	interval		1.10	1.07	1.07	1.09	1.10	1.10	1.10	1.10	1.10	1.16			3.24	3.29	3.30
	velocity	4.92	7.73	7.94	7.94	7.80	7.73	7.73	7.73	7.73	7.73	8.66	7.34		7.87	7.75	7.73
Fujiwara, Miku (JPN) (1992)	time	2.63	3.70	4.75	5.79	6.82	7.87	8.92	9.99	11.04	12.11		13.65	8 / 5			
reaction time	interval		1.07	1.05	1.04	1.03	1.05	1.05	1.07	1.05	1.07	1.54			3.16	3.13	3.19
	velocity	4.94	7.94	8.10	8.17	8.25	8.10	8.10	7.94	8.10	7.94	6.53	7.33		8.07	8.15	7.99
Suzuki, Miho (JPN) (1996)	time	2.60	3.68	4.75	5.80	6.85	7.90	8.95	10.03	11.13	12.25		13.66	4 / 6			
reaction time	interval		1.08	1.07	1.05	1.05	1.05	1.05	1.08	1.10	1.12	1.41			3.20	3.15	3.30
	velocity	5.00	7.87	7.94	8.10	8.10	8.10	8.10	7.87	7.73	7.59	7.13	7.32		7.97	8.10	7.73
Nakajima, Hitomi (JPN) (1995)	time	2.65	3.74	4.83	5.90	6.95	8.03	9.12	10.22	11.31	12.43		13.70	9 / 7			
reaction time	interval		1.09	1.09	1.07	1.05	1.08	1.09	1.10	1.09	1.12	1.27			3.25	3.22	3.31
	velocity	4.91	7.80	7.80	7.94	8.10	7.87	7.80	7.73	7.80	7.59	7.91	7.30		7.85	7.92	7.70
Soma, Eriko (JPN) (1991)	time	2.71	3.80	4.86	5.95	7.02	8.09	9.18	10.27	11.37	12.50		13.74	3 / 8			
reaction time	interval		1.09	1.06	1.09	1.07	1.07	1.09	1.09	1.10	1.13	1.24			3.24	3.23	3.32
	velocity	4.80	7.80	8.02	7.80	7.94	7.94	7.80	7.80	7.73	7.52	8.10	7.28		7.87	7.89	7.68

2020 Japanese National Championships (Niigata, JPN)

FINAL date 03-Oct-20 wind -0.1 m/s

Kijima (2020) - race analysis of 2020 top domestic japanese 100m hurdlers

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Aoki, Masumi (JPN) (1994)	time	2.58	3.63	4.65	5.66	6.69	7.71	8.74	9.78	10.82	11.89		13.02	6 / 1			
reaction time 0.115	interval		1.05	1.02	1.01	1.03	1.02	1.03	1.04	1.04	1.07	1.13	PB		3.08	3.08	3.15
	velocity	5.04	8.10	8.33	8.42	8.25	8.33	8.25	8.17	8.17	7.94	8.89	7.68		8.28	8.28	8.10
Tereda, Asuka (JPN) (1990)	time	2.62	3.68	4.71	5.72	6.74	7.77	8.79	9.83	10.88	11.96		13.14	4 / 2			
reaction time 0.154	interval		1.06	1.03	1.01	1.02	1.03	1.02	1.04	1.05	1.08	1.18			3.10	3.07	3.17
	velocity	4.96	8.02	8.25	8.42	8.33	8.25	8.33	8.17	8.10	7.87	8.52	7.61		8.23	8.31	8.04
Fujimori, Nana (JPN) (1997)	time	2.68	3.75	4.77	5.82	6.84	7.90	8.94	10.02	11.10	12.22		13.33	5 / 3			
reaction time 0.140	interval		1.07	1.02	1.05	1.02	1.06	1.04	1.08	1.08	1.12	1.11			3.14	3.12	3.28
	velocity	4.85	7.94	8.33	8.10	8.33	8.02	8.17	7.87	7.87	7.59	9.05	7.50		8.12	8.17	7.77

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tanaka, Yumi (JPN) (1998)	time	2.64	3.69	4.74	5.77	6.82	7.85	8.90	9.95	11.02	12.13		13.37	3 / 4			
reaction time 0.150	interval		1.05	1.05	1.03	1.05	1.03	1.05	1.05	1.07	1.11	1.24			3.13	3.13	3.23
	velocity	4.92	8.10	8.10	8.25	8.10	8.25	8.10	8.10	7.94	7.66	8.10	7.48		8.15	8.15	7.89
Suzuki, Miho (JPN) (1996)	time	2.69	3.78	4.83	5.89	6.92	7.96	9.04	10.11	11.17	12.28		13.49	9 / 5			
reaction time 0.153	interval		1.09	1.05	1.06	1.03	1.04	1.08	1.07	1.06	1.11	1.21			3.20	3.15	3.24
	velocity	4.83	7.80	8.10	8.02	8.25	8.17	7.87	7.94	8.02	7.66	8.31	7.41		7.97	8.10	7.87
Shimura, Hitomi (JPN) (1990)	time	2.67	3.75	4.80	5.83	6.88	7.94	9.00	10.08	11.19	12.29		13.52	7 / 6			
reaction time 0.174	interval		1.08	1.05	1.03	1.05	1.06	1.06	1.08	1.11	1.10	1.23			3.16	3.17	3.29
	velocity	4.87	7.87	8.10	8.25	8.10	8.02	8.02	7.87	7.66	7.73	8.17	7.40		8.07	8.04	7.75
Takeuchi, Maya (JPN) (1998)	time	2.62	3.71	4.78	5.82	6.89	7.94	9.00	10.08	11.18	12.30		13.52	8 / 7			
reaction time 0.154	interval		1.09	1.07	1.04	1.07	1.05	1.06	1.08	1.10	1.12	1.22	PB		3.20	3.18	3.30
	velocity	4.96	7.80	7.94	8.17	7.94	8.10	8.02	7.87	7.73	7.59	8.24	7.40		7.97	8.02	7.73
Fujiwara, Miku (JPN) (1992)	time	2.67	3.74	4.81	5.88	6.94	8.01	9.09	10.19	11.30	12.42		13.66	2 / 8			
reaction time 0.134	interval		1.07	1.07	1.07	1.06	1.07	1.08	1.10	1.11	1.12	1.24			3.21	3.21	3.33
	velocity	4.87	7.94	7.94	7.94	8.02	7.94	7.87	7.73	7.66	7.59	8.10	7.32		7.94	7.94	7.66

2020 Japanese Multi-Event National Championships (Nagano, JPN)

Heptathlon - Heat 3

date 26-Sep-20 wind 0.1 m/s

Matsubayashi (2020) - research on athlete performance and technique- 2020 data book

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Hemphill, Megu (JPN) (1996)	time	2.74	3.85	4.91	5.97	7.01	8.06	9.10	10.17	11.24	12.33		13.54	4 / 1			
reaction time	interval		1.11	1.06	1.06	1.04	1.05	1.04	1.07	1.07	1.09	1.21			3.23	3.13	3.23
	velocity	4.74	7.66	8.02	8.02	8.17	8.10	8.17	7.94	7.94	7.80	8.31	7.39		7.89	8.15	7.89
Odama, Karin (JPN) (1999)	time	2.76	3.87	4.95	6.02	7.08	8.15	9.22	10.35	11.44	12.59		13.82	5 / 2			
reaction time	interval		1.11	1.08	1.07	1.06	1.07	1.07	1.13	1.09	1.15	1.23			3.26	3.20	3.37
	velocity	4.71	7.66	7.87	7.94	8.02	7.94	7.94	7.52	7.80	7.39	8.17	7.24		7.82	7.97	7.57
Yamasaki, Yuki (JPN) (1995)	time	2.74	3.83	4.94	6.02	7.12	8.21	9.30	10.43	11.55	12.70		13.95	6 / 3			
reaction time	interval		1.09	1.11	1.08	1.10	1.09	1.09	1.13	1.12	1.15	1.25			3.28	3.28	3.40
	velocity	4.74	7.80	7.66	7.87	7.73	7.80	7.80	7.52	7.59	7.39	8.04	7.17		7.77	7.77	7.50

2020 Doha Diamond League (Doha, QAT) (TV Analysis)

FINAL

date 25-Sep-20 wind 1.1 m/s

Henson (2020) - Athlete First: 2020 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Chadwick, Payton (USA) (199	time	2.53	3.56	4.56	5.56	6.56	7.56	8.53	9.53	10.56	11.60		12.78	5 / 1			
reaction time 0.137	interval		1.03	1.00	1.00	1.00	1.00	0.97	1.00	1.03	1.04	1.18			3.03	2.97	3.07
	velocity	5.14	8.25	8.50	8.50	8.50	8.50	8.76	8.50	8.25	8.17	8.52	7.82		8.42	8.59	8.31
Brooks, Taliyah (USA) (1995)	time	2.53	3.56	4.56	5.56	6.56	7.53	8.56	9.56	10.60	11.63		12.86	7 / 2			
reaction time 0.139	interval	7 steps	1.03	1.00	1.00	1.00	0.97	1.03	1.00	1.04	1.03	1.23	PB		3.03	3.00	3.07
	velocity	5.14	8.25	8.50	8.50	8.50	8.76	8.25	8.50	8.17	8.25	8.17	7.78		8.42	8.50	8.31
Ofili, Cindy (GBR) (1994)	time	2.56	3.60	4.63	5.63	6.63	7.63	8.63	9.66	10.70	11.76		13.02	4 / 3			
reaction time 0.180	interval		1.04	1.03	1.00	1.00	1.00	1.00	1.03	1.04	1.06	1.26			3.07	3.00	3.13
	velocity	5.08	8.17	8.25	8.50	8.50	8.50	8.50	8.25	8.17	8.02	7.98	7.68		8.31	8.50	8.15
Wojtunik, Klaudia (POL) (199	time	2.56	3.63	4.66	5.70	6.73	7.76	8.80	9.83	10.86	11.96		13.21	8 / 4			
reaction time 0.137	interval		1.07	1.03	1.04	1.03	1.03	1.04	1.03	1.03	1.10	1.25			3.14	3.10	3.16
	velocity	5.08	7.94	8.25	8.17	8.25	8.25	8.17	8.25	8.25	7.73	8.04	7.57		8.12	8.23	8.07
Sedney, Zoë (NED) (2001)	time	2.56	3.63	4.66	5.73	6.73	7.73	8.76	9.83	10.86	12.00		13.24	2 / 5			
reaction time 0.168	interval		1.07	1.03	1.07	1.00	1.00	1.03	1.07	1.03	1.14	1.24	PB		3.17	3.03	3.24
	velocity	5.08	7.94	8.25	7.94	8.50	8.50	8.25	7.94	8.25	7.46	8.10	7.55		8.04	8.42	7.87
Graversgaard, Mette (DEN) (1!	time	2.53	3.63	4.66	5.73	6.76	7.76	8.80	9.86	10.93	12.00		13.25	3 / 6			
reaction time 0.140	interval		1.10	1.03	1.07	1.03	1.00	1.04	1.06	1.07	1.07	1.25			3.20	3.07	3.20
	velocity	5.14	7.73	8.25	7.94	8.25	8.50	8.17	8.02	7.94	7.94	8.04	7.55		7.97	8.31	7.97
Lukic, Anja (SRB) (1999)	time	2.60	3.66	4.73	5.80	6.83	7.86	8.96	10.03	11.13	12.20		13.48	1 / 7			
reaction time 0.163	interval		1.06	1.07	1.07	1.03	1.03	1.10	1.07	1.10	1.07	1.28			3.20	3.16	3.24
	velocity	5.00	8.02	7.94	7.94	8.25	8.25	7.73	7.94	7.73	7.94	7.85	7.42		7.97	8.07	7.87
Thompson, Yanique (JAM) (1!	time	2.60	3.66	4.76	5.83	6.86	7.90	8.93	10.00	11.06	12.20		13.52	6 / 8			
reaction time 0.144	interval		1.06	1.10	1.07	1.03	1.04	1.03	1.07	1.06	1.14	1.32			3.23	3.10	3.27
	velocity	5.00	8.02	7.73	7.94	8.25	8.17	8.25	7.94	8.02	7.46	7.61	7.40		7.89	8.23	7.80

2020 All Japan Corporate Championships (Kumagaya, JPN)

FINAL

date 20-Sep-20 wind 0.0 m/s

Kijima (2020) - race analysis of 2020 top domestic japanese 100m hurdlers

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Aoki, Masumi (JPN) (1994)	time	2.62	3.67	4.70	5.72	6.73	7.75	8.77	9.80	10.86	11.93		13.13	6 / 1			
reaction time 0.152	interval		1.05	1.03	1.02	1.01	1.02	1.02	1.03	1.06	1.07	1.20			3.10	3.05	3.16
	velocity	4.96	8.10	8.25	8.33	8.42	8.33	8.33	8.25	8.02	7.94	8.37	7.62		8.23	8.36	8.07

Suzuki, Miho (JPN) (1996)	time	2.72	3.76	4.80	5.82	6.84	7.86	8.90	9.94	11.02	12.10		13.30	5 / 2			
reaction time 0.202	interval		1.04	1.04	1.02	1.02	1.02	1.04	1.04	1.08	1.08	1.20			3.10	3.08	3.20
	velocity	4.78	8.17	8.17	8.33	8.33	8.33	8.17	8.17	7.87	7.87	8.37	7.52		8.23	8.28	7.97
Shimura, Hitomi (JPN) (1990)	time	2.66	3.72	4.78	5.80	6.84	7.87	8.92	9.97	11.04	12.13		13.32	7 / 3			
reaction time 0.149	interval		1.06	1.06	1.02	1.04	1.03	1.05	1.05	1.07	1.09	1.19			3.14	3.12	3.21
	velocity	4.89	8.02	8.02	8.33	8.17	8.25	8.10	8.10	7.94	7.80	8.45	7.51		8.12	8.17	7.94
Fujimori, Nana (JPN) (1997)	time	2.69	3.76	4.81	5.84	6.89	7.95	9.00	10.08	11.17	12.29		13.43	4 / 4			
reaction time 0.131	interval		1.07	1.05	1.03	1.05	1.06	1.05	1.08	1.09	1.12	1.14			3.15	3.16	3.29
	velocity	4.83	7.94	8.10	8.25	8.10	8.02	8.10	7.87	7.80	7.59	8.82	7.45		8.10	8.07	7.75
Fujiwara, Miku (JPN) (1992)	time	2.71	3.81	4.87	5.93	6.99	8.04	9.11	10.21	11.33	12.47		13.46	2 / 5			
reaction time 0.124	interval		1.10	1.06	1.06	1.06	1.05	1.07	1.10	1.12	1.14	0.99			3.22	3.18	3.36
	velocity	4.80	7.73	8.02	8.02	8.02	8.10	7.94	7.73	7.59	7.46	10.15	7.43		7.92	8.02	7.59
Kanai, Marumi (JPN) (1997)	time	2.70	3.80	4.90	5.98	7.03	8.11	9.20	10.29	11.41	12.54		13.58	8 / 6			
reaction time 0.139	interval		1.10	1.10	1.08	1.05	1.08	1.09	1.09	1.12	1.13	1.04			3.28	3.22	3.34
	velocity	4.81	7.73	7.73	7.87	8.10	7.87	7.80	7.80	7.59	7.52	9.66	7.36		7.77	7.92	7.63
Nakajima, Hitomi (JPN) (1995)	time	2.69	3.77	4.84	5.91	6.96	8.03	9.11	10.21	11.32	12.45		13.68	9 / 7			
reaction time 0.137	interval		1.08	1.07	1.07	1.05	1.07	1.08	1.10	1.11	1.13	1.23			3.22	3.20	3.34
	velocity	4.83	7.87	7.94	7.94	8.10	7.94	7.87	7.73	7.66	7.52	8.17	7.31		7.92	7.97	7.63
Omura, Mika (JPN) (1995)	time	2.70	3.79	4.85	5.94	7.01	8.09	9.18	10.28	11.39	12.54		13.79	3 / 8			
reaction time 0.153	interval		1.09	1.06	1.09	1.07	1.08	1.09	1.10	1.11	1.15	1.25			3.24	3.24	3.36
	velocity	4.81	7.80	8.02	7.80	7.94	7.87	7.80	7.73	7.66	7.39	8.04	7.25		7.87	7.87	7.59

2020 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis)

FINAL date 17-Sep-20 wind 0.1 m/s

Henson (2020) - Athlete First: 2020 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Visser, Nadine (NED) (1995)	time	2.52	3.56	4.56	5.52	6.50	7.48	8.48	9.48	10.52	11.56		12.72	6 / 1			
reaction time 0.156	interval		1.04	1.00	0.96	0.98	0.98	1.00	1.00	1.04	1.04	1.16			3.00	2.96	3.08
	velocity	5.16	8.17	8.50	8.85	8.67	8.67	8.50	8.50	8.17	8.17	8.66	7.86		8.50	8.61	8.28
Bogliolo, Luminosa (ITA) (199	time	2.58	3.60	4.60	5.60	6.58	7.56	8.56	9.58	10.60	11.64		12.83	5 / 2			
reaction time 0.161	interval		1.02	1.00	1.00	0.98	0.98	1.00	1.02	1.02	1.04	1.19			3.02	2.96	3.08
	velocity	5.04	8.33	8.50	8.50	8.67	8.67	8.50	8.33	8.33	8.17	8.45	7.79		8.44	8.61	8.28
Chadwick, Payton (USA) (199	time	2.52	3.60	4.64	5.64	6.64	7.64	8.66	9.68	10.70	11.72		12.89	2 / 3			
reaction time 0.126	interval		1.08	1.04	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.17			3.12	3.02	3.06
	velocity	5.16	7.87	8.17	8.50	8.50	8.50	8.33	8.33	8.33	8.33	8.59	7.76		8.17	8.44	8.33
Ofili, Cindy (GBR) (1994)	time	2.52	3.58	4.58	5.58	6.58	7.60	8.62	9.66	10.72	11.78		13.02	3 / 4			
reaction time 0.136	interval		1.06	1.00	1.00	1.00	1.02	1.02	1.04	1.06	1.06	1.24			3.06	3.04	3.16
	velocity	5.16	8.02	8.50	8.50	8.50	8.33	8.33	8.17	8.02	8.02	8.10	7.68		8.33	8.39	8.07
Brooks, Taliyah (USA) (1995)	time	2.54	3.60	4.62	5.62	6.62	7.64	8.66	9.72	10.78	11.86		13.05	9 / 5			
reaction time 0.138	interval	7 steps	1.06	1.02	1.00	1.00	1.02	1.02	1.06	1.06	1.08	1.19			3.08	3.04	3.20
	velocity	5.12	8.02	8.33	8.50	8.50	8.33	8.33	8.02	8.02	7.87	8.45	7.66		8.28	8.39	7.97
di Lazzaro, Elisa Maria (ITA) (1	time	2.56	3.62	4.64	5.66	6.68	7.68	8.68	9.70	10.74	11.80		13.05	8 / 6			
reaction time 0.135	interval		1.06	1.02	1.02	1.02	1.00	1.00	1.02	1.04	1.06	1.25	NUR PB		3.10	3.02	3.12
	velocity	5.08	8.02	8.33	8.33	8.33	8.50	8.50	8.33	8.17	8.02	8.04	7.66		8.23	8.44	8.17
Samba-Mayela, Cyréna (FRA)	time	2.48	3.66	4.78	5.84	6.88	7.90	8.92	9.92	10.94	12.00		13.29	7 / 7			
reaction time 0.131	interval		1.18	1.12	1.06	1.04	1.02	1.02	1.00	1.02	1.06	1.29			3.36	3.08	3.08
	velocity	5.24	7.20	7.59	8.02	8.17	8.33	8.33	8.50	8.33	8.02	7.79	7.52		7.59	8.28	8.28
Graversgaard, Mette (DEN) (1	time	2.62	3.66	4.70	5.72	6.74	7.78	8.82	9.86	10.94	12.06		13.30	1 / 8			
reaction time 0.160	interval		1.04	1.04	1.02	1.02	1.04	1.04	1.04	1.08	1.12	1.24			3.10	3.10	3.24
	velocity	4.96	8.17	8.17	8.33	8.33	8.17	8.17	8.17	7.87	7.59	8.10	7.52		8.23	8.23	7.87
Korte, Annimari (FIN) (1988)	time	2.56	3.64	4.68	5.72	6.76	7.80	8.86	9.92	10.98	12.06		13.34	4 / 9			
reaction time 0.143	interval		1.08	1.04	1.04	1.04	1.04	1.06	1.06	1.06	1.08	1.28			3.16	3.14	3.20
	velocity	5.08	7.87	8.17	8.17	8.17	8.17	8.02	8.02	8.02	7.87	7.85	7.50		8.07	8.12	7.97

2020 Galà dei Castelli (Bellinzona, SUI) (TV Analysis)

FINAL date 15-Sep-20 wind 0.0 m/s

Henson (2020) - Athlete First: 2020 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Visser, Nadine (NED) (1995)	time	2.52	3.56	4.56	5.56	6.56	7.54	8.52	9.52	10.56	11.62		12.79	5 / 1			
reaction time	interval		1.04	1.00	1.00	1.00	0.98	0.98	1.00	1.04	1.06	1.17			3.04	2.96	3.10
	velocity	5.16	8.17	8.50	8.50	8.50	8.67	8.67	8.50	8.17	8.02	8.59	7.82		8.39	8.61	8.23
Bogliolo, Luminosa (ITA) (199	time	2.60	3.60	4.58	5.58	6.56	7.56	8.56	9.56	10.60	11.64		12.82	4 / 2			
reaction time	interval		1.00	0.98	1.00	0.98	1.00	1.00	1.00	1.04	1.04	1.18			2.98	2.98	3.08

	velocity	5.00	8.50	8.67	8.50	8.67	8.50	8.50	8.50	8.17	8.17	8.52	7.80		8.56	8.56	8.28
Harala, Lotta (FIN) (1992)	time	2.56	3.60	4.64	5.66	6.66	7.68	8.70	9.74	10.80	11.88		13.19	6 / 3			
reaction time	interval		1.04	1.04	1.02	1.00	1.02	1.02	1.04	1.06	1.08	1.31			3.10	3.04	3.18
	velocity	5.08	8.17	8.17	8.33	8.50	8.33	8.33	8.17	8.02	7.87	7.67	7.58		8.23	8.39	8.02
Carmassi, Giada (ITA) (1994)	time	2.66	3.72	4.76	5.80	6.80	7.82	8.86	9.90	10.96	12.06		13.30	2 / 4			
reaction time	interval		1.06	1.04	1.04	1.00	1.02	1.04	1.04	1.06	1.10	1.24			3.14	3.06	3.20
	velocity	4.89	8.02	8.17	8.17	8.50	8.33	8.17	8.17	8.02	7.73	8.10	7.52		8.12	8.33	7.97
Kambundji, Ditaji (SUI) (2002)	time	2.64	3.70	4.76	5.80	6.84	7.86	8.90	9.96	11.06	12.16		13.36	3 / 5			
reaction time	interval		1.06	1.06	1.04	1.04	1.02	1.04	1.06	1.10	1.10	1.20			3.16	3.10	3.26
	velocity	4.92	8.02	8.02	8.17	8.17	8.33	8.17	8.02	7.73	7.73	8.38	7.49		8.07	8.23	7.82
Miteva, Elena (BUL) (1992)	time	2.72	3.78	4.88	5.94	7.00	8.08	9.16	10.28	11.40	12.52		13.74	7 / 6			
reaction time	interval	7 steps	1.06	1.10	1.06	1.06	1.08	1.08	1.12	1.12	1.12	1.22			3.22	3.22	3.36
	velocity	4.78	8.02	7.73	8.02	8.02	7.87	7.87	7.59	7.59	7.59	8.24	7.28		7.92	7.92	7.59
Mayer, Isabel (GER) (1993)	time	2.68	3.78	4.86	5.94	7.00	8.08	9.14	10.24	11.36	12.50		13.81	8 / 7			
reaction time	interval		1.10	1.08	1.08	1.06	1.08	1.06	1.10	1.12	1.14	1.31			3.26	3.20	3.36
	velocity	4.85	7.73	7.87	7.87	8.02	7.87	8.02	7.73	7.59	7.46	7.67	7.24		7.82	7.97	7.59
Piffaretti, Emma (SUI) (2002)	time	2.72	3.84	4.96	6.08	7.18	8.32	9.48	10.64	11.80	12.98		14.27	1 / 8			
reaction time	interval	7 steps	1.12	1.12	1.12	1.10	1.14	1.16	1.16	1.16	1.18	1.29			3.36	3.40	3.50
	velocity	4.78	7.59	7.59	7.59	7.73	7.46	7.33	7.33	7.33	7.20	7.79	7.01		7.59	7.50	7.29

2020 Chinese National Championships (Shaoxing, CHN)

FINAL

date 15-Sep-20 wind -0.4 m/s *CAA Hurdle Development (2020)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Yanni (CHN) (1997)	time	2.65	3.70	4.72	5.73	6.74	7.76	8.79	9.82	10.87	11.94		13.09	6 / 1			
reaction time 0.143	interval		1.05	1.02	1.01	1.01	1.02	1.03	1.03	1.05	1.07	1.15	PB		3.08	3.06	3.15
	velocity	4.91	8.10	8.33	8.42	8.42	8.33	8.25	8.25	8.10	7.94	8.74	7.64		8.28	8.33	8.10
Lin Yuwei (CHN) (1999)	time	2.61	3.67	4.71	5.75	6.77	7.79	8.83	9.90	10.97	12.05		13.22	4 / 2			
reaction time 0.144	interval		1.06	1.04	1.04	1.02	1.02	1.04	1.07	1.07	1.08	1.17	PB		3.14	3.08	3.22
	velocity	4.98	8.02	8.17	8.17	8.33	8.33	8.17	7.94	7.94	7.87	8.59	7.56		8.12	8.28	7.92
Wang Dou (CHN) (1993)	time	2.72	3.79	4.83	5.88	6.92	7.98	9.04	10.10	11.18	12.27		13.40	5 / 3			
reaction time 0.184	interval		1.07	1.04	1.05	1.04	1.06	1.06	1.06	1.08	1.09	1.13			3.16	3.16	3.23
	velocity	4.78	7.94	8.17	8.10	8.17	8.02	8.02	8.02	7.87	7.80	8.89	7.46		8.07	8.07	7.89
You Na (CHN) (1993)	time	2.63	3.74	4.80	5.85	6.90	7.96	9.02	10.10	11.20	12.31		13.55	7 / 4			
reaction time 0.148	interval		1.11	1.06	1.05	1.05	1.06	1.06	1.08	1.10	1.11	1.24			3.22	3.17	3.29
	velocity	4.94	7.66	8.02	8.10	8.10	8.02	8.02	7.87	7.73	7.66	8.10	7.38		7.92	8.04	7.75
Jiang Liyunzhe (CHN) (2002)	time	2.69	3.76	4.84	5.90	6.97	8.04	9.12	10.22	11.33	12.42		13.57	2 / 5			
reaction time 0.174	interval		1.07	1.08	1.06	1.07	1.07	1.08	1.10	1.11	1.09	1.15	PB		3.21	3.22	3.30
	velocity	4.83	7.94	7.87	8.02	7.94	7.94	7.87	7.73	7.66	7.80	8.74	7.37		7.94	7.92	7.73
Wang Li (CHN) (1999)	time	2.65	3.76	4.85	5.91	6.97	8.03	9.10	10.17	11.27	12.39		13.61	9 / 6			
reaction time 0.158	interval		1.11	1.09	1.06	1.06	1.06	1.07	1.07	1.10	1.12	1.22			3.26	3.19	3.29
	velocity	4.91	7.66	7.80	8.02	8.02	8.02	7.94	7.94	7.73	7.59	8.24	7.35		7.82	7.99	7.75
Xiao Juxiu (CHN) (1998)	time	2.68	3.77	4.84	5.91	6.98	8.05	9.13	10.25	11.38	12.52		13.71	8 / 7			
reaction time 0.161	interval		1.09	1.07	1.07	1.07	1.07	1.08	1.12	1.13	1.14	1.19			3.23	3.22	3.39
	velocity	4.85	7.80	7.94	7.94	7.94	7.94	7.87	7.59	7.52	7.46	8.45	7.29		7.89	7.92	7.52
Yao Hui (CHN) (2000)	time	2.66	3.76	4.85	5.93	7.02	8.11	9.23	10.37	11.52	12.68		13.90	3 / 8			
reaction time 0.143	interval		1.10	1.09	1.08	1.09	1.09	1.12	1.14	1.15	1.16	1.22	PB		3.27	3.30	3.45
	velocity	4.89	7.73	7.80	7.87	7.80	7.80	7.59	7.46	7.39	7.33	8.24	7.19		7.80	7.73	7.39

Heat 2

date 15-Sep-20 wind -0.6 m/s *CAA Hurdle Development (2020)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Deng Xuelin (CHN) (1998)	time	2.72	3.78	4.82	5.84	6.88	7.92	8.95	10.01	11.07	12.16		13.31	3 / 1			
reaction time 0.166	interval		1.06	1.04	1.02	1.04	1.04	1.03	1.06	1.06	1.09	1.15			3.12	3.11	3.21
	velocity	4.78	8.02	8.17	8.33	8.17	8.17	8.25	8.02	8.02	7.80	8.74	7.51		8.17	8.20	7.94
Lin Yuwei (CHN) (1999)	time	2.67	3.75	4.82	5.88	6.95	8.02	9.06	10.14	11.21	12.31		13.47	6 / 2			
reaction time 0.136	interval		1.08	1.07	1.06	1.07	1.07	1.04	1.08	1.07	1.10	1.16			3.21	3.18	3.25
	velocity	4.87	7.87	7.94	8.02	7.94	7.94	8.17	7.87	7.94	7.73	8.66	7.42		7.94	8.02	7.85
Dai Yiru (CHN) (2001)	time	2.64	3.70	4.74	5.79	6.84	7.88	8.96	10.07	11.18	12.36		13.61	2 / 3			
reaction time 0.155	interval		1.06	1.04	1.05	1.05	1.04	1.08	1.11	1.11	1.18	1.25			3.15	3.17	3.40
	velocity	4.92	8.02	8.17	8.10	8.10	8.17	7.87	7.66	7.66	7.20	8.04	7.35		8.10	8.04	7.50
You Na (CHN) (1993)	time	2.71	3.80	4.84	5.88	6.97	8.04	9.12	10.23	11.30	12.42		13.62	4 / 4			
reaction time 0.147	interval		1.09	1.04	1.04	1.09	1.07	1.08	1.11	1.07	1.12	1.20			3.17	3.24	3.30

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
		velocity	4.80	7.80	8.17	8.17	7.80	7.94	7.87	7.66	7.94	7.59	8.38	7.34		8.04	7.87	7.73
Niao Juxiu (CHN) (1998)		time	2.72	3.80	4.87	5.95	7.02	8.09	9.18	10.28	11.41	12.54		13.76	8 / 5			
reaction time	0.169	interval		1.08	1.07	1.08	1.07	1.07	1.09	1.10	1.13	1.13	1.22			3.23	3.23	3.36
		velocity	4.78	7.87	7.94	7.87	7.94	7.94	7.80	7.73	7.52	7.52	8.24	7.27		7.89	7.89	7.59
Yao Hui (CHN) (2000)		time	2.76	3.88	4.98	6.09	7.19	8.29	9.41	10.54	11.67	12.80		14.02	5 / 6			
reaction time	0.218	interval		1.12	1.10	1.11	1.10	1.10	1.12	1.13	1.13	1.13	1.22			3.33	3.32	3.39
		velocity	4.71	7.59	7.73	7.66	7.73	7.73	7.59	7.52	7.52	7.52	8.24	7.13		7.66	7.68	7.52
Luo Xianyan (CHN) (1997)		time	2.73	3.83	4.94	6.05	7.15	8.28	9.42	10.55	11.70	12.86		14.15	9 / 7			
reaction time	0.153	interval		1.10	1.11	1.11	1.10	1.13	1.14	1.13	1.15	1.16	1.29			3.32	3.37	3.44
		velocity	4.76	7.73	7.66	7.66	7.73	7.52	7.46	7.52	7.39	7.33	7.79	7.07		7.68	7.57	7.41
Chen Yuyang (CHN) (2002)		time	2.84	3.98	5.12	6.24	7.36	8.50	9.65	10.79	11.93	13.09		14.36	7 / 8			
reaction time	0.205	interval		1.14	1.14	1.12	1.12	1.14	1.15	1.14	1.14	1.16	1.27			3.40	3.41	3.44
		velocity	4.58	7.46	7.46	7.59	7.59	7.46	7.39	7.46	7.46	7.33	7.91	6.96		7.50	7.48	7.41

Heat 1

date 15-Sep-20 wind 0.3 m/s

CAA Hurdle Development (2020)

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Yanni (CHN) (1997)		time	2.70	3.78	4.82	5.85	6.88	7.91	8.95	10.01	11.07	12.17		13.37	5 / 1			
reaction time	0.130	interval		1.08	1.04	1.03	1.03	1.03	1.04	1.06	1.06	1.10	1.20			3.15	3.10	3.22
		velocity	4.81	7.87	8.17	8.25	8.25	8.25	8.17	8.02	8.02	7.73	8.38	7.48		8.10	8.23	7.92
Wang Dou (CHN) (1993)		time	2.73	3.81	4.88	5.94	7.00	8.06	9.12	10.19	11.27	12.37		13.52	7 / 2			
reaction time	0.165	interval		1.08	1.07	1.06	1.06	1.06	1.06	1.07	1.08	1.10	1.15			3.21	3.18	3.25
		velocity	4.76	7.87	7.94	8.02	8.02	8.02	8.02	7.94	7.87	7.73	8.74	7.40		7.94	8.02	7.85
Wang Li (CHN) (1999)		time	2.69	3.76	4.82	5.89	6.95	8.03	9.11	10.23	11.34	12.46		13.64	4 / 3			
reaction time	0.172	interval		1.07	1.06	1.07	1.06	1.08	1.08	1.12	1.11	1.12	1.18			3.20	3.22	3.35
		velocity	4.83	7.94	8.02	7.94	8.02	7.87	7.87	7.59	7.66	7.59	8.52	7.33		7.97	7.92	7.61
Yu Jiaru (CHN) (1999)		time	2.77	3.85	4.91	5.99	7.06	8.13	9.21	10.30	11.41	12.54		13.74	2 / 4			
reaction time	0.169	interval		1.08	1.06	1.08	1.07	1.07	1.08	1.09	1.11	1.13	1.20			3.22	3.22	3.33
		velocity	4.69	7.87	8.02	7.87	7.94	7.94	7.87	7.80	7.66	7.52	8.37	7.28		7.92	7.92	7.66
Chen Jiamin (CHN) (1996)		time	2.80	3.89	5.00	6.08	7.14	8.21	9.30	10.39	11.51	12.66		13.92	9 / 5			
reaction time	0.203	interval		1.09	1.11	1.08	1.06	1.07	1.09	1.09	1.12	1.15	1.26			3.28	3.22	3.36
		velocity	4.64	7.80	7.66	7.87	8.02	7.94	7.80	7.80	7.59	7.39	7.98	7.18		7.77	7.92	7.59
Jiang Liyunzhe (CHN) (2002)		time	2.77	3.89	5.00	6.10	7.19	8.28	9.41	10.54	11.67	12.81		14.03	8 / 6			
reaction time	0.239	interval		1.12	1.11	1.10	1.09	1.09	1.13	1.13	1.13	1.14	1.22			3.33	3.31	3.40
		velocity	4.69	7.59	7.66	7.73	7.80	7.80	7.52	7.52	7.52	7.46	8.24	7.13		7.66	7.70	7.50
Lun Xinyu (CHN) (1998)		time	2.78	3.94	5.11	6.28	7.45	8.60	9.77	10.95	12.13	13.35		14.69	6 / 7			
reaction time	0.169	interval		1.16	1.17	1.17	1.17	1.15	1.17	1.18	1.18	1.22	1.34			3.50	3.49	3.58
		velocity	4.68	7.33	7.26	7.26	7.26	7.39	7.26	7.20	7.20	6.97	7.50	6.81		7.29	7.31	7.12

2020 French National Championships (Albi, FRA) (TV Analysis)

FINAL

date 12-Sep-20 wind 1.5 m/s

Henson (2020) - Athlete First: 2020 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Samba-Mayela, Cyrena (FRA)		time	2.46	3.49	4.46	5.47	6.48	7.50	8.49	9.46	10.48	11.48		12.73	4 / 1			
reaction time	0.297	interval		1.03	0.97	1.01	1.01	1.02	0.99	0.97	1.02	1.00	1.25	PB		3.01	3.02	2.99
		velocity	5.28	8.25	8.76	8.42	8.42	8.33	8.59	8.76	8.33	8.50	8.04	7.86		8.47	8.44	8.53
Compper, Solenn (FRA) (1995		time	2.50	3.55	4.56	5.60	6.58	7.60	8.61	9.65	10.74	11.85		13.20	5 / 2			
reaction time	0.212	interval		1.05	1.01	1.04	0.98	1.02	1.01	1.04	1.09	1.11	1.35			3.10	3.01	3.24
		velocity	5.20	8.10	8.42	8.17	8.67	8.33	8.42	8.17	7.80	7.66	7.44	7.58		8.23	8.47	7.87
Quenot, Fanny (FRA) (1990)		time	2.60	3.61	4.66	5.70	6.75	7.80	8.81	9.93	10.94	12.05		13.36	6 / 3			
reaction time	0.483	interval		1.01	1.05	1.04	1.05	1.05	1.01	1.12	1.01	1.11	1.31			3.10	3.11	3.24
		velocity	5.00	8.42	8.10	8.17	8.10	8.10	8.42	7.59	8.42	7.66	7.67	7.49		8.23	8.20	7.87
Bapte, Laeticia (FRA) (1999)		time	2.63	3.70	4.79	5.87	6.89	7.90	8.92	9.97	11.04	12.12		13.43	3 / 4			
reaction time	0.215	interval	9 steps	1.07	1.09	1.08	1.02	1.01	1.02	1.05	1.07	1.08	1.31			3.24	3.05	3.20
		velocity	4.94	7.94	7.80	7.87	8.33	8.42	8.33	8.10	7.94	7.87	7.67	7.45		7.87	8.36	7.97
Jollivet, Lou-Anne (FRA) (200		time	2.63	3.71	4.76	5.88	6.92	7.94	8.98	10.03	11.11	12.19		13.52	7 / 5			
reaction time	0.204	interval		1.08	1.05	1.12	1.04	1.02	1.04	1.05	1.08	1.08	1.33	PB		3.25	3.10	3.21
		velocity	4.94	7.87	8.10	7.59	8.17	8.33	8.17	8.10	7.87	7.87	7.56	7.40		7.85	8.23	7.94
Chausseray, Celia (FRA) (2000		time	2.67	3.78	4.79	5.94	6.99	8.00	9.11	10.19	11.24	12.39		13.73	2 / 6			
reaction time	0.208	interval		1.11	1.01	1.15	1.05	1.01	1.11	1.08	1.05	1.15	1.34	PB		3.27	3.17	3.28
		velocity	4.87	7.66	8.42	7.39	8.10	8.42	7.66	7.87	8.10	7.39	7.50	7.28		7.80	8.04	7.77
Reppert, Axelle (FRA) (2001)		time	2.63	3.75	4.79	5.91	6.99	8.07	9.18	10.33	11.44	12.60		13.97	8 / 7			
reaction time	0.223	interval		1.12	1.04	1.12	1.08	1.08	1.11	1.15	1.11	1.16	1.37	PB		3.28	3.27	3.42

	velocity	4.94	7.59	8.17	7.59	7.87	7.87	7.66	7.39	7.66	7.33	7.34	7.16		7.77	7.80	7.46
Sevila, Emeline (FRA) (1994)	time	2.63	3.71	4.76	5.91	6.96	8.04	9.18	10.33	11.41	12.60		13.99	1 / 8			
reaction time 0.208	interval		1.08	1.05	1.15	1.05	1.08	1.14	1.15	1.08	1.19	1.39			3.28	3.27	3.42
	velocity	4.94	7.87	8.10	7.39	8.10	7.87	7.46	7.39	7.87	7.14	7.23	7.15		7.77	7.80	7.46

2020 World Athletics Trials (Fuji, JPN)

Race 2

date 06-Sep-20 wind 1.3 m/s

Kijima (2020) - race analysis of 2020 top domestic japanese 100m hurdlers

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Fujiwara, Miku (JPN) (1992)	time	2.65	3.73	4.77	5.82	6.84	7.89	8.94	9.98	11.07	12.16		13.36	/ 1			
reaction time	interval		1.08	1.04	1.05	1.02	1.05	1.05	1.04	1.09	1.09	1.20	PB		3.17	3.12	3.22
	velocity	4.91	7.87	8.17	8.10	8.33	8.10	8.10	8.17	7.80	7.80	8.38	7.49		8.04	8.17	7.92
Hemphill, Megu (JPN) (1996)	time	2.69	3.77	4.82	5.84	6.87	7.89	8.93	9.98	11.05	12.15		13.37	/ 2			
reaction time	interval		1.08	1.05	1.02	1.03	1.02	1.04	1.05	1.07	1.10	1.22			3.15	3.09	3.22
	velocity	4.83	7.87	8.10	8.33	8.25	8.33	8.17	8.10	7.94	7.73	8.24	7.48		8.10	8.25	7.92
Sasaki, Ten (JPN) (1997)	time	2.66	3.74	4.80	5.86	6.92	7.97	9.07	10.16	11.27	12.42		13.69	/ 3			
reaction time	interval		1.08	1.06	1.06	1.06	1.05	1.10	1.09	1.11	1.15	1.27			3.20	3.21	3.35
	velocity	4.89	7.87	8.02	8.02	8.02	8.10	7.73	7.80	7.66	7.39	7.91	7.30		7.97	7.94	7.61
Soma, Eriko (JPN) (1991)	time	2.74	3.84	4.91	5.96	7.00	8.05	9.13	10.23	11.34	12.47		13.70	/ 4			
reaction time	interval		1.10	1.07	1.05	1.04	1.05	1.08	1.10	1.11	1.13	1.23			3.22	3.17	3.34
	velocity	4.74	7.73	7.94	8.10	8.17	8.10	7.87	7.73	7.66	7.52	8.17	7.30		7.92	8.04	7.63
Omura, Mika (JPN) (1995)	time	2.71	3.81	4.87	5.93	6.99	8.04	9.11	10.21	11.33	12.47		13.71	/ 5			
reaction time	interval		1.10	1.06	1.06	1.06	1.05	1.07	1.10	1.12	1.14	1.24			3.22	3.18	3.36
	velocity	4.80	7.73	8.02	8.02	8.02	8.10	7.94	7.73	7.59	7.46	8.10	7.29		7.92	8.02	7.59
Kamada, Saki (JPN) (1997)	time	2.70	3.80	4.90	5.98	7.03	8.11	9.20	10.29	11.41	12.54		13.80	/ 6			
reaction time	interval		1.10	1.10	1.08	1.05	1.08	1.09	1.09	1.12	1.13	1.26			3.28	3.22	3.34
	velocity	4.81	7.73	7.73	7.87	8.10	7.87	7.80	7.80	7.59	7.52	7.98	7.25		7.77	7.92	7.63

2020 Memorial Van Damme (Brussels, BEL) (TV Analysis)

FINAL

date 04-Sep-20 wind -0.2 m/s

Henson (2020) - Athlete First: 2020 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Zagré, Anne (BEL) (1990)	time	2.57	3.60	4.63	5.67	6.70	7.70	8.73	9.76	10.80	11.90		13.21	4 / 1			
reaction time 0.136	interval		1.03	1.03	1.04	1.03	1.00	1.03	1.03	1.04	1.10	1.31			3.10	3.06	3.17
	velocity	5.06	8.25	8.25	8.17	8.25	8.50	8.25	8.25	8.17	7.73	7.67	7.57		8.23	8.33	8.04
Graversgaard, Mette (DEN) (1	time	2.50	3.57	4.60	5.67	6.70	7.73	8.76	9.80	10.87	11.97		13.26	6 / 2			
reaction time 0.145	interval		1.07	1.03	1.07	1.03	1.03	1.03	1.04	1.07	1.10	1.29			3.17	3.09	3.21
	velocity	5.20	7.94	8.25	7.94	8.25	8.25	8.25	8.17	7.94	7.73	7.79	7.54		8.04	8.25	7.94
Missinne, Sarah (BEL) (1995)	time	2.63	3.70	4.77	5.83	6.87	7.93	9.00	10.10	11.17	12.30		13.55	7 / 3			
reaction time 0.133	interval		1.07	1.07	1.06	1.04	1.06	1.07	1.10	1.07	1.13	1.25			3.20	3.17	3.30
	velocity	4.94	7.94	7.94	8.02	8.17	8.02	7.94	7.73	7.94	7.52	8.04	7.38		7.97	8.04	7.73
Johnson-Thompson, Katarin	time	2.60	3.73	4.80	5.87	6.90	7.97	9.03	10.10	11.17	12.30		13.57	5 / 4			
reaction time 0.170	interval	7 steps	1.13	1.07	1.07	1.03	1.07	1.06	1.07	1.07	1.13	1.27			3.27	3.16	3.27
	velocity	5.00	7.52	7.94	7.94	8.25	7.94	8.02	7.94	7.94	7.52	7.91	7.37		7.80	8.07	7.80
Tomicic Prezelj, Joni (SLO) (1	time	2.67	3.73	4.80	5.87	6.93	7.97	9.07	10.13	11.23	12.33		13.64	8 / 5			
reaction time 0.147	interval		1.06	1.07	1.07	1.06	1.04	1.10	1.06	1.10	1.10	1.31			3.20	3.20	3.26
	velocity	4.87	8.02	7.94	7.94	8.02	8.17	7.73	8.02	7.73	7.73	7.67	7.33		7.97	7.97	7.82
Beaucarne, Chloë (BEL) (1997	time	2.73	3.83	4.93	6.00	7.07	8.13	9.27	10.37	11.50	12.60		13.93	2 / 6			
reaction time 0.179	interval		1.10	1.10	1.07	1.07	1.06	1.14	1.10	1.13	1.10	1.33			3.27	3.27	3.33
	velocity	4.76	7.73	7.73	7.94	7.94	8.02	7.46	7.73	7.52	7.73	7.56	7.18		7.80	7.80	7.66
Bakker, Sharona (NED) (1990)	time	2.57	3.67	4.73									dnf	3 / --			
reaction time 0.130	interval		1.10	1.06													
	velocity	5.06	7.73	8.02													

2020 Athlete Night Games (Fukui, JPN)

FINAL

date 29-Aug-20 wind 2.1 m/s

Kijima (2020) - race analysis of 2020 top domestic japanese 100m hurdlers

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Aoki, Masumi (JPN) (1994)	time	2.62	3.64	4.68	5.68	6.69	7.68	8.69	9.71	10.73	11.78		12.87	/ 1			
reaction time	interval		1.02	1.04	1.00	1.01	0.99	1.01	1.02	1.02	1.05	1.09			3.06	3.01	3.09
	velocity	4.96	8.33	8.17	8.50	8.42	8.59	8.42	8.33	8.33	8.10	9.22	7.77		8.33	8.47	8.25
Terada, Asuka (JPN) (1990)	time	2.61	3.63	4.64	5.65	6.65	7.66	8.67	9.69	10.73	11.78		12.93	/ 2			
reaction time	interval		1.02	1.01	1.01	1.00	1.01	1.01	1.02	1.04	1.05	1.15			3.04	3.02	3.11
	velocity	4.98	8.33	8.42	8.42	8.50	8.42	8.42	8.33	8.17	8.10	8.74	7.73		8.39	8.44	8.20
Kiyoyama, Chisato (JPN) (199	time	2.66	3.73	4.75	5.76	6.78	7.79	8.83	9.85	10.89	11.98		13.10	/ 3			
reaction time	interval		1.07	1.02	1.01	1.02	1.01	1.04	1.02	1.04	1.09	1.12			3.10	3.07	3.15

	velocity	4.89	7.94	8.33	8.42	8.33	8.42	8.17	8.33	8.17	7.80	8.97	7.63		8.23	8.31	8.10
Suzuki, Miho (JPN) (1996)	time	2.69	3.73	4.74	5.76	6.76	7.77	8.79	9.84	10.89	11.99		13.12	/ 4			
reaction time	interval		1.04	1.01	1.02	1.00	1.01	1.02	1.05	1.05	1.10	1.13			3.07	3.03	3.20
	velocity	4.83	8.17	8.42	8.33	8.50	8.42	8.33	8.10	8.10	7.73	8.89	7.62		8.31	8.42	7.97
Shimura, Hitomi (JPN) (1990)	time	2.67	3.72	4.75	5.77	6.78	7.80	8.82	9.86	10.91	11.97		13.14	/ 5			
reaction time	interval		1.05	1.03	1.02	1.01	1.02	1.02	1.04	1.05	1.06	1.17			3.10	3.05	3.15
	velocity	4.87	8.10	8.25	8.33	8.42	8.33	8.33	8.17	8.10	8.02	8.59	7.61		8.23	8.36	8.10
Fukube, Mako (JPN) (1995)	time	2.67	3.75	4.82	5.86	6.87	7.92	8.96	10.03	11.10	12.19		13.36	/ 6			
reaction time	interval		1.08	1.07	1.04	1.01	1.05	1.04	1.07	1.07	1.09	1.17			3.19	3.10	3.23
	velocity	4.87	7.87	7.94	8.17	8.42	8.10	8.17	7.94	7.94	7.80	8.59	7.49		7.99	8.23	7.89
Hemphill, Megu (JPN) (1996)	time	2.68	3.78	4.84	5.89	6.93	7.98	9.04	10.11	11.19	12.32		13.58	/ 7			
reaction time	interval		1.10	1.06	1.05	1.04	1.05	1.06	1.07	1.08	1.13	1.26			3.21	3.15	3.28
	velocity	4.85	7.73	8.02	8.10	8.17	8.10	8.02	7.94	7.87	7.52	7.98	7.36		7.94	8.10	7.77
Kobayashi, Ayumi (JPN) (2001	time	2.69	3.79	4.86	5.91	6.94	8.00	9.06	10.14	11.22	12.33		13.58	/ 8			
reaction time	interval		1.10	1.07	1.05	1.03	1.06	1.06	1.08	1.08	1.11	1.25			3.22	3.15	3.27
	velocity	4.83	7.73	7.94	8.10	8.25	8.02	8.02	7.87	7.87	7.66	8.04	7.36		7.92	8.10	7.80

2020 Bauhaus Galan (Stockholm, SWE) (TV Analysis)

FINAL date 23-Aug-20 wind 1.4 m/s

Henson (2020) - Athlete First: 2020 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Bogliolo, Luminosa (ITA) (199	time	2.60	3.63	4.60	5.60	6.63	7.63	8.63	9.63	10.63	11.73		12.88	4 / 1			
reaction time 0.170	interval		1.03	0.97	1.00	1.03	1.00	1.00	1.00	1.00	1.10	1.15			3.00	3.03	3.10
	velocity	5.00	8.25	8.76	8.50	8.25	8.50	8.50	8.50	8.50	7.73	8.74	7.76		8.50	8.42	8.23
Harala, Lotta (FIN) (1992)	time	2.57	3.63	4.63	5.66	6.66	7.66	8.70	9.73	10.76	11.86		13.07	2 / 2			
reaction time 0.154	interval		1.06	1.00	1.03	1.00	1.00	1.04	1.03	1.03	1.10	1.21	=PB		3.09	3.04	3.16
	velocity	5.06	8.02	8.50	8.25	8.50	8.50	8.17	8.25	8.25	7.73	8.31	7.65		8.25	8.39	8.07
Graversgaard, Mette (DEN) (19	time	2.57	3.63	4.67	5.70	6.73	7.73	8.77	9.77	10.86	11.93		13.13	3 / 3			
reaction time 0.145	interval		1.06	1.04	1.03	1.03	1.00	1.04	1.00	1.09	1.07	1.20	NR PB		3.13	3.07	3.16
	velocity	5.06	8.02	8.17	8.25	8.25	8.50	8.17	8.50	7.80	7.94	8.37	7.62		8.15	8.31	8.07
Wennersten, Julia (SWE) (200	time	2.60	3.70	4.77	5.87	6.97	8.03	9.13	10.20	11.33	12.47		13.72	7 / 4			
reaction time 0.144	interval		1.10	1.07	1.10	1.10	1.06	1.10	1.07	1.13	1.14	1.25			3.27	3.26	3.34
	velocity	5.00	7.73	7.94	7.73	7.73	8.02	7.73	7.94	7.52	7.46	8.04	7.29		7.80	7.82	7.63
Karlsson, Lovisa (SWE) (2000)	time	2.70	3.77	4.83	5.90	6.97	8.03	9.13	10.23	11.37	12.50		13.76	5 / 5			
reaction time 0.152	interval		1.07	1.06	1.07	1.07	1.06	1.10	1.10	1.14	1.13	1.26			3.20	3.23	3.37
	velocity	4.81	7.94	8.02	7.94	7.94	8.02	7.73	7.73	7.46	7.52	7.98	7.27		7.97	7.89	7.57
Johnson-Thompson, Katarina	time	2.63	3.77	4.83	5.93	7.00	8.10	9.17	10.20	11.30	12.43		13.94	6 / 6			
reaction time 0.155	interval	7 steps	1.14	1.06	1.10	1.07	1.10	1.07	1.03	1.10	1.13	1.51			3.30	3.24	3.26
	velocity	4.94	7.46	8.02	7.73	7.94	7.73	7.94	8.25	7.73	7.52	6.66	7.17		7.73	7.87	7.82
Klaup-McColl, Mari (EST) (199	time	2.73	3.83	4.93	6.00	7.13	8.23	9.33	10.43	11.53	12.67		13.98	8 / 7			
reaction time 0.185	interval		1.10	1.10	1.07	1.13	1.10	1.10	1.10	1.10	1.14	1.31			3.27	3.33	3.34
	velocity	4.76	7.73	7.73	7.94	7.52	7.73	7.73	7.73	7.73	7.46	7.67	7.15		7.80	7.66	7.63
Skogström, Malin (SWE) (199	time	2.73	3.87	5.00	6.17	7.23	8.37	9.47	10.63	11.83	13.00		14.32	1 / 8			
reaction time 0.144	interval		1.14	1.13	1.17	1.06	1.14	1.10	1.16	1.20	1.17	1.32			3.44	3.30	3.53
	velocity	4.76	7.46	7.52	7.26	8.02	7.46	7.73	7.33	7.08	7.26	7.61	6.98		7.41	7.73	7.22

2020 Seiko Golden Grand Prix (Tokyo, JPN)

FINAL date 23-Aug-20 wind 0.3 m/s

Kijima (2020) - race analysis of 2020 top domestic japanese 100m hurdlers

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Terada, Asuka (JPN) (1990)	time	2.61	3.69	4.69	5.69	6.71	7.71	8.74	9.77	10.81	11.88		13.03	5 / 1			
reaction time 0.164	interval		1.08	1.00	1.00	1.02	1.00	1.03	1.03	1.04	1.07	1.15			3.08	3.05	3.14
	velocity	4.98	7.87	8.50	8.50	8.33	8.50	8.25	8.25	8.17	7.94	8.74	7.67		8.28	8.36	8.12
Aoki, Masumi (JPN) (1994)	time	2.65	3.70	4.72	5.74	6.77	7.79	8.83	9.86	10.90	11.96		13.09	7 / 2			
reaction time 0.131	interval		1.05	1.02	1.02	1.03	1.02	1.04	1.03	1.04	1.06	1.13	PB		3.09	3.09	3.13
	velocity	4.91	8.10	8.33	8.33	8.25	8.33	8.17	8.25	8.17	8.02	8.89	7.64		8.25	8.25	8.15
Kiyoyama, Chisato (JPN) (199	time	2.67	3.75	4.77	5.77	6.80	7.82	8.85	9.88	10.94	12.02		13.19	6 / 3			
reaction time 0.139	interval		1.08	1.02	1.00	1.03	1.02	1.03	1.03	1.06	1.08	1.17			3.10	3.08	3.17
	velocity	4.87	7.87	8.33	8.50	8.25	8.33	8.25	8.25	8.02	7.87	8.59	7.58		8.23	8.28	8.04
Tanaka, Yumi (JPN) (1998)	time	2.62	3.67	4.72	5.73	6.77	7.82	8.88	9.92	10.98	12.06		13.27	3 / 4			
reaction time 0.157	interval		1.05	1.05	1.01	1.04	1.05	1.06	1.04	1.06	1.08	1.21			3.11	3.15	3.18
	velocity	4.96	8.10	8.10	8.42	8.17	8.10	8.02	8.17	8.02	7.87	8.31	7.54		8.20	8.10	8.02
Suzuki, Miho (JPN) (1996)	time	2.72	3.78	4.83	5.86	6.89	7.92	8.96	10.03	11.08	12.17		13.30	2 / 5			

reaction time 0.184	interval		1.06	1.05	1.03	1.03	1.03	1.04	1.07	1.05	1.09	1.13			3.14	3.10	3.21
	velocity	4.78	8.02	8.10	8.25	8.25	8.25	8.17	7.94	8.10	7.80	8.89	7.52		8.12	8.23	7.94
Fukube, Mako (JPN) (1995)	time	2.67	3.73	4.78	5.81	6.83	7.89	8.94	10.00	11.07	12.16		13.33	9 / 6			
reaction time 0.123	interval		1.06	1.05	1.03	1.02	1.06	1.05	1.06	1.07	1.09	1.17			3.14	3.13	3.22
	velocity	4.87	8.02	8.10	8.25	8.33	8.02	8.10	8.02	7.94	7.80	8.59	7.50		8.12	8.15	7.92
Shimura, Hitomi (JPN) (1990)	time	2.62	3.69	4.75	5.78	6.82	7.85	8.90	9.97	11.05	12.14		13.36	4 / 7			
reaction time 0.148	interval		1.07	1.06	1.03	1.04	1.03	1.05	1.07	1.08	1.09	1.22			3.16	3.12	3.24
	velocity	4.96	7.94	8.02	8.25	8.17	8.25	8.10	7.94	7.87	7.80	8.24	7.49		8.07	8.17	7.87
Ito, Ayaka (JPN) (2002)	time	2.66	3.80	4.92	6.02	7.12	8.22	9.33	10.42	11.56	12.70		13.90	1 / 8			
reaction time 0.146	interval		1.14	1.12	1.10	1.10	1.10	1.11	1.09	1.14	1.14	1.20	PB		3.36	3.31	3.37
	velocity	4.89	7.46	7.59	7.73	7.73	7.73	7.66	7.80	7.46	7.46	8.37	7.19		7.59	7.70	7.57
Fujimori, Nana (JPN) (1997)	time	2.72	3.79	4.83	5.87	6.92	8.01						14.03	8 / 9			
reaction time 0.138	interval		1.07	1.04	1.04	1.05	1.09								3.15		
	velocity	4.78	7.94	8.17	8.17	8.10	7.80						7.13		8.10		

2020 István Gyulai Memorial (Székesfehérvár, HUN) (TV Analysis)

FINAL date 19-Aug-20 wind -0.2 m/s

Henson (2020) - Athlete First: 2020 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Visser, Nadine (NED) (1995)	time	2.49	3.50	4.50	5.47	6.44	7.41	8.41	9.41	10.42	11.44		12.68	5 / 1			
reaction time 0.145	interval		1.01	1.00	0.97	0.97	0.97	1.00	1.00	1.01	1.02	1.24			2.98	2.94	3.03
	velocity	5.22	8.42	8.50	8.76	8.76	8.76	8.50	8.50	8.42	8.33	8.10	7.89		8.56	8.67	8.42
Kozák, Luca (HUN) (1996)	time	2.47	3.50	4.50	5.47	6.44	7.44	8.44	9.44	10.44	11.44		12.71	6 / 2			
reaction time 0.168	interval		1.03	1.00	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.27	NR PB		3.00	2.97	3.00
	velocity	5.26	8.25	8.50	8.76	8.76	8.50	8.50	8.50	8.50	8.50	7.91	7.87		8.50	8.59	8.50
Herman, Elvira (BLR) (1997)	time	2.56	3.60	4.63	5.61	6.61	7.61	8.61	9.61	10.64	11.67		12.96	3 / 3			
reaction time 0.142	interval		1.04	1.03	0.98	1.00	1.00	1.00	1.00	1.03	1.03	1.29			3.05	3.00	3.06
	velocity	5.08	8.17	8.25	8.67	8.50	8.50	8.50	8.50	8.25	8.25	7.79	7.72		8.36	8.50	8.33
Samba-Mayela, Cyrena (FRA)	time	2.47	3.53	4.57	5.61		7.64	8.64	9.67	10.71	11.78		13.07	8 / 4			
reaction time 0.147	interval		1.06	1.04	1.04		2.03	1.00	1.03	1.04	1.07	1.29			3.14	3.03	3.14
	velocity	5.26	8.02	8.17	8.17		8.37	8.50	8.25	8.17	7.94	7.79	7.65		8.12	8.42	8.12
Korte, Annimari (FIN) (1988)	time	2.54	3.57	4.62	5.61	6.64	7.64	8.64	9.67	10.71	11.81		13.09	7 / 5			
reaction time 0.148	interval		1.03	1.05	0.99	1.03	1.00	1.00	1.03	1.04	1.10	1.28			3.07	3.03	3.17
	velocity	5.12	8.25	8.10	8.59	8.25	8.50	8.50	8.25	8.17	7.73	7.85	7.64		8.31	8.42	8.04
Nelvis, Sharika (USA) (1990)	time	2.50	3.53	4.57	5.54	6.54	7.54	8.57	9.61	10.64	11.67		13.09	4 / 6			
reaction time 0.147	interval	7 steps	1.03	1.04	0.97	1.00	1.00	1.03	1.04	1.03	1.03	1.42			3.04	3.03	3.10
	velocity	5.20	8.25	8.17	8.76	8.50	8.50	8.25	8.17	8.25	8.25	7.08	7.64		8.39	8.42	8.23
Kerekes, Gréta (HUN) (1992)	time	2.53	3.57	4.64	5.67	6.71	7.74	8.80	9.84	10.88	11.94		13.27	2 / 7			
reaction time 0.121	interval		1.04	1.07	1.03	1.04	1.03	1.06	1.04	1.04	1.06	1.33			3.14	3.13	3.14
	velocity	5.14	8.17	7.94	8.25	8.17	8.25	8.02	8.17	8.17	8.02	7.56	7.54		8.12	8.15	8.12
Brooks, Taliyah (USA) (1995)	time	2.50	3.54										dnf	1 / --			
reaction time 0.120	interval	7 steps	1.04														
	velocity	5.20	8.17														

2020 Finnish National Championships (Turku, FIN) (TV Analysis

FINAL date 14-Aug-20 wind 1.0 m/s

Henson (2020) - Athlete First: 2020 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Korte, Annimari (FIN) (1988)	time	2.60	3.66	4.66	5.63	6.60	7.60	8.60	9.57	10.57	11.60		12.79	4 / 1			
reaction time 0.197	interval		1.06	1.00	0.97	0.97	1.00	1.00	0.97	1.00	1.03	1.19			3.03	2.97	3.00
	velocity	5.00	8.02	8.50	8.76	8.76	8.50	8.50	8.76	8.50	8.25	8.45	7.82		8.42	8.59	8.50
Neziri, Nooralotta (FIN) (1992)	time	2.56	3.66	4.66	5.66	6.66	7.66	8.70	9.70	10.70	11.76		13.01	6 / 2			
reaction time 0.177	interval		1.10	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.06	1.25			3.10	3.04	3.06
	velocity	5.08	7.73	8.50	8.50	8.50	8.50	8.17	8.50	8.50	8.02	8.04	7.69		8.23	8.39	8.33
Hurske, Reetta (FIN) (1995)	time	2.56	3.60	4.63	5.66	6.66	7.66	8.66	9.70	10.73	11.80		13.02	3 / 3			
reaction time 0.175	interval		1.04	1.03	1.03	1.00	1.00	1.00	1.04	1.03	1.07	1.22			3.10	3.00	3.14
	velocity	5.08	8.17	8.25	8.25	8.50	8.50	8.50	8.17	8.25	7.94	8.24	7.68		8.23	8.50	8.12
Harala, Lotta (FIN) (1992)	time	2.56	3.63	4.66	5.70	6.70	7.70	8.73	9.76	10.80	11.83		13.15	5 / 4			
reaction time 0.131	interval		1.07	1.03	1.04	1.00	1.00	1.03	1.03	1.04	1.03	1.32			3.14	3.03	3.10
	velocity	5.08	7.94	8.25	8.17	8.50	8.50	8.25	8.25	8.17	8.25	7.61	7.60		8.12	8.42	8.23
Siirtola, Anni (FIN) (1998)	time	2.66	3.80	4.86	5.90	7.00	8.06	9.10	10.20	11.30	12.40		13.71	8 / 5			
reaction time 0.193	interval		1.14	1.06	1.04	1.10	1.06	1.04	1.10	1.10	1.10	1.31			3.24	3.20	3.30
	velocity	4.89	7.46	8.02	8.17	7.73	8.02	8.17	7.73	7.73	7.73	7.67	7.29		7.87	7.97	7.73

Vento, Lotta (FIN) (1997)	time	2.76	3.86	4.93	6.03	7.13	8.20	9.30	10.36	11.46	12.56		13.84	1 / 6				
reaction time 0.154	interval		1.10	1.07	1.10	1.10	1.07	1.10	1.06	1.10	1.10	1.28			3.27	3.27	3.26	
	velocity	4.71	7.73	7.94	7.73	7.73	7.94	7.73	8.02	7.73	7.73	7.85	7.23		7.80	7.80	7.82	
Avikainen, Viivi (FIN) (1987)	time	2.73	3.86	4.93	6.03	7.10	8.16	9.23	10.33	11.43	12.56		13.87	2 / 7				
reaction time 0.163	interval		1.13	1.07	1.10	1.07	1.06	1.07	1.10	1.10	1.13	1.31			3.30	3.20	3.33	
	velocity	4.76	7.52	7.94	7.73	7.94	8.02	7.94	7.73	7.73	7.52	7.67	7.21		7.73	7.97	7.66	
Keskitalo, Saara (FIN) (2000)	time	2.73	3.86	4.93	6.00	7.06	8.20	9.26	10.36	11.46	12.60		13.87	7 / 8				
reaction time 0.171	interval		1.13	1.07	1.07	1.06	1.14	1.06	1.10	1.10	1.14	1.27			3.27	3.26	3.34	
	velocity	4.76	7.52	7.94	7.94	8.02	7.46	8.02	7.73	7.73	7.46	7.91	7.21		7.80	7.82	7.63	

2020 Paavo Nurmi Games (Turku, FIN) (TV Analysis)

FINAL date 11-Aug-20 wind 1.2 m/s *Henson (2020) - Athlete First: 2020 year end hurdle report*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Visser, Nadine (NED) (1995)	time	2.50	3.52	4.54	5.54	6.50	7.48	8.48	9.46	10.48	11.50		12.68	4 / 1			
reaction time 0.137	interval		1.02	1.02	1.00	0.96	0.98	1.00	0.98	1.02	1.02	1.18			3.04	2.94	3.02	
	velocity	5.20	8.33	8.33	8.50	8.85	8.67	8.50	8.67	8.33	8.33	8.52	7.89		8.39	8.67	8.44	
Bogliolo, Luminosa (ITA) (199	time	2.56	3.58	4.60	5.58	6.58	7.56	8.56	9.54	10.56	11.60		12.79	6 / 2			
reaction time 0.180	interval		1.02	1.02	0.98	1.00	0.98	1.00	0.98	1.02	1.04	1.19			3.02	2.98	3.04	
	velocity	5.08	8.33	8.33	8.67	8.50	8.67	8.50	8.67	8.33	8.17	8.45	7.82		8.44	8.56	8.39	
Kozák, Luca (HUN) (1996)	time	2.56	3.60	4.62	5.60	6.58	7.58	8.56	9.54	10.58	11.60		12.83	8 / 3			
reaction time 0.174	interval		1.04	1.02	0.98	0.98	1.00	0.98	0.98	1.04	1.02	1.23	PB		3.04	2.96	3.04	
	velocity	5.08	8.17	8.33	8.67	8.67	8.50	8.67	8.67	8.17	8.33	8.17	7.79		8.39	8.61	8.39	
Korte, Annimari (FIN) (1988)	time	2.62	3.64	4.64	5.64	6.64	7.62	8.62	9.64	10.66	11.68		12.89	3 / 4			
reaction time 0.225	interval		1.02	1.00	1.00	1.00	0.98	1.00	1.02	1.02	1.02	1.21			3.02	2.98	3.06	
	velocity	4.96	8.33	8.50	8.50	8.50	8.67	8.50	8.33	8.33	8.33	8.31	7.76		8.44	8.56	8.33	
Neziri, Nooralotta (FIN) (1992)	time	2.58	3.62	4.64	5.64	6.66	7.66	8.66	9.70	10.74	11.78		13.00	5 / 5			
reaction time 0.171	interval		1.04	1.02	1.00	1.02	1.00	1.00	1.04	1.04	1.04	1.22			3.06	3.02	3.12	
	velocity	5.04	8.17	8.33	8.50	8.33	8.50	8.50	8.17	8.17	8.17	8.24	7.69		8.33	8.44	8.17	
Harala, Lotta (FIN) (1992)	time	2.56	3.62	4.62	5.64	6.64	7.66	8.68	9.70	10.76	11.82		13.10	7 / 6			
reaction time 0.190	interval		1.06	1.00	1.02	1.00	1.02	1.02	1.02	1.06	1.06	1.28	PB		3.08	3.04	3.14	
	velocity	5.08	8.02	8.50	8.33	8.50	8.33	8.33	8.33	8.02	8.02	7.85	7.63		8.28	8.39	8.12	
Hurske, Reetta (FIN) (1995)	time	2.54	3.58	4.62	5.66	6.66	7.66	8.70	9.72	10.78	11.86		13.11	2 / 7			
reaction time 0.168	interval		1.04	1.04	1.04	1.00	1.00	1.04	1.02	1.06	1.08	1.25			3.12	3.04	3.16	
	velocity	5.12	8.17	8.17	8.17	8.50	8.50	8.17	8.33	8.02	7.87	8.04	7.63		8.17	8.39	8.07	
Ndama, Solène (FRA) (1998)	time	2.60	3.66	4.70	5.74	6.74	7.74	8.76	9.80	10.86	11.92		13.21	1 / 8			
reaction time 0.161	interval		1.06	1.04	1.04	1.00	1.00	1.02	1.04	1.06	1.06	1.29			3.14	3.02	3.16	
	velocity	5.00	8.02	8.17	8.17	8.50	8.50	8.33	8.17	8.02	8.02	7.79	7.57		8.12	8.44	8.07	

2020 Shimane High School Championships (Honshu, JPN)

FINAL date 11-Jul-20 wind 0.4 m/s *Shimizu (2020) - shimane high school championships 2020 - biomechanics data analysis*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
福本 智帆	time	2.78	3.93	5.08	6.23	7.40	8.57	9.75	10.97	12.20	13.47		14.89	3 / 1			
reaction time	interval		1.15	1.15	1.15	1.17	1.17	1.18	1.22	1.23	1.27	1.42			3.45	3.52	3.72	
	velocity	4.68	7.39	7.39	7.39	7.26	7.26	7.20	6.97	6.91	6.69	7.08	6.72		7.39	7.24	6.85	
上木 杏香音	time	2.85	4.07	5.32	6.58	7.85	9.13	10.47	11.85	13.23	14.68		16.23	6 / 2			
reaction time	interval		1.22	1.25	1.26	1.27	1.28	1.34	1.38	1.38	1.45	1.55			3.73	3.89	4.21	
	velocity	4.56	6.97	6.80	6.75	6.69	6.64	6.34	6.16	6.16	5.86	6.48	6.16		6.84	6.56	6.06	
松本 春佳	time	2.87	4.07	5.30	6.52	7.78	9.08	10.42	11.78	13.18	14.73		16.23	1 / 3			
reaction time	interval		1.20	1.23	1.22	1.26	1.30	1.34	1.36	1.40	1.55	1.50			3.65	3.90	4.31	
	velocity	4.53	7.08	6.91	6.97	6.75	6.54	6.34	6.25	6.07	5.48	6.70	6.16		6.99	6.54	5.92	
中村 寧々	time	2.88	4.08	5.35	6.63	7.95	9.33	10.72	12.20	13.78	15.28		16.91	5 / 4			
reaction time	interval		1.20	1.27	1.28	1.32	1.38	1.39	1.48	1.58	1.50	1.63			3.75	4.09	4.56	
	velocity	4.51	7.08	6.69	6.64	6.44	6.16	6.12	5.74	5.38	5.67	6.17	5.91		6.80	6.23	5.59	
錦織 玲菜	time	2.93	4.18	5.47	6.78	8.12	9.48	10.85	12.28	13.77	15.32		17.43	7 / 5			
reaction time	interval		1.25	1.29	1.31	1.34	1.36	1.37	1.43	1.49	1.55	2.11			3.85	4.07	4.47	
	velocity	4.44	6.80	6.59	6.49	6.34	6.25	6.20	5.94	5.70	5.48	4.76	5.74		6.62	6.27	5.70	
藤原 未歩	time	3.05	4.43	5.85	7.33	8.82	10.30	11.78	13.28	14.78	16.32		17.89	2 / 6			
reaction time	interval		1.38	1.42	1.48	1.49	1.48	1.48	1.50	1.50	1.54	1.57			4.28	4.45	4.54	
	velocity	4.26	6.16	5.99	5.74	5.70	5.74	5.74	5.67	5.67	5.52	6.40	5.59		5.96	5.73	5.62	

2020 Motonet GP (Jyräskylä, FIN) (TV Analysis

FINAL date 08-Jul-20 wind 0.7 m/s *Henson (2020) - Athlete First: 2020 year end hurdle report*

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

Korte, Annimari (FIN) (1988)	time	2.60	3.63	4.66	5.66	6.63	7.60	8.60	9.60	10.60	11.63		12.76	4 / 1			
reaction time	interval		1.03	1.03	1.00	0.97	0.97	1.00	1.00	1.00	1.03	1.13			3.06	2.94	3.03
	velocity	5.00	8.25	8.25	8.50	8.76	8.76	8.50	8.50	8.50	8.25	8.89	7.84		8.33	8.67	8.42
Hurske, Reetta (FIN) (1995)	time	2.56	3.60	4.63	5.63	6.63	7.63	8.63	9.66	10.70	11.73		12.91	6 / 2			
reaction time	interval		1.04	1.03	1.00	1.00	1.00	1.00	1.03	1.04	1.03	1.18			3.07	3.00	3.10
	velocity	5.08	8.17	8.25	8.50	8.50	8.50	8.50	8.25	8.17	8.25	8.52	7.75		8.31	8.50	8.23
Neziri, Nooralotta (FIN) (1992)	time	2.60	3.63	4.66	5.66	6.63	7.63	8.63	9.63	10.66	11.73		12.95	5 / 3			
reaction time	interval		1.03	1.03	1.00	0.97	1.00	1.00	1.00	1.03	1.07	1.22			3.06	2.97	3.10
	velocity	5.00	8.25	8.25	8.50	8.76	8.50	8.50	8.50	8.25	7.94	8.24	7.72		8.33	8.59	8.23
Harala, Lotta (FIN) (1992)	time	2.56	3.66	4.70	5.73	6.76	7.80	8.83	9.86	10.93	12.03		13.29	3 / 4			
reaction time	interval		1.10	1.04	1.03	1.03	1.04	1.03	1.03	1.07	1.10	1.26			3.17	3.10	3.20
	velocity	5.08	7.73	8.17	8.25	8.25	8.17	8.25	8.25	7.94	7.73	7.98	7.52		8.04	8.23	7.97
Stång, Sonja (FIN) (2002)	time	2.70	3.83	4.93	6.03	7.10	8.16	9.23	10.33	11.43	12.56		13.82	2 / 5			
reaction time	interval		1.13	1.10	1.10	1.07	1.06	1.07	1.10	1.10	1.13	1.26	PB		3.33	3.20	3.33
	velocity	4.81	7.52	7.73	7.73	7.94	8.02	7.94	7.73	7.73	7.52	7.98	7.24		7.66	7.97	7.66
Avikainen, Viivi (FIN) (1987)	time	2.73	3.83	4.93	6.00	7.06	8.23	9.33	10.46				14.10	8 / 6			
reaction time	interval		1.10	1.10	1.07	1.06	1.17	1.10	1.13			3.64			3.27	3.33	
	velocity	4.76	7.73	7.73	7.94	8.02	7.26	7.73	7.52			7.43	7.09		7.80	7.66	
Kokkonen, Tanja (FIN) (2002)	time	2.70	3.83	4.96	6.06	7.16	8.26	9.36	10.50	11.66	12.86		14.21	1 / 7			
reaction time	interval		1.13	1.13	1.10	1.10	1.10	1.10	1.14	1.16	1.20	1.35			3.36	3.30	3.50
	velocity	4.81	7.52	7.52	7.73	7.73	7.73	7.73	7.46	7.33	7.08	7.44	7.04		7.59	7.73	7.29
Siirtola, Anni (FIN) (1998)	time	2.60	3.70										dnf	7 / --			
reaction time	interval		1.10														
	velocity	5.00	7.73														

2020 USATF National Indoor Championships (Albuquerque, NM) (Altitude)

FINAL

date 15-Feb-20

CAA Hurdle Development (2020)

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Cunningham, Gabriele (USA)	time	2.57	3.58	4.60	5.58	6.57		7.92	6 / 1			
reaction time 0.170	interval		1.01	1.02	0.98	0.99	1.35	PB		3.01		
	velocity	5.06	8.42	8.33	8.67	8.59	9.63	7.58		8.47		
Chadwick, Payton (USA) (199	time	2.60	3.63	4.63	5.64	6.64		7.94	3 / 2			
reaction time 0.160	interval		1.03	1.00	1.01	1.00	1.30			3.04		
	velocity	5.00	8.25	8.50	8.42	8.50	10.00	7.56		8.39		
McReynolds, Tiffani (USA) (1	time	2.60	3.63	4.65	5.65	6.64		7.96	4 / 3			
reaction time 0.181	interval		1.03	1.02	1.00	0.99	1.32			3.05		
	velocity	5.00	8.25	8.33	8.50	8.59	9.85	7.54		8.36		
Jones, Cortney (USA) (1999)	time	2.65	3.67	4.68	5.69	6.69		8.10	7 / 4			
reaction time 0.171	interval		1.02	1.01	1.01	1.00	1.41			3.04		
	velocity	4.91	8.33	8.42	8.42	8.50	9.22	7.41		8.39		
Castlin, Kristi (USA) (1988)	time	2.65	3.70	4.73	5.74	6.74		8.12	1 / 5			
reaction time 0.166	interval		1.05	1.03	1.01	1.00	1.38			3.09		
	velocity	4.91	8.10	8.25	8.42	8.50	9.42	7.39		8.25		
Bougard, Erica (USA) (1993)	time	2.67	3.73	4.75	5.75	6.75		8.13	8 / 6			
reaction time 0.143	interval		1.06	1.02	1.00	1.00	1.38			3.08		
	velocity	4.87	8.02	8.33	8.50	8.50	9.42	7.38		8.28		
Howell, Jackie (USA) (1996)	time	2.67	4.02					dnf	2 / --			
reaction time 0.141	interval		1.35									
	velocity	4.87	6.30									

Heat 2

date 15-Feb-20

CAA Hurdle Development (2020)

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
McReynolds, Tiffani (USA) (1	time	2.59	3.64	4.64	5.64	6.62		7.98	6 / 1			
reaction time 0.156	interval		1.05	1.00	1.00	0.98	1.36			3.05		
	velocity	5.02	8.10	8.50	8.50	8.67	9.56	7.52		8.36		
Chadwick, Payton (USA) (199	time	2.62	3.65	4.69	5.65	6.67		8.04	7 / 2			
reaction time 0.170	interval		1.03	1.04	0.96	1.02	1.37			3.03		
	velocity	4.96	8.25	8.17	8.85	8.33	9.49	7.46		8.42		
Jones, Cortney (USA) (1999)	time	2.67	3.72	4.72	5.73	6.74		8.14	3 / 3			
reaction time 0.175	interval		1.05	1.00	1.01	1.01	1.40			3.06		
	velocity	4.87	8.10	8.50	8.42	8.42	9.29	7.37		8.33		

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Bougard, Erica (USA) (1993)	time	2.68	3.75	4.77	5.77	6.77		8.16	5 / 4			
reaction time 0.161	interval		1.07	1.02	1.00	1.00	1.39			3.09		
	velocity	4.85	7.94	8.33	8.50	8.50	9.35	7.35		8.25		
Penda, Helnsarah (USA)	time	2.70	3.82	4.92	6.02	7.12		8.67	4 / 5			
reaction time 0.168	interval		1.12	1.10	1.10	1.10	1.55			3.32		
	velocity	4.81	7.59	7.73	7.73	7.73	8.39	6.92		7.68		

Heat 1

date 15-Feb-20

CAA Hurdle Development (2020)

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Jones, Tia (USA) (2000)	time	2.60	3.63	4.65	5.64	6.62		7.96	3 / 1			
reaction time 0.162	interval		1.03	1.02	0.99	0.98	1.34	PB		3.04		
	velocity	5.00	8.25	8.33	8.59	8.67	9.70	7.54		8.39		
Cunningham, Gabriele (USA)	time	2.54	3.58	4.60	5.60	6.59		7.97	6 / 2			
reaction time 0.164	interval		1.04	1.02	1.00	0.99	1.38	PB		3.06		
	velocity	5.12	8.17	8.33	8.50	8.59	9.42	7.53		8.33		
Howell, Jackie (USA) (1996)	time	2.67	3.73	4.77	5.78	6.79		8.17	4 / 3			
reaction time 0.154	interval		1.06	1.04	1.01	1.01	1.38			3.11		
	velocity	4.87	8.02	8.17	8.42	8.42	9.42	7.34		8.20		
Castlin, Kristi (USA) (1988)	time	2.62	3.70	4.75	5.79	6.80		8.19	5 / 4			
reaction time 0.136	interval		1.08	1.05	1.04	1.01	1.39			3.17		
	velocity	4.96	7.87	8.10	8.17	8.42	9.35	7.33		8.04		
Moore, Tawnie (USA) (1995)	time	2.65	3.72	4.77	5.79	6.82		8.21	7 / 5			
reaction time 0.147	interval		1.07	1.05	1.02	1.03	1.39			3.14		
	velocity	4.91	7.94	8.10	8.33	8.25	9.35	7.31		8.12		

2020 Don Kirby Elite Invitational (Albuquerque, NM) (Altitude)

FINAL

date 14-Feb-20

CAA Hurdle Development (2020)

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Sloan, Emily (USA) (2000)	time	2.67	3.70	4.76	5.77	6.82		8.18	4 / 1			
reaction time	interval		1.03	1.06	1.01	1.05	1.36	PB		3.10		
	velocity	4.87	8.25	8.02	8.42	8.10	9.56	7.33		8.23		
You Na (CHN) (1993)	time	2.72	3.79	4.83	5.87	6.90		8.28	6 / 2			
reaction time	interval		1.07	1.04	1.04	1.03	1.38			3.15		
	velocity	4.78	7.94	8.17	8.17	8.25	9.42	7.25		8.10		
Harrison, Michelle (CAN) (199	time	2.70	3.79	4.83	5.87	6.92		8.31	5 / 3			
reaction time	interval		1.09	1.04	1.04	1.05	1.39			3.17		
	velocity	4.81	7.80	8.17	8.17	8.10	9.35	7.22		8.04		
Caicedo, Maribel (ECU) (1998)	time	2.72	3.78	4.84	5.86	6.92		8.32	2 / 4			
reaction time	interval		1.06	1.06	1.02	1.06	1.40			3.14		
	velocity	4.78	8.02	8.02	8.33	8.02	9.29	7.21		8.12		
Hicks, Jada (USA) (2000)	time	2.67	3.74	4.82	5.86	6.93		8.35	1 / 5			
reaction time	interval		1.07	1.08	1.04	1.07	1.42			3.19		
	velocity	4.87	7.94	7.87	8.17	7.94	9.15	7.19		7.99		
Rusnak, Hannah (USA)	time	2.64	3.72	4.79	5.84	6.92		8.39	7 / 6			
reaction time	interval		1.08	1.07	1.05	1.08	1.47			3.20		
	velocity	4.92	7.87	7.94	8.10	7.87	8.84	7.15		7.97		

Semi-Final 2

date 14-Feb-20

CAA Hurdle Development (2020)

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shi Jiali (CHN) (1997)	time	2.67	3.77	4.81	5.86	6.92		8.49	8 / 4			
reaction time	interval		1.10	1.04	1.05	1.06	1.57			3.19		
	velocity	4.87	7.73	8.17	8.10	8.02	8.28	7.07		7.99		

Semi-Final 1

date 14-Feb-20

CAA Hurdle Development (2020)

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
You Na (CHN) (1993)	time	2.73	3.80	4.84	5.87	6.92		8.30	1 / 2			
reaction time	interval		1.07	1.04	1.03	1.05	1.38			3.14		
	velocity	4.76	7.94	8.17	8.25	8.10	9.42	7.23		8.12		
Shimura, Hitomi (JPN) (1990)	time	2.68	3.75	4.81	5.86	6.95		8.43	5 / 4			
reaction time	interval		1.07	1.06	1.05	1.09	1.48			3.18		
	velocity	4.85	7.94	8.02	8.10	7.80	8.78	7.12		8.02		

Heat 6

date 14-Feb-20

CAA Hurdle Development (2020)

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
You Na (CHN) (1993)	time	2.59	3.69	4.74	5.80	6.89		8.48	2 / 2			
reaction time	interval		1.10	1.05	1.06	1.09	1.59			3.21		

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

		velocity	5.02	7.73	8.10	8.02	7.80		8.18	7.08		7.94		

Heat 3

date 14-Feb-20 — *CAA Hurdle Development (2020)*

			H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shi Jiali (CHN) (1997)		time	2.65	3.74	4.80	5.87	6.92		8.54	7 / 2			
reaction time		interval		1.09	1.06	1.07	1.05	1.62			3.22		
		velocity	4.91	7.80	8.02	7.94	8.10	8.02	7.03		7.92		

2020 Millrose Games (New York, NY)

FINAL

date 08-Feb-20 — *PrimeTime Timing (2020) - http://results.nyrrmillrosegames.org/*

			H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Keni (USA) (1992)		time	2.53	3.56	4.52	5.51	6.48		7.90	5 / 1			
reaction time	0.201	interval		1.03	0.96	0.99	0.97	1.42			2.98		
		velocity	5.14	8.25	8.85	8.59	8.76	9.15	7.59		8.56		
Ali, Nia (USA) (1988)	0.199	no information available							7.96	4 / 2			
Chadwick, Payton (USA) (199		time	2.57	3.62	4.61	5.61	6.59		8.00	8 / 3			
reaction time	0.161	interval		1.05	0.99	1.00	0.98	1.41			3.04		
		velocity	5.06	8.10	8.59	8.50	8.67	9.22	7.50		8.39		
Anderson, Britany (JAM) (200		time	2.60	3.63	4.60	5.60	6.57		8.02	7 / 4			
reaction time	0.168	interval		1.03	0.97	1.00	0.97	1.45	NJR PB		3.00		
		velocity	5.00	8.25	8.76	8.50	8.76	8.97	7.48		8.50		
Cunningham, Gabbi (USA) (1		time	2.56	3.60	4.62	5.64	6.64		8.08	3 / 5			
reaction time	0.176	interval		1.04	1.02	1.02	1.00	1.44			3.08		
		velocity	5.08	8.17	8.33	8.33	8.50	9.03	7.43		8.28		
Brown, Janeek (JAM) (1998)		time	2.54	3.60	4.60	5.60	6.61		8.10	6 / 6			
reaction time	0.139	interval		1.06	1.00	1.00	1.01	1.49			3.06		
		velocity	5.12	8.02	8.50	8.50	8.42	8.72	7.41		8.33		
Phillips, Leah (USA) (2002)		time	2.70	3.79	4.86	5.90	6.94		8.44	1 / 7			
reaction time	0.217	interval		1.09	1.07	1.04	1.04	1.50			3.20		
		velocity	4.81	7.80	7.94	8.17	8.17	8.67	7.11		7.97		
Ellenwood, Georgia (CAN) (19		time	2.71	3.82	4.88	5.92	6.97		8.47	2 / 8			
reaction time	0.234	interval		1.11	1.06	1.04	1.05	1.50	PB		3.21		
		velocity	4.80	7.66	8.02	8.17	8.10	8.67	7.08		7.94		

2020 Mountain T's Invitational (Flagstaff AZ) (Altitude)

FINAL

date 01-Feb-20 — *CAA Hurdle Development (2020)*

			H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Dyer, Danae (USA) (2000)		time	2.65	3.75	4.77	5.82	6.86		8.24	5 / 1			
reaction time		interval		1.10	1.02	1.05	1.04	1.38	PB		3.17		
		velocity	4.91	7.73	8.33	8.10	8.17	9.42	7.28		8.04		
You Na (CHN) (1993)		time	2.70	3.76	4.82	5.84	6.91		8.28	4 / 2			
reaction time		interval		1.06	1.06	1.02	1.07	1.37			3.14		
		velocity	4.81	8.02	8.02	8.33	7.94	9.49	7.25		8.12		
Beattie, Danielle (USA) (2001)		time	2.74	3.79	4.83	5.89	6.94		8.30	3 / 3			
reaction time		interval		1.05	1.04	1.06	1.05	1.36			3.15		
		velocity	4.74	8.10	8.17	8.02	8.10	9.56	7.23		8.10		
Shi Jiali (CHN) (1997)		time	2.70	3.77	4.84	5.90	6.94		8.40	6 / 4			
reaction time		interval		1.07	1.07	1.06	1.04	1.46			3.20		
		velocity	4.81	7.94	7.94	8.02	8.17	8.90	7.14		7.97		

Heat 2

date 01-Feb-20 — *CAA Hurdle Development (2020)*

			H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
You Na (CHN) (1993)		time	2.65	3.72	4.77	5.82	6.86		8.26	4 / 1			
reaction time		interval		1.07	1.05	1.05	1.04	1.40	PB		3.17		
		velocity	4.91	7.94	8.10	8.10	8.17	9.29	7.26		8.04		

Heat 1

date 01-Feb-20 — *CAA Hurdle Development (2020)*

			H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Dyer, Danae (USA) (2000)		time	2.67	3.74	4.80	5.84	6.86		8.27	5 / 1			
reaction time		interval		1.07	1.06	1.04	1.02	1.41	PB		3.17		
		velocity	4.87	7.94	8.02	8.17	8.33	9.22	7.26		8.04		
Shi Jiali (CHN) (1997)		time	2.74	3.80	4.88	5.93	6.97		8.41	4 / 2			
reaction time		interval		1.06	1.08	1.05	1.04	1.44			3.19		
		velocity	4.74	8.02	7.87	8.10	8.17	9.03	7.13		7.99		

2020 New Balance Indoor Grand Prix (Boston, MA)

FINAL

date 25-Jan-20

PrimeTime Timing (2020) - https://results.nbindoorgrandprix.com/

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ali, Nia (USA) (1988)	time	2.57	3.62	4.60	5.60	6.58		7.94	4 / 1			
reaction time	interval		1.05	0.98	1.00	0.98	1.36			3.03		
	velocity	5.06	8.10	8.67	8.50	8.67	9.56	7.56		8.42		
Clemons, Christina (USA) (19	time	2.57	3.61	4.60	5.60	6.57		7.98	3 / 2			
reaction time	interval		1.04	0.99	1.00	0.97	1.41			3.03		
	velocity	5.06	8.17	8.59	8.50	8.76	9.22	7.52		8.42		
Brown, Janeek (JAM) (1998)	time	2.58	3.62	4.63	5.62	6.62		8.00	5 / 3			
reaction time	interval		1.04	1.01	0.99	1.00	1.38			3.04		
	velocity	5.04	8.17	8.42	8.59	8.50	9.42	7.50		8.39		
Anderson, Britany (JAM) (200	time	2.69	3.72	4.71	5.71	6.70		8.07	7 / 4			
reaction time	interval		1.03	0.99	1.00	0.99	1.37	NJR PB		3.02		
	velocity	4.83	8.25	8.59	8.50	8.59	9.49	7.43		8.44		
Pedersen, Isabelle (NOR) (199	time	2.67	3.69	4.69	5.72	6.70		8.10	6 / 5			
reaction time	interval		1.02	1.00	1.03	0.98	1.40			3.05		
	velocity	4.87	8.33	8.50	8.25	8.67	9.29	7.41		8.36		
Chadwick, Payton (USA) (199	time	2.63	3.67	4.71	5.73	6.69		8.13	2 / 6			
reaction time	interval		1.04	1.04	1.02	0.96	1.44			3.10		
	velocity	4.94	8.17	8.17	8.33	8.85	9.03	7.38		8.23		
Williams, Jeanine (JAM) (1997	time	2.59	3.63	4.67	5.69	6.69		8.14	1 / 7			
reaction time	interval		1.04	1.04	1.02	1.00	1.45			3.10		
	velocity	5.02	8.17	8.17	8.33	8.50	8.97	7.37		8.23		
Porter, Tiffany (GBR) (1987)	time	2.66	3.73	4.76	5.78	6.79		8.21	8 / 8			
reaction time	interval		1.07	1.03	1.02	1.01	1.42			3.12		
	velocity	4.89	7.94	8.25	8.33	8.42	9.15	7.31		8.17		

Heat 2

date 25-Jan-20

PrimeTime Timing (2020) - https://results.nbindoorgrandprix.com/

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Brown, Janeek (JAM) (1998)	time	2.60	3.65	4.68	5.69	6.69		8.06	5 / 1			
reaction time	interval		1.05	1.03	1.01	1.00	1.37			3.09		
	velocity	5.00	8.10	8.25	8.42	8.50	9.49	7.44		8.25		
Pedersen, Isabelle (NOR) (199	time	2.64	3.68	4.68	5.68	6.68		8.06	4 / 2			
reaction time	interval		1.04	1.00	1.00	1.00	1.38			3.04		
	velocity	4.92	8.17	8.50	8.50	8.50	9.42	7.44		8.39		
Anderson, Britany (JAM) (200	time	2.72	3.75	4.74	5.74	6.72		8.12	6 / 3			
reaction time	interval		1.03	0.99	1.00	0.98	1.40	PB		3.02		
	velocity	4.78	8.25	8.59	8.50	8.67	9.29	7.39		8.44		
Porter, Tiffany (GBR) (1987)	time	2.67	3.76	4.79	5.81	6.83		8.24	3 / 4			
reaction time	interval		1.09	1.03	1.02	1.02	1.41			3.14		
	velocity	4.87	7.80	8.25	8.33	8.33	9.22	7.28		8.12		
Stowers, Jasmin (USA) (1991)	time	2.68						dnf	7 / --			
reaction time	interval											
	velocity	4.85										

Heat 1

date 25-Jan-20

PrimeTime Timing (2020) - https://results.nbindoorgrandprix.com/

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ali, Nia (USA) (1988)	time	2.57	3.62	4.62	5.63	6.62		7.99	5 / 1			
reaction time	interval		1.05	1.00	1.01	0.99	1.37			3.06		
	velocity	5.06	8.10	8.50	8.42	8.59	9.49	7.51		8.33		
Clemons, Christina (USA) (19	time	2.59	3.65	4.67	5.68	6.66		8.02	4 / 2			
reaction time	interval		1.06	1.02	1.01	0.98	1.36			3.09		
	velocity	5.02	8.02	8.33	8.42	8.67	9.56	7.48		8.25		
Chadwick, Payton (USA) (199	time	2.66	3.71	4.74	5.75	6.72		8.07	3 / 3			
reaction time	interval		1.05	1.03	1.01	0.97	1.35			3.09		
	velocity	4.89	8.10	8.25	8.42	8.76	9.63	7.43		8.25		
Williams, Jeanine (JAM) (1997	time	2.61	3.66	4.68	5.71	6.71		8.14	6 / 4			
reaction time	interval		1.05	1.02	1.03	1.00	1.43			3.10		
	velocity	4.98	8.10	8.33	8.25	8.50	9.09	7.37		8.23		
Jones, Lolo (USA) (1982)	time	2.66	3.73	4.80	5.83	6.91		8.32	7 / 5			
reaction time	interval		1.07	1.07	1.03	1.08	1.41			3.17		

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

		velocity	4.89	7.94	7.94	8.25	7.87						9.22	7.21		8.04	

2020 Leonard Hilton Memorial Invitational (Houston, TX)

FINAL

date 17-Jan-20 — *CAA Hurdle Development (2020)*

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Taylor, Naomi (USA) (1998)	time	2.54	3.57	4.63	5.66	6.69		8.23	4 / 1			
reaction time	interval		1.03	1.06	1.03	1.03	1.54			3.12		
	velocity	5.12	8.25	8.02	8.25	8.25	8.44	7.29		8.17		
Carter, Kori (USA) (1992)	time	2.55	3.62	4.67	5.71	6.76		8.26	3 / 2			
reaction time	interval		1.07	1.05	1.04	1.05	1.50			3.16		
	velocity	5.10	7.94	8.10	8.17	8.10	8.67	7.26		8.07		
You Na (CHN) (1993)	time	2.57	3.65	4.70	5.76	6.81		8.33	5 / 3			
reaction time	interval		1.08	1.05	1.06	1.05	1.52	PB		3.19		
	velocity	5.06	7.87	8.10	8.02	8.10	8.55	7.20		7.99		
Shi Jiali (CHN) (1997)	time	2.59	3.64	4.71	5.77	6.82		8.42	6 / 4			
reaction time	interval		1.05	1.07	1.06	1.05	1.60			3.18		
	velocity	5.02	8.10	7.94	8.02	8.10	8.13	7.13		8.02		

Heat 3

date 17-Jan-20 — *CAA Hurdle Development (2020)*

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
You Na (CHN) (1993)	time	2.55	3.67	4.72	5.77	6.82		8.37	4 / 1			
reaction time	interval		1.12	1.05	1.05	1.05	1.55			3.22		
	velocity	5.10	7.59	8.10	8.10	8.10	8.39	7.17		7.92		

Heat 2

date 17-Jan-20 — *CAA Hurdle Development (2020)*

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shi Jiali (CHN) (1997)	time	2.60	3.70	4.77	5.82	6.86		8.43	6 / 2			
reaction time	interval		1.10	1.07	1.05	1.04	1.57			3.22		
	velocity	5.00	7.73	7.94	8.10	8.17	8.28	7.12		7.92		

2019 Japanese National U18/U20 Championships (Hiroshima, JPN)

U20 FINAL

date 18-Oct-19 wind -0.5 m/s — *Kijima (2019) - research on athlete performance and technique- 2019 data book*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shibata, Manaka (JPN) (2001)	time	2.66	3.73	4.78	5.81	6.85	7.89	8.93	9.99	11.09	12.20		13.45	6 / 1			
reaction time 0.142	interval		1.07	1.05	1.03	1.04	1.04	1.04	1.06	1.10	1.11	1.25			3.15	3.12	3.27
	velocity	4.89	7.94	8.10	8.25	8.17	8.17	8.17	8.02	7.73	7.66	8.40	7.43		8.10	8.17	7.80
Shimano, Mao (JPN) (2001)	time	2.71	3.81	4.85	5.91	6.97	8.05	9.15	10.24	11.39	12.53		13.78	4 / 2			
reaction time 0.153	interval		1.10	1.04	1.06	1.06	1.08	1.10	1.09	1.15	1.14	1.25			3.20	3.24	3.38
	velocity	4.80	7.73	8.17	8.02	8.02	7.87	7.73	7.80	7.39	7.46	8.40	7.26		7.97	7.87	7.54
Kobayashi, Ayumi (JPN) (2001	time	2.72	3.79	4.86	5.90	6.98	8.04	9.11	10.21	11.35	12.49		13.79	5 / 3			
reaction time 0.133	interval		1.07	1.07	1.04	1.08	1.06	1.07	1.10	1.14	1.14	1.30			3.18	3.21	3.38
	velocity	4.78	7.94	7.94	8.17	7.87	8.02	7.94	7.73	7.46	7.46	8.08	7.25		8.02	7.94	7.54

U18 FINAL (76cm)

date 18-Oct-19 wind -0.8m/s — *Kijima (2019) - research on athlete performance and technique- 2019 data book*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ito, Ayaka (JPN) (2002)	time	2.59	3.69	4.76	5.83	6.88	7.92	9.00	10.10	11.20	12.30		13.56	5 / 1			
reaction time 0.153	interval		1.10	1.07	1.07	1.05	1.04	1.08	1.10	1.10	1.10	1.26			3.24	3.17	3.30
	velocity	5.02	7.73	7.94	7.94	8.10	8.17	7.87	7.73	7.73	7.73	8.33	7.37		7.87	8.04	7.73
Kikuchi, Aika (JPN) (2002)	time	2.73	3.83	4.89	5.95	7.03	8.10	9.17	10.28	11.38	12.51		13.73	4 / 2			
reaction time 0.152	interval		1.10	1.06	1.06	1.08	1.07	1.07	1.11	1.10	1.13	1.22			3.22	3.22	3.34
	velocity	4.76	7.73	8.02	8.02	7.87	7.94	7.94	7.66	7.73	7.52	8.61	7.28		7.92	7.92	7.63
Kurokawa, Sane (JPN) (2002)	time	2.69	3.76	4.84	5.91	6.97	8.05	9.15	10.26	11.40	12.56		13.83	7 / 3			
reaction time 0.107	interval		1.07	1.08	1.07	1.06	1.08	1.10	1.11	1.14	1.16	1.27			3.22	3.24	3.41
	velocity	4.83	7.94	7.87	7.94	8.02	7.87	7.73	7.66	7.46	7.33	8.27	7.23		7.92	7.87	7.48

2019 IAAF World Championships (Doha, QAT)

FINAL

date 06-Oct-19 wind 0.3 m/s — *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ali, Nia (USA) (1988)	time	2.43	3.44	4.41	5.37	6.32	7.28	8.23	9.19	10.19	11.16		12.34	4 / 1			
reaction time 0.155	interval		1.01	0.97	0.96	0.95	0.96	0.95	0.96	1.00	0.97	1.18	PB		2.94	2.86	2.93
	velocity	5.35	8.42	8.76	8.85	8.95	8.85	8.95	8.85	8.50	8.76	8.52	8.10		8.67	8.92	8.70
Harrison, Kendra (USA) (1992)	time	2.41	3.46	4.44	5.39	6.38	7.32	8.29	9.26	10.25	11.25		12.46	6 / 2			
reaction time 0.140	interval		1.05	0.98	0.95	0.99	0.94	0.97	0.97	0.99	1.00	1.21			2.98	2.90	2.96
	velocity	5.39	8.10	8.67	8.95	8.59	9.04	8.76	8.76	8.59	8.50	8.31	8.03		8.56	8.79	8.61
Williams, Danielle (JAM) (1992	time	2.45	3.46	4.42	5.39	6.37	7.33	8.30	9.28	10.28	11.28		12.47	5 / 3			
reaction time 0.127	interval		1.01	0.96	0.97	0.98	0.96	0.97	0.98	1.00	1.00	1.19			2.94	2.91	2.98
	velocity	5.31	8.42	8.85	8.76	8.67	8.85	8.76	8.67	8.50	8.50	8.45	8.02		8.67	8.76	8.56

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

Amusan, Tobi (NGR) (1997)	time	2.53	3.56	4.53	5.50	6.45	7.39	8.35	9.32	10.30	11.30		12.49	7 / 4			
reaction time 0.218	interval		1.03	0.97	0.97	0.95	0.94	0.96	0.97	0.98	1.00	1.19			2.97	2.85	2.95
	velocity	5.14	8.25	8.76	8.76	8.95	9.04	8.85	8.76	8.67	8.50	8.45	8.01		8.59	8.95	8.64
Vargas, Andrea Carolina (CRC	time	2.48	3.52	4.50	5.49	6.47	7.44	8.43	9.41	10.43	11.44		12.64	3 / 5			
reaction time 0.157	interval		1.04	0.98	0.99	0.98	0.97	0.99	0.98	1.02	1.01	1.20	NR		3.01	2.94	3.01
	velocity	5.24	8.17	8.67	8.59	8.67	8.76	8.59	8.67	8.33	8.42	8.37	7.91		8.47	8.67	8.47
Visser, Nadine (NED) (1995)	time	2.48	3.51	4.49	5.46	6.43	7.38	8.37	9.36	10.36	11.43		12.66	2 / 6			
reaction time 0.147	interval		1.03	0.98	0.97	0.97	0.95	0.99	0.99	1.00	1.07	1.23			2.98	2.91	3.06
	velocity	5.24	8.25	8.67	8.76	8.76	8.95	8.59	8.59	8.50	7.94	8.17	7.90		8.56	8.76	8.33
Brown, Janeek (JAM) (1998)	time	2.57	3.63	4.63	5.60	6.60	7.59	8.58	9.58	10.59	11.64		12.88	8 / 7			
reaction time 0.147	interval		1.06	1.00	0.97	1.00	0.99	0.99	1.00	1.01	1.05	1.24			3.03	2.98	3.06
	velocity	5.06	8.02	8.50	8.76	8.50	8.59	8.59	8.50	8.42	8.10	8.10	7.76		8.42	8.56	8.33
Tapper, Megan (JAM) (1994)	time	2.67	4.08										dnf	9 / -			
reaction time 0.209	interval	*10 step*	1.41														
	velocity	4.87	6.03														

Semi-Final 3

date 06-Oct-19 wind 0.6 m/s

CAA Hurdle Development (2019)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)	time	2.49	3.52	4.49	5.45	6.41	7.38	8.33	9.32	10.30	11.33		12.48	5 / 1			
reaction time 0.124	interval		1.03	0.97	0.96	0.96	0.97	0.95	0.99	0.98	1.03	1.15	=PB		2.96	2.88	3.00
	velocity	5.22	8.25	8.76	8.85	8.85	8.76	8.95	8.59	8.67	8.25	8.74	8.01		8.61	8.85	8.50
Brown, Janeek (JAM) (1998)	time	2.53	3.56	4.54	5.53	6.52	7.49	8.48	9.47	10.47	11.50		12.62	7 / 2			
reaction time 0.134	interval		1.03	0.98	0.99	0.99	0.97	0.99	0.99	1.00	1.03	1.12			3.00	2.95	3.02
	velocity	5.14	8.25	8.67	8.59	8.59	8.76	8.59	8.59	8.50	8.25	8.97	7.92		8.50	8.64	8.44
Vargas, Andrea Carolina (CRC	time	2.57	3.60	4.57	5.56	6.53	7.51	8.51	9.49	10.50	11.53		12.65	4 / 3			
reaction time 0.150	interval		1.03	0.97	0.99	0.97	0.98	1.00	0.98	1.01	1.03	1.12	NR		2.99	2.95	3.02
	velocity	5.06	8.25	8.76	8.59	8.76	8.67	8.50	8.67	8.42	8.25	8.97	7.91		8.53	8.64	8.44
Herman, Elvira (BLR) (1997)	time	2.63	3.67	4.67	5.65	6.62	7.62	8.60	9.60	10.61	11.64		12.78	6 / 4			
reaction time 0.144	interval		1.04	1.00	0.98	0.97	1.00	0.98	1.00	1.01	1.03	1.14			3.02	2.95	3.04
	velocity	4.94	8.17	8.50	8.67	8.76	8.50	8.67	8.50	8.42	8.25	8.82	7.82		8.44	8.64	8.39
Zagré, Anne (BEL) (1990)	time	2.61	3.64	4.63	5.61	6.59	7.56	8.54	9.56	10.58	11.62		13.23	9 / ~~5~~			
reaction time 0.135	interval		1.03	0.99	0.98	0.98	0.97	0.98	1.02	1.02	1.04	1.61	DQ		3.00	2.93	3.08
	velocity	4.98	8.25	8.59	8.67	8.67	8.76	8.67	8.33	8.33	8.17	6.24	7.56		8.50	8.70	8.28
Hurske, Reetta (FIN) (1995)	time	2.57	3.62	4.64	5.64	6.65	7.65	8.68	9.71	10.78	11.85		13.24	8 / ~~6~~ 5			
reaction time 0.128	interval		1.05	1.02	1.00	1.01	1.00	1.03	1.03	1.07	1.07	1.39			3.07	3.04	3.17
	velocity	5.06	8.10	8.33	8.50	8.42	8.50	8.25	8.25	7.94	7.94	7.23	7.55		8.31	8.39	8.04
Schrott, Beate (AUT) (1988)	time	2.71	3.77	4.78	5.81	6.81	7.83	8.85	9.89	10.94	12.02		13.25	3 / ~~7~~ 6			
reaction time 0.150	interval		1.06	1.01	1.03	1.00	1.02	1.02	1.04	1.05	1.08	1.23			3.10	3.04	3.17
	velocity	4.80	8.02	8.42	8.25	8.50	8.33	8.33	8.17	8.10	7.87	8.17	7.55		8.23	8.39	8.04
Beahan, Brianna (AUS) (1991)	time	2.68	3.71	4.74	5.76	6.78	7.80	8.86	9.92	10.98	12.06		13.38	2 / ~~8~~ 7			
reaction time 0.131	interval		1.03	1.03	1.02	1.02	1.02	1.06	1.06	1.06	1.08	1.32			3.08	3.10	3.20
	velocity	4.85	8.25	8.25	8.33	8.33	8.33	8.02	8.02	8.02	7.87	7.61	7.47		8.28	8.23	7.97

Semi-Final 2

date 06-Oct-19 wind 0.8 m/s

Henson (2020) - Athlete First: 2019 year end hurdle report (TV Analysis)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992	time	2.38	3.38	4.36	5.34	6.30	7.26	8.24	9.22	10.22	11.26		12.58	5 / 1			
reaction time 0.155	interval		1.00	0.98	0.98	0.96	0.96	0.98	0.98	1.00	1.04	1.32			2.96	2.90	3.02
	velocity	5.46	8.50	8.67	8.67	8.85	8.85	8.67	8.67	8.50	8.17	7.61	7.95		8.61	8.79	8.44
Tapper, Megan (JAM) (1994)	time	2.38	3.38	4.36	5.32	6.28	7.26	8.24	9.24	10.26	11.28		12.61	4 / 2			
reaction time 0.175	interval		1.00	0.98	0.96	0.96	0.98	0.98	1.00	1.02	1.02	1.33	PB		2.94	2.92	3.04
	velocity	5.46	8.50	8.67	8.85	8.85	8.67	8.67	8.50	8.33	8.33	7.56	7.93		8.67	8.73	8.39
Thompson, Yanique (JAM) (1!	time	2.44	3.48	4.50	5.50	6.46	7.42	8.42	9.42	10.42	11.42		12.80	6 / 3			
reaction time 0.150	interval		1.04	1.02	1.00	0.96	0.96	1.00	1.00	1.00	1.00	1.38			3.06	2.92	3.00
	velocity	5.33	8.17	8.33	8.50	8.85	8.85	8.50	8.50	8.50	8.50	7.28	7.81		8.33	8.73	8.50
Kołeczek, Karolina (POL) (199	time	2.44	3.48	4.48	5.46	6.46	7.50	8.50	9.50	10.52	11.56		12.86	8 / 4			
reaction time 0.134	interval		1.04	1.00	0.98	1.00	1.04	1.00	1.00	1.02	1.04	1.30			3.02	3.04	3.06
	velocity	5.33	8.17	8.50	8.67	8.50	8.17	8.50	8.50	8.33	8.17	7.73	7.78		8.44	8.39	8.33
Neziri, Nooralotta (FIN) (1992)	time	2.44	3.46	4.46	5.46	6.44	7.42	8.42	9.44	10.46	11.50		12.89	2 / 5			
reaction time 0.155	interval		1.02	1.00	1.00	0.98	0.98	1.00	1.02	1.02	1.04	1.39			3.02	2.96	3.08
	velocity	5.33	8.33	8.50	8.50	8.67	8.67	8.50	8.33	8.33	8.17	7.23	7.76		8.44	8.61	8.28
Ofili, Cindy (GBR) (1994)	time	2.46	3.50	4.50	5.50	6.50	7.48	8.48	9.50	10.54	11.58		12.95	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	0.189	interval		1.04	1.00	1.00	1.00	0.98	1.00	1.02	1.04	1.04	1.37			3.04	2.98	3.10
		velocity	5.28	8.17	8.50	8.50	8.50	8.67	8.50	8.33	8.17	8.17	7.34	7.72		8.39	8.56	8.23
Steenkamp, Rikenette (RSA) (		time	2.42	3.46	4.48	5.48	6.48	7.48	8.50	9.52	10.56	11.62		12.96	3 / 7			
reaction time	0.145	interval		1.04	1.02	1.00	1.00	1.00	1.02	1.02	1.04	1.06	1.34			3.06	3.02	3.12
		velocity	5.37	8.17	8.33	8.50	8.50	8.50	8.33	8.33	8.17	8.02	7.50	7.72		8.33	8.44	8.17
Bogliolo, Luminosa (ITA) (199		time	2.46	3.50	4.52	5.52	6.50	7.52	8.54	9.60	10.64	11.70		13.06	7 / 8			
reaction time	0.159	interval		1.04	1.02	1.00	0.98	1.02	1.02	1.06	1.04	1.06	1.36			3.06	3.02	3.16
		velocity	5.28	8.17	8.33	8.50	8.67	8.33	8.33	8.02	8.17	8.02	7.39	7.66		8.33	8.44	8.07

Semi-Final 1

date 06-Oct-19 wind 1.0 m/s

Henson (2020) - Athlete First: 2019 year end hurdle report (TV Analysis)

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Williams, Danielle (JAM) (1992		time	2.44	3.44	4.42	5.38	6.34	7.30	8.26	9.24	10.22	11.20		12.41	6 / 1			
reaction time	0.122	interval		1.00	0.98	0.96	0.96	0.96	0.96	0.98	0.98	0.98	1.21			2.94	2.88	2.94
		velocity	5.33	8.50	8.67	8.85	8.85	8.85	8.85	8.67	8.67	8.67	8.31	8.06		8.67	8.85	8.67
Ali, Nia (USA) (1988)		time	2.42	3.42	4.40	5.36	6.32	7.30	8.26	9.24	10.22	11.22		12.44	7 / 2			
reaction time	0.150	interval		1.00	0.98	0.96	0.96	0.98	0.96	0.98	0.98	1.00	1.22	PB		2.94	2.90	2.96
		velocity	5.37	8.50	8.67	8.85	8.85	8.67	8.85	8.67	8.67	8.50	8.24	8.04		8.67	8.79	8.61
Visser, Nadine (NED) (1995)		time	2.48	3.50	4.48	5.44	6.40	7.38	8.34	9.32	10.34	11.38		12.62	5 / 3			
reaction time	0.148	interval		1.02	0.98	0.96	0.96	0.98	0.96	0.98	1.02	1.04	1.24	NR		2.96	2.90	3.04
		velocity	5.24	8.33	8.67	8.85	8.85	8.67	8.85	8.67	8.33	8.17	8.10	7.92		8.61	8.79	8.39
Roleder, Cindy (GER) (1989)		time	2.54	3.58	4.60	5.60	6.58	7.58	8.56	9.58	10.60	11.62		12.86	4 / 4			
reaction time	0.144	interval		1.04	1.02	1.00	0.98	1.00	0.98	1.02	1.02	1.02	1.24			3.06	2.96	3.06
		velocity	5.12	8.17	8.33	8.50	8.67	8.50	8.67	8.33	8.33	8.33	8.10	7.78		8.33	8.61	8.33
Kozák, Luca (HUN) (1996)		time	2.52	3.56	4.58	5.56	6.56	7.54	8.54	9.56	10.58	11.62		12.87	8 / 5			
reaction time	0.187	interval		1.04	1.02	0.98	1.00	0.98	1.00	1.02	1.02	1.04	1.25			3.04	2.98	3.08
		velocity	5.16	8.17	8.33	8.67	8.50	8.67	8.50	8.33	8.33	8.17	8.04	7.77		8.39	8.56	8.28
Korte, Annimari (FIN) (1988)		time	2.54	3.58	4.58	5.58	6.60	7.58	8.58	9.60	10.64	11.68		12.97	9 / 6			
reaction time	0.176	interval		1.04	1.00	1.00	1.02	0.98	1.00	1.02	1.04	1.04	1.29			3.04	3.00	3.10
		velocity	5.12	8.17	8.50	8.50	8.33	8.67	8.50	8.33	8.17	8.17	7.79	7.71		8.39	8.50	8.23
Jenneke, Michelle (AUS) (1993		time	2.50	3.54	4.56	5.56	6.56	7.58	8.60	9.62	10.68	11.74		13.09	2 / 7			
reaction time	0.159	interval		1.04	1.02	1.00	1.00	1.02	1.02	1.02	1.06	1.06	1.35			3.06	3.04	3.14
		velocity	5.20	8.17	8.33	8.50	8.50	8.33	8.33	8.33	8.02	8.02	7.44	7.64		8.33	8.39	8.12
Romero, Genesis (VEN) (1995)		time	2.64	3.68	4.72	5.74	6.76	7.76	8.76	9.78	10.82	11.88		13.18	3 / 8			
reaction time	0.193	interval		1.04	1.04	1.02	1.02	1.00	1.00	1.02	1.04	1.06	1.30			3.10	3.02	3.12
		velocity	4.92	8.17	8.17	8.33	8.33	8.50	8.50	8.33	8.17	8.02	7.73	7.59		8.23	8.44	8.17

Heat 5 (TV Analysis

date 05-Oct-19 wind 0.2 m/s

Henson (2021) - Athlete First: 2019 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Amusan, Tobi (NGR) (1997)		time	2.48	3.50	4.48	5.44	6.38	7.34	8.28	9.26	10.26	11.26		12.48	9 / 1			
reaction time	0.121	interval		1.02	0.98	0.96	0.94	0.96	0.94	0.98	1.00	1.00	1.22	PB		2.96	2.84	2.98
		velocity	5.24	8.33	8.67	8.85	9.04	8.85	9.04	8.67	8.50	8.50	8.24	8.01		8.61	8.98	8.56

Heat 4 (TV Analysis

date 05-Oct-19 wind 0.3 m/s

Henson (2021) - Athlete First: 2019 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)		time	2.36	3.36	4.34	5.30	6.26	7.22	8.20	9.20	10.22	11.26		12.55	4 / 1			
reaction time	0.131	interval		1.00	0.98	0.96	0.96	0.96	0.98	1.00	1.02	1.04	1.29			2.94	2.90	3.06
		velocity	5.51	8.50	8.67	8.85	8.85	8.85	8.67	8.50	8.33	8.17	7.79	7.97		8.67	8.79	8.33

Heat 3 (TV Analysis

date 05-Oct-19 wind 0.4 m/s

Henson (2021) - Athlete First: 2019 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Williams, Danielle (JAM) (1992		time	2.42	3.42	4.40	5.36	6.32	7.28	8.24	9.22	10.22	11.24		12.51	5 / 1			
reaction time	0.126	interval		1.00	0.98	0.96	0.96	0.96	0.96	0.98	1.00	1.02	1.27			2.94	2.88	3.00
		velocity	5.37	8.50	8.67	8.85	8.85	8.85	8.85	8.67	8.50	8.33	7.91	7.99		8.67	8.85	8.50

Henson (2021) - Athlete First: 2019 year end hurdle report (TV Analysis)

Heat 1

date 05-Oct-19 wind 0.3 m/s

(2019) - http://tfdata-store.com/2019/09/02/post-1606/

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ali, Nia (USA) (1988)		time	2.36	3.38	4.38	5.36	6.34	7.30	8.28	9.26	10.26	11.28		12.59	7 / 1			*Henson (2021)*
reaction time	0.157	interval		1.02	1.00	0.98	0.98	0.96	0.98	0.98	1.00	1.02	1.31			3.00	2.92	3.00
		velocity	5.51	8.33	8.50	8.67	8.67	8.85	8.67	8.67	8.50	8.33	7.67	7.94		8.50	8.73	8.50
Terada, Asuka (JPN) (1990)		time	2.66	3.69	4.72	5.74	6.76	7.79	8.82	9.88	10.94	12.03		13.20	5 / 5			*(2019) - tfdata-store*
reaction time	0.170	interval		1.03	1.03	1.02	1.02	1.03	1.03	1.06	1.06	1.09	1.17			3.08	3.08	3.21
		velocity	4.89	8.25	8.25	8.33	8.33	8.25	8.25	8.02	8.02	7.80	8.59	7.58		8.28	8.28	7.94

Heptathlon - Heat 3

date 03-Oct-19 wind 0.4 m/s

Henson (2021) - Athlete First: 2019 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Williams, Kendall (USA) (1995)		time	2.40	3.42	4.40	5.38	6.34	7.30	8.28	9.26	10.26	11.28		12.58	7 / 1			
reaction time	0.146	interval		1.02	0.98	0.98	0.96	0.96	0.98	0.98	1.00	1.02	1.30	CHB PB		2.98	2.90	3.00

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
	velocity	5.42	8.33	8.67	8.67	8.85	8.85	8.67	8.67	8.50	8.33	7.73	7.95		8.56	8.79	8.50

2019 National Sports Festival (Hitachinaka, JPN) (76cm)

U18 FINAL

date 06-Oct-19 wind 1.6 m/s

Enomoto (2019) - research on athlete performance and technique- 2019 data book

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Onda, Misaki (JPN) (2004)		time	2.68	3.77	4.83	5.88	6.93	8.02	9.08	10.14	11.22	12.32		13.58	7 / 1			
reaction time 0.169		interval		1.09	1.06	1.05	1.05	1.09	1.06	1.06	1.08	1.10	1.26			3.20	3.20	3.24
		velocity	4.85	7.80	8.02	8.10	8.10	7.80	8.02	8.02	7.87	7.73	8.33	7.36		7.97	7.97	7.87
Asagi, Tsukiha (JPN) (2003)		time	2.68	3.76	4.83	5.90	6.98	8.03	9.10	10.18	11.26	12.38		13.65	4 / 2			
reaction time 0.137		interval		1.08	1.07	1.07	1.08	1.05	1.07	1.08	1.08	1.12	1.27			3.22	3.20	3.28
		velocity	4.85	7.87	7.94	7.94	7.87	8.10	7.94	7.87	7.87	7.59	8.27	7.33		7.92	7.97	7.77
Fujiwara, Karen (JPN) (2004)		time	2.63	3.73	4.81	5.89	6.96	8.03	9.13	10.23	11.35	12.48		13.81	5 / 3			
reaction time 0.147		interval		1.10	1.08	1.08	1.07	1.07	1.10	1.10	1.12	1.13	1.33			3.26	3.24	3.35
		velocity	4.94	7.73	7.87	7.87	7.94	7.94	7.73	7.73	7.59	7.52	7.89	7.24		7.82	7.87	7.61
Suzuki, Risa (JPN) (2003)		time	2.80	3.93	5.03	6.12	7.21	8.29	9.38	10.48	11.58	12.68		13.90	9 / 4			
reaction time 0.226		interval		1.13	1.10	1.09	1.09	1.08	1.09	1.10	1.10	1.10	1.22			3.32	3.26	3.30
		velocity	4.64	7.52	7.73	7.80	7.80	7.87	7.80	7.73	7.73	7.73	8.61	7.19		7.68	7.82	7.73
越智 心愛 (JPN) (2003)		time	2.74	3.85	4.97	6.07	7.15	8.27	9.35	10.47	11.58	12.69		13.91	6 / 5			
reaction time 0.175		interval		1.11	1.12	1.10	1.08	1.12	1.08	1.12	1.11	1.11	1.22			3.33	3.28	3.34
		velocity	4.74	7.66	7.59	7.73	7.87	7.59	7.87	7.59	7.66	7.66	8.61	7.19		7.66	7.77	7.63
Shimamura, Aozora (JPN) (20		time	2.68	3.78	4.87	5.96	7.05	8.13	9.23	10.36	11.48	12.63		13.95	3 / 6			
reaction time 0.138		interval		1.10	1.09	1.09	1.09	1.08	1.10	1.13	1.12	1.15	1.32			3.28	3.27	3.40
		velocity	4.85	7.73	7.80	7.80	7.80	7.87	7.73	7.52	7.59	7.39	7.95	7.17		7.77	7.80	7.50
Matsuda, Kako (JPN) (2003)		time	2.68	3.78	4.87	5.94	7.02	8.13	9.23	10.34	11.49	12.68		13.97	8 / 7			
reaction time 0.159		interval		1.10	1.09	1.07	1.08	1.11	1.10	1.11	1.15	1.19	1.29			3.26	3.29	3.45
		velocity	4.85	7.73	7.80	7.94	7.87	7.66	7.73	7.66	7.39	7.14	8.14	7.16		7.82	7.75	7.39
Yasui, Mari (JPN) (2003)		time	2.75	3.88	4.98	6.09	7.19	8.28	9.41	10.57	11.72	12.87		14.12	2 / 8			
reaction time 0.188		interval		1.13	1.10	1.11	1.10	1.09	1.13	1.16	1.15	1.15	1.25			3.34	3.32	3.46
		velocity	4.73	7.52	7.73	7.66	7.73	7.80	7.52	7.33	7.39	7.39	8.40	7.08		7.63	7.68	7.37

2019 The Match - Europe v USA (Minsk, BLR) (TV Analysis

FINAL

date 10-Sep-19 wind 0.1 m/s

Henson (2020) - Athlete First: 2019 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nelvis, Sharika (USA) (1990)	time	2.53	3.50	4.50	5.46	6.43	7.43	8.43	9.46	10.46	11.53		12.80	7 / 1			
reaction time 0.172	interval		0.97	1.00	0.96	0.97	1.00	1.00	1.03	1.00	1.07	1.27			2.93	2.97	3.10
	velocity	5.14	8.76	8.50	8.85	8.76	8.50	8.50	8.25	8.50	7.94	8.27	7.81		8.70	8.59	8.23
Kołeczek, Karolina (POL) (199	time	2.56	3.60	4.60	5.60	6.60	7.60	8.60	9.60	10.63	11.63		12.86	2 / 2			
reaction time 0.166	interval		1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.03	1.00	1.23			3.04	3.00	3.03
	velocity	5.08	8.17	8.50	8.50	8.50	8.50	8.50	8.50	8.25	8.50	8.54	7.78		8.39	8.50	8.42
Herman, Elvira (BLR) (1997)	time	2.56	3.63	4.63	5.63	6.60	7.60	8.60	9.63	10.63	11.65		12.92	4 / 3			
reaction time 0.145	interval		1.07	1.00	1.00	0.97	1.00	1.00	1.03	1.00	1.02	1.27			3.07	2.97	3.05
	velocity	5.08	7.94	8.50	8.50	8.76	8.50	8.50	8.25	8.50	8.33	8.27	7.74		8.31	8.59	8.36
Claye, Queen (USA) (1988)	time	2.53	3.56	4.60	5.60	6.60	7.60	8.60	9.60	10.63	11.73		12.95	5 / 4			
reaction time 0.155	interval		1.03	1.04	1.00	1.00	1.00	1.00	1.00	1.03	1.10	1.22			3.07	3.00	3.13
	velocity	5.14	8.25	8.17	8.50	8.50	8.50	8.50	8.50	8.25	7.73	8.61	7.72		8.31	8.50	8.15
Korte, Annimari (FIN) (1988)	time	2.56	3.63	4.66	5.66	6.66	7.66	8.66	9.68	10.70	11.75		12.98	6 / 5			
reaction time 0.140	interval		1.07	1.03	1.00	1.00	1.00	1.00	1.02	1.02	1.05	1.23			3.10	3.00	3.09
	velocity	5.08	7.94	8.25	8.50	8.50	8.50	8.50	8.33	8.33	8.10	8.54	7.70		8.23	8.50	8.25
Bogliolo, Luminosa (ITA) (199	time	2.56	3.60	4.60	5.60	6.63	7.63	8.63	9.66	10.70	11.80		13.05	8 / 6			
reaction time 0.187	interval		1.04	1.00	1.00	1.03	1.00	1.00	1.03	1.04	1.10	1.25			3.04	3.03	3.17
	velocity	5.08	8.17	8.50	8.50	8.25	8.50	8.50	8.25	8.17	7.73	8.40	7.66		8.39	8.42	8.04
McReynolds, Tiffani (USA) (1	time	2.53	3.56	4.60	5.63	6.63	7.66	8.73	9.77	10.83	11.87		13.13	3 / 7			
reaction time 0.167	interval		1.03	1.04	1.03	1.00	1.03	1.07	1.04	1.06	1.04	1.26			3.10	3.10	3.14
	velocity	5.14	8.25	8.17	8.25	8.50	8.25	7.94	8.17	8.02	8.17	8.33	7.62		8.23	8.23	8.12
Barber, Kalia (USA) (1993)	time	2.58	3.66	4.80	5.86	6.93	8.00	9.06	10.15	11.20	12.30		13.64	9 / 8			
reaction time 0.192	interval		1.08	1.14	1.06	1.07	1.07	1.06	1.09	1.05	1.10	1.34			3.28	3.20	3.24
	velocity	5.04	7.87	7.46	8.02	7.94	7.94	8.02	7.80	8.10	7.73	7.84	7.33		7.77	7.97	7.87

2019 AG Memorial van Damme (Brussels, BEL) (TV Analysis)

FINAL

date 06-Sep-19 wind 0.0 m/s

Henson (2020) - Athlete First: 2019 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Williams, Danielle (JAM) (1992	time	2.44	3.43	4.40	5.38	6.34	7.31	8.28	9.26	10.26	11.26		12.46	5 / 1			
reaction time 0.119	interval		0.99	0.97	0.98	0.96	0.97	0.97	0.98	1.00	1.00	1.20			2.94	2.90	2.98

	velocity	5.33	8.59	8.76	8.67	8.85	8.76	8.76	8.67	8.50	8.50	8.75	8.03		8.67	8.79	8.56
Harrison, Kendra (USA) (1992)	time	2.50	3.52	4.53	5.50	6.49	7.47	8.45	9.45	10.47	11.52		12.73	4 / 2			
reaction time 0.141	interval		1.02	1.01	0.97	0.99	0.98	0.98	1.00	1.02	1.05	1.21			3.00	2.95	3.07
	velocity	5.20	8.33	8.42	8.76	8.59	8.67	8.67	8.50	8.33	8.10	8.68	7.86		8.50	8.64	8.31
Ali, Nia (USA) (1988)	time	2.50	3.52	4.54	5.53	6.52	7.49	8.49	9.50	10.51	11.52		12.74	6 / 3			
reaction time 0.144	interval		1.02	1.02	0.99	0.99	0.97	1.00	1.01	1.01	1.01	1.22			3.03	2.96	3.03
	velocity	5.20	8.33	8.33	8.59	8.59	8.76	8.50	8.42	8.42	8.42	8.61	7.85		8.42	8.61	8.42
Nelvis, Sharika (USA) (1990)	time	2.50	3.50	4.50	5.50	6.48	7.48	8.48	9.50	10.52	11.52		12.83	8 / 4			
reaction time 0.139	interval		1.00	1.00	1.00	0.98	1.00	1.00	1.02	1.02	1.00	1.31			3.00	2.98	3.04
	velocity	5.20	8.50	8.50	8.50	8.67	8.50	8.50	8.33	8.33	8.50	8.02	7.79		8.50	8.56	8.39
Clemons, Christina (USA) (19	time	2.50	3.50	4.52	5.50	6.50	7.50	8.50	9.50	10.54	11.61		12.84	2 / 5			
reaction time 0.136	interval		1.00	1.02	0.98	1.00	1.00	1.00	1.00	1.04	1.07	1.23			3.00	3.00	3.11
	velocity	5.20	8.50	8.33	8.67	8.50	8.50	8.50	8.50	8.17	7.94	8.54	7.79		8.50	8.50	8.20
Roleder, Cindy (GER) (1989)	time	2.63	3.67	4.70	5.70	6.70	7.70	8.74	9.77	10.81	11.87		13.12	1 / 6			
reaction time 0.125	interval		1.04	1.03	1.00	1.00	1.00	1.04	1.03	1.04	1.06	1.25			3.07	3.04	3.13
	velocity	4.94	8.17	8.25	8.50	8.50	8.50	8.17	8.25	8.17	8.02	8.40	7.62		8.31	8.39	8.15
Herman, Elvira (BLR) (1997)	time	2.63	3.70	4.72	5.72	6.74	7.74	8.77	9.79	10.82	11.87		13.12	7 / 7			
reaction time 0.119	interval		1.07	1.02	1.00	1.02	1.00	1.03	1.02	1.03	1.05	1.25			3.09	3.05	3.10
	velocity	4.94	7.94	8.33	8.50	8.33	8.50	8.25	8.33	8.25	8.10	8.40	7.62		8.25	8.36	8.23
Zagne, Anne (BEL) (1990)	time	2.60	3.63	4.67	5.70	6.70	7.70						dnf	9 / --			
reaction time 0.139	interval		1.03	1.04	1.03	1.00	1.00						DQ		3.10		
	velocity	5.00	8.25	8.17	8.25	8.50	8.50								8.23		

2019 Japanese World Championships Trials (Fujiyoshida, JPN)

FINAL date 01-Sep-19 wind 1.2 m/s

Kijima (2019) - race analysis 100m hurdle top-ranked women 2019 Japanese and international comps

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Terada, Asuka (JPN) (1990)	time	2.58	3.62	4.62	5.63	6.63	7.65	8.67	9.70	10.76	11.82		12.97	4 / 1			
reaction time	interval		1.04	1.00	1.01	1.00	1.02	1.02	1.03	1.06	1.06	1.15	NR PB		3.05	3.04	3.15
	velocity	5.04	8.17	8.50	8.42	8.50	8.33	8.33	8.25	8.02	8.02	8.74	7.71		8.36	8.39	8.10
Fukube, Mako (JPN) (1995)	time	2.59	3.62	4.65	5.67	6.68	7.70	8.72	9.80	10.87	11.95		13.15	6 / 2			
reaction time	interval		1.03	1.03	1.02	1.01	1.02	1.02	1.08	1.07	1.08	1.20			3.08	3.05	3.23
	velocity	5.02	8.25	8.25	8.33	8.42	8.33	8.33	7.87	7.94	7.87	8.75	7.60		8.28	8.36	7.89
Kiyoyama, Chisato (JPN) (199	time	2.64	3.73	4.76	5.78	6.79	7.83	8.87	9.92	10.99	12.07		13.25	5 / 3			
reaction time	interval		1.09	1.03	1.02	1.01	1.04	1.04	1.05	1.07	1.08	1.18			3.14	3.09	3.20
	velocity	4.92	7.80	8.25	8.33	8.42	8.17	8.17	8.10	7.94	7.87	8.90	7.55		8.12	8.25	7.97
Suzuki, Miho (JPN) (1996)	time	2.73	3.78	4.82	5.85	6.86	7.90	8.95	10.00	11.07	12.13		13.29	2 / 4			
reaction time	interval		1.05	1.04	1.03	1.01	1.04	1.05	1.05	1.07	1.06	1.16			3.12	3.10	3.18
	velocity	4.76	8.10	8.17	8.25	8.42	8.17	8.10	8.10	7.94	8.02	9.05	7.52		8.17	8.23	8.02
Shimura, Hitomi (JPN) (1990)	time	2.64	3.69	4.73	5.76	6.77	7.85	8.90	9.97	11.05	12.13		13.32	3 / 5			
reaction time	interval		1.05	1.04	1.03	1.01	1.08	1.05	1.07	1.08	1.08	1.19			3.12	3.14	3.23
	velocity	4.92	8.10	8.17	8.25	8.42	7.87	8.10	7.94	7.87	7.87	8.82	7.51		8.17	8.12	7.89
Fujimori, Nana (JPN) (1997)	time	2.70	3.77	4.81	5.85	6.88	7.94	9.00	10.07	11.15	12.25		13.40	7 / 6			
reaction time	interval		1.07	1.04	1.04	1.03	1.06	1.06	1.07	1.08	1.10	1.15			3.15	3.15	3.25
	velocity	4.81	7.94	8.17	8.17	8.25	8.02	8.02	7.94	7.87	7.73	9.13	7.46		8.10	8.10	7.85
Sasaki, Aogi (JPN) (1997)	time	2.67	3.74	4.80	5.85	6.92	8.00	9.06	10.15	11.27	12.39		13.66	8 / 7			
reaction time	interval		1.07	1.06	1.05	1.07	1.08	1.06	1.09	1.12	1.12	1.27			3.18	3.21	3.33
	velocity	4.87	7.94	8.02	8.10	7.94	7.87	8.02	7.80	7.59	7.59	8.27	7.32		8.02	7.94	7.66

2019 Chinese National Grand Prix Final (Daqing, CHN)

FINAL date 24-Aug-19 wind -0.1 m/s

CAA Hurdle Development (2019)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Chen Jiamin (CHN) (1996)	time	2.67	3.71	4.81	5.85	6.91	7.96	9.01	10.09	11.16	12.26		13.46	5 / 1			
reaction time 0.215	interval		1.04	1.10	1.04	1.06	1.05	1.05	1.08	1.07	1.10	1.20			3.18	3.16	3.25
	velocity	4.87	8.17	7.73	8.17	8.02	8.10	8.10	7.87	7.94	7.73	8.75	7.43		8.02	8.07	7.85
Dai Yiru (CHN) (2001)	time	2.70	3.75	4.82	5.85	6.91	7.96	9.01	10.08	11.17	12.29		13.49	3 / 2			
reaction time 0.202	interval		1.05	1.07	1.03	1.06	1.05	1.05	1.07	1.09	1.12	1.20			3.15	3.16	3.28
	velocity	4.81	8.10	7.94	8.25	8.02	8.10	8.10	7.94	7.80	7.59	8.75	7.41		8.10	8.07	7.77
Deng Xuelin (CHN) (1998)	time	2.72	3.77	4.82	5.84	6.89	7.95	9.01	10.11	11.21	12.28		13.49	4 / 3			
reaction time 0.230	interval		1.05	1.05	1.02	1.05	1.06	1.06	1.10	1.10	1.07	1.21			3.12	3.17	3.27
	velocity	4.78	8.10	8.10	8.33	8.10	8.02	8.02	7.73	7.73	7.94	8.68	7.41		8.17	8.04	7.80
Lin Yuwei (CHN) (1999)	time	2.68	3.77	4.84	5.92	6.97	8.04	9.10	10.16	11.27	12.37		13.55	9 / 4			

reaction time	0.161	interval		1.09	1.07	1.08	1.05	1.07	1.06	1.06	1.11	1.10	1.18			3.24	3.18	3.27
		velocity	4.85	7.80	7.94	7.87	8.10	7.94	8.02	8.02	7.66	7.73	8.90	7.38		7.87	8.02	7.80
You Na (CHN) (1993)		time	2.70	3.77	4.81	5.83	6.87	7.93	9.11	10.21	11.30	12.43		13.64	6 / 5			
reaction time	0.176	interval		1.07	1.04	1.02	1.04	1.06	1.18	1.10	1.09	1.13	1.21			3.13	3.28	3.32
		velocity	4.81	7.94	8.17	8.33	8.17	8.02	7.20	7.73	7.80	7.52	8.68	7.33		8.15	7.77	7.68
Wu Yanni (CHN) (1997)		time	2.79	3.87	4.94	5.99	7.06	8.13	9.21	10.29	11.40	12.53		13.75	7 / 6			
reaction time	0.196	interval		1.08	1.07	1.05	1.07	1.07	1.08	1.08	1.11	1.13	1.22			3.20	3.22	3.32
		velocity	4.66	7.87	7.94	8.10	7.94	7.94	7.87	7.87	7.66	7.52	8.61	7.27		7.97	7.92	7.68
Yu Jiaru (CHN) (1999)		time	2.77	3.87	4.99	6.06	7.12	8.19	9.24	10.36	11.46	12.58		13.80	2 / 7			
reaction time	0.225	interval		1.10	1.12	1.07	1.06	1.07	1.05	1.12	1.10	1.12	1.22			3.29	3.18	3.34
		velocity	4.69	7.73	7.59	7.94	8.02	7.94	8.10	7.59	7.73	7.59	8.61	7.25		7.75	8.02	7.63
Shi Jiali (CHN) (1997)		time	2.75	3.85	4.94	6.02	7.12	8.22	9.34	10.47	11.64	12.81		14.13	8 / 8			
reaction time	0.208	interval		1.10	1.09	1.08	1.10	1.10	1.12	1.13	1.17	1.17	1.32			3.27	3.32	3.47
		velocity	4.73	7.73	7.80	7.87	7.73	7.73	7.59	7.52	7.26	7.26	7.95	7.08		7.80	7.68	7.35

Heat 2

date 23-Aug-19 wind 0.2 m/s *CAA Hurdle Development (2019)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Yanni (CHN) (1997)		time	2.79	3.85	4.91	5.96	7.02	8.08	9.14	10.23	11.33	12.45		13.68	5 / 1			
reaction time	0.193	interval		1.06	1.06	1.05	1.06	1.06	1.06	1.09	1.10	1.12	1.23			3.17	3.18	3.31
		velocity	4.66	8.02	8.02	8.10	8.02	8.02	8.02	7.80	7.73	7.59	8.54	7.31		8.04	8.02	7.70
Chen Jiamin (CHN) (1996)		time	2.72	3.79	4.86	5.92	6.99	8.06	9.14	10.24	11.34	12.46		13.72	6 / 2			
reaction time	0.215	interval		1.07	1.07	1.06	1.07	1.07	1.08	1.10	1.10	1.12	1.26			3.20	3.22	3.32
		velocity	4.78	7.94	7.94	8.02	7.94	7.94	7.87	7.73	7.73	7.59	8.33	7.29		7.97	7.92	7.68
Deng Xuelin (CHN) (1998)		time	2.75	3.85	4.94	5.97	7.04	8.09	9.14	10.19	11.31	12.50		13.73	7 / 3			
reaction time	0.250	interval		1.10	1.09	1.03	1.07	1.05	1.05	1.05	1.12	1.19	1.23			3.22	3.17	3.36
		velocity	4.73	7.73	7.80	8.25	7.94	8.10	8.10	8.10	7.59	7.14	8.54	7.28		7.92	8.04	7.59
Yu Jiaru (CHN) (1999)		time	2.82	3.90	4.99	6.09	7.17	8.27	9.36	10.48	11.60	12.73		13.98	9 / 4			
reaction time	0.200	interval		1.08	1.09	1.10	1.08	1.10	1.09	1.12	1.12	1.13	1.25			3.27	3.27	3.37
		velocity	4.61	7.87	7.80	7.73	7.87	7.73	7.80	7.59	7.59	7.52	8.40	7.15		7.80	7.80	7.57
Guo Jinglei (CHN) (2000)		time	2.77	3.95	5.07	6.19	7.31	8.44	9.59	10.89	12.16	13.48		14.97	2 / 5			
reaction time	0.196	interval		1.18	1.12	1.12	1.12	1.13	1.15	1.30	1.27	1.32	1.49			3.42	3.40	3.89
		velocity	4.69	7.20	7.59	7.59	7.59	7.52	7.39	6.54	6.69	6.44	7.05	6.68		7.46	7.50	6.56
Wang Li (CHN) (1999)		time	2.82	3.95										dnf	8 / --			
reaction time	0.174	interval		1.13														
		velocity	4.61	7.52														

Heat 1

date 23-Aug-19 wind -0.2 m/s *CAA Hurdle Development (2019)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
You Na (CHN) (1993)		time	2.65	3.74	4.79	5.82	6.87	7.93	8.99	10.08	11.16	12.30		13.53	7 / 1			
reaction time	0.175	interval		1.09	1.05	1.03	1.05	1.06	1.06	1.09	1.08	1.14	1.23			3.17	3.17	3.31
		velocity	4.91	7.80	8.10	8.25	8.10	8.02	8.02	7.80	7.87	7.46	8.54	7.39		8.04	8.04	7.70
Lin Yuwei (CHN) (1999)		time	2.70	3.79	4.87	5.94	7.04	8.09	9.19	10.29	11.40	12.54		13.77	9 / 2			
reaction time	0.151	interval		1.09	1.08	1.07	1.10	1.05	1.10	1.10	1.11	1.14	1.23			3.24	3.25	3.35
		velocity	4.81	7.80	7.87	7.94	7.73	8.10	7.73	7.73	7.66	7.46	8.54	7.26		7.87	7.85	7.61
Shi Jiali (CHN) (1997)		time	2.74	3.82	4.91	5.97	7.07	8.18	9.29	10.38	11.55	12.68		13.97	5 / 3			
reaction time	0.199	interval		1.08	1.09	1.06	1.10	1.11	1.11	1.09	1.17	1.13	1.29			3.23	3.32	3.39
		velocity	4.74	7.87	7.80	8.02	7.73	7.66	7.66	7.80	7.26	7.52	8.14	7.16		7.89	7.68	7.52
Dai Yiru (CHN) (2001)		time	2.70	3.77	4.86	5.91	6.99	8.11	9.23	10.39	11.54	12.75		14.02	4 / 4			
reaction time	0.197	interval		1.07	1.09	1.05	1.08	1.12	1.12	1.16	1.15	1.21	1.27			3.21	3.32	3.52
		velocity	4.81	7.94	7.80	8.10	7.87	7.59	7.59	7.33	7.39	7.02	8.27	7.13		7.94	7.68	7.24
Wang Dou (CHN) (1993)		time	2.82	3.94	5.04	6.14	7.24	8.34	9.46	10.61	11.75	12.86		14.13	6 / 5			
reaction time	0.206	interval		1.12	1.10	1.10	1.10	1.10	1.12	1.15	1.14	1.11	1.27			3.32	3.32	3.40
		velocity	4.61	7.59	7.73	7.73	7.73	7.73	7.59	7.39	7.46	7.66	8.27	7.08		7.68	7.68	7.50
He Jiamin (CHN) (2001)		time	2.90	4.09	5.29	6.47	7.66	8.88	10.08	11.30	12.56	13.86		15.33	2 / 6			
reaction time	0.216	interval		1.19	1.20	1.18	1.19	1.22	1.20	1.22	1.26	1.30	1.47			3.57	3.61	3.78
		velocity	4.48	7.14	7.08	7.20	7.14	6.97	7.08	6.97	6.75	6.54	7.14	6.52		7.14	7.06	6.75
Yao Hui (CHN) (2000)		time	2.75	3.90	5.12									dnf	3 / --			
reaction time	0.200	interval		1.15	1.22													
		velocity	4.73	7.39	6.97													

Heptathlon - Heat 2

date 23-Aug-19 wind ?? m/s *CAA Hurdle Development (2019)*

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

Shen Muhan (CHN) (1997)	time	2.84	3.99	5.15	6.29	7.44	8.58	9.74	10.91	12.12	13.34		14.68	7 / 1			
reaction time 0.217	interval		1.15	1.16	1.14	1.15	1.14	1.16	1.17	1.21	1.22	1.34			3.45	3.45	3.60
	velocity	4.58	7.39	7.33	7.46	7.39	7.46	7.33	7.26	7.02	6.97	7.84	6.81		7.39	7.39	7.08
Pang Yuting (CHN) (1995)	time	2.77	3.92	5.10	6.26	7.41	8.58	9.73	10.91	12.11	13.33		14.69	5 / 2			
reaction time 0.172	interval		1.15	1.18	1.16	1.15	1.17	1.15	1.18	1.20	1.22	1.36			3.49	3.47	3.60
	velocity	4.69	7.39	7.20	7.33	7.39	7.26	7.39	7.20	7.08	6.97	7.72	6.81		7.31	7.35	7.08
Zhou Jingjing (CHN) (1998)	time	2.87	4.04	5.22	6.41	7.57	8.76	9.96	11.19	12.41	13.69		15.07	6 / 3			
reaction time 0.177	interval		1.17	1.18	1.19	1.16	1.19	1.20	1.23	1.22	1.28	1.38			3.54	3.55	3.73
	velocity	4.53	7.26	7.20	7.14	7.33	7.14	7.08	6.91	6.97	6.64	7.61	6.64		7.20	7.18	6.84
Sun Lan (CHN) (2002)	time	2.88	4.09	5.27	6.46	7.66	8.83	10.03	11.25	12.48	13.70		15.09	4 / 4			
reaction time 0.199	interval		1.21	1.18	1.19	1.20	1.17	1.20	1.22	1.23	1.22	1.39			3.58	3.57	3.67
	velocity	4.51	7.02	7.20	7.14	7.08	7.26	7.08	6.97	6.91	6.97	7.55	6.63		7.12	7.14	6.95
Li Jinghua (CHN) (1996)	time	2.92	4.10	5.29	6.47	7.65	8.83	10.06	11.28	12.53	13.80		15.16	9 / 5			
reaction time 0.195	interval		1.18	1.19	1.18	1.18	1.18	1.23	1.22	1.25	1.27	1.36			3.55	3.59	3.74
	velocity	4.45	7.20	7.14	7.20	7.20	7.20	6.91	6.97	6.80	6.69	7.72	6.60		7.18	7.10	6.82
Jin Donghua (CHN) (1999)	time	2.94	4.10	5.34	6.52	7.72	8.91	10.13	11.35	12.53	13.83		15.20	8 / 6			
reaction time 0.267	interval		1.16	1.24	1.18	1.20	1.19	1.22	1.22	1.18	1.30	1.37			3.58	3.61	3.70
	velocity	4.42	7.33	6.85	7.20	7.08	7.14	6.97	6.97	7.20	6.54	7.66	6.58		7.12	7.06	6.89
Pu Jing (CHN) (1997)	time	3.02	4.29	5.57	6.81	8.09	9.38	10.68	11.98	13.30	14.62		15.99	3 / 7			
reaction time 0.207	interval		1.27	1.28	1.24	1.28	1.29	1.30	1.30	1.32	1.32	1.37			3.79	3.87	3.94
	velocity	4.30	6.69	6.64	6.85	6.64	6.59	6.54	6.54	6.44	6.44	7.66	6.25		6.73	6.59	6.47

Heptathlon - Heat 1

date 23-Aug-19 wind ?? m/s

CAA Hurdle Development (2019)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wang Qingling (CHN) (1993)	time	2.75	3.84	4.92	5.97	7.06	8.14	9.21	10.33	11.43	12.59		13.82	4 / 1			
reaction time 0.201	interval		1.09	1.08	1.05	1.09	1.08	1.07	1.12	1.10	1.16	1.23			3.22	3.24	3.38
	velocity	4.73	7.80	7.87	8.10	7.80	7.87	7.94	7.59	7.73	7.33	8.54	7.24		7.92	7.87	7.54
Wu Zheng (CHN) (2001)	time	2.82	3.94	5.05	6.16	7.29	8.43	9.56	10.71	11.89	13.10		14.44	6 / 2			
reaction time 0.209	interval		1.12	1.11	1.11	1.13	1.14	1.13	1.15	1.18	1.21	1.34			3.34	3.40	3.54
	velocity	4.61	7.59	7.66	7.66	7.52	7.46	7.52	7.39	7.20	7.02	7.84	6.93		7.63	7.50	7.20
Wang Meiqing (CHN) (1996)	time	2.77	3.92	5.09	6.24	7.42	8.58	9.74	10.94	12.13	13.35		14.60	7 / 3			
reaction time 0.206	interval		1.15	1.17	1.15	1.18	1.16	1.16	1.20	1.19	1.22	1.25			3.47	3.50	3.61
	velocity	4.69	7.39	7.26	7.39	7.20	7.33	7.33	7.08	7.14	6.97	8.40	6.85		7.35	7.29	7.06
Gao Miao (CHN) (2001)	time	2.87	3.99	5.11	6.24	7.41	8.56	9.73	10.93	12.13	13.36		14.62	5 / 4			
reaction time 0.218	interval		1.12	1.12	1.13	1.17	1.15	1.17	1.20	1.20	1.23	1.26			3.37	3.49	3.63
	velocity	4.53	7.59	7.59	7.52	7.26	7.39	7.26	7.08	7.08	6.91	8.33	6.84		7.57	7.31	7.02
Wang Huiqiong (CHN) (1990)	time	2.92	4.10	5.26	6.41	7.57	8.72	9.94	11.18	12.43	13.68		15.08	2 / 5			
reaction time 0.230	interval		1.18	1.16	1.15	1.16	1.15	1.22	1.24	1.25	1.25	1.40			3.49	3.53	3.74
	velocity	4.45	7.20	7.33	7.39	7.33	7.39	6.97	6.85	6.80	6.80	7.50	6.63		7.31	7.22	6.82
Liu Jingyi (CHN) (2000)	time	2.80	3.95	5.14	6.30	7.49	8.68	9.89	11.14	12.42	13.68		15.17	3 / 6			
reaction time 0.179	interval		1.15	1.19	1.16	1.19	1.19	1.21	1.25	1.28	1.26	1.49			3.50	3.59	3.79
	velocity	4.64	7.39	7.14	7.33	7.14	7.14	7.02	6.80	6.64	6.75	7.05	6.59		7.29	7.10	6.73
Yin Xinyi (CHN) (2000)	time	2.95	4.19	5.41	6.62	7.84	9.09	10.38	11.66	12.96	14.28		15.74	8 / 7			
reaction time 0.245	interval		1.24	1.22	1.21	1.22	1.25	1.29	1.28	1.30	1.32	1.46			3.67	3.76	3.90
	velocity	4.41	6.85	6.97	7.02	6.97	6.80	6.59	6.64	6.54	6.44	7.19	6.35		6.95	6.78	6.54

2019 Müller Grand Prix (Birmingham, GBR) (TV Analysis)

FINAL

date 18-Aug-19 wind -0.2 m/s

Henson (2020) - Athlete First: 2019 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Williams, Danielle (JAM) (1992	time	2.44	3.44	4.42	5.40	6.37	7.33	8.30	9.28	10.27	11.28		12.46	5 / 1			
reaction time 0.135	interval		1.00	0.98	0.98	0.97	0.96	0.97	0.98	0.99	1.01	1.18			2.96	2.90	2.98
	velocity	5.33	8.50	8.67	8.67	8.76	8.85	8.76	8.67	8.59	8.42	8.90	8.03		8.61	8.79	8.56
Harrison, Kendra (USA) (1992)	time	2.50	3.53	4.53	5.50	6.47	7.44	8.41	9.41	10.41	11.44		12.66	2 / 2			
reaction time 0.172	interval		1.03	1.00	0.97	0.97	0.97	0.97	1.00	1.00	1.03	1.22			3.00	2.91	3.03
	velocity	5.20	8.25	8.50	8.76	8.76	8.76	8.76	8.50	8.50	8.25	8.61	7.90		8.50	8.76	8.42
Amusan, Tobi (NGR) (1997)	time	2.53	3.57	4.57	5.54	6.50	7.47	8.44	9.45	10.45	11.47		12.71	4 / 3			
reaction time 0.167	interval		1.04	1.00	0.97	0.96	0.97	0.97	1.01	1.00	1.02	1.24			3.01	2.90	3.03
	velocity	5.14	8.17	8.50	8.76	8.85	8.76	8.76	8.42	8.50	8.33	8.47	7.87		8.47	8.79	8.42
Ali, Nia (USA) (1988)	time	2.49	3.52	4.53	5.52	6.54	7.50	8.50	9.50	10.51	11.52		12.73	7 / 4			
reaction time 0.161	interval		1.03	1.01	0.99	1.02	0.96	1.00	1.00	1.01	1.01	1.21			3.03	2.98	3.02
	velocity	5.22	8.25	8.42	8.59	8.33	8.85	8.50	8.50	8.42	8.42	8.68	7.86		8.42	8.56	8.44

Brown, Janeek (JAM) (1998)	time	2.49	3.52	4.53	5.52	6.54	7.52	8.52	9.54	10.54	11.57		12.79	8 / 5			
reaction time 0.138	interval		1.03	1.01	0.99	1.02	0.98	1.00	1.02	1.00	1.03	1.22			3.03	3.00	3.05
	velocity	5.22	8.25	8.42	8.59	8.33	8.67	8.50	8.33	8.50	8.25	8.61	7.82		8.42	8.50	8.36
McNeal, Brianna (USA) (1991)	time	2.50	3.53	4.53	5.53	6.51	7.49	8.55	9.56	10.61	11.66		12.90	9 / 6			
reaction time 0.164	interval		1.03	1.00	1.00	0.98	0.98	1.06	1.01	1.05	1.05	1.24			3.03	3.02	3.11
	velocity	5.20	8.25	8.50	8.50	8.67	8.67	8.02	8.42	8.10	8.10	8.47	7.75		8.42	8.44	8.20
Chadwick, Payton (USA) (199	time	2.56	3.67	4.70	5.70	6.70	7.70	8.70	9.70	10.71	11.74		12.92	6 / 7			
reaction time 0.150	interval		1.11	1.03	1.00	1.00	1.00	1.00	1.00	1.01	1.03	1.18			3.14	3.00	3.04
	velocity	5.08	7.66	8.25	8.50	8.50	8.50	8.50	8.50	8.42	8.25	8.90	7.74		8.12	8.50	8.39
McReynolds, Tiffani (USA) (1	time	2.54	3.63	4.68	5.72	6.74	7.77	8.80	9.86	10.91	11.96		13.16	3 / 8			
reaction time 0.163	interval		1.09	1.05	1.04	1.02	1.03	1.03	1.06	1.05	1.05	1.20			3.18	3.08	3.16
	velocity	5.12	7.80	8.10	8.17	8.33	8.25	8.25	8.02	8.10	8.10	8.75	7.60		8.02	8.28	8.07

2019 Athlete Night Games (Fukui, JPN)

FINAL

date 17-Aug-19 wind 1.4 m/s *(2019) - http://tfdata-store.com/2019/09/02/post-1606/*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Terada, Asuka (JPN) (1990)	time	2.61	3.67	4.70	5.69	6.69	7.70	8.72	9.75	10.80	11.86		13.00	5 / 1			
reaction time	interval		1.06	1.03	0.99	1.00	1.01	1.02	1.03	1.05	1.06	1.14	NR		3.08	3.03	3.14
	velocity	4.98	8.02	8.25	8.59	8.50	8.42	8.33	8.25	8.10	8.02	8.82	7.69		8.28	8.42	8.12

2019 Chinese National Youth Games (Taiyuan, CHN)

U20 FINAL

date 14-Aug-19 wind -0.1 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Dai Yiru (CHN) (2001)	time	2.54	3.61	4.70	5.75	6.78	7.82	8.88	9.96	11.03	12.13		13.36	6 / 1			
reaction time 0.156	interval		1.07	1.09	1.05	1.03	1.04	1.06	1.08	1.07	1.10	1.23			3.21	3.13	3.25
	velocity	5.12	7.94	7.80	8.10	8.25	8.17	8.02	7.87	7.94	7.73	8.54	7.49		7.94	8.15	7.85
Guo Jinglei (CHN) (2000)	time	2.62	3.72	4.81	5.87	6.94	8.02	9.09	10.19	11.32	12.43		13.76	7 / 2			
reaction time 0.161	interval		1.10	1.09	1.06	1.07	1.08	1.07	1.10	1.13	1.11	1.33	PB		3.25	3.22	3.34
	velocity	4.96	7.73	7.80	8.02	7.94	7.87	7.94	7.73	7.52	7.66	7.89	7.27		7.85	7.92	7.63
Zhang Jiayi (CHN) (2001)	time	2.64	3.74	4.84	5.92	7.02	8.11	9.21	10.33	11.45	12.60		13.87	5 / 3			
reaction time 0.182	interval		1.10	1.10	1.08	1.10	1.09	1.10	1.12	1.12	1.15	1.27			3.28	3.29	3.39
	velocity	4.92	7.73	7.73	7.87	7.73	7.80	7.73	7.59	7.59	7.39	8.27	7.21		7.77	7.75	7.52
Ge Ge (CHN) (2000)	time	2.67	3.79	4.91	6.02	7.11	8.24	9.37	10.49	11.59	12.76		14.06	3 / 4			
reaction time 0.188	interval		1.12	1.12	1.11	1.09	1.13	1.13	1.12	1.10	1.17	1.30	PB		3.35	3.35	3.39
	velocity	4.87	7.59	7.59	7.66	7.80	7.52	7.52	7.59	7.73	7.26	8.08	7.11		7.61	7.61	7.52
Yao Hui (CHN) (2000)	time	2.71	3.84	4.94	6.06	7.16	8.27	9.39	10.54	11.68	12.83		14.14	9 / 5			
reaction time 0.374	interval		1.13	1.10	1.12	1.10	1.11	1.12	1.15	1.14	1.15	1.31	PB		3.35	3.33	3.44
	velocity	4.80	7.52	7.73	7.59	7.73	7.66	7.59	7.39	7.46	7.39	8.02	7.07		7.61	7.66	7.41
He Jiamin (CHN) (2001)	time	2.74	3.89	5.00	6.13	7.24	8.39	9.53	10.67	11.83	13.00		14.33	2 / 6			
reaction time 0.164	interval		1.15	1.11	1.13	1.11	1.15	1.14	1.14	1.16	1.17	1.33			3.39	3.40	3.47
	velocity	4.74	7.39	7.66	7.52	7.66	7.39	7.46	7.46	7.33	7.26	7.89	6.98		7.52	7.50	7.35
Shing Cho Yan (HKG) (2001)	time	2.62	3.74	4.84	5.96	7.06	8.19	9.34	10.53	11.73	12.95		14.40	8 / 7			
reaction time 0.144	interval		1.12	1.10	1.12	1.10	1.13	1.15	1.19	1.20	1.22	1.45			3.34	3.38	3.61
	velocity	4.96	7.59	7.73	7.59	7.73	7.52	7.39	7.14	7.08	6.97	7.24	6.94		7.63	7.54	7.06
Zhang Yi (CHN) (2000)	time	2.65	3.80	4.90	6.03	7.12	8.28	9.43	10.61	11.81	13.06		14.51	4 / 8			
reaction time 0.179	interval		1.15	1.10	1.13	1.09	1.16	1.15	1.18	1.20	1.25	1.45			3.38	3.40	3.63
	velocity	4.91	7.39	7.73	7.52	7.80	7.33	7.39	7.20	7.08	6.80	7.24	6.89		7.54	7.50	7.02

U18 FINAL (76cm)

date 14-Aug-19 wind 0.0 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Xia Sining (CHN) (2003)	time	2.72	3.79	4.82	5.87	6.89	7.91	8.93	9.97	11.03	12.10		13.30	7 / 1			
reaction time 0.172	interval		1.07	1.03	1.05	1.02	1.02	1.02	1.04	1.06	1.07	1.20	NYR		3.15	3.06	3.17
	velocity	4.78	7.94	8.25	8.10	8.33	8.33	8.33	8.17	8.02	7.94	8.75	7.52		8.10	8.33	8.04
Han Zhirou (CHN) (2002)	time	2.73	3.82	4.92	6.01	7.11	8.24	9.35	10.50	11.68	12.86		14.20	5 / 2			
reaction time 0.174	interval		1.09	1.10	1.09	1.10	1.13	1.11	1.15	1.18	1.18	1.34			3.28	3.34	3.51
	velocity	4.76	7.80	7.73	7.80	7.73	7.52	7.66	7.39	7.20	7.20	7.84	7.04		7.77	7.63	7.26
Li Yuansu (CHN) (2003)	time	2.80	3.97	5.10	6.26	7.39	8.54	9.68	10.83	12.00	13.16		14.45	6 / 3			
reaction time 0.184	interval		1.17	1.13	1.16	1.13	1.15	1.14	1.15	1.17	1.16	1.29			3.46	3.42	3.48
	velocity	4.64	7.26	7.52	7.33	7.52	7.39	7.46	7.39	7.26	7.33	8.14	6.92		7.37	7.46	7.33
Wei Huaning (CHN) (2002)	time	2.75	3.89	5.04	6.17	7.31	8.46	9.63	10.78	11.95	13.13		14.47	9 / 4			
reaction time 0.160	interval		1.14	1.15	1.13	1.14	1.15	1.17	1.15	1.17	1.18	1.34			3.42	3.46	3.50
	velocity	4.73	7.46	7.39	7.52	7.46	7.39	7.26	7.39	7.26	7.20	7.84	6.91		7.46	7.37	7.29
Lu Xinyue (CHN) (2002)	time	2.79	3.96	5.12	6.26	7.41	8.54	9.71	10.89	12.06	13.28		14.65	3 / 5			

reaction time 0.156	interval		1.17	1.16	1.14	1.15	1.13	1.17	1.18	1.17	1.22	1.37			3.47	3.45	3.57
	velocity	4.66	7.26	7.33	7.46	7.39	7.52	7.26	7.20	7.26	6.97	7.66	6.83		7.35	7.39	7.14
Mei Xiaoqian (CHN) (2002)	time	2.90	4.07	5.21	6.36	7.47	8.61	9.76	10.93	12.11	13.31		14.66	4 / 6			
reaction time 0.418	interval		1.17	1.14	1.15	1.11	1.14	1.15	1.17	1.18	1.20	1.35			3.46	3.40	3.55
	velocity	4.48	7.26	7.46	7.39	7.66	7.46	7.39	7.26	7.20	7.08	7.78	6.82		7.37	7.50	7.18
Wu Wenya (CHN) (2003)	time	2.80	3.95	5.10	6.26	7.41	8.56	9.73	10.91	12.11	13.38		14.79	8 / 7			
reaction time 0.178	interval		1.15	1.15	1.16	1.15	1.15	1.17	1.18	1.20	1.27	1.41			3.46	3.47	3.65
	velocity	4.64	7.39	7.39	7.33	7.39	7.39	7.26	7.20	7.08	6.69	7.45	6.76		7.37	7.35	6.99
Sun Jingyuan (CHN) (2002)	time	2.94	4.12	5.24	6.39	7.56	8.71	9.88	11.06	12.25	13.48		14.83	2 / 8			
reaction time 0.224	interval		1.18	1.12	1.15	1.17	1.15	1.17	1.18	1.19	1.23	1.35			3.45	3.49	3.60
	velocity	4.42	7.20	7.59	7.39	7.26	7.39	7.26	7.20	7.14	6.91	7.78	6.74		7.39	7.31	7.08

U20 Heat 3

date 14-Aug-19 wind 0.0 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Dai Yiru (CHN) (2001)	time	2.64	3.70	4.77	5.79	6.86	7.91	9.01	10.11	11.23	12.36		13.62	5 / 1			
reaction time 0.168	interval		1.06	1.07	1.02	1.07	1.05	1.10	1.10	1.12	1.13	1.26			3.15	3.22	3.35
	velocity	4.92	8.02	7.94	8.33	7.94	8.10	7.73	7.73	7.59	7.52	8.33	7.34		8.10	7.92	7.61
Yao Hui (CHN) (2000)	time	2.72	3.84	4.94	6.03	7.17	8.29	9.44	10.58	11.74	12.91		14.15	4 / 2			
reaction time 0.170	interval		1.12	1.10	1.09	1.14	1.12	1.15	1.14	1.16	1.17	1.24	=PB		3.31	3.41	3.47
	velocity	4.78	7.59	7.73	7.80	7.46	7.59	7.39	7.46	7.33	7.26	8.47	7.07		7.70	7.48	7.35
He Jiamin (CHN) (2001)	time	2.74	3.87	5.00	6.12	7.23	8.34	9.47	10.58	11.74	12.93		14.20	6 / 3			
reaction time 0.190	interval		1.13	1.13	1.12	1.11	1.11	1.13	1.11	1.16	1.19	1.27	PB		3.38	3.35	3.46
	velocity	4.74	7.52	7.52	7.59	7.66	7.66	7.52	7.66	7.33	7.14	8.27	7.04		7.54	7.61	7.37
Ma Shiqi (CHN) (2001)	time	2.75	3.87	5.04	6.19	7.36	8.54	9.73	10.93	12.14	13.40		14.74	7 / 4			
reaction time 0.152	interval		1.12	1.17	1.15	1.17	1.18	1.19	1.20	1.21	1.26	1.34	PB		3.44	3.54	3.67
	velocity	4.73	7.59	7.26	7.39	7.26	7.20	7.14	7.08	7.02	6.75	7.84	6.78		7.41	7.20	6.95
He Xinyi (CHN) (2000)	time	2.75	3.89	5.01	6.16	7.29	8.46	9.64	10.87	12.10	13.37		14.79	3 / 5			
reaction time 0.179	interval		1.14	1.12	1.15	1.13	1.17	1.18	1.23	1.23	1.27	1.42	=PB		3.41	3.48	3.73
	velocity	4.73	7.46	7.59	7.39	7.52	7.26	7.20	6.91	6.91	6.69	7.39	6.76		7.48	7.33	6.84

U20 Heat 2

date 14-Aug-19 wind -0.2 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Zhang Jiayi (CHN) (2001)	time	2.72	3.80	4.87	5.96	7.06	8.16	9.27	10.37	11.48	12.61		13.84	8 / 1			
reaction time 0.192	interval		1.08	1.07	1.09	1.10	1.10	1.11	1.10	1.11	1.13	1.23	PB		3.24	3.31	3.34
	velocity	4.78	7.87	7.94	7.80	7.73	7.73	7.66	7.73	7.66	7.52	8.54	7.23		7.87	7.70	7.63
Guo Jinglei (CHN) (2000)	time	2.69	3.81	4.91	5.97	7.07	8.16	9.26	10.39	11.54	12.69		13.97	5 / 2			
reaction time 0.168	interval		1.12	1.10	1.06	1.10	1.09	1.10	1.13	1.15	1.15	1.28	PB		3.28	3.29	3.43
	velocity	4.83	7.59	7.73	8.02	7.73	7.80	7.73	7.52	7.39	7.39	8.20	7.16		7.77	7.75	7.43
Ge Ge (CHN) (2000)	time	2.76	3.90	5.02	6.09	7.19	8.31	9.45	10.58	11.71	12.88		14.14	6 / 3			
reaction time 0.190	interval		1.14	1.12	1.07	1.10	1.12	1.14	1.13	1.13	1.17	1.26	PB		3.33	3.36	3.43
	velocity	4.71	7.46	7.59	7.94	7.73	7.59	7.46	7.52	7.52	7.26	8.33	7.07		7.66	7.59	7.43
Yin Xiaoxia (CHN) (2000)	time	2.75	3.89	4.99	6.12	7.26	8.38	9.53	10.66	11.83	12.98		14.20	7 / 4			
reaction time 0.152	interval		1.14	1.10	1.13	1.14	1.12	1.15	1.13	1.17	1.15	1.22			3.37	3.41	3.45
	velocity	4.73	7.46	7.73	7.52	7.46	7.59	7.39	7.52	7.26	7.39	8.61	7.04		7.57	7.48	7.39
Wang Yan (CHN) (2000)	time	2.75	3.89	5.06	6.21	7.36	8.51	9.68	10.88	12.06	13.30		14.64	4 / 5			
reaction time 0.170	interval		1.14	1.17	1.15	1.15	1.15	1.17	1.20	1.18	1.24	1.34			3.46	3.47	3.62
	velocity	4.73	7.46	7.26	7.39	7.39	7.39	7.26	7.08	7.20	6.85	7.84	6.83		7.37	7.35	7.04
Jiang Minhong (CHN) (2000)	time	2.80	3.93	5.11	6.27	7.42	8.61	9.83	11.08	12.33	13.62		15.02	3 / 6			
reaction time 0.179	interval		1.13	1.18	1.16	1.15	1.19	1.22	1.25	1.25	1.29	1.40			3.47	3.56	3.79
	velocity	4.64	7.52	7.20	7.33	7.39	7.14	6.97	6.80	6.80	6.59	7.50	6.66		7.35	7.16	6.73

U20 Heat 1

date 14-Aug-19 wind 0.5 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Zhang Yi (CHN) (2000)	time	2.68	3.79	4.87	5.96	7.02	8.12	9.21	10.36	11.50	12.71		14.08	3 / 1			
reaction time 0.138	interval		1.11	1.08	1.09	1.06	1.10	1.09	1.15	1.14	1.21	1.37	PB		3.28	3.25	3.50
	velocity	4.85	7.66	7.87	7.80	8.02	7.73	7.80	7.39	7.46	7.02	7.66	7.10		7.77	7.85	7.29
Shing Cho Yan (HKG) (2001)	time	2.67	3.81	4.91	6.00	7.09	8.21	9.33	10.49	11.66	12.89		14.25	6 / 2			
reaction time 0.135	interval		1.14	1.10	1.09	1.09	1.12	1.12	1.16	1.17	1.23	1.36	PB		3.33	3.33	3.56
	velocity	4.87	7.46	7.73	7.80	7.80	7.59	7.59	7.33	7.26	6.91	7.72	7.02		7.66	7.66	7.16
Chen Zhifei (CHN) (2001)	time	2.75	3.89	4.99	6.10	7.22	8.32	9.46	10.61	11.78	13.01		14.33	5 / 3			
reaction time 0.163	interval		1.14	1.10	1.11	1.12	1.10	1.14	1.15	1.17	1.23	1.32	PB		3.35	3.36	3.55
	velocity	4.73	7.46	7.73	7.66	7.59	7.73	7.46	7.39	7.26	6.91	7.95	6.98		7.61	7.59	7.18

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Qin Hongyan (CHN) (2001)	time	2.75	3.89	5.04	6.16	7.27	8.39	9.53	10.68	11.86	13.05		14.39	8 / 4			
reaction time 0.162	interval		1.14	1.15	1.12	1.11	1.12	1.14	1.15	1.18	1.19	1.34			3.41	3.37	3.52
	velocity	4.73	7.46	7.39	7.59	7.66	7.59	7.46	7.39	7.20	7.14	7.84	6.95		7.48	7.57	7.24
Tong Menghui (CHN) (2000)	time	2.77	3.90	5.02	6.16	7.29	8.42	9.57	10.73	11.89	13.11		14.43	7 / 5			
reaction time 0.152	interval		1.13	1.12	1.14	1.13	1.13	1.15	1.16	1.16	1.22	1.32			3.39	3.41	3.54
	velocity	4.69	7.52	7.59	7.46	7.52	7.52	7.39	7.33	7.33	6.97	7.95	6.93		7.52	7.48	7.20
Zhang Yan (CHN) (2001)	time	2.79	3.94	5.09	6.27	7.46	8.66	9.89	11.16	12.45	13.80		15.28	4 / 6			
reaction time 0.154	interval		1.15	1.15	1.18	1.19	1.20	1.23	1.27	1.29	1.35	1.48			3.48	3.62	3.91
	velocity	4.66	7.39	7.39	7.20	7.14	7.08	6.91	6.69	6.59	6.30	7.09	6.54		7.33	7.04	6.52

2019 Pan American Games (Lima, PER) (TV Analysis)

FINAL date 08-Aug-19 wind 0.1 m/s

Henson (2020) - Athlete First: 2019 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Vargas, Andrea Carolina (CRC	time	2.51	3.54	4.54	5.54	6.52	7.52	8.50	9.52	10.52	11.56		12.82	4 / 1			
reaction time 0.149	interval		1.03	1.00	1.00	0.98	1.00	0.98	1.02	1.00	1.04	1.26			3.03	2.96	3.06
	velocity	5.18	8.25	8.50	8.50	8.67	8.50	8.67	8.33	8.50	8.17	8.33	7.80		8.42	8.61	8.33
Brissett, Chanel (USA) (1999)	time	2.51	3.58	4.62	5.64	6.64	7.64	8.64	9.64	10.67	11.71		12.99	2 / 2			
reaction time 0.173	interval		1.07	1.04	1.02	1.00	1.00	1.00	1.00	1.03	1.04	1.28			3.13	3.00	3.07
	velocity	5.18	7.94	8.17	8.33	8.50	8.50	8.50	8.50	8.25	8.17	8.20	7.70		8.15	8.50	8.31
Tapper, Megan (JAM) (1994)	time	2.53	3.57	4.60	5.58	6.58	7.58	8.60	9.62	10.67	11.74		13.01	9 / 3			
reaction time 0.199	interval		1.04	1.03	0.98	1.00	1.00	1.02	1.02	1.05	1.07	1.27			3.05	3.02	3.14
	velocity	5.14	8.17	8.25	8.67	8.50	8.50	8.33	8.33	8.10	7.94	8.27	7.69		8.36	8.44	8.12
Thompson, Yanique (JAM) (1!	time	2.51	3.59	4.63	5.63	6.65	7.67	8.67	9.67	10.72	11.77		13.11	6 / 4			
reaction time 0.178	interval		1.08	1.04	1.00	1.02	1.02	1.00	1.00	1.05	1.05	1.34			3.12	3.04	3.10
	velocity	5.18	7.87	8.17	8.50	8.33	8.33	8.50	8.50	8.10	8.10	7.84	7.63		8.17	8.39	8.23
Seymour, Pedrya (BAH) (1995)	time	2.50	3.58	4.62	5.64	6.65	7.66	8.67	9.71	10.72	11.81		13.12	7 / 5			
reaction time 0.164	interval		1.08	1.04	1.02	1.01	1.01	1.01	1.04	1.01	1.09	1.31			3.14	3.03	3.14
	velocity	5.20	7.87	8.17	8.33	8.42	8.42	8.42	8.17	8.42	7.80	8.02	7.62		8.12	8.42	8.12

2019 Japanese National High School Championships (Okinawa, JPN)

FINAL date 08-Aug-19 wind -4.1 m/s

Kota (2019) - 72nd high school championships: JAF scientific committee - biomechanics data

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shimano, Maki (JPN) (2001)	time	2.68	3.76	4.83	5.94	7.04	8.17	9.28	10.40	11.52	12.69		13.97	5 / 1			
reaction time	interval		1.08	1.07	1.11	1.10	1.13	1.11	1.12	1.12	1.17	1.28			3.26	3.34	3.41
	velocity	4.85	7.87	7.94	7.66	7.73	7.52	7.66	7.59	7.59	7.26	8.20	7.16		7.82	7.63	7.48
Nagamine, Sayuri (JPN) (2001)	time	2.71	3.81	4.89	5.99	7.10	8.24	9.36	10.50	11.67	12.86		14.15	4 / 2			
reaction time	interval		1.10	1.08	1.10	1.11	1.14	1.12	1.14	1.17	1.19	1.29			3.28	3.37	3.50
	velocity	4.80	7.73	7.87	7.73	7.66	7.46	7.59	7.46	7.26	7.14	8.14	7.07		7.77	7.57	7.29
Tezuka, Mai (JPN) (2001)	time	2.71	3.84	4.93	6.01	7.14	8.27	9.41	10.56	11.72	12.88		14.15	6 / 3			
reaction time	interval		1.13	1.09	1.08	1.13	1.13	1.14	1.15	1.16	1.16	1.27			3.30	3.40	3.47
	velocity	4.80	7.52	7.80	7.87	7.52	7.52	7.46	7.39	7.33	7.33	8.27	7.07		7.73	7.50	7.35
Masuda, Ayana (JPN) (2002)	time	2.68	3.81	4.91	6.01	7.12	8.25	9.42	10.59	11.79	13.02		14.34	2 / 4			
reaction time	interval		1.13	1.10	1.10	1.11	1.13	1.17	1.17	1.20	1.23	1.32			3.33	3.41	3.60
	velocity	4.85	7.52	7.73	7.73	7.66	7.52	7.26	7.26	7.08	6.91	7.95	6.97		7.66	7.48	7.08
Ando, Manami (JPN) (2001)	time	2.72	3.81	4.90	6.03	7.17	8.33	9.51	10.67	11.84	13.05		14.36	8 / 5			
reaction time	interval		1.09	1.09	1.13	1.14	1.16	1.18	1.16	1.17	1.21	1.31			3.31	3.48	3.54
	velocity	4.78	7.80	7.80	7.52	7.46	7.33	7.20	7.33	7.26	7.02	8.02	6.96		7.70	7.33	7.20
Saka, Nozomi (JPN) (2001)	time	2.74	3.87	4.98	6.11	7.27	8.44	9.61	10.79	11.97	13.16		14.42	7 / 6			
reaction time	interval		1.13	1.11	1.13	1.16	1.17	1.17	1.18	1.18	1.19	1.26			3.37	3.50	3.55
	velocity	4.74	7.52	7.66	7.52	7.33	7.26	7.26	7.20	7.20	7.14	8.33	6.93		7.57	7.29	7.18
Yamanishi, Momoko (JPN) (20	time	2.77	3.92	5.03	6.11	7.22	8.34	9.49	10.67	11.87	13.10		14.47	1 / 7			
reaction time	interval		1.15	1.11	1.08	1.11	1.12	1.15	1.18	1.20	1.23	1.37			3.34	3.38	3.61
	velocity	4.69	7.38	7.67	7.87	7.66	7.59	7.39	7.20	7.08	6.91	7.66	6.91		7.63	7.54	7.06
Yoshii, Ririko (JPN) (2001)	time	2.73	3.82	4.91	6.01	7.14	8.26	9.42	10.64	11.86	13.13		14.53	3 / 8			
reaction time	interval		1.09	1.09	1.10	1.13	1.12	1.16	1.22	1.22	1.27	1.40			3.28	3.41	3.71
	velocity	4.76	7.80	7.80	7.73	7.52	7.59	7.33	6.97	6.97	6.69	7.50	6.88		7.77	7.48	6.87

2019 Chinese World Championship Trials (Shenyang, CHN)

FINAL date 02-Aug-19 wind 0.0 m/s

CAA Hurdle Development (2019)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Dai Yiru (CHN) (2001)	time	2.62	3.65	4.72	5.72	6.74	7.77	8.81	9.88	10.94	12.06		13.24	4 / 1			
reaction time 0.178	interval		1.03	1.07	1.00	1.02	1.03	1.04	1.07	1.06	1.12	1.18	PB		3.10	3.09	3.25
	velocity	4.96	8.25	7.94	8.50	8.33	8.25	8.17	7.94	8.02	7.59	8.90	7.55		8.23	8.25	7.85

Deng Xuelin (CHN) (1998)	time	2.70	3.75	4.80	5.81	6.85	7.88	8.90	9.94	10.98	12.04		13.25	3 / 2			
reaction time 0.219	interval		1.05	1.05	1.01	1.04	1.03	1.02	1.04	1.04	1.06	1.21	PB		3.11	3.09	3.14
	velocity	4.81	8.10	8.10	8.42	8.17	8.25	8.33	8.17	8.17	8.02	8.68	7.55		8.20	8.25	8.12
Wu Yanni (CHN) (1997)	time	2.74	3.80	4.86	5.89	6.92	7.96	9.00	10.09	11.17	12.26		13.49	5 / 3			
reaction time 0.169	interval		1.06	1.06	1.03	1.03	1.04	1.04	1.09	1.08	1.09	1.23			3.15	3.11	3.26
	velocity	4.74	8.02	8.02	8.25	8.25	8.17	8.17	7.80	7.87	7.80	8.54	7.41		8.10	8.20	7.82
Wang Dou (CHN) (1993)	time	2.70	3.78	4.84	5.91	6.95	7.98	9.09	10.16	11.23	12.34		13.52	7 / 4			
reaction time 0.170	interval		1.08	1.06	1.07	1.04	1.03	1.11	1.07	1.07	1.11	1.18			3.21	3.18	3.25
	velocity	4.81	7.87	8.02	7.94	8.17	8.25	7.66	7.94	7.94	7.66	8.90	7.40		7.94	8.02	7.85
Yu Jiaru (CHN) (1999)	time	2.78	3.82	4.89	5.94	6.98	8.03	9.09	10.14	11.24	12.33		13.54	8 / 5			
reaction time 0.197	interval		1.04	1.07	1.05	1.04	1.05	1.06	1.05	1.10	1.09	1.21			3.16	3.15	3.24
	velocity	4.68	8.17	7.94	8.10	8.17	8.10	8.02	8.10	7.73	7.80	8.68	7.39		8.07	8.10	7.87
Lin Yuwei (CHN) (1999)	time	2.67	3.74	4.81	5.86	6.91	7.99	9.03	10.13	11.23	12.36		13.57	1 / 6			
reaction time 0.127	interval		1.07	1.07	1.05	1.05	1.08	1.04	1.10	1.10	1.13	1.21			3.19	3.17	3.33
	velocity	4.87	7.94	7.94	8.10	8.10	7.87	8.17	7.73	7.73	7.52	8.68	7.37		7.99	8.04	7.66
Chen Jiamin (CHN) (1996)	time	2.70	3.75	4.80	5.83	6.91	7.96	9.03	10.10	11.22	12.34		13.60	6 / 7			
reaction time 0.185	interval		1.05	1.05	1.03	1.08	1.05	1.07	1.07	1.12	1.12	1.26			3.13	3.20	3.31
	velocity	4.81	8.10	8.10	8.25	7.87	8.10	7.94	7.94	7.59	7.59	8.33	7.35		8.15	7.97	7.70

Heat 2

date 02-Aug-19 wind -0.3 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Deng Xuelin (CHN) (1998)	time	2.72	3.78	4.84	5.91	6.94	7.97	9.04	10.08	11.14	12.21		13.43	2 / 1			
reaction time 0.216	interval		1.06	1.06	1.07	1.03	1.03	1.07	1.04	1.06	1.07	1.22			3.19	3.13	3.17
	velocity	4.78	8.02	8.02	7.94	8.25	8.25	7.94	8.17	8.02	7.94	8.61	7.45		7.99	8.15	8.04
Chen Jiamin (CHN) (1996)	time	2.67	3.74	4.78	5.84	6.89	7.96	9.04	10.13	11.21	12.31		13.57	4 / 2			
reaction time 0.146	interval		1.07	1.04	1.06	1.05	1.07	1.08	1.09	1.08	1.10	1.26			3.17	3.20	3.27
	velocity	4.87	7.94	8.17	8.02	8.10	7.94	7.87	7.80	7.87	7.73	8.33	7.37		8.04	7.97	7.80
Wang Dou (CHN) (1993)	time	2.74	3.85	4.94	6.00	7.07	8.16	9.24	10.31	11.41	12.51		13.71	1 / 3			
reaction time 0.180	interval		1.11	1.09	1.06	1.07	1.09	1.08	1.07	1.10	1.10	1.20			3.26	3.24	3.27
	velocity	4.74	7.66	7.80	8.02	7.94	7.80	7.87	7.94	7.73	7.73	8.75	7.29		7.82	7.87	7.80
Lin Yuwei (CHN) (1999)	time	2.69	3.78	4.87	5.96	7.02	8.09	9.19	10.27	11.37	12.49		13.72	5 / 4			
reaction time 0.152	interval		1.09	1.09	1.09	1.06	1.07	1.10	1.08	1.10	1.12	1.23			3.27	3.23	3.30
	velocity	4.83	7.80	7.80	7.80	8.02	7.94	7.73	7.87	7.73	7.59	8.54	7.29		7.80	7.89	7.73
Luo Xianyan (CHN) (1997)	time	2.75	3.85	4.94	6.02	7.08	8.14	9.22	10.31	11.39	12.49		13.72	8 / 5			
reaction time 0.168	interval		1.10	1.09	1.08	1.06	1.06	1.08	1.09	1.08	1.10	1.23			3.27	3.20	3.27
	velocity	4.73	7.73	7.80	7.87	8.02	8.02	7.87	7.80	7.87	7.73	8.54	7.29		7.80	7.97	7.80
Li Jinyu (CHN) (1999)	time	2.77	3.87	5.00	6.09	7.21	8.33	9.44	10.59	11.74	12.93		14.18	3 / 6			
reaction time 0.189	interval		1.10	1.13	1.09	1.12	1.12	1.11	1.15	1.15	1.19	1.25			3.32	3.35	3.49
	velocity	4.69	7.73	7.52	7.80	7.59	7.59	7.66	7.39	7.39	7.14	8.40	7.05		7.68	7.61	7.31
Guo Jinglei (CHN) (2000)	time	2.82	3.92	5.05	6.17	7.29	8.42	9.54	10.69	11.84	13.01		14.34	7 / 7			
reaction time 0.172	interval		1.10	1.13	1.12	1.12	1.13	1.12	1.15	1.15	1.17	1.33			3.35	3.37	3.47
	velocity	4.61	7.73	7.52	7.59	7.59	7.52	7.59	7.39	7.39	7.26	7.89	6.97		7.61	7.57	7.35

Heat 1

date 02-Aug-19 wind 0.2 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Dai Yiru (CHN) (2001)	time	2.64	3.70	4.77	5.83	6.87	7.92	8.97	10.04	11.13	12.25		13.46	6 / 1			
reaction time 0.183	interval		1.06	1.07	1.06	1.04	1.05	1.05	1.07	1.09	1.12	1.21	PB		3.19	3.14	3.28
	velocity	4.92	8.02	7.94	8.02	8.17	8.10	8.10	7.94	7.80	7.59	8.68	7.43		7.99	8.12	7.77
Wu Yanni (CHN) (1997)	time	2.70	3.79	4.86	5.92	6.97	8.02	9.09	10.16	11.24	12.33		13.57	3 / 2			
reaction time 0.162	interval		1.09	1.07	1.06	1.05	1.05	1.07	1.07	1.08	1.09	1.24			3.22	3.17	3.24
	velocity	4.81	7.80	7.94	8.02	8.10	8.10	7.94	7.94	7.87	7.80	8.47	7.37		7.92	8.04	7.87
Yu Jiaru (CHN) (1999)	time	2.72	3.82	4.91	5.97	7.02	8.07	9.13	10.23	11.31	12.49		13.65	1 / 3			
reaction time 0.175	interval		1.10	1.09	1.06	1.05	1.05	1.06	1.10	1.08	1.18	1.16			3.25	3.16	3.36
	velocity	4.78	7.73	7.80	8.02	8.10	8.10	8.02	7.73	7.87	7.20	9.05	7.33		7.85	8.07	7.59
You Na (CHN) (1993)	time	2.75	3.84	4.93	5.99	7.06	8.11	9.19	10.26	11.36	12.48		13.69	8 / 4			
reaction time 0.168	interval		1.09	1.09	1.06	1.07	1.05	1.08	1.07	1.10	1.12	1.21			3.24	3.20	3.29
	velocity	4.73	7.80	7.80	8.02	7.94	8.10	7.87	7.94	7.73	7.59	8.68	7.30		7.87	7.97	7.75
Xiao Juxiu (CHN) (1998)	time	2.70	3.83	4.91	5.99	7.02	8.11	9.19	10.29	11.42	12.53		13.75	2 / 5			
reaction time 0.166	interval		1.13	1.08	1.08	1.03	1.09	1.08	1.10	1.13	1.11	1.22			3.29	3.20	3.34
	velocity	4.81	7.52	7.87	7.87	8.25	7.80	7.87	7.73	7.52	7.66	8.61	7.27		7.75	7.97	7.63
Shi Jiali (CHN) (1997)	time	2.67	3.77	4.87	5.94	7.00	8.06	9.14	10.23	11.33	12.48		13.81	4 / 6			
reaction time 0.156	interval		1.10	1.10	1.07	1.06	1.06	1.08	1.09	1.10	1.15	1.33			3.27	3.20	3.34

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

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
		velocity	4.87	7.73	7.73	7.94	8.02	8.02	7.87	7.80	7.73	7.39	7.89	7.24		7.80	7.97	7.63
Yao Hui (CHN) (2000)		time	2.70	3.87	5.02	6.14	7.27	8.39	9.54	10.68	11.84	13.01		14.29	7 / 7			
reaction time	0.185	interval		1.17	1.15	1.12	1.13	1.12	1.15	1.14	1.16	1.17	1.28			3.44	3.40	3.47
		velocity	4.81	7.26	7.39	7.59	7.52	7.59	7.39	7.46	7.33	7.26	8.20	7.00		7.41	7.50	7.35
Ge Ge (CHN) (2000)		time	2.79	3.92	5.07	6.22	7.34	8.47	9.64	10.81	11.98	13.21		14.56	5 / 8			
reaction time	0.215	interval		1.13	1.15	1.15	1.12	1.13	1.17	1.17	1.17	1.23	1.35			3.43	3.42	3.57
		velocity	4.66	7.52	7.39	7.39	7.59	7.52	7.26	7.26	7.26	6.91	7.78	6.87		7.43	7.46	7.14

2019 USATF National Championships (Des Moines, IA) (TV Analysis)

FINAL date 27-Jul-19 wind -1.2 m/s

Henson (2020) - Athlete First: 2019 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.53	3.50	4.47	5.44	6.38	7.34	8.30	9.27	10.24	11.24		12.44	3 / 1			
reaction time	interval		0.97	0.97	0.97	0.94	0.96	0.96	0.97	0.97	1.00	1.20			2.91	2.86	2.94
	velocity	5.14	8.76	8.76	8.76	9.04	8.85	8.85	8.76	8.76	8.50	8.75	8.04		8.76	8.92	8.67
Ali, Nia (USA) (1988)	time	2.47	3.50	4.47	5.44	6.40	7.37	8.34	9.34	10.34	11.35		12.55	5 / 2			
reaction time	interval		1.03	0.97	0.97	0.96	0.97	0.97	1.00	1.00	1.01	1.20			2.97	2.90	3.01
	velocity	5.26	8.25	8.76	8.76	8.85	8.76	8.76	8.50	8.50	8.42	8.75	7.97		8.59	8.79	8.47
McNeal, Brianna (USA) (1991)	time	2.47	3.50	4.47	5.46	6.40	7.40	8.38	9.37	10.37	11.40		12.61	4 / 3			
reaction time	interval		1.03	0.97	0.99	0.94	1.00	0.98	0.99	1.00	1.03	1.21			2.99	2.92	3.02
	velocity	5.26	8.25	8.76	8.59	9.04	8.50	8.67	8.59	8.50	8.25	8.68	7.93		8.53	8.73	8.44
Nelvis, Sharika (USA) (1990)	time	2.47	3.50	4.47	5.47	6.44	7.40	8.37	9.37	10.37	11.41		12.66	1 / 4			
reaction time	interval		1.03	0.97	1.00	0.97	0.96	0.97	1.00	1.00	1.04	1.25			3.00	2.90	3.04
	velocity	5.26	8.25	8.76	8.50	8.76	8.85	8.76	8.50	8.50	8.17	8.40	7.90		8.50	8.79	8.39
Claye, Queen (USA) (1988)	time	2.51	3.54	4.50	5.50	6.47	7.44	8.40	9.40	10.41	11.44		12.68	2 / 5			
reaction time	interval		1.03	0.96	1.00	0.97	0.97	0.96	1.00	1.01	1.03	1.24			2.99	2.90	3.04
	velocity	5.18	8.25	8.85	8.50	8.76	8.76	8.85	8.50	8.42	8.25	8.47	7.89		8.53	8.79	8.39
Marshall, Tonea (USA) (1998)	time	2.50	3.50	4.47	5.50	6.47	7.47	8.47	9.47	10.47	11.54		12.81	8 / 6			
reaction time	interval		1.00	0.97	1.03	0.97	1.00	1.00	1.00	1.00	1.07	1.27			3.00	2.97	3.07
	velocity	5.20	8.50	8.76	8.25	8.76	8.50	8.50	8.50	8.50	7.94	8.27	7.81		8.50	8.59	8.31
Castlin, Kristi (USA) (1988)	time	2.60	3.63	4.64	5.64	6.61	7.61	8.58	9.58	10.61	11.62		12.86	7 / 7			
reaction time	interval		1.03	1.01	1.00	0.97	1.00	0.97	1.00	1.03	1.01	1.24			3.04	2.94	3.04
	velocity	5.00	8.25	8.42	8.50	8.76	8.50	8.76	8.50	8.25	8.42	8.47	7.78		8.39	8.67	8.39
Clemons, Christina (USA) (19	time	2.50	3.50	4.47	5.47	6.44	7.40	8.38	9.44	10.51	11.61		13.01	6 / 8			
reaction time	interval		1.00	0.97	1.00	0.97	0.96	0.98	1.06	1.07	1.10	1.40			2.97	2.91	3.23
	velocity	5.20	8.50	8.76	8.50	8.76	8.85	8.67	8.02	7.94	7.73	7.50	7.69		8.59	8.76	7.89

2019 Corporate Team vs College Team (Hiratsukai, JPN)

FINAL date 27-Jul-19 wind 1.3 m/s

(2019) - http://tfdata-store.com/2019/09/02/post-1606/

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Terada, Asuka (JPN) (1990)	time	2.63	3.68	4.71	5.73	6.73	7.75	8.77	9.80	10.84	11.90		13.07	2 / 1			
reaction time	interval		1.05	1.03	1.02	1.00	1.02	1.02	1.03	1.04	1.06	1.17			3.10	3.04	3.13
	velocity	4.94	8.10	8.25	8.33	8.50	8.33	8.33	8.25	8.17	8.02	8.59	7.65		8.23	8.39	8.15

2019 Müller Anniversary Games (London, GBR) (TV Analysis)

FINAL date 20-Jul-19 wind 0.8 m/s

Henson (2020) - Athlete First: 2019 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Williams, Danielle (JAM) (1992	time	2.44	3.42	4.38	5.32	6.28	7.22	8.18	9.14	10.14	11.14		12.32	7 / 1			
reaction time	0.119 interval		0.98	0.96	0.94	0.96	0.94	0.96	0.96	1.00	1.00	1.18	AR PB		2.88	2.86	2.96
	velocity	5.33	8.67	8.85	9.04	8.85	9.04	8.85	8.85	8.50	8.50	8.90	8.12		8.85	8.92	8.61
Ali, Nia (USA) (1988)	time	2.48	3.50	4.50	5.48	6.44	7.42	8.38	9.36	10.36	11.38		12.57	4 / 2			
reaction time	0.147 interval		1.02	1.00	0.98	0.96	0.98	0.96	0.98	1.00	1.02	1.19			3.00	2.90	3.00
	velocity	5.24	8.33	8.50	8.67	8.85	8.67	8.85	8.67	8.50	8.33	8.82	7.96		8.50	8.79	8.50
Claye, Queen (USA) (1988)	time	2.48	3.50	4.48	5.46	6.44	7.42	8.40	9.40	10.42	11.44		12.64	6 / 3			
reaction time	0.131 interval		1.02	0.98	0.98	0.98	0.98	0.98	1.00	1.02	1.02	1.20			2.98	2.94	3.04
	velocity	5.24	8.33	8.67	8.67	8.67	8.67	8.67	8.50	8.33	8.33	8.75	7.91		8.56	8.67	8.39
Tapper, Megan (JAM) (1994)	time	2.48	3.48	4.44	5.42	6.40	7.40	8.40	9.42	10.42	11.48		12.66	5 / 4			
reaction time	0.142 interval		1.00	0.96	0.98	0.98	1.00	1.00	1.02	1.00	1.06	1.18			2.94	2.98	3.08
	velocity	5.24	8.50	8.85	8.67	8.67	8.50	8.50	8.33	8.50	8.02	8.90	7.90		8.67	8.56	8.28
Amusan, Tobi (NGR) (1997)	time	2.48	3.52	4.52	5.52	6.48	7.44	8.44	9.44	10.48	11.52		12.73	9 / 5			
reaction time	0.153 interval		1.04	1.00	1.00	0.96	0.96	1.00	1.00	1.04	1.04	1.21			3.04	2.92	3.08
	velocity	5.24	8.17	8.50	8.50	8.85	8.85	8.50	8.50	8.17	8.17	8.68	7.86		8.39	8.73	8.28
Seymour, Pedrya (BAH) (1995)	time	2.54	3.58	4.62	5.60	6.60	7.62	8.64	9.64	10.68	11.74		12.96	3 / 6			
reaction time	0.172 interval		1.04	1.04	0.98	1.00	1.02	1.02	1.00	1.04	1.06	1.22			3.06	3.04	3.10

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
		velocity	5.12	8.17	8.17	8.67	8.50	8.33	8.33	8.50	8.17	8.02	8.61	7.72		8.33	8.39	8.23
Herman, Elvira (BLR) (1997)		time	2.60	3.66	4.68	5.68	6.66	7.66	8.68	9.72	10.76	11.80		13.02	1 / 7			
reaction time 0.129		interval		1.06	1.02	1.00	0.98	1.00	1.02	1.04	1.04	1.04	1.22			3.08	3.00	3.12
		velocity	5.00	8.02	8.33	8.50	8.67	8.50	8.33	8.17	8.17	8.17	8.61	7.68		8.28	8.50	8.17
Britton, Evonne (USA) (1991)		time	2.48	3.52	4.56	5.58	6.56	7.56	8.58	9.62	10.72	11.82		13.15	8 / 8			
reaction time 0.133		interval		1.04	1.04	1.02	0.98	1.00	1.02	1.04	1.10	1.10	1.33			3.10	3.00	3.24
		velocity	5.24	8.17	8.17	8.33	8.67	8.50	8.33	8.17	7.73	7.73	7.89	7.60		8.23	8.50	7.87
McReynolds, Tiffani (USA) (19		time	2.48	3.52	4.50	5.48	6.48	7.48						dnf	2 / --			
reaction time 0.153		interval		1.04	0.98	0.98	1.00	1.00						DQ		3.00		
		velocity	5.24	8.17	8.67	8.67	8.50	8.50								8.50		

Heat 1

date 20-Jul-19 wind -1.1 m/s

Henson (2020) - Athlete First: 2019 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Williams, Danielle (JAM) (1992		time	2.42	3.42	4.38	5.34	6.30	7.26	8.24	9.22	10.22	11.22		12.41	6 / 1			
reaction time 0.132		interval		1.00	0.96	0.96	0.96	0.96	0.98	0.98	1.00	1.00	1.19	PB		2.92	2.90	2.98
		velocity	5.37	8.50	8.85	8.85	8.85	8.85	8.67	8.67	8.50	8.50	8.82	8.06		8.73	8.79	8.56
Claye, Queen (USA) (1988)		time	2.52	3.52	4.52	5.50	6.50	7.50	8.50	9.52	10.52	11.56		12.80	4 / 2			
reaction time 0.149		interval		1.00	1.00	0.98	1.00	1.00	1.00	1.02	1.00	1.04	1.24			2.98	3.00	3.06
		velocity	5.16	8.50	8.50	8.67	8.50	8.50	8.50	8.33	8.50	8.17	8.47	7.81		8.56	8.50	8.33
Britton, Evonne (USA) (1991)		time	2.48	3.50	4.50	5.50	6.50	7.50	8.50	9.56	10.60	11.70		12.95	7 / 3			
reaction time 0.146		interval		1.02	1.00	1.00	1.00	1.00	1.00	1.06	1.04	1.10	1.25			3.02	3.00	3.20
		velocity	5.24	8.33	8.50	8.50	8.50	8.50	8.50	8.02	8.17	7.73	8.40	7.72		8.44	8.50	7.97

2019 Herculis Meeting International d'Athletisme (Monaco, MON) (TV Analysis)

FINAL

date 12-Jul-19 wind 0.1 m/s

Henson (2020) - Athlete First: 2019 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)		time	2.54	3.54	4.52	5.48	6.44	7.38	8.32	9.30	10.28	11.26		12.43	4 / 1			
reaction time 0.126		interval		1.00	0.98	0.96	0.96	0.94	0.94	0.98	0.98	0.98	1.17			2.94	2.84	2.94
		velocity	5.12	8.50	8.67	8.85	8.85	9.04	9.04	8.67	8.67	8.67	8.97	8.05		8.67	8.98	8.67
Williams, Danielle (JAM) (1992		time	2.46	3.48	4.44	5.40	6.36	7.32	8.32	9.32	10.32	11.34		12.52	3 / 2			
reaction time 0.150		interval		1.02	0.96	0.96	0.96	0.96	1.00	1.00	1.00	1.02	1.18			2.94	2.92	3.02
		velocity	5.28	8.33	8.85	8.85	8.85	8.85	8.50	8.50	8.50	8.33	8.90	7.99		8.67	8.73	8.44
Clemons, Christina (USA) (19		time	2.46	3.50	4.48	5.46	6.44	7.42	8.40	9.38	10.38	11.42		12.62	6 / 3			
reaction time 0.148		interval		1.04	0.98	0.98	0.98	0.98	0.98	0.98	1.00	1.04	1.20			3.00	2.94	3.02
		velocity	5.28	8.17	8.67	8.67	8.67	8.67	8.67	8.67	8.50	8.17	8.75	7.92		8.50	8.67	8.44
Brown, Janeek (JAM) (1998)		time	2.48	3.52	4.52	5.52	6.52	7.50	8.50	9.50	10.52	11.58		12.71	5 / 4			
reaction time 0.184		interval		1.04	1.00	1.00	1.00	0.98	1.00	1.00	1.02	1.06	1.13			3.04	2.98	3.08
		velocity	5.24	8.17	8.50	8.50	8.50	8.67	8.50	8.50	8.33	8.02	9.29	7.87		8.39	8.56	8.28
Ali, Nia (USA) (1988)		time	2.52	3.56	4.56	5.56	6.56	7.56	8.56	9.56	10.60	11.62		12.80	2 / 5			
reaction time 0.137		interval		1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.02	1.18			3.04	3.00	3.06
		velocity	5.16	8.17	8.50	8.50	8.50	8.50	8.50	8.50	8.17	8.33	8.90	7.81		8.39	8.50	8.33
Kołeczek, Karolina (POL) (199		time	2.56	3.64	4.64	5.66	6.66	7.68	8.68	9.70	10.74	11.78		12.93	8 / 6			
reaction time 0.130		interval		1.08	1.00	1.02	1.00	1.02	1.00	1.02	1.04	1.04	1.15			3.10	3.02	3.10
		velocity	5.08	7.87	8.50	8.33	8.50	8.33	8.50	8.33	8.17	8.17	9.13	7.73		8.23	8.44	8.23
Nelvis, Sharika (USA) (1990)		time	2.48	3.52	4.52	5.52	6.50	7.50	8.50	9.54	10.62	11.72		12.98	7 / 7			
reaction time 0.123		interval		1.04	1.00	1.00	0.98	1.00	1.00	1.04	1.08	1.10	1.26			3.04	2.98	3.22
		velocity	5.24	8.17	8.50	8.50	8.67	8.50	8.50	8.17	7.87	7.73	8.33	7.70		8.39	8.56	7.92

2019 Chinese National Championships (Shenyang, CHN)

FINAL

date 08-Jul-19 wind 0.2 m/s

CAA Hurdle Development (2019)

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Chen Jiamin (CHN) (1996)		time	2.66	3.70	4.74	5.77	6.77	7.82	8.86	9.91	10.97	12.06		13.25	5 / 1			
reaction time 0.166		interval		1.04	1.04	1.03	1.00	1.05	1.04	1.05	1.06	1.09	1.19			3.11	3.09	3.20
		velocity	4.89	8.17	8.17	8.25	8.50	8.10	8.17	8.10	8.02	7.80	8.82	7.55		8.20	8.25	7.97
Deng Xuelin (CHN) (1998)		time	2.73	3.78	4.82	5.87	6.89	7.94	8.97	10.04	11.09	12.17		13.36	3 / 2			
reaction time 0.243		interval		1.05	1.04	1.05	1.02	1.05	1.03	1.07	1.05	1.08	1.19	PB		3.14	3.10	3.20
		velocity	4.76	8.10	8.17	8.10	8.33	8.10	8.25	7.94	8.10	7.87	8.82	7.49		8.12	8.23	7.97
You Na (CHN) (1993)		time	2.68	3.72	4.77	5.81	6.85	7.89	8.92	10.01	11.08	12.18		13.38	4 / 3			
reaction time 0.170		interval		1.04	1.05	1.04	1.04	1.04	1.03	1.09	1.07	1.10	1.20	PB		3.13	3.11	3.26
		velocity	4.85	8.17	8.10	8.17	8.17	8.17	8.25	7.80	7.94	7.73	8.75	7.47		8.15	8.20	7.82
Wang Li (CHN) (1999)		time	2.70	3.75	4.80	5.84	6.89	7.94	9.01	10.09	11.18	12.28		13.46	6 / 4			
reaction time 0.174		interval		1.05	1.05	1.04	1.05	1.05	1.07	1.08	1.09	1.10	1.18	PB		3.14	3.17	3.27
		velocity	4.81	8.10	8.10	8.17	8.10	8.10	7.94	7.87	7.80	7.73	8.90	7.43		8.12	8.04	7.80

Shi Jiali (CHN) (1997)		time	2.65	3.71	4.78	5.83	6.88	7.92	8.97	10.04	11.11	12.23		13.46	8 / 5			
reaction time	0.161	interval		1.06	1.07	1.05	1.05	1.04	1.05	1.07	1.07	1.12	1.23			3.18	3.14	3.26
		velocity	4.91	8.02	7.94	8.10	8.10	8.17	8.10	7.94	7.94	7.59	8.54	7.43		8.02	8.12	7.82
Yu Jiaru (CHN) (1999)		time	2.75	3.83	4.91	5.96	7.00	8.06	9.12	10.19	11.28	12.38		13.57	2 / 5			
reaction time	0.203	interval		1.08	1.08	1.05	1.04	1.06	1.06	1.07	1.09	1.10	1.19			3.21	3.16	3.26
		velocity	4.73	7.87	7.87	8.10	8.17	8.02	8.02	7.94	7.80	7.73	8.82	7.37		7.94	8.07	7.82
Dai Yiru (CHN) (2001)		time	2.67	3.79	4.85	5.91	6.96	8.00	9.09	10.17	11.27	12.36		13.58	1 / 7			
reaction time	0.197	interval		1.12	1.06	1.06	1.05	1.04	1.09	1.08	1.10	1.09	1.22	PB		3.24	3.18	3.27
		velocity	4.87	7.59	8.02	8.02	8.10	8.17	7.80	7.87	7.73	7.80	8.61	7.36		7.87	8.02	7.80
Lin Yuwei (CHN) (1999)		time	2.73	3.81	4.89	5.98	7.06	8.15	9.24	10.36	11.46	12.60		13.83	7 / 8			
reaction time	0.143	interval		1.08	1.08	1.09	1.08	1.09	1.09	1.12	1.10	1.14	1.23			3.25	3.26	3.36
		velocity	4.76	7.87	7.87	7.80	7.87	7.80	7.80	7.59	7.73	7.46	8.54	7.23		7.85	7.82	7.59

Heat 3

date 08-Jul-19 wind 1.3 m/s *CAA Hurdle Development (2019)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
You Na (CHN) (1993)		time	2.68	3.72	4.77	5.82	6.86	7.90	8.94	9.99	11.10	12.22		13.44	6 / 1			
reaction time	0.165	interval		1.04	1.05	1.05	1.04	1.04	1.04	1.05	1.11	1.12	1.22	PB		3.14	3.12	3.28
		velocity	4.85	8.17	8.10	8.10	8.17	8.17	8.17	8.10	7.66	7.59	8.61	7.44		8.12	8.17	7.77
Deng Xuelin (CHN) (1998)		time	2.72	3.79	4.88	5.94	6.98	8.02	9.08	10.12	11.16	12.26		13.46	5 / 2			
reaction time	0.235	interval		1.07	1.09	1.06	1.04	1.04	1.06	1.04	1.04	1.10	1.20			3.22	3.14	3.18
		velocity	4.78	7.94	7.80	8.02	8.17	8.17	8.02	8.17	8.17	7.73	8.75	7.43		7.92	8.12	8.02
Dai Yiru (CHN) (2001)		time	2.72	3.82	4.88	5.92	7.00	8.05	9.12	10.18	11.28	12.38		13.60	3 / 3			
reaction time	0.199	interval		1.10	1.06	1.04	1.08	1.05	1.07	1.06	1.10	1.10	1.22	PB		3.20	3.20	3.26
		velocity	4.78	7.73	8.02	8.17	7.87	8.10	7.94	8.02	7.73	7.73	8.61	7.35		7.97	7.97	7.82
Wang Dou (CHN) (1993)		time	2.79	3.88	4.96	6.04	7.10	8.20	9.28	10.38	11.48	12.60		13.79	8 / 4			
reaction time	0.266	interval		1.09	1.08	1.08	1.06	1.10	1.08	1.10	1.10	1.12	1.19			3.25	3.24	3.32
		velocity	4.66	7.80	7.87	7.87	8.02	7.73	7.87	7.73	7.73	7.59	8.82	7.25		7.85	7.87	7.68
Jie Zhimao (CHN) (1998)		time	2.76	3.92	5.04	6.11	7.24	8.34	9.46	10.60	11.77	12.94		14.21	7 / 5			
reaction time	0.163	interval		1.16	1.12	1.07	1.13	1.10	1.12	1.14	1.17	1.17	1.27			3.35	3.35	3.48
		velocity	4.71	7.33	7.59	7.94	7.52	7.73	7.59	7.46	7.26	7.26	8.27	7.04		7.61	7.61	7.33
Yao Hui (CHN) (2000)		time	2.76	3.95	5.04	6.14	7.26	8.40	9.54	10.70	11.86	13.04		14.34	4 / 6			
reaction time	0.250	interval		1.19	1.09	1.10	1.12	1.14	1.14	1.16	1.16	1.18	1.30			3.38	3.40	3.50
		velocity	4.71	7.14	7.80	7.73	7.59	7.46	7.46	7.33	7.33	7.20	8.08	6.97		7.54	7.50	7.29

Heat 2

date 08-Jul-19 wind 0.7 m/s *CAA Hurdle Development (2019)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Chen Jiamin (CHN) (1996)		time	2.72	3.78	4.82	5.86	6.92	7.98	9.06	10.15	11.25	12.36		13.65	6 / 1			
reaction time	0.179	interval		1.06	1.04	1.04	1.06	1.06	1.08	1.09	1.10	1.11	1.29			3.14	3.20	3.30
		velocity	4.78	8.02	8.17	8.17	8.02	8.02	7.87	7.80	7.73	7.66	8.14	7.33		8.12	7.97	7.73
Lin Yuwei (CHN) (1999)		time	2.74	3.84	4.91	6.00	7.06	8.13	9.22	10.30	11.42	12.56		13.78	7 / 2			
reaction time	0.163	interval		1.10	1.07	1.09	1.06	1.07	1.09	1.08	1.12	1.14	1.22			3.26	3.22	3.34
		velocity	4.74	7.73	7.94	7.80	8.02	7.94	7.80	7.87	7.59	7.46	8.61	7.26		7.82	7.92	7.63
Luo Xianyan (CHN) (1997)		time	2.76	3.86	4.96	6.03	7.08	8.18	9.26	10.36	11.46	12.58		13.79	4 / 3			
reaction time	0.181	interval		1.10	1.10	1.07	1.05	1.10	1.08	1.10	1.10	1.12	1.21			3.27	3.23	3.32
		velocity	4.71	7.73	7.73	7.94	8.10	7.73	7.87	7.73	7.73	7.59	8.68	7.25		7.80	7.89	7.68
Guo Jinglei (CHN) (2000)		time	2.80	3.92	5.02	6.10	7.18	8.28	9.40	10.52	11.66	12.82		14.14	3 / 4			
reaction time	0.195	interval		1.12	1.10	1.08	1.08	1.10	1.12	1.12	1.14	1.16	1.32			3.30	3.30	3.42
		velocity	4.64	7.59	7.73	7.87	7.87	7.73	7.59	7.59	7.46	7.33	7.95	7.07		7.73	7.73	7.46
Ge Ge (CHN) (2000)		time	2.78	3.91	5.00	6.10	7.20	8.33	9.46	10.62	11.78	13.00		14.34	5 / 5			
reaction time	0.211	interval		1.13	1.09	1.10	1.10	1.13	1.13	1.16	1.16	1.22	1.34			3.32	3.36	3.54
		velocity	4.68	7.52	7.80	7.73	7.73	7.52	7.52	7.33	7.33	6.97	7.84	6.97		7.68	7.59	7.20

Heat 1

date 08-Jul-19 wind 0.5 m/s *CAA Hurdle Development (2019)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wang Li (CHN) (1999)		time	2.70	3.76	4.82	5.88	6.92	7.97	9.02	10.10	11.20	12.32		13.56	6 / 1			
reaction time	0.178	interval		1.06	1.06	1.06	1.04	1.05	1.05	1.08	1.10	1.12	1.24			3.18	3.14	3.30
		velocity	4.81	8.02	8.02	8.02	8.17	8.10	8.10	7.87	7.73	7.59	8.47	7.37		8.02	8.12	7.73
Shi Jiali (CHN) (1997)		time	2.72	3.80	4.86	5.91	6.96	8.03	9.08	10.18	11.26	12.40		13.64	7 / 2			
reaction time	0.220	interval		1.08	1.06	1.05	1.05	1.07	1.05	1.10	1.08	1.14	1.24			3.19	3.17	3.32
		velocity	4.78	7.87	8.02	8.10	8.10	7.94	8.10	7.73	7.87	7.46	8.47	7.33		7.99	8.04	7.68
Yu Jiaru (CHN) (1999)		time	2.80	3.88	4.98	6.04	7.10	8.16	9.24	10.32	11.40	12.50		13.71	8 / 3			
reaction time	0.285	interval		1.08	1.10	1.06	1.06	1.06	1.08	1.08	1.08	1.10	1.21			3.24	3.20	3.26

	velocity	4.64	7.87	7.73	8.02	8.02	8.02	7.87	7.87	7.87	7.73	8.68	7.29		7.87	7.97	7.82
Xiao Juxiu (CHN) (1998)	time	2.76	3.86	4.98	6.04	7.14	8.22	9.32	10.42	11.54	12.66		13.84	3 / 4			
reaction time 0.196	interval		1.10	1.12	1.06	1.10	1.08	1.10	1.10	1.12	1.12	1.18			3.28	3.28	3.34
	velocity	4.71	7.73	7.59	8.02	7.73	7.87	7.73	7.73	7.59	7.59	8.90	7.23		7.77	7.77	7.63
Huo Xuanyi (CHN) (1998)	time	2.86	4.01	5.16	6.30	7.42	8.56	9.72	10.90	12.08	13.30		14.63	4 / 5			
reaction time 0.188	interval		1.15	1.15	1.14	1.12	1.14	1.16	1.18	1.18	1.22	1.33			3.44	3.42	3.58
	velocity	4.55	7.39	7.39	7.46	7.59	7.46	7.33	7.20	7.20	6.97	7.89	6.84		7.41	7.46	7.12
Chen Zhifei (CHN) (2001)	time	2.88	4.08	5.24	6.42	7.57	8.75	9.90	11.09	12.34	13.56		14.92	5 / 6			
reaction time 0.163	interval		1.20	1.16	1.18	1.15	1.18	1.15	1.19	1.25	1.22	1.36			3.54	3.48	3.66
	velocity	4.51	7.08	7.33	7.20	7.39	7.20	7.39	7.14	6.80	6.97	7.72	6.70		7.20	7.33	6.97

Heptathlon - Heat 2

date 08-Jul-19 wind 0.8 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wang Qingling (CHN) (1993)	time	2.70	3.77	4.84	5.91	6.99	8.07	9.14	10.24	11.34	12.48		13.71	4 / 1			
reaction time 0.189	interval		1.07	1.07	1.07	1.08	1.08	1.07	1.10	1.10	1.14	1.23			3.21	3.23	3.34
	velocity	4.81	7.94	7.94	7.94	7.87	7.87	7.94	7.73	7.73	7.46	8.54	7.29		7.94	7.89	7.63
Gao Miao (CHN) (2001)	time	2.75	3.91	5.04	6.17	7.32	8.44	9.61	10.79	11.98	13.19		14.48	1 / 2			
reaction time 0.154	interval		1.16	1.13	1.13	1.15	1.12	1.17	1.18	1.19	1.21	1.29			3.42	3.44	3.58
	velocity	4.73	7.33	7.52	7.52	7.39	7.59	7.26	7.20	7.14	7.02	8.14	6.91		7.46	7.41	7.12
Pang Yuting (CHN) (1995)	time	2.75	3.95	5.09	6.21	7.31	8.53	9.69	10.86	12.03	13.23		14.62	3 / 3			
reaction time 0.180	interval		1.20	1.14	1.12	1.10	1.22	1.16	1.17	1.17	1.20	1.39			3.46	3.48	3.54
	velocity	4.73	7.08	7.46	7.59	7.73	6.97	7.33	7.26	7.26	7.08	7.55	6.84		7.37	7.33	7.20
Wang Huiqiong (CHN) (1990)	time	2.88	4.05	5.22	6.37	7.52	8.67	9.85	11.03	12.26	13.51		14.87	2 / 4			
reaction time 0.282	interval		1.17	1.17	1.15	1.15	1.15	1.18	1.18	1.23	1.25	1.36			3.49	3.48	3.66
	velocity	4.51	7.26	7.26	7.39	7.39	7.39	7.20	7.20	6.91	6.80	7.72	6.72		7.31	7.33	6.97
Sun Lan (CHN) (2002)	time	2.87	4.10	5.29	6.47	7.64	8.84	9.99	11.21	12.43	13.65		15.01	6 / 5			
reaction time 0.193	interval		1.23	1.19	1.18	1.17	1.20	1.15	1.22	1.22	1.22	1.36	PB		3.60	3.52	3.66
	velocity	4.53	6.91	7.14	7.20	7.26	7.08	7.39	6.97	6.97	6.97	7.72	6.66		7.08	7.24	6.97
Wen Xiaoyun (CHN) (1999)	time	3.15	4.50	5.77	6.99	8.19	9.41	10.61	11.86	13.11	14.36		15.69	5 / 6			
reaction time 0.245	interval		1.35	1.27	1.22	1.20	1.22	1.20	1.25	1.25	1.25	1.33			3.84	3.62	3.75
	velocity	4.13	6.30	6.69	6.97	7.08	6.97	7.08	6.80	6.80	6.80	7.89	6.37		6.64	7.04	6.80
Zhang Yali (CHN) (1996)	time	3.08	4.34	5.63	6.89	8.16	9.40	10.66	11.93	13.23	14.53		15.82	7 / 7			
reaction time 0.219	interval		1.26	1.29	1.26	1.27	1.24	1.26	1.27	1.30	1.30	1.29	PB		3.81	3.77	3.87
	velocity	4.22	6.75	6.59	6.75	6.69	6.85	6.75	6.69	6.54	6.54	8.14	6.32		6.69	6.76	6.59
Pu Jing (CHN) (1997)	time	3.02	4.35	5.65	6.94	8.15	9.40	10.66	11.94	13.25	14.57		15.93	8 / 8			
reaction time 0.213	interval		1.33	1.30	1.29	1.21	1.25	1.26	1.28	1.31	1.32	1.36			3.92	3.72	3.91
	velocity	4.30	6.39	6.54	6.59	7.02	6.80	6.75	6.64	6.49	6.44	7.72	6.28		6.51	6.85	6.52

Heptathlon - Heat 1

date 08-Jul-19 wind 0.1 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wang Meiqing (CHN) (1996)	time	2.78	3.94	5.05	6.16	7.29	8.44	9.62	10.79	11.98	13.20		14.47	5 / 1			
reaction time 0.186	interval		1.16	1.11	1.11	1.13	1.15	1.18	1.17	1.19	1.22	1.27	PB		3.38	3.46	3.58
	velocity	4.68	7.33	7.66	7.66	7.52	7.39	7.20	7.26	7.14	6.97	8.27	6.91		7.54	7.37	7.12
Shen Muhan (CHN) (1997)	time	2.83	4.00	5.12	6.24	7.36	8.49	9.64	10.79	12.00	13.23		14.57	8 / 2			
reaction time 0.230	interval		1.17	1.12	1.12	1.12	1.13	1.15	1.15	1.21	1.23	1.34			3.41	3.40	3.59
	velocity	4.59	7.26	7.59	7.59	7.59	7.52	7.39	7.39	7.02	6.91	7.84	6.86		7.48	7.50	7.10
Jin Donghua (CHN) (1999)	time	2.93	4.09	5.27	6.42	7.59	8.77	9.94	11.14	12.34	13.58		14.85	6 / 3			
reaction time 0.261	interval		1.16	1.18	1.15	1.17	1.18	1.17	1.20	1.20	1.24	1.27	PB		3.49	3.52	3.64
	velocity	4.44	7.33	7.20	7.39	7.26	7.20	7.26	7.08	7.08	6.85	8.27	6.73		7.31	7.24	7.01
Ren Shimei (CHN) (1996)	time	2.85	4.02	5.19	6.36	7.51	8.69	9.86	11.09	12.31	13.56		14.92	2 / 4			
reaction time 0.224	interval		1.17	1.17	1.17	1.15	1.18	1.17	1.23	1.22	1.25	1.36	PB		3.51	3.50	3.70
	velocity	4.56	7.26	7.26	7.26	7.39	7.20	7.26	6.91	6.97	6.80	7.72	6.70		7.26	7.29	6.89
Li Jinghua (CHN) (1996)	time	2.88	4.04	5.20	6.35	7.52	8.71	9.91	11.12	12.36	13.61		14.98	7 / 5			
reaction time 0.214	interval		1.16	1.16	1.15	1.17	1.19	1.20	1.21	1.24	1.25	1.37			3.47	3.56	3.70
	velocity	4.51	7.33	7.33	7.39	7.26	7.14	7.08	7.02	6.85	6.80	7.66	6.68		7.35	7.16	6.89
Zhou Jingjing (CHN) (1998)	time	2.91	4.07	5.24	6.39	7.56	8.71	9.88	11.09	12.33	13.58		15.00	1 / 6			
reaction time 0.221	interval		1.16	1.17	1.15	1.17	1.15	1.17	1.21	1.24	1.25	1.42			3.48	3.49	3.70
	velocity	4.47	7.33	7.26	7.39	7.26	7.39	7.26	7.02	6.85	6.80	7.39	6.67		7.33	7.31	6.89
Liu Jingyi (CHN) (2000)	time	2.83	4.00	5.17	6.36	7.54	8.72	9.96	11.22	12.51	13.83		15.31	3 / 7			
reaction time 0.167	interval		1.17	1.17	1.19	1.18	1.18	1.24	1.26	1.29	1.32	1.48			3.53	3.60	3.87
	velocity	4.59	7.26	7.26	7.14	7.20	7.20	6.85	6.75	6.59	6.44	7.09	6.53		7.22	7.08	6.59

Yin Xinyi (CHN) (2000)		time	2.95	4.17	5.37	6.57	7.81	9.06	10.31	11.63	12.93	14.31		15.81	4 / 8			
reaction time	0.176	interval		1.22	1.20	1.20	1.24	1.25	1.25	1.32	1.30	1.38	1.50	PB		3.62	3.74	4.00
		velocity	4.41	6.97	7.08	7.08	6.85	6.80	6.80	6.44	6.54	6.16	7.00	6.33		7.04	6.82	6.38

2019 Japanese National Championships (Fukuoka, JPN)

FINAL date 29-Jun-19 wind 0.6 m/s

Yamanaka (2019) - research on athlete performance and technique- 2019 data book

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kimura, Ayako (JPN) (1988)		time	2.60	3.63	4.65	5.68	6.69	7.71	8.74	9.78	10.84	11.92		13.14	7 / 1			
reaction time	0.150	interval		1.03	1.02	1.03	1.01	1.02	1.03	1.04	1.06	1.08	1.22			3.08	3.06	3.18
		velocity	5.00	8.25	8.33	8.25	8.42	8.33	8.25	8.17	8.02	7.87	8.61	7.61		8.28	8.33	8.02
Aoki, Masumi (JPN) (1994)		time	2.62	3.65	4.68	5.71	6.74	7.77	8.81	9.86	10.92	11.99		13.15	6 / 2			
reaction time	0.123	interval		1.03	1.03	1.03	1.03	1.03	1.04	1.05	1.06	1.07	1.16	PB		3.09	3.10	3.18
		velocity	4.96	8.25	8.25	8.25	8.25	8.25	8.17	8.10	8.02	7.94	9.05	7.60		8.25	8.23	8.02
Terada, Asuka (JPN) (1990)		time	2.61	3.66	4.69	5.70	6.73	7.76	8.80	9.84	10.92	11.98		13.16	5 / 3			
reaction time	0.172	interval		1.05	1.03	1.01	1.03	1.03	1.04	1.04	1.08	1.06	1.18			3.09	3.10	3.18
		velocity	4.98	8.10	8.25	8.42	8.25	8.25	8.17	8.17	7.87	8.02	8.90	7.60		8.25	8.23	8.02
Shimura, Hitomi (JPN) (1990)		time	2.64	3.69	4.72	5.75	6.77	7.80	8.83	9.88	10.94	12.03		13.20	9 / 4			
reaction time	0.156	interval		1.05	1.03	1.03	1.02	1.03	1.03	1.05	1.06	1.09	1.17			3.11	3.08	3.20
		velocity	4.92	8.10	8.25	8.25	8.33	8.25	8.25	8.10	8.02	7.80	8.97	7.58		8.20	8.28	7.97
Kiyoyama, Chisato (JPN) (199		time	2.67	3.75	4.79	5.83	6.85	7.87	8.90	9.96	11.01	12.08		13.24	2 / 5			
reaction time	0.161	interval		1.08	1.04	1.04	1.02	1.02	1.03	1.06	1.05	1.07	1.16	PB		3.16	3.07	3.18
		velocity	4.87	7.87	8.17	8.17	8.33	8.33	8.25	8.02	8.10	7.94	9.05	7.55		8.07	8.31	8.02
Fukube, Mako (JPN) (1995)		time	2.64	3.69	4.70	5.78	6.83	7.85	8.90	9.96	11.03	12.11		13.30	4 / 6			
reaction time	0.150	interval		1.05	1.01	1.08	1.05	1.02	1.05	1.06	1.07	1.08	1.19			3.14	3.12	3.21
		velocity	4.92	8.10	8.42	7.87	8.10	8.33	8.10	8.02	7.94	7.87	8.82	7.52		8.12	8.17	7.94
Suzuki, Miho (JPN) (1996)		time	2.72	3.77	4.80	5.84	6.87	7.91	8.95	10.00	11.07	12.14		13.31	8 / 7			
reaction time	0.191	interval		1.05	1.03	1.04	1.03	1.04	1.04	1.05	1.07	1.07	1.17	PB		3.12	3.11	3.19
		velocity	4.78	8.10	8.25	8.17	8.25	8.17	8.17	8.10	7.94	7.94	8.97	7.51		8.17	8.20	7.99
Fujimori, Nana (JPN) (1997)		time	2.71	3.77	4.82	5.85	6.90	7.94	9.01	10.08	11.16	12.27		13.41	3 / 8			
reaction time	0.165	interval		1.06	1.05	1.03	1.05	1.04	1.07	1.07	1.08	1.11	1.14			3.14	3.16	3.26
		velocity	4.80	8.02	8.10	8.25	8.10	8.17	7.94	7.94	7.87	7.66	9.21	7.46		8.12	8.07	7.82

2019 Bislett Games (Oslo, NOR) (TV Analysis)

FINAL date 13-Jun-19 wind 1.1 m/s

Henson (2020) - Athlete First: 2019 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Clemons, Christina (USA) (19		time	2.56	3.56	4.56	5.54	6.50	7.48	8.46	9.46	10.50	11.52		12.69	3 / 1			
reaction time	0.126	interval		1.00	1.00	0.98	0.96	0.98	0.98	1.00	1.04	1.02	1.17			2.98	2.92	3.06
		velocity	5.08	8.50	8.50	8.67	8.85	8.67	8.67	8.50	8.17	8.33	8.97	7.88		8.56	8.73	8.33
Nelvis, Sharika (USA) (1990)		time	2.52	3.54	4.52	5.52	6.50	7.48	8.46	9.46	10.48	11.54		12.74	5 / 2			
reaction time	0.130	interval		1.02	0.98	1.00	0.98	0.98	0.98	1.00	1.02	1.06	1.20			3.00	2.94	3.08
		velocity	5.16	8.33	8.67	8.50	8.67	8.67	8.67	8.50	8.33	8.02	8.75	7.85		8.50	8.67	8.28
Herman, Elvira (BLR) (1997)		time	2.64	3.68	4.68	5.68	6.68	7.66	8.64	9.64	10.66	11.68		12.84	6 / 3			
reaction time	0.145	interval		1.04	1.00	1.00	1.00	0.98	0.98	1.00	1.02	1.02	1.16			3.04	2.96	3.04
		velocity	4.92	8.17	8.50	8.50	8.50	8.67	8.67	8.50	8.33	8.33	9.05	7.79		8.39	8.61	8.39
Roleder, Cindy (GER) (1989)		time	2.68	3.70	4.72	5.72	6.70	7.70	8.68	9.70	10.72	11.78		12.93	7 / 4			
reaction time	0.144	interval		1.02	1.02	1.00	0.98	1.00	0.98	1.02	1.02	1.06	1.15			3.04	2.96	3.10
		velocity	4.85	8.33	8.33	8.50	8.67	8.50	8.67	8.33	8.33	8.02	9.13	7.73		8.39	8.61	8.23
Visser, Nadine (NED) (1995)		time	2.60	3.64	4.64	5.66	6.66	7.66	8.66	9.68	10.72	11.80		13.00	2 / 5			
reaction time	0.159	interval		1.04	1.00	1.02	1.00	1.00	1.00	1.02	1.04	1.08	1.20			3.06	3.00	3.14
		velocity	5.00	8.17	8.50	8.33	8.50	8.50	8.50	8.33	8.17	7.87	8.75	7.69		8.33	8.50	8.12
Pedersen, Isabelle (NOR) (199		time	2.56	3.58	4.56	5.56	6.60	7.60	8.64	9.68	10.74	11.84		13.08	1 / 6			
reaction time	0.157	interval		1.02	0.98	1.00	1.04	1.00	1.04	1.04	1.06	1.10	1.24			3.00	3.08	3.20
		velocity	5.08	8.33	8.67	8.50	8.17	8.50	8.17	8.17	8.02	7.73	8.47	7.65		8.50	8.28	7.97
Neziri, Nooralotta (FIN) (1992)		time	2.62	3.68	4.72	5.76	6.76	7.80	8.84	9.88	10.92	11.98		13.18	8 / 7			
reaction time	0.152	interval		1.06	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.06	1.20			3.14	3.08	3.14
		velocity	4.96	8.02	8.17	8.17	8.50	8.17	8.17	8.17	8.17	8.02	8.75	7.59		8.12	8.28	8.12

2019 NCAA National Championships (Austin, TX) (TV Analysis)

FINAL date 08-Jun-19 wind 0.6 m/s

Henson (2020) - Athlete First: 2019 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Brown, Janeek (JAM) (1998)		time	2.45	3.44	4.42	5.41	6.38	7.34	8.30	9.28	10.26	11.26		12.40	6 / 1			
reaction time	0.138	interval		0.99	0.98	0.99	0.97	0.96	0.96	0.98	0.98	1.00	1.14	AR PB		2.96	2.89	2.96
		velocity	5.31	8.59	8.67	8.59	8.76	8.85	8.85	8.67	8.67	8.50	9.21	8.06		8.61	8.82	8.61

Brissett, Chanel (USA) (1999)	time	2.50	3.53	4.51	5.47	6.43	7.37	8.34	9.31	10.27	11.30		12.52	4 / 2			
reaction time 0.144	interval		1.03	0.98	0.96	0.96	0.94	0.97	0.97	0.96	1.03	1.22	PB		2.97	2.87	2.96
	velocity	5.20	8.25	8.67	8.85	8.85	9.04	8.76	8.76	8.85	8.25	8.61	7.99		8.59	8.89	8.61
Marshall, Tonea (USA) (1998)	time	2.46	3.54	4.53	5.51	6.49	7.47	8.45	9.43	10.45	11.47		12.66	5 / 3			
reaction time 0.125	interval		1.08	0.99	0.98	0.98	0.98	0.98	0.98	1.02	1.02	1.19	PB		3.05	2.94	3.02
	velocity	5.28	7.87	8.59	8.67	8.67	8.67	8.67	8.67	8.33	8.33	8.82	7.90		8.36	8.67	8.44
Williams, Jeanie (JAM) (1997)	time	2.46	3.50	4.50	5.50	6.46	7.43	8.40	9.43	10.43	11.43		12.74	3 / 4			
reaction time 0.164	interval		1.04	1.00	1.00	0.96	0.97	0.97	1.03	1.00	1.00	1.31			3.04	2.90	3.03
	velocity	5.28	8.17	8.50	8.50	8.85	8.76	8.76	8.25	8.50	8.50	8.02	7.85		8.39	8.79	8.42
Cockrell, Anna (USA) (1997)	time	2.56	3.60	4.60	5.56	6.53	7.50	8.50	9.50	10.50	11.53		12.80	8 / 5			
reaction time 0.182	interval		1.04	1.00	0.96	0.97	0.97	1.00	1.00	1.00	1.03	1.27			3.00	2.94	3.03
	velocity	5.08	8.17	8.50	8.85	8.76	8.76	8.50	8.50	8.50	8.25	8.27	7.81		8.50	8.67	8.42
Jones, Cortney (USA) (1999)	time	2.56	3.60	4.60	5.56	6.56	7.53	8.56	9.53	10.56	11.60		12.81	7 / 6			
reaction time 0.183	interval		1.04	1.00	0.96	1.00	0.97	1.03	0.97	1.03	1.04	1.21			3.00	3.00	3.04
	velocity	5.08	8.17	8.50	8.85	8.50	8.76	8.25	8.76	8.25	8.17	8.68	7.81		8.50	8.50	8.39
McMinn, Tiara (USA) (1999)	time	2.53	3.56	4.56	5.56	6.56	7.60	8.60	9.63	10.66	11.73		12.97	9 / 7			
reaction time 0.175	interval		1.03	1.00	1.00	1.00	1.04	1.00	1.03	1.03	1.07	1.24			3.03	3.04	3.13
	velocity	5.14	8.25	8.50	8.50	8.50	8.17	8.50	8.25	8.25	7.94	8.47	7.71		8.42	8.39	8.15
Chadwick, Payton (USA) (199	time	2.50	3.54	4.56	5.56	6.56	7.56	8.56	9.66	10.73	11.80		13.05	2 / 8			
reaction time 0.194	interval		1.04	1.02	1.00	1.00	1.00	1.00	1.10	1.07	1.07	1.25			3.06	3.00	3.24
	velocity	5.20	8.17	8.33	8.50	8.50	8.50	8.50	7.73	7.94	7.94	8.40	7.66		8.33	8.50	7.87

2019 Japanese National Multi-Event Championships (Nagano, JPN)

Heptathlon - Heat 3

date 08-Jun-19 wind 2.3 m/s

Matsubayashi (2019) - research on athlete performance and technique- 2019 data book

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Utsunomiya, Eri (JPN) (1993)	time	2.75	3.88	4.98	6.07	7.15	8.23	9.31	10.41	11.51	12.61		13.81	7 / 2			
reaction time	interval		1.13	1.10	1.09	1.08	1.08	1.08	1.10	1.10	1.10	1.20			3.32	3.24	3.30
	velocity	4.73	7.52	7.73	7.80	7.87	7.87	7.87	7.73	7.73	7.73	8.75	7.24		7.68	7.87	7.73
Yamasaki, Yuki (JPN) (1995)	time	2.74	3.86	4.99	6.10	7.24	8.36	9.50	10.64	11.78	12.95		14.19	4 / 4			
reaction time	interval		1.12	1.13	1.11	1.14	1.12	1.14	1.14	1.14	1.17	1.24			3.36	3.40	3.45
	velocity	4.74	7.59	7.52	7.66	7.46	7.59	7.46	7.46	7.46	7.26	8.47	7.05		7.59	7.50	7.39

2019 Asian Grand Prix 2 (Chongqing, CHN)

FINAL

date 07-Jun-19 wind 2.3 m/s

CAA Hurdle Development (2019)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shimura, Hitomi (JPN) (1990)	time	2.63	3.69	4.73	5.75	6.77	7.79	8.81	9.86	10.89	11.94		13.11	5 / 1			
reaction time 0.183	interval		1.06	1.04	1.02	1.02	1.02	1.02	1.05	1.03	1.05	1.17			3.12	3.06	3.13
	velocity	4.94	8.02	8.17	8.33	8.33	8.33	8.33	8.10	8.25	8.10	8.97	7.63		8.17	8.33	8.15
Lui Lai Yiu (HKG) (1994)	time	2.66	3.72	4.75	5.77	6.79	7.80	8.82	9.87	10.92	11.99		13.18	7 / 2			
reaction time 0.180	interval		1.06	1.03	1.02	1.02	1.01	1.02	1.05	1.05	1.07	1.19			3.11	3.05	3.17
	velocity	4.89	8.02	8.25	8.33	8.33	8.42	8.33	8.10	8.10	7.94	8.82	7.59		8.20	8.36	8.04
Shi Jiali (CHN) (1997)	time	2.66	3.73	4.78	5.82	6.84	7.87	8.89	9.93	10.97	12.04		13.26	3 / 3			
reaction time 0.190	interval		1.07	1.05	1.04	1.02	1.03	1.02	1.04	1.04	1.07	1.22			3.16	3.07	3.15
	velocity	4.89	7.94	8.10	8.17	8.33	8.25	8.33	8.17	8.17	7.94	8.61	7.54		8.07	8.31	8.10
Chen Jiamin (CHN) (1996)	time	2.70	3.73	4.80	5.83	6.89	7.94	8.99	10.02	11.11	12.19		13.37	4 / 4			
reaction time 0.193	interval		1.03	1.07	1.03	1.06	1.05	1.05	1.03	1.09	1.08	1.18			3.13	3.16	3.20
	velocity	4.81	8.25	7.94	8.25	8.02	8.10	8.10	8.25	7.80	7.87	8.90	7.48		8.15	8.07	7.97
Shynyzbekova, Aygerim (KAZ	time	2.78	3.85	4.92	5.98	7.05	8.10	9.17	10.22	11.31	12.40		13.60	8 / 5			
reaction time 0.186	interval		1.07	1.07	1.06	1.07	1.05	1.07	1.05	1.09	1.09	1.20			3.20	3.19	3.23
	velocity	4.68	7.94	7.94	8.02	7.94	8.10	7.94	8.10	7.80	7.80	8.75	7.35		7.97	7.99	7.89
Tran Thi Yen Hao (VIE) (1990)	time	2.60	3.70	4.78	5.83	6.90	7.94	8.99	10.14	11.27	12.39		13.61	6 / 6			
reaction time 0.165	interval		1.10	1.08	1.05	1.07	1.04	1.05	1.15	1.13	1.12	1.22			3.23	3.16	3.40
	velocity	5.00	7.73	7.87	8.10	7.94	8.17	8.10	7.39	7.52	7.59	8.61	7.35		7.89	8.07	7.50
Meesri, Suchada (THA) (1994)	time	2.70	3.78	4.87	5.96	7.04	8.14	9.24	10.37	11.49	12.64		13.89	2 / 7			
reaction time 0.180	interval		1.08	1.09	1.09	1.08	1.10	1.10	1.13	1.12	1.15	1.25			3.26	3.28	3.40
	velocity	4.81	7.87	7.80	7.80	7.87	7.73	7.73	7.52	7.59	7.39	8.40	7.20		7.82	7.77	7.50

2019 Asian Grand Prix 1 (Chongqing, CHN)

FINAL

date 04-Jun-19 wind -1.2 m/s

CAA Hurdle Development (2019)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shimura, Hitomi (JPN) (1990)	time	2.61	3.70	4.73	5.77	6.82	7.85	8.92	9.97	11.06	12.13		13.31	4 / 1			
reaction time 0.145	interval		1.09	1.03	1.04	1.05	1.03	1.07	1.05	1.09	1.07	1.18			3.16	3.15	3.21
	velocity	4.98	7.80	8.25	8.17	8.10	8.25	7.94	8.10	7.80	7.94	8.90	7.51		8.07	8.10	7.94

Lui Lai Yiu (HKG) (1994)	time	2.65	3.73	4.78	5.82	6.87	7.90	8.99	10.04	11.11	12.21		13.42	3 / 2			
reaction time 0.151	interval		1.08	1.05	1.04	1.05	1.03	1.09	1.05	1.07	1.10	1.21			3.17	3.17	3.22
	velocity	4.91	7.87	8.10	8.17	8.10	8.25	7.80	8.10	7.94	7.73	8.68	7.45		8.04	8.04	7.92
Shi Jiali (CHN) (1997)	time	2.65	3.73	4.78	5.83	6.87	7.94	8.99	10.06	11.16	12.27		13.53	8 / 3			
reaction time 0.156	interval		1.08	1.05	1.05	1.04	1.07	1.05	1.07	1.10	1.11	1.26			3.18	3.16	3.28
	velocity	4.91	7.87	8.10	8.10	8.17	7.94	8.10	7.94	7.73	7.66	8.33	7.39		8.02	8.07	7.77
Chen Jiamin (CHN) (1996)	time	2.61	3.69	4.73	5.79	6.85	7.92	9.00	10.11	11.24	12.38		13.60	5 / 4			
reaction time 0.143	interval		1.08	1.04	1.06	1.06	1.07	1.08	1.11	1.13	1.14	1.22			3.18	3.21	3.38
	velocity	4.98	7.87	8.17	8.02	8.02	7.94	7.87	7.66	7.52	7.46	8.61	7.35		8.02	7.94	7.54
Tran Thi Yen Hao (VIE) (1990)	time	2.61	3.71	4.80	5.87	6.95	8.04	9.12	10.22	11.32	12.47		13.67	6 / 5			
reaction time 0.167	interval		1.10	1.09	1.07	1.08	1.09	1.08	1.10	1.10	1.15	1.20			3.26	3.25	3.35
	velocity	4.98	7.73	7.80	7.94	7.87	7.80	7.87	7.73	7.73	7.39	8.75	7.32		7.82	7.85	7.61
Shynyzbekova, Aygerim (KAZ	time	2.75	3.85	4.95	6.03	7.12	8.20	9.29	10.39	11.51	12.62		13.91	7 / 6			
reaction time 0.147	interval		1.10	1.10	1.08	1.09	1.08	1.09	1.10	1.12	1.11	1.29			3.28	3.26	3.33
	velocity	4.73	7.73	7.73	7.87	7.80	7.87	7.80	7.73	7.59	7.66	8.14	7.19		7.77	7.82	7.66
Meesri, Suchada (THA) (1994)	time	2.68	3.78	4.87	5.97	7.19	8.37	9.56	10.74				14.44	2 / 7			
reaction time 0.171	interval		1.10	1.09	1.10	1.22	1.18	1.19	1.18						3.29	3.59	
	velocity	4.85	7.73	7.80	7.73	6.97	7.20	7.14	7.20				6.93		7.75	7.10	

2019 Fuse Sprint (Tottori, JPN)

FINAL date 02-Jun-19 wind 3.5 m/s

Kijima (2019) - research on athlete performance and technique- 2019 data book

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kimura, Ayako (JPN) (1988)	time	2.60	3.63	4.63	5.63	6.64	7.64	8.65	9.69	10.75	11.82		13.01	4 / 1			
reaction time 0.160	interval		1.03	1.00	1.00	1.01	1.00	1.01	1.04	1.06	1.07	1.19			3.03	3.02	3.17
	velocity	5.00	8.25	8.50	8.50	8.42	8.50	8.42	8.17	8.02	7.94	8.82	7.69		8.42	8.44	8.04
Kiyoyama, Chisato (JPN) (199	time	2.64	3.71	4.73	5.76	6.77	7.77	8.80	9.81	10.89	11.92		13.10	5 / 2			
reaction time 0.137	interval		1.07	1.02	1.03	1.01	1.00	1.03	1.01	1.08	1.03	1.18			3.12	3.04	3.12
	velocity	4.92	7.94	8.33	8.25	8.42	8.50	8.25	8.42	7.87	8.25	8.90	7.63		8.17	8.39	8.17
Aoki, Masumi (JPN) (1994)	time	2.60	3.66	4.69	5.70	6.72	7.75	8.78	9.81	10.87	11.92		13.11	6 / 3			
reaction time 0.141	interval		1.06	1.03	1.01	1.02	1.03	1.03	1.03	1.06	1.05	1.19			3.10	3.08	3.14
	velocity	5.00	8.02	8.25	8.42	8.33	8.25	8.25	8.25	8.02	8.10	8.82	7.63		8.23	8.28	8.12
Fukube, Mako (JPN) (1995)	time	2.60	3.65	4.68	5.70	6.72	7.75	8.78	9.83	10.91	12.00		13.19	7 / 4			
reaction time 0.139	interval		1.05	1.03	1.02	1.02	1.03	1.03	1.05	1.08	1.09	1.19			3.10	3.08	3.22
	velocity	5.00	8.10	8.25	8.33	8.33	8.25	8.25	8.10	7.87	7.80	8.82	7.58		8.23	8.28	7.92
Kobayashi, Ayumi (JPN) (2001	time	2.69	3.76	4.80	5.85	6.89	7.92	8.96	10.01	11.08	12.16		13.35	8 / 5			
reaction time 0.133	interval		1.07	1.04	1.05	1.04	1.03	1.04	1.05	1.07	1.08	1.19			3.16	3.11	3.20
	velocity	4.83	7.94	8.17	8.10	8.17	8.25	8.17	8.10	7.94	7.87	8.82	7.49		8.07	8.20	7.97
Suzuki, Miho (JPN) (1996)	time	2.72	3.78	4.82	5.87	6.92	7.95	8.99	10.03	11.11	12.19		13.35	9 / 6			
reaction time 0.155	interval		1.06	1.04	1.05	1.05	1.03	1.04	1.04	1.08	1.08	1.16			3.15	3.12	3.20
	velocity	4.78	8.02	8.17	8.10	8.10	8.25	8.17	8.17	7.87	7.87	9.05	7.49		8.10	8.17	7.97
Nakajima, Hitomi (JPN) (1995)	time	2.67	3.75	4.80	5.84	6.88	7.93	8.99	10.06	11.14	12.25		13.41	2 / 7			
reaction time 0.126	interval		1.08	1.05	1.04	1.04	1.05	1.06	1.07	1.08	1.11	1.16			3.17	3.15	3.26
	velocity	4.87	7.87	8.10	8.17	8.17	8.10	8.02	7.94	7.87	7.66	9.05	7.46		8.04	8.10	7.82
Nakamura, Yuki (JPN) (1995)	time	2.68	3.76	4.81	5.84	6.92	7.97	9.03	10.12	11.22	12.33		13.51	3 / 8			
reaction time 0.138	interval		1.08	1.05	1.03	1.08	1.05	1.06	1.09	1.10	1.11	1.18			3.16	3.19	3.30
	velocity	4.85	7.87	8.10	8.25	7.87	8.10	8.02	7.80	7.73	7.66	8.90	7.40		8.07	7.99	7.73

2019 Bauhaus Athletics (Stockholm, SWE) (TV Analysis)

FINAL date 30-May-19 wind 1.3 m/s

Henson (2020) - Athlete First: 2019 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.52	3.54	4.52	5.48	6.46	7.44	8.42	9.40	10.38	11.38		12.52	5 / 1			
reaction time 0.137	interval		1.02	0.98	0.96	0.98	0.98	0.98	0.98	0.98	1.00	1.14			2.96	2.94	2.96
	velocity	5.16	8.33	8.67	8.85	8.67	8.67	8.67	8.67	8.67	8.50	9.21	7.99		8.61	8.67	8.61
Nelvis, Sharika (USA) (1990)	time	2.52	3.48	4.48	5.46	6.44	7.42	8.40	9.40	10.42	11.46		12.69	4 / 2			
reaction time 0.104	interval		0.96	1.00	0.98	0.98	0.98	0.98	1.00	1.02	1.04	1.23			2.94	2.94	3.06
	velocity	5.16	8.85	8.50	8.67	8.67	8.67	8.67	8.50	8.33	8.17	8.54	7.88		8.67	8.67	8.33
Amusan, Tobi (NGR) (1997)	time	2.52	3.58	4.58	5.60	6.60	7.60	8.60	9.60	10.60	11.64		12.85	6 / 3			
reaction time 0.129	interval		1.06	1.00	1.02	1.00	1.00	1.00	1.00	1.00	1.04	1.21			3.08	3.00	3.04
	velocity	5.16	8.02	8.50	8.33	8.50	8.50	8.50	8.50	8.50	8.17	8.68	7.78		8.28	8.50	8.39
Roleder, Cindy (GER) (1989)	time	2.64	3.68	4.68	5.68	6.68	7.68	8.70	9.70	10.72	11.76		12.94	2 / 4			
reaction time 0.137	interval		1.04	1.00	1.00	1.00	1.00	1.02	1.00	1.02	1.04	1.18			3.04	3.02	3.06
	velocity	4.92	8.17	8.50	8.50	8.50	8.50	8.33	8.50	8.33	8.17	8.90	7.73		8.39	8.44	8.33

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Herman, Elvira (BLR) (1997)		time	2.64	3.68	4.68	5.68	6.68	7.68	8.68	9.70	10.72	11.76		12.94	3 / 5			
reaction time 0.132		interval		1.04	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.04	1.18			3.04	3.00	3.08
		velocity	4.92	8.17	8.50	8.50	8.50	8.50	8.50	8.33	8.33	8.17	8.90	7.73		8.39	8.50	8.28
Seymour, Pedrya (BAH) (1995)		time	2.56	3.64	4.68	5.72	6.74	7.74	8.74	9.74	10.74	11.78		12.97	8 / 6			
reaction time 0.150		interval		1.08	1.04	1.04	1.02	1.00	1.00	1.00	1.00	1.04	1.19			3.16	3.02	3.04
		velocity	5.08	7.87	8.17	8.17	8.33	8.50	8.50	8.50	8.50	8.17	8.82	7.71		8.07	8.44	8.39
Boons, Eefje (NED) (1994)		time	2.68	3.72	4.74	5.76	6.78	7.78	8.84	9.90	10.98	12.06		13.32	1 / 7			
reaction time 0.148		interval		1.04	1.02	1.02	1.02	1.00	1.06	1.06	1.08	1.08	1.26			3.08	3.08	3.22
		velocity	4.85	8.17	8.33	8.33	8.33	8.50	8.02	8.02	7.87	7.87	8.33	7.51		8.28	8.28	7.92
Visser, Nadine (NED) (1995)		time	2.60	3.68	4.68	5.72	6.74	7.76	8.80	9.84	10.92	12.08		13.39	7 / 8			
reaction time 0.162		interval		1.08	1.00	1.04	1.02	1.02	1.04	1.04	1.08	1.16	1.31			3.12	3.08	3.28
		velocity	5.00	7.87	8.50	8.17	8.33	8.33	8.17	8.17	7.87	7.33	8.02	7.47		8.17	8.28	7.77

2019 Chinese National Grand Prix 4 (Luoyang, CHN)

FINAL date 30-May-19 wind -0.1 m/s *CAA Hurdle Development (2019)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Deng Xuelin (CHN) (1998)		time	2.75	3.82	4.87	5.91	6.97	8.02	9.08	10.14	11.21	12.32		13.48	3 / 1			
reaction time 0.207		interval		1.07	1.05	1.04	1.06	1.05	1.06	1.06	1.07	1.11	1.16			3.16	3.17	3.24
		velocity	4.73	7.94	8.10	8.17	8.02	8.10	8.02	8.02	7.94	7.66	9.05	7.42		8.07	8.04	7.87
Wang Li (CHN) (1999)		time	2.68	3.77	4.83	5.88	6.92	7.97	9.04	10.12	11.18	12.31		13.51	8 / 2			
reaction time 0.170		interval		1.09	1.06	1.05	1.04	1.05	1.07	1.08	1.06	1.13	1.20	PB		3.20	3.16	3.27
		velocity	4.85	7.80	8.02	8.10	8.17	8.10	7.94	7.87	8.02	7.52	8.75	7.40		7.97	8.07	7.80
Chen Jiamin (CHN) (1996)		time	2.68	3.75	4.80	5.88	6.92	8.04	9.12	10.21	11.31	12.43		13.64	7 / 3			
reaction time 0.180		interval		1.07	1.05	1.08	1.04	1.12	1.08	1.09	1.10	1.12	1.21			3.20	3.24	3.31
		velocity	4.85	7.94	8.10	7.87	8.17	7.59	7.87	7.80	7.73	7.59	8.68	7.33		7.97	7.87	7.70
Xiao Juxiu (CHN) (1998)		time	2.68	3.80	4.85	5.90	6.96	8.04	9.14	10.22	11.32	12.46		13.65	6 / 4			
reaction time 0.168		interval		1.12	1.05	1.05	1.06	1.08	1.10	1.08	1.10	1.14	1.19			3.22	3.24	3.32
		velocity	4.85	7.59	8.10	8.10	8.02	7.87	7.73	7.87	7.73	7.46	8.82	7.33		7.92	7.87	7.68
Dai Yiru (CHN) (2001)		time	2.74	3.82	4.92	5.97	7.00	8.07	9.12	10.24	11.38	12.52		13.74	5 / 5			
reaction time 0.200		interval		1.08	1.10	1.05	1.03	1.07	1.05	1.12	1.14	1.14	1.22	=PB		3.23	3.15	3.40
		velocity	4.74	7.87	7.73	8.10	8.25	7.94	8.10	7.59	7.46	7.46	8.61	7.28		7.89	8.10	7.50
You Na (CHN) (1993)		time	2.73	3.82	4.92	5.95	7.02	8.09	9.19	10.31	11.42	12.58		13.80	4 / 6			
reaction time 0.180		interval		1.09	1.10	1.03	1.07	1.07	1.10	1.12	1.11	1.16	1.22			3.22	3.24	3.39
		velocity	4.76	7.80	7.73	8.25	7.94	7.94	7.73	7.59	7.66	7.33	8.61	7.25		7.92	7.87	7.52
Jie Zhimao (CHN) (1998)		time	2.80	3.95	5.09	6.26	7.41	8.56	9.72	10.91	12.09	13.29		14.59	1 / 7			
reaction time 0.149		interval		1.15	1.14	1.17	1.15	1.15	1.16	1.19	1.18	1.20	1.30			3.46	3.46	3.57
		velocity	4.64	7.39	7.46	7.26	7.39	7.39	7.33	7.14	7.20	7.08	8.08	6.85		7.37	7.37	7.14
Huo Xuanyi (CHN) (1998)		time	2.88	4.02	5.15	6.32	7.46	8.61	9.78	10.97	12.16	13.39		14.73	2 / 8			
reaction time 0.183		interval		1.14	1.13	1.17	1.14	1.15	1.17	1.19	1.19	1.23	1.34			3.44	3.46	3.61
		velocity	4.51	7.46	7.52	7.26	7.46	7.39	7.26	7.14	7.14	6.91	7.84	6.79		7.41	7.37	7.06

2019 Shimane High School Championships (Honshu, JPN)

FINAL date 26-May-19 wind 1.9 m/s *Shimizu (2019) - shimane high school championships 2019 - biomechanics data analysis*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nagamine, Sayuri (JPN) (2001)		time	2.75	3.90	5.04	6.15	7.25	8.37	9.49	10.62	11.79	12.99		14.35	4 / 1			
reaction time		interval		1.15	1.14	1.11	1.10	1.12	1.12	1.13	1.17	1.20	1.36			3.40	3.34	3.50
		velocity	4.73	7.39	7.46	7.66	7.73	7.59	7.59	7.52	7.26	7.08	7.39	6.97		7.50	7.63	7.29
拝上 芽生		time	2.92	4.22	5.50	6.79	8.04	9.27	10.54	11.79	13.04	14.34		15.80	6 / 2			
reaction time		interval		1.30	1.28	1.29	1.25	1.23	1.27	1.25	1.25	1.30	1.46			3.87	3.75	3.80
		velocity	4.45	6.54	6.64	6.59	6.80	6.91	6.69	6.80	6.80	6.54	6.88	6.33		6.59	6.80	6.71
髙田 菜月		time	2.88	4.10	5.32	6.55	7.79	9.02	10.36	11.67	13.04	14.41		15.91	7 / 3			
reaction time		interval		1.22	1.22	1.23	1.24	1.23	1.34	1.31	1.37	1.37	1.50			3.67	3.81	4.05
		velocity	4.51	6.97	6.97	6.91	6.85	6.91	6.34	6.49	6.20	6.20	6.70	6.29		6.95	6.69	6.30
伊藤 彩乃		time	2.90	4.22	5.57	6.92	8.30	9.69	11.12	12.59	14.01	15.39		16.89	8 / 4			
reaction time		interval		1.32	1.35	1.35	1.38	1.39	1.43	1.47	1.42	1.38	1.50			4.02	4.20	4.27
		velocity	4.48	6.44	6.30	6.30	6.16	6.12	5.94	5.78	5.99	6.16	6.70	5.92		6.34	6.07	5.97
中村 好香		time	2.88	4.17	5.45	6.77	8.07	9.40	10.77	12.19	13.81	15.34		16.95	2 / 5			
reaction time		interval		1.29	1.28	1.32	1.30	1.33	1.37	1.42	1.62	1.53	1.61			3.89	4.00	4.57
		velocity	4.51	6.59	6.64	6.44	6.54	6.39	6.20	5.99	5.25	5.56	6.24	5.90		6.56	6.38	5.58
米原 楓加		time	2.95	4.35	5.72	7.12	8.49	9.84	11.27	12.71	14.17	15.67		17.25	3 / 6			
reaction time		interval		1.40	1.37	1.40	1.37	1.35	1.43	1.44	1.46	1.50	1.58			4.17	4.15	4.40

	velocity	4.41	6.07	6.20	6.07	6.20	6.30	5.94	5.90	5.82	5.67	6.36	5.80		6.12	6.14	5.80

2019 Chinese National Grand Prix 3 (Jinhau, CHN)

FINAL date 23-May-19 wind 0.4 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Luo Xianyan (CHN) (1997)	time	2.66	3.74	4.80	5.82	6.88	7.94	8.98	10.02	11.08	12.16		13.36	5 / 1			
reaction time 0.149	interval		1.08	1.06	1.02	1.06	1.06	1.04	1.04	1.06	1.08	1.20	PB		3.16	3.16	3.18
	velocity	4.89	7.87	8.02	8.33	8.02	8.02	8.17	8.17	8.02	7.87	8.75	7.49		8.07	8.07	8.02
Deng Xuelin (CHN) (1998)	time	2.72	3.78	4.82	5.86	6.90	7.94	8.98	10.04	11.12	12.22		13.41	6 / 2			
reaction time 0.222	interval		1.06	1.04	1.04	1.04	1.04	1.04	1.06	1.08	1.10	1.19			3.14	3.12	3.24
	velocity	4.78	8.02	8.17	8.17	8.17	8.17	8.17	8.02	7.87	7.73	8.82	7.46		8.12	8.17	7.87
Yu Jiaru (CHN) (1999)	time	2.72	3.78	4.84	5.88	6.92	7.98	9.04	10.10	11.16	12.24		13.42	7 / 3			
reaction time 0.185	interval		1.06	1.06	1.04	1.04	1.06	1.06	1.06	1.06	1.08	1.18			3.16	3.16	3.20
	velocity	4.78	8.02	8.02	8.17	8.17	8.02	8.02	8.02	8.02	7.87	8.90	7.45		8.07	8.07	7.97
Wang Dou (CHN) (1993)	time	2.76	3.82	4.88	5.92	6.98	8.04	9.10	10.16	11.26	12.34		13.53	9 / 4			
reaction time 0.207	interval		1.06	1.06	1.04	1.06	1.06	1.06	1.06	1.10	1.08	1.19			3.16	3.18	3.24
	velocity	4.71	8.02	8.02	8.17	8.02	8.02	8.02	8.02	7.73	7.87	8.82	7.39		8.07	8.02	7.87
Xiao Juxiu (CHN) (1998)	time	2.72	3.82	4.90	5.96	7.02	8.10	9.18	10.26	11.36	12.48		13.67	4 / 5			
reaction time 0.197	interval		1.10	1.08	1.06	1.06	1.08	1.08	1.08	1.10	1.12	1.19			3.24	3.22	3.30
	velocity	4.78	7.73	7.87	8.02	8.02	7.87	7.87	7.87	7.73	7.59	8.82	7.32		7.87	7.92	7.73
Shi Jiali (CHN) (1997)	time	2.68	3.76	4.84	5.88	6.94	8.02	9.08	10.16	11.28	12.40		13.68	8 / 6			
reaction time 0.176	interval		1.08	1.08	1.04	1.06	1.08	1.06	1.08	1.12	1.12	1.28			3.20	3.20	3.32
	velocity	4.85	7.87	7.87	8.17	8.02	7.87	8.02	7.87	7.59	7.59	8.20	7.31		7.97	7.97	7.68
Wang Li (CHN) (1999)	time	2.70	3.80	4.86	5.92	6.98	8.04	9.14	10.22	11.32	12.46		13.75	3 / 7			
reaction time 0.179	interval		1.10	1.06	1.06	1.06	1.06	1.10	1.08	1.10	1.14	1.29			3.22	3.22	3.32
	velocity	4.81	7.73	8.02	8.02	8.02	8.02	7.73	7.87	7.73	7.46	8.14	7.27		7.92	7.92	7.68
Chen Yinfeng (CHN) (1998)	time	2.80	3.94	5.04	6.12	7.22	8.32	9.42	10.56	11.70	12.88		14.21	2 / 8			
reaction time 0.264	interval		1.14	1.10	1.08	1.10	1.10	1.10	1.14	1.14	1.18	1.33			3.32	3.30	3.46
	velocity	4.64	7.46	7.73	7.87	7.73	7.73	7.73	7.46	7.46	7.20	7.89	7.04		7.68	7.73	7.37

2019 Nanjing World Challenge (Nanjing, CHN)

FINAL date 21-May-19 wind -1.0 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
McNeal, Brianna (USA) (1991)	time	2.57	3.60	4.60	5.58	6.57	7.52	8.55	9.56	10.58	11.62		12.78	5 / 1			
reaction time 0.173	interval		1.03	1.00	0.98	0.99	0.95	1.03	1.01	1.02	1.04	1.16			3.01	2.97	3.07
	velocity	5.06	8.25	8.50	8.67	8.59	8.95	8.25	8.42	8.33	8.17	9.05	7.82		8.47	8.59	8.31
Ali, Nia (USA) (1988)	time	2.55	3.59	4.58	5.59	6.58	7.56	8.56	9.58	10.59	11.62		12.78	2 / 2			
reaction time 0.153	interval		1.04	0.99	1.01	0.99	0.98	1.00	1.02	1.01	1.03	1.16			3.04	2.97	3.06
	velocity	5.10	8.17	8.59	8.42	8.59	8.67	8.50	8.33	8.42	8.25	9.05	7.82		8.39	8.59	8.33
Clemons, Christina (USA) (19	time	2.53	3.53	4.56	5.55	6.53	7.55	8.52	9.55	10.56	11.62		12.79	6 / 3			
reaction time 0.131	interval		1.00	1.03	0.99	0.98	1.02	0.97	1.03	1.01	1.06	1.17			3.02	2.97	3.10
	velocity	5.14	8.50	8.25	8.59	8.67	8.33	8.76	8.25	8.42	8.02	8.97	7.82		8.44	8.59	8.23
Harrison, Queen (USA) (1988)	time	2.59	3.62	4.64	5.64	6.61	7.61	8.60	9.61	10.62	11.67		12.80	3 / 4			
reaction time 0.162	interval		1.03	1.02	1.00	0.97	1.00	0.99	1.01	1.01	1.05	1.13			3.05	2.96	3.07
	velocity	5.02	8.25	8.33	8.50	8.76	8.50	8.59	8.42	8.42	8.10	9.29	7.81		8.36	8.61	8.31
Seymour, Pedrya (BAH) (1995)	time	2.56	3.61	4.64	5.64	6.65	7.64	8.64	9.63	10.62	11.67		12.83	7 / 5			
reaction time 0.149	interval		1.05	1.03	1.00	1.01	0.99	1.00	0.99	0.99	1.05	1.16			3.08	3.00	3.03
	velocity	5.08	8.10	8.25	8.50	8.42	8.59	8.50	8.59	8.59	8.10	9.05	7.79		8.28	8.50	8.42
Roleder, Cindy (GER) (1989)	time	2.65	3.67	4.69	5.69	6.70	7.70	8.70	9.72	10.75	11.79		12.94	4 / 6			
reaction time 0.138	interval		1.02	1.02	1.00	1.01	1.00	1.00	1.02	1.03	1.04	1.15			3.04	3.01	3.09
	velocity	4.91	8.33	8.33	8.50	8.42	8.50	8.50	8.33	8.25	8.17	9.13	7.73		8.39	8.47	8.25
Castlin, Kristi (USA) (1988)	time	2.65	3.67	4.71	5.66	6.72	7.71	8.75	9.75	10.79	11.85		13.10	8 / 7			
reaction time 0.154	interval		1.02	1.04	0.95	1.06	0.99	1.04	1.00	1.04	1.06	1.25			3.01	3.09	3.10
	velocity	4.91	8.33	8.17	8.95	8.02	8.59	8.17	8.50	8.17	8.02	8.40	7.63		8.47	8.25	8.23
Wu Yanni (CHN) (1997)	time	2.73	3.78	4.83	5.88	6.93	7.97	9.02	10.07	11.12			13.44	10 / 8			
reaction time 0.173	interval		1.05	1.05	1.05	1.05	1.04	1.05	1.05	1.05					3.15	3.14	
	velocity	4.76	8.10	8.10	8.10	8.10	8.17	8.10	8.10	8.10			7.44		8.10	8.12	
Chen Jiamin (CHN) (1996)	time	2.67	3.73	4.80	5.87	6.96	8.08	9.15	10.24	11.36	12.46		13.72	1 / 9			
reaction time 0.303	interval		1.06	1.07	1.07	1.09	1.12	1.07	1.09	1.12	1.10	1.26			3.20	3.28	3.31
	velocity	4.87	8.02	7.94	7.94	7.80	7.59	7.94	7.80	7.59	7.73	8.33	7.29		7.97	7.77	7.70
Charlton, Devynne (BAH) (19	time	2.62	3.71	4.78	5.84	6.93	8.00	9.09	10.21				14.08	9 / 10			

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	0.172	interval		1.09	1.07	1.06	1.09	1.07	1.09	1.12					3.22	3.25	
		velocity	4.96	7.80	7.94	8.02	7.80	7.94	7.80	7.59			7.10		7.92	7.85	

2019 Seiko Golden Grand Prix (Osaka, JPN)

FINAL

date 19-May-19 wind 0.4 m/s

Kijima (2019) - race analysis 100m hurdle top-ranked women 2019 Japanese and international comps

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nelvis, Sharika (USA) (1990)		time	2.55	3.58	4.58	5.57	6.54	7.52	8.50	9.48	10.50	11.54		12.70	4 / 1			
reaction time	0.178	interval		1.03	1.00	0.99	0.97	0.98	0.98	0.98	1.02	1.04	1.16			3.02	2.93	3.04
		velocity	5.10	8.25	8.50	8.59	8.76	8.67	8.67	8.67	8.33	8.17	9.05	7.87		8.44	8.70	8.39
Pearson, Sally (AUS) (1986)		time	2.56	3.57	4.55	5.53	6.51	7.49	8.48	9.48	10.50	11.54		12.70	5 / 2			
reaction time	0.136	interval		1.01	0.98	0.98	0.98	0.98	0.99	1.00	1.02	1.04	1.16			2.97	2.95	3.06
		velocity	5.08	8.42	8.67	8.67	8.67	8.67	8.59	8.50	8.33	8.17	9.05	7.87		8.59	8.64	8.33
Seymour, Pedrya (BAH) (1995)		time	2.68	3.70	4.72	5.73	6.73	7.70	8.68	9.68	10.69	11.74		12.90	8 / 3			
reaction time	0.274	interval		1.02	1.02	1.01	1.00	0.97	0.98	1.00	1.01	1.05	1.16			3.05	2.95	3.06
		velocity	4.85	8.33	8.33	8.42	8.50	8.76	8.67	8.50	8.42	8.10	9.05	7.75		8.36	8.64	8.33
Harrison, Queen (USA) (1988)		time	2.64	3.67	4.71	5.72	6.72	7.72	8.73	9.73	10.74	11.79		12.92	7 / 4			
reaction time	0.155	interval		1.03	1.04	1.01	1.00	1.00	1.01	1.00	1.01	1.05	1.13			3.08	3.01	3.06
		velocity	4.92	8.25	8.17	8.42	8.50	8.50	8.42	8.50	8.42	8.10	9.29	7.74		8.28	8.47	8.33
Castlin, Kristi (USA) (1988)		time	2.64	3.69	4.72	5.73	6.73	7.75	8.75	9.78	10.81	11.86		13.01	2 / 5			
reaction time	0.145	interval		1.05	1.03	1.01	1.00	1.02	1.00	1.03	1.03	1.05	1.15			3.09	3.02	3.11
		velocity	4.92	8.10	8.25	8.42	8.50	8.33	8.50	8.25	8.25	8.10	9.13	7.69		8.25	8.44	8.20
Kimura, Ayako (JPN) (1988)		time	2.58	3.65	4.66	5.66	6.67	7.69	8.70	9.74	10.81	11.90		13.11	6 / 6			
reaction time	0.156	interval		1.07	1.01	1.00	1.01	1.02	1.01	1.04	1.07	1.09	1.21			3.08	3.04	3.20
		velocity	5.04	7.94	8.42	8.50	8.42	8.33	8.42	8.17	7.94	7.80	8.68	7.63		8.28	8.39	7.97
Tanaka, Yumi (JPN) (1998)		time	2.63	3.65	4.68	5.69	6.71	7.74	8.76	9.83	10.90	12.01		13.22	1 / 7			
reaction time	0.148	interval		1.02	1.03	1.01	1.02	1.03	1.02	1.07	1.07	1.11	1.21	PB		3.06	3.07	3.25
		velocity	4.94	8.33	8.25	8.42	8.33	8.25	8.33	7.94	7.94	7.66	8.68	7.56		8.33	8.31	7.85
Shimura, Hitomi (JPN) (1990)		time	2.62	3.69	4.73	5.76	6.79	7.83	8.87	9.94	11.02	12.12		13.33	9 / 8			
reaction time	0.157	interval		1.07	1.04	1.03	1.03	1.04	1.04	1.07	1.08	1.10	1.21			3.14	3.11	3.25
		velocity	4.96	7.94	8.17	8.25	8.25	8.17	8.17	7.94	7.87	7.73	8.68	7.50		8.12	8.20	7.85
Aoki, Masumi (JPN) (1994)		time	2.63	3.68	4.72	5.76	6.79	7.82	8.87	9.92	10.99	12.12		13.37	3 / 9			
reaction time	0.132	interval		1.05	1.04	1.04	1.03	1.03	1.05	1.05	1.07	1.13	1.25			3.13	3.11	3.25
		velocity	4.94	8.10	8.17	8.17	8.25	8.25	8.10	8.10	7.94	7.52	8.40	7.48		8.15	8.20	7.85

2019 IAAF World Relays - Shuttle Hurdle Relay (Yokohama, JPN)

Heat 2 - 1st Leg

date 11-May-19 wind na

CAA Hurdle Development (2019)

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shi Jiali (CHN) (1997)		time	2.59	3.65	4.73	5.78	6.84	7.91	9.00	10.09	11.24	12.37		13.62	3 /			
reaction time	0.162	interval		1.06	1.08	1.05	1.06	1.07	1.09	1.09	1.15	1.13	1.25	*(14.93)*		3.19	3.22	3.37
		velocity	5.02	8.02	7.87	8.10	8.02	7.94	7.80	7.80	7.39	7.52	8.40	7.34	***57.54***	7.99	7.92	7.57

Heat 2 - 3rd Leg

date 11-May-19 wind na

CAA Hurdle Development (2019)

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Yanni (CHN) (1997)		time	2.65	3.75	4.82	5.88	6.97	8.04	9.12	10.19	11.28	12.41		13.63	3 /			
reaction time		interval		1.10	1.07	1.06	1.09	1.07	1.08	1.07	1.09	1.13	1.22	*(14.84)*		3.23	3.24	3.29
		velocity	4.91	7.73	7.94	8.02	7.80	7.94	7.87	7.94	7.80	7.52	8.61	7.34	***57.54***	7.89	7.87	7.75

2019 Kinami Memorial (Osaka, JPN)

FINAL

date 06-May-19 wind 0.5 m/s

Matsubayashi (2019) - research on athlete performance and technique- 2019 data book

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Britton, Evonne (USA) (1991)		time	2.56	3.61	4.63	5.65	6.66	7.67	8.69	9.70	10.74	11.80		13.01	7 / 1			
reaction time		interval		1.05	1.02	1.02	1.01	1.01	1.02	1.01	1.04	1.06	1.21			3.09	3.04	3.11
		velocity	5.08	8.10	8.33	8.33	8.42	8.42	8.33	8.42	8.17	8.02	8.68	7.69		8.25	8.39	8.20
Shimura, Hitomi (JPN) (1990)		time	2.62	3.67	4.72	5.75	6.78	7.83	8.87	9.92	10.98	12.05		13.22	6 / 2			
reaction time		interval		1.05	1.05	1.03	1.03	1.05	1.04	1.05	1.06	1.07	1.17			3.13	3.12	3.18
		velocity	4.96	8.10	8.10	8.25	8.25	8.10	8.17	8.10	8.02	7.94	8.97	7.56		8.15	8.17	8.02
Aoki, Masumi (JPN) (1994)		time	2.60	3.68	4.75	5.81	6.84	7.88	8.90	9.96	11.02	12.09		13.27	3 / 3			
reaction time		interval		1.08	1.07	1.06	1.03	1.04	1.02	1.06	1.06	1.07	1.18			3.21	3.09	3.19
		velocity	5.00	7.87	7.94	8.02	8.25	8.17	8.33	8.02	8.02	7.94	8.90	7.54		7.94	8.25	7.99
Fukube, Mako (JPN) (1995)		time	2.64	3.71	4.75	5.78	6.82	7.86	8.90	9.96	11.03	12.11		13.31	9 / 4			
reaction time		interval		1.07	1.04	1.03	1.04	1.04	1.04	1.06	1.07	1.08	1.20	PB		3.14	3.12	3.21
		velocity	4.92	7.94	8.17	8.25	8.17	8.17	8.17	8.02	7.94	7.87	8.75	7.51		8.12	8.17	7.94
Tanaka, Yumi (JPN) (1998)		time	2.59	3.65	4.71	5.74	6.78	7.82	8.86	9.90	10.99	12.09		13.33	4 / 5			
reaction time		interval		1.06	1.06	1.03	1.04	1.04	1.04	1.04	1.09	1.10	1.24	PB		3.15	3.12	3.23
		velocity	5.02	8.02	8.02	8.25	8.17	8.17	8.17	8.17	7.80	7.73	8.47	7.50		8.10	8.17	7.89

Fujimori, Nana (JPN) (1997)	time	2.69	3.77	4.83	5.88	6.93	7.97	9.03	10.08	11.14	12.26		13.39	2 / 6			
reaction time	interval		1.08	1.06	1.05	1.05	1.04	1.06	1.05	1.06	1.12	1.13	PB		3.19	3.15	3.23
	velocity	4.83	7.87	8.02	8.10	8.10	8.17	8.02	8.10	8.02	7.59	9.29	7.47		7.99	8.10	7.89
Kiyoyama, Chisato (JPN) (199	time	2.69	3.78	4.86	5.91	6.96	7.99	9.03	10.09	11.16	12.24		13.43	5 / 7			
reaction time	interval		1.09	1.08	1.05	1.05	1.03	1.04	1.06	1.07	1.08	1.19			3.22	3.12	3.21
	velocity	4.83	7.80	7.87	8.10	8.10	8.25	8.17	8.02	7.94	7.87	8.82	7.45		7.92	8.17	7.94
Kanai, Marumi (JPN) (1997)	time	2.75	3.85	4.96	6.04	7.11	8.19	9.27	10.36	11.47	12.58		13.74	8 / 8			
reaction time	interval		1.10	1.11	1.08	1.07	1.08	1.08	1.09	1.11	1.11	1.16			3.29	3.23	3.31
	velocity	4.73	7.73	7.66	7.87	7.94	7.87	7.87	7.80	7.66	7.66	9.05	7.28		7.75	7.89	7.70

2019 Doha Diamond League (Doha, QAT) (TV Analysis)

FINAL

date 03-May-19 wind 0.9 m/s

Henson (2020) - Athlete First: 2019 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Williams, Danielle (JAM) (1992	time	2.46	3.50	4.50	5.48	6.44	7.44	8.40	9.40	10.42	11.46		12.66	4 / 1			
reaction time 0.141	interval		1.04	1.00	0.98	0.96	1.00	0.96	1.00	1.02	1.04	1.20			3.02	2.92	3.06
	velocity	5.28	8.17	8.50	8.67	8.85	8.50	8.85	8.50	8.33	8.17	8.75	7.90		8.44	8.73	8.33
Amusan, Tobi (NGR) (1997)	time	2.48	3.50	4.50	5.48	6.46	7.44	8.42	9.42	10.46	11.50		12.73	2 / 2			
reaction time 0.147	interval		1.02	1.00	0.98	0.98	0.98	0.98	1.00	1.04	1.04	1.23			3.00	2.94	3.08
	velocity	5.24	8.33	8.50	8.67	8.67	8.67	8.67	8.50	8.17	8.17	8.54	7.86		8.50	8.67	8.28
Nelvis, Sharika (USA) (1990)	time	2.48	3.48	4.48	5.46	6.46	7.46	8.44	9.46	10.48	11.54		12.78	6 / 3			
reaction time 0.139	interval		1.00	1.00	0.98	1.00	1.00	0.98	1.02	1.02	1.06	1.24			2.98	2.98	3.10
	velocity	5.24	8.50	8.50	8.67	8.50	8.50	8.67	8.33	8.33	8.02	8.47	7.82		8.56	8.56	8.23
Clemons, Christina (USA) (19	time	2.52	3.56	4.54	5.52	6.50	7.48	8.48	9.48	10.50	11.56		12.83	7 / 4			
reaction time 0.142	interval		1.04	0.98	0.98	0.98	0.98	1.00	1.00	1.02	1.06	1.27			3.00	2.96	3.08
	velocity	5.16	8.17	8.67	8.67	8.67	8.67	8.50	8.50	8.33	8.02	8.27	7.79		8.50	8.61	8.28
Camacho-Quinn, Jasmine (PU	time	2.56	3.58	4.60	5.60	6.58	7.56	8.56	9.56	10.58	11.62		12.85	8 / 5			
reaction time 0.182	interval		1.02	1.02	1.00	0.98	0.98	1.00	1.00	1.02	1.04	1.23			3.04	2.96	3.06
	velocity	5.08	8.33	8.33	8.50	8.67	8.67	8.50	8.50	8.33	8.17	8.54	7.78		8.39	8.61	8.33
Herman, Elvira (BLR) (1997)	time	2.58	3.62	4.64	5.64	6.58	7.58	8.58	9.60	10.62	11.66		12.88	3 / 6			
reaction time 0.136	interval		1.04	1.02	1.00	0.94	1.00	1.00	1.02	1.02	1.04	1.22			3.06	2.94	3.08
	velocity	5.04	8.17	8.33	8.50	9.04	8.50	8.50	8.33	8.33	8.17	8.61	7.76		8.33	8.67	8.28
McNeal, Brianna (USA) (1991)	time	2.52	3.52	4.52	5.50	6.48	7.46	8.48	9.50	10.56	11.68		12.94	5 / 7			
reaction time 0.163	interval		1.00	1.00	0.98	0.98	0.98	1.02	1.02	1.06	1.12	1.26			2.98	2.98	3.20
	velocity	5.16	8.50	8.50	8.67	8.67	8.67	8.33	8.33	8.02	7.59	8.33	7.73		8.56	8.56	7.97
Hughes, Amber (USA) (1994)	time	2.56	3.60	4.64	5.68	6.68	7.68	8.70	9.70	10.74	11.78		12.97	9 / 8			
reaction time 0.141	interval		1.04	1.04	1.04	1.00	1.00	1.02	1.00	1.04	1.04	1.19			3.12	3.02	3.08
	velocity	5.08	8.17	8.17	8.17	8.50	8.50	8.33	8.50	8.17	8.17	8.82	7.71		8.17	8.44	8.28
Pedersen, Isabelle (NOR) (199	time	2.60	3.64	4.64	5.64	6.64	7.66	8.70	9.76	10.86	11.96		13.26	1 / 9			
reaction time 0.187	interval		1.04	1.00	1.00	1.00	1.02	1.04	1.06	1.10	1.10	1.30			3.04	3.06	3.26
	velocity	5.00	8.17	8.50	8.50	8.50	8.33	8.17	8.02	7.73	7.73	8.08	7.54		8.39	8.33	7.82

2019 Mikio Oda Memorial (Hiroshima, JPN)

A FINAL

date 28-Apr-19 wind 0.6 m/s

Kobayashi (2019) - research on athlete performance and technique- 2019 data book

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Pearson, Sally (AUS) (1986)	time	2.61	3.65	4.64	5.66	6.64	7.63	8.65	9.66	10.71	11.78		12.99	3 / 1			
reaction time	interval		1.04	0.99	1.02	0.98	0.99	1.02	1.01	1.05	1.07	1.21			3.05	2.99	3.13
	velocity	4.98	8.17	8.59	8.33	8.67	8.59	8.33	8.42	8.10	7.94	8.68	7.70		8.36	8.53	8.15
Tanaka, Yumi (JPN) (1998)	time	2.62	3.70	4.73	5.78	6.80	7.83	8.88	9.95	11.01	12.14		13.38	2 / 2			
reaction time	interval		1.08	1.03	1.05	1.02	1.03	1.05	1.07	1.06	1.13	1.24	PB		3.16	3.10	3.26
	velocity	4.96	7.87	8.25	8.10	8.33	8.25	8.10	7.94	8.02	7.52	8.47	7.47		8.07	8.23	7.82
Shimura, Hitomi (JPN) (1990)	time	2.69	3.75	4.80	5.85	6.89	7.92	8.98	10.03	11.10	12.19		13.39	4 / 3			
reaction time	interval		1.06	1.05	1.05	1.04	1.03	1.06	1.05	1.07	1.09	1.20			3.16	3.13	3.21
	velocity	4.83	8.02	8.10	8.10	8.17	8.25	8.02	8.10	7.94	7.80	8.75	7.47		8.07	8.15	7.94
Fukube, Mako (JPN) (1995)	time	2.66	3.75	4.80	5.84	6.89	7.94	8.99	10.06	11.14	12.25		13.47	7 / 4			
reaction time	interval		1.09	1.05	1.04	1.05	1.05	1.05	1.07	1.08	1.11	1.22			3.18	3.15	3.26
	velocity	4.89	7.80	8.10	8.17	8.10	8.10	8.10	7.94	7.87	7.66	8.61	7.42		8.02	8.10	7.82
Fujimori, Nana (JPN) (1997)	time	2.69	3.78	4.84	5.89	6.94	7.97	9.05	10.12	11.22	12.34		13.49	8 / 5			
reaction time	interval		1.09	1.06	1.05	1.05	1.03	1.08	1.07	1.10	1.12	1.15	PB		3.20	3.16	3.29
	velocity	4.83	7.80	8.02	8.10	8.10	8.25	7.87	7.94	7.73	7.59	9.13	7.41		7.97	8.07	7.75
Kiyoyama, Chisato (JPN) (199	time	2.72	3.84	4.89	5.94	6.99	8.03	9.08	10.14	11.22	12.32		13.49	6 / 6			
reaction time	interval		1.12	1.05	1.05	1.05	1.04	1.05	1.06	1.08	1.10	1.17			3.22	3.14	3.24

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
	velocity	4.78	7.59	8.10	8.10	8.10	8.17	8.10	8.02	7.87	7.73	8.97	7.41		7.92	8.12	7.87
Suzuki, Miho (JPN) (1996)	time	2.72	3.80	4.87	5.93	6.97	8.05	9.12	10.20	11.29	12.40		13.62	1 / 7			
reaction time	interval		1.08	1.07	1.06	1.04	1.08	1.07	1.08	1.09	1.11	1.22			3.21	3.19	3.28
	velocity	4.78	7.87	7.94	8.02	8.17	7.87	7.94	7.87	7.80	7.66	8.61	7.34		7.94	7.99	7.77
Tanaka, Hikari (JPN) (1998)	time	2.70	3.78	4.85	5.91	6.97	8.03	9.11	10.20	11.29	12.41		13.65	5 / 8			
reaction time	interval	7 steps	1.08	1.07	1.06	1.06	1.06	1.08	1.09	1.09	1.12	1.24			3.21	3.20	3.30
	velocity	4.81	7.87	7.94	8.02	8.02	8.02	7.87	7.80	7.80	7.59	8.47	7.33		7.94	7.97	7.73

B FINAL

date 28-Apr-19 wind 1.3 m/s

Kobayashi (2019) - research on athlete performance and technique- 2019 data book

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kobayashi, Ayumi (JPN) (2001	time	2.70	3.79	4.87	5.91	6.96	8.03	9.10	10.19	11.28	12.38		13.59	4 / 1			
reaction time	interval		1.09	1.08	1.04	1.05	1.07	1.07	1.09	1.09	1.10	1.21			3.21	3.19	3.28
	velocity	4.81	7.80	7.87	8.17	8.10	7.94	7.94	7.80	7.80	7.73	8.68	7.36		7.94	7.99	7.77
Okubo, Yuri (JPN) (1997)	time	2.72	3.81	4.88	5.94	7.00	8.06	9.13	10.20	11.29	12.43		13.68	5 / 2			
reaction time	interval		1.09	1.07	1.06	1.06	1.06	1.07	1.07	1.09	1.14	1.25			3.22	3.19	3.30
	velocity	4.78	7.80	7.94	8.02	8.02	8.02	7.94	7.94	7.80	7.46	8.40	7.31		7.92	7.99	7.73
Nakamura, Yuki (JPN) (1995)	time	2.72	3.79	4.85	5.89	6.99	8.06	9.14	10.26	11.38	12.51		13.73	3 / 3			
reaction time	interval		1.07	1.06	1.04	1.10	1.07	1.08	1.12	1.12	1.13	1.22			3.17	3.25	3.37
	velocity	4.78	7.94	8.02	8.17	7.73	7.94	7.87	7.59	7.59	7.52	8.61	7.28		8.04	7.85	7.57
Fujiwara, Miku (JPN) (1992)	time	2.74	3.85	4.94	6.02	7.08	8.17	9.26	10.36	11.48	12.61		13.82	1 / 4			
reaction time	interval		1.11	1.09	1.08	1.06	1.09	1.09	1.10	1.12	1.13	1.21			3.28	3.24	3.35
	velocity	4.74	7.66	7.80	7.87	8.02	7.80	7.80	7.73	7.59	7.52	8.68	7.24		7.77	7.87	7.61
Kabayashi, Sayaka (JPN) (1996	time	2.72	3.84	4.93	6.01	7.09	8.17	9.26	10.37	11.49	12.63		13.91	6 / 5			
reaction time	interval		1.12	1.09	1.08	1.08	1.08	1.09	1.11	1.12	1.14	1.28			3.29	3.25	3.37
	velocity	4.78	7.59	7.80	7.87	7.87	7.87	7.80	7.66	7.59	7.46	8.20	7.19		7.75	7.85	7.57
Sasaki, Aogi (JPN) (1997)	time	2.70	3.82	4.90	5.96	7.04	8.11	9.21	10.34	11.48	12.65		13.96	7 / 6			
reaction time	interval		1.12	1.08	1.06	1.08	1.07	1.10	1.13	1.14	1.17	1.31			3.26	3.25	3.44
	velocity	4.81	7.59	7.87	8.02	7.87	7.94	7.73	7.52	7.46	7.26	8.02	7.16		7.82	7.85	7.41
Shibata, Manaka (JPN) (2001)	time	2.75	3.86	4.96	6.05	7.12	8.20	9.32	10.43	11.55	12.71		13.99	2 / 7			
reaction time	interval		1.11	1.10	1.09	1.07	1.08	1.12	1.11	1.12	1.16	1.28			3.30	3.27	3.39
	velocity	4.73	7.66	7.73	7.80	7.94	7.87	7.59	7.66	7.59	7.33	8.20	7.15		7.73	7.80	7.52

2019 Asian Athletics Championships (Doha, QAT)

FINAL

date 24-Apr-19 wind 1.3 m/s

CAA Hurdle Development (2019)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kimura, Ayako (JPN) (1988)	time	2.56	3.61	4.63	5.64	6.65	7.68	8.71	9.76	10.82	11.89		13.13	4 / 1			
reaction time 0.148	interval		1.05	1.02	1.01	1.01	1.03	1.03	1.05	1.06	1.07	1.24			3.08	3.07	3.18
	velocity	5.08	8.10	8.33	8.42	8.42	8.25	8.25	8.10	8.02	7.94	8.47	7.62		8.28	8.31	8.02
Chen Jiamin (CHN) (1996)	time	2.62	3.67	4.69	5.72	6.74	7.76	8.80	9.86	10.96	12.06		13.24	6 / 2			
reaction time 0.150	interval		1.05	1.02	1.03	1.02	1.02	1.04	1.06	1.10	1.10	1.18	PB		3.10	3.08	3.26
	velocity	4.96	8.10	8.33	8.25	8.33	8.33	8.17	8.02	7.73	7.73	8.90	7.55		8.23	8.28	7.82
Aoki, Masumi (JPN) (1994)	time	2.63	3.69	4.73	5.77	6.79	7.82	8.87	9.94	11.00	12.10		13.28	7 / 3			
reaction time 0.156	interval		1.06	1.04	1.04	1.02	1.03	1.05	1.07	1.06	1.10	1.18			3.14	3.10	3.23
	velocity	4.94	8.02	8.17	8.17	8.33	8.25	8.10	7.94	8.02	7.73	8.90	7.53		8.12	8.23	7.89
Lui Lai Yiu (HKG) (1994)	time	2.62	3.65	4.68	5.72	6.74	7.79	8.84	9.89	10.99	12.09		13.32	5 / 4			
reaction time 0.132	interval		1.03	1.03	1.04	1.02	1.05	1.05	1.05	1.10	1.10	1.23	PB		3.10	3.12	3.25
	velocity	4.96	8.25	8.25	8.17	8.33	8.10	8.10	8.10	7.73	7.73	8.54	7.51		8.23	8.17	7.85
Wu Yanni (CHN) (1997)	time	2.74	3.79	4.83	5.86	6.89	7.91	8.93	9.97	11.03	12.11		13.33	9 / 5			
reaction time 0.152	interval		1.05	1.04	1.03	1.03	1.02	1.02	1.04	1.06	1.08	1.22			3.12	3.07	3.18
	velocity	4.74	8.10	8.17	8.25	8.25	8.33	8.33	8.17	8.02	7.87	8.61	7.50		8.17	8.31	8.02
Hsieh His-En (TPE) (1994)	time	2.64	3.68	4.74	5.78	6.81	7.86	8.89	9.96	11.02	12.13		13.37	8 / 6			
reaction time 0.146	interval		1.04	1.06	1.04	1.03	1.05	1.03	1.07	1.06	1.11	1.24	PB		3.14	3.11	3.24
	velocity	4.92	8.17	8.02	8.17	8.25	8.10	8.25	7.94	8.02	7.66	8.47	7.48		8.12	8.20	7.87
Jung Hye-Lim (KOR) (1987)	time	2.62	3.69	4.73	5.77	6.82	7.89	8.96	10.04	11.14	12.24		13.50	2 / 7			
reaction time 0.136	interval		1.07	1.04	1.04	1.05	1.07	1.07	1.08	1.10	1.10	1.26			3.15	3.19	3.28
	velocity	4.96	7.94	8.17	8.17	8.10	7.94	7.94	7.87	7.73	7.73	8.33	7.41		8.10	7.99	7.77
Shynyzbekova, Aygerim (KAZ	time	2.68	3.77	4.83	5.87	6.94	7.98	9.05	10.12	11.19	12.29		13.50	3 / 8			
reaction time 0.132	interval		1.09	1.06	1.04	1.07	1.04	1.07	1.07	1.07	1.10	1.21			3.19	3.18	3.24
	velocity	4.85	7.80	8.02	8.17	7.94	8.17	7.94	7.94	7.94	7.73	8.68	7.41		7.99	8.02	7.87

Heat 2

date 23-Apr-19 wind 1.9 m/s

CAA Hurdle Development (2019)

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

Kimura, Ayako (JPN) (1988)	time	2.62	3.65	4.65	5.67	6.67	7.70	8.72	9.77	10.86			13.19	2 / 1				
reaction time 0.158	interval		1.03	1.00	1.02	1.00	1.03	1.02	1.05	1.09					3.05	3.05		
	velocity	4.96	8.25	8.50	8.33	8.50	8.25	8.33	8.10	7.80			7.58		8.36	8.36		
Lui Lai Yiu (HKG) (1994)	time	2.67	3.70	4.73	5.75	6.79	7.82	8.87	9.94	11.01	12.12		13.35	5 / 2				
reaction time 0.131	interval		1.03	1.03	1.02	1.04	1.03	1.05	1.07	1.07	1.11	1.23	PB		3.08	3.12	3.25	
	velocity	4.87	8.25	8.25	8.33	8.17	8.25	8.10	7.94	7.94	7.66	8.54	7.49		8.28	8.17	7.85	
Wu Yanni (CHN) (1997)	time	2.75	3.80	4.84	5.90	6.96	8.01	9.05	10.11	11.16	12.28		13.52	6 / 3				
reaction time 0.161	interval		1.05	1.04	1.06	1.06	1.05	1.04	1.06	1.05	1.12	1.24			3.15	3.15	3.23	
	velocity	4.73	8.10	8.17	8.02	8.02	8.10	8.17	8.02	8.10	7.59	8.47	7.40		8.10	8.10	7.89	

Heat 1

date 23-Apr-19 wind 1.3 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Chen Jiamin (CHN) (1996)	time	2.65	3.70	4.75	5.80	6.83	7.86	8.89	9.94	11.01	12.11		13.30	9 / 1			
reaction time 0.157	interval		1.05	1.05	1.05	1.03	1.03	1.03	1.05	1.07	1.10	1.19			3.15	3.09	3.22	
	velocity	4.91	8.10	8.10	8.10	8.25	8.25	8.25	8.10	7.94	7.73	8.82	7.52		8.10	8.25	7.92	
Aoki, Masumi (JPN) (1994)	time	2.63	3.70	4.75	5.80	6.84	7.87	8.91	9.96	11.01	12.11		13.31	7 / 2			
reaction time 0.151	interval		1.07	1.05	1.05	1.04	1.03	1.04	1.05	1.05	1.10	1.20			3.17	3.11	3.20	
	velocity	4.94	7.94	8.10	8.10	8.17	8.25	8.17	8.10	8.10	7.73	8.75	7.51		8.04	8.20	7.97	
Hsieh His-En (TPE) (1994)	time		3.74	4.77	5.81	6.86	7.89	8.95	9.99	11.07	12.16		13.39	3 / 3			
reaction time 0.157	interval			1.03	1.04	1.05	1.03	1.06	1.04	1.08	1.09	1.23	PB			3.14	3.21	
	velocity			8.25	8.17	8.10	8.25	8.02	8.17	7.87	7.80	8.54	7.47			8.12	7.94	

2019 Chinese National Grand Prix 2 (Huangshi, CHN)

FINAL

date 13-Apr-19 wind 0.3 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Chen Jiamin (CHN) (1996)	time	2.68	3.74	4.79	5.83	6.87	7.91	8.94	10.00	11.06	12.14		13.35	9 / 1			
reaction time 0.181	interval		1.06	1.05	1.04	1.04	1.04	1.03	1.06	1.06	1.08	1.21			3.15	3.11	3.20	
	velocity	4.85	8.02	8.10	8.17	8.17	8.17	8.25	8.02	8.02	7.87	8.68	7.49		8.10	8.20	7.97	
Shi Jiali (CHN) (1997)	time	2.61	3.68	4.71	5.75	6.80	7.83	8.88	9.95	11.03	12.13		13.36	5 / 2			
reaction time 0.169	interval		1.07	1.03	1.04	1.05	1.03	1.05	1.07	1.08	1.10	1.23			3.14	3.13	3.25	
	velocity	4.98	7.94	8.25	8.17	8.10	8.25	8.10	7.94	7.87	7.73	8.54	7.49		8.12	8.15	7.85	
Yu Jiaru (CHN) (1999)	time	2.72	3.77	4.84	5.87	6.89	7.93	8.97	10.04	11.10	12.20		13.40	6 / 3			
reaction time 0.183	interval		1.05	1.07	1.03	1.02	1.04	1.04	1.07	1.06	1.10	1.20			3.15	3.10	3.23	
	velocity	4.78	8.10	7.94	8.25	8.33	8.17	8.17	7.94	8.02	7.73	8.75	7.46		8.10	8.23	7.89	
Wang Dou (CHN) (1993)	time	2.71	3.80	4.84	5.88	6.94	8.00	9.06	10.13	11.20	12.30		13.48	3 / 4			
reaction time 0.217	interval		1.09	1.04	1.04	1.06	1.06	1.06	1.07	1.07	1.10	1.18			3.17	3.18	3.24	
	velocity	4.80	7.80	8.17	8.17	8.02	8.02	8.02	7.94	7.94	7.73	8.90	7.42		8.04	8.02	7.87	
You Na (CHN) (1993)	time	2.66	3.74	4.79	5.82	6.87	7.91	9.00	10.09	11.15	12.27		13.52	4 / 5			
reaction time 0.202	interval		1.08	1.05	1.03	1.05	1.04	1.09	1.09	1.06	1.12	1.25	PB		3.16	3.18	3.27	
	velocity	4.89	7.87	8.10	8.25	8.10	8.17	7.80	7.80	8.02	7.59	8.40	7.40		8.07	8.02	7.80	
Luo Xianyan (CHN) (1997)	time	2.68	3.79	4.86	5.90	6.95	8.00	9.05	10.12	11.20	12.31		13.56	7 / 6			
reaction time 0.174	interval		1.11	1.07	1.04	1.05	1.05	1.05	1.07	1.08	1.11	1.25	PB		3.22	3.15	3.26	
	velocity	4.85	7.66	7.94	8.17	8.10	8.10	8.10	7.94	7.87	7.66	8.40	7.37		7.92	8.10	7.82	
Dai Yiru (CHN) (2001)	time	2.67	3.75	4.82	5.89	6.95	8.01	9.08	10.17	11.30	12.43		13.74	2 / 7			
reaction time 0.220	interval		1.08	1.07	1.07	1.06	1.06	1.07	1.09	1.13	1.13	1.31	PB		3.22	3.19	3.35	
	velocity	4.87	7.87	7.94	7.94	8.02	8.02	7.94	7.80	7.52	7.52	8.02	7.28		7.92	7.99	7.61	
Wang Li (CHN) (1999)	time	2.73	3.84	4.93	6.01	7.11	8.22	9.36	10.50	11.68	12.87		14.22	8 / 8			
reaction time 0.186	interval		1.11	1.09	1.08	1.10	1.11	1.14	1.14	1.18	1.19	1.35			3.28	3.35	3.51	
	velocity	4.76	7.66	7.80	7.87	7.73	7.66	7.46	7.46	7.20	7.14	7.78	7.03		7.77	7.61	7.26	

Heat 4

date 13-Apr-19 wind 0.1 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Jiang Liyunzhe (CHN) (2002)	time	2.70	3.84	4.96	6.10	7.18	8.28	9.41	10.56	11.72	12.87		14.17	5 / 1			
reaction time 0.262	interval		1.14	1.12	1.14	1.08	1.10	1.13	1.15	1.16	1.15	1.30	PB		3.40	3.31	3.46	
	velocity	4.81	7.46	7.59	7.46	7.87	7.73	7.52	7.39	7.33	7.39	8.08	7.06		7.50	7.70	7.37	
Guo Jinglei (CHN) (2000)	time	2.73	3.85	4.94	6.02	7.13	8.22	9.34	10.48	11.63	12.80		14.17	8 / 2			
reaction time 0.183	interval		1.12	1.09	1.08	1.11	1.09	1.12	1.14	1.15	1.17	1.37			3.29	3.32	3.46	
	velocity	4.76	7.59	7.80	7.87	7.66	7.80	7.59	7.46	7.39	7.26	7.66	7.06		7.75	7.68	7.37	
Yao Hui (CHN) (2000)	time	2.70	3.82	4.92	6.02	7.12	8.24	9.36	10.52	11.69	12.87		14.21	4 / 3			
reaction time 0.224	interval		1.12	1.10	1.10	1.10	1.12	1.12	1.16	1.17	1.18	1.34			3.32	3.34	3.51	
	velocity	4.81	7.59	7.73	7.73	7.73	7.59	7.59	7.33	7.26	7.20	7.84	7.04		7.68	7.63	7.26	

Heat 3

date 13-Apr-19 wind 1.0 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Luo Xianyan (CHN) (1997)	time	2.66	3.75	4.82	5.86	6.90	7.93	9.01	10.10	11.18	12.29		13.58	4 / 1			
reaction time 0.158	interval		1.09	1.07	1.04	1.04	1.03	1.08	1.09	1.08	1.11	1.29	PB		3.20	3.15	3.28
	velocity	4.89	7.80	7.94	8.17	8.17	8.25	7.87	7.80	7.87	7.66	8.14	7.36		7.97	8.10	7.77
Wang Li (CHN) (1999)	time	2.68	3.76	4.82	5.90	6.95	8.03	9.11	10.25	11.39	12.56		13.86	2 / 2			
reaction time 0.192	interval		1.08	1.06	1.08	1.05	1.08	1.08	1.14	1.14	1.17	1.30			3.22	3.21	3.45
	velocity	4.85	7.87	8.02	7.87	8.10	7.87	7.87	7.46	7.46	7.26	8.08	7.22		7.92	7.94	7.39
Lin Yuwei (CHN) (1999)	time	2.76	3.87	4.97	6.05	7.14	8.25	9.35	10.46	11.61	12.78		14.07	9 / 3			
reaction time 0.158	interval		1.11	1.10	1.08	1.09	1.11	1.10	1.11	1.15	1.17	1.29			3.29	3.30	3.43
	velocity	4.71	7.66	7.73	7.87	7.80	7.66	7.73	7.66	7.39	7.26	8.14	7.11		7.75	7.73	7.43

Heat 2

date 13-Apr-19 wind 0.2 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shi Jiali (CHN) (1997)	time	2.66	3.73	4.79	5.84	6.89	7.94	9.01	10.09	11.19	12.30		13.59	3 / 1			
reaction time 0.187	interval		1.07	1.06	1.05	1.05	1.05	1.07	1.08	1.10	1.11	1.29			3.18	3.17	3.29
	velocity	4.89	7.94	8.02	8.10	8.10	8.10	7.94	7.87	7.73	7.66	8.14	7.36		8.02	8.04	7.75
Dai Yiru (CHN) (2001)	time	2.68	3.78	4.84	5.90	6.95	8.02	9.10	10.18	11.35	12.52		13.86	7 / 2			
reaction time 0.177	interval		1.10	1.06	1.06	1.05	1.07	1.08	1.08	1.17	1.17	1.34	PB		3.22	3.20	3.42
	velocity	4.85	7.73	8.02	8.02	8.10	7.94	7.87	7.87	7.26	7.26	7.84	7.22		7.92	7.97	7.46
Wang Dou (CHN) (1993)	time	2.78	3.86	4.94	6.02	7.08	8.16	9.28	10.38	11.51	12.66		13.91	6 / 3			
reaction time 0.222	interval		1.08	1.08	1.08	1.06	1.08	1.12	1.10	1.13	1.15	1.25			3.24	3.26	3.38
	velocity	4.68	7.87	7.87	7.87	8.02	7.87	7.59	7.73	7.52	7.39	8.40	7.19		7.87	7.82	7.54

Heat 1

date 13-Apr-19 wind 0.7 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Yu Jiaru (CHN) (1999)	time	2.72	3.80	4.87	5.92	6.98	8.02	9.08	10.16	11.24	12.34		13.57	8 / 1			
reaction time 0.195	interval		1.08	1.07	1.05	1.06	1.04	1.06	1.08	1.08	1.10	1.23			3.20	3.16	3.26
	velocity	4.78	7.87	7.94	8.10	8.02	8.17	8.02	7.87	7.87	7.73	8.54	7.37		7.97	8.07	7.82
You Na (CHN) (1993)	time	2.74	3.82	4.89	5.93	7.02	8.07	9.15	10.24	11.34	12.47		13.70	4 / 2			
reaction time 0.197	interval		1.08	1.07	1.04	1.09	1.05	1.08	1.09	1.10	1.13	1.23			3.19	3.22	3.32
	velocity	4.74	7.87	7.94	8.17	7.80	8.10	7.87	7.80	7.73	7.52	8.54	7.30		7.99	7.92	7.68
Chen Jiamin (CHN) (1996)	time	2.64	3.70	4.82	5.87	6.94	8.02	9.09	10.20	11.31	12.44		13.71	6 / 3			
reaction time 0.200	interval		1.06	1.12	1.05	1.07	1.08	1.07	1.11	1.11	1.13	1.27			3.23	3.22	3.35
	velocity	4.92	8.02	7.59	8.10	7.94	7.87	7.94	7.66	7.66	7.52	8.27	7.29		7.89	7.92	7.61

2019 Chinese National Grand Prix 1 (Zhaoqing, CHN)

FINAL

date 09-Apr-19 wind 0.1 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shi Jiali (CHN) (1997)	time	2.67	3.73	4.79	5.83	6.87	7.90	8.93	9.97	11.03	12.12		13.35	6 / 1			
reaction time 0.182	interval		1.06	1.06	1.04	1.04	1.03	1.03	1.04	1.06	1.09	1.23	PB		3.16	3.10	3.19
	velocity	4.87	8.02	8.02	8.17	8.17	8.25	8.25	8.17	8.02	7.80	8.54	7.49		8.07	8.23	7.99
Wang Dou (CHN) (1993)	time	2.71	3.78	4.84	5.90	6.94	8.02	9.06	10.12	11.18	12.28		13.47	7 / 2			
reaction time 0.174	interval		1.07	1.06	1.06	1.04	1.08	1.04	1.06	1.06	1.10	1.19			3.19	3.16	3.22
	velocity	4.80	7.94	8.02	8.02	8.17	7.87	8.17	8.02	8.02	7.73	8.82	7.42		7.99	8.07	7.92
Wu Yanni (CHN) (1997)	time	2.78	3.86	4.92	5.97	7.02	8.06	9.11	10.20	11.28	12.38		13.63	5 / 3			
reaction time 0.217	interval		1.08	1.06	1.05	1.05	1.04	1.05	1.09	1.08	1.10	1.25			3.19	3.14	3.27
	velocity	4.68	7.87	8.02	8.10	8.10	8.17	8.10	7.80	7.87	7.73	8.40	7.34		7.99	8.12	7.80
Yu Jiaru (CHN) (1999)	time	2.77	3.85	4.94	5.99	7.04	8.12	9.18	10.24	11.34	12.44		13.68	9 / 4			
reaction time 0.242	interval		1.08	1.09	1.05	1.05	1.08	1.06	1.06	1.10	1.10	1.24			3.22	3.19	3.26
	velocity	4.69	7.87	7.80	8.10	8.10	7.87	8.02	8.02	7.73	7.73	8.47	7.31		7.92	7.99	7.82
Chen Jiamin (CHN) (1996)	time	2.71	3.79	4.81	5.87	6.93	7.99	9.04	10.10	11.16	12.29		13.71	4 / 5			
reaction time 0.216	interval		1.08	1.02	1.06	1.06	1.06	1.05	1.06	1.06	1.13	1.42			3.16	3.17	3.25
	velocity	4.80	7.87	8.33	8.02	8.02	8.02	8.10	8.02	8.02	7.52	7.39	7.29		8.07	8.04	7.85
Luo Xianyan (CHN) (1997)	time	2.72	3.84	4.93	6.00	7.06	8.14	9.21	10.30	11.41	12.49		13.76	3 / 6			
reaction time 0.167	interval		1.12	1.09	1.07	1.06	1.08	1.07	1.09	1.11	1.08	1.27			3.28	3.21	3.28
	velocity	4.78	7.59	7.80	7.94	8.02	7.87	7.94	7.80	7.66	7.87	8.27	7.27		7.77	7.94	7.77
Wang Li (CHN) (1999)	time	2.73	3.80	4.88	5.96	7.04	8.13	9.22	10.32	11.43	12.56		13.81	2 / 7			
reaction time 0.179	interval		1.07	1.08	1.08	1.08	1.09	1.09	1.10	1.11	1.13	1.25			3.23	3.26	3.34
	velocity	4.76	7.94	7.87	7.87	7.87	7.80	7.80	7.73	7.66	7.52	8.40	7.24		7.89	7.82	7.63
Deng Xuelin (CHN) (1998)	time	2.76	3.84	4.89	5.94	7.00	8.04	9.09	10.20					8 / --			
reaction time 0.234	interval		1.08	1.05	1.05	1.06	1.04	1.05	1.11				DQ		3.18	3.15	
	velocity	4.71	7.87	8.10	8.10	8.02	8.17	8.10	7.66						8.02	8.10	

Heat 4

date 08-Apr-19 wind 0.1 m/s *CAA Hurdle Development (2019)*

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

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Chen Jiamin (CHN) (1996)	time	2.62	3.67	4.73	5.79	6.86	7.91	9.00	10.09	11.16	12.27		13.56	8 / 1			
reaction time 0.176	interval		1.05	1.06	1.06	1.07	1.05	1.09	1.09	1.07	1.11	1.29			3.17	3.21	3.27
	velocity	4.96	8.10	8.02	8.02	7.94	8.10	7.80	7.80	7.94	7.66	8.14	7.37		8.04	7.94	7.80
Luo Xianyan (CHN) (1997)	time	2.72	3.82	4.90	5.97	7.04	8.11	9.18	10.28	11.40	12.50		13.78	2 / 2			
reaction time 0.181	interval		1.10	1.08	1.07	1.07	1.07	1.07	1.10	1.12	1.10	1.28			3.25	3.21	3.32
	velocity	4.78	7.73	7.87	7.94	7.94	7.94	7.94	7.73	7.59	7.73	8.20	7.26		7.85	7.94	7.68

Heat 3

date 08-Apr-19 wind 1.0 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shi Jiali (CHN) (1997)	time	2.64	3.73	4.79	5.84	6.87	7.92	8.98	10.03	11.12	12.20		13.42	4 / 1			
reaction time 0.191	interval		1.09	1.06	1.05	1.03	1.05	1.06	1.05	1.09	1.08	1.22	PB		3.20	3.14	3.22
	velocity	4.92	7.80	8.02	8.10	8.25	8.10	8.02	8.10	7.80	7.87	8.61	7.45		7.97	8.12	7.92
Yu Jiaru (CHN) (1999)	time	2.78	3.85	4.92	5.99	7.03	8.09	9.17	10.24	11.30	12.41		13.63	8 / 2			
reaction time 0.207	interval		1.07	1.07	1.07	1.04	1.06	1.08	1.07	1.06	1.11	1.22			3.21	3.18	3.24
	velocity	4.68	7.94	7.94	7.94	8.17	8.02	7.87	7.94	8.02	7.66	8.61	7.34		7.94	8.02	7.87

Heat 2

date 08-Apr-19 wind -0.2 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Deng Xuelin (CHN) (1998)	time	2.72	3.81	4.87	5.91	6.97	8.04	9.13	10.22	11.31	12.44		13.68	8 / 1			
reaction time 0.232	interval		1.09	1.06	1.04	1.06	1.07	1.09	1.09	1.09	1.13	1.24			3.19	3.22	3.31
	velocity	4.78	7.80	8.02	8.17	8.02	7.94	7.80	7.80	7.80	7.52	8.47	7.31		7.99	7.92	7.70
Wang Li (CHN) (1999)	time	2.73	3.83	4.93	5.99	7.06	8.14	9.24	10.32	11.45	12.58		13.83	5 / 2			
reaction time 0.178	interval		1.10	1.10	1.06	1.07	1.08	1.10	1.08	1.13	1.13	1.25			3.26	3.25	3.34
	velocity	4.76	7.73	7.73	8.02	7.94	7.87	7.73	7.87	7.52	7.52	8.40	7.23		7.82	7.85	7.63

Heat 1

date 08-Apr-19 wind -1.0 m/s *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Yanni (CHN) (1997)	time	2.73	3.79	4.86	5.90	6.93	7.98	9.04	10.10	11.17	12.27		13.51	4 / 1			
reaction time 0.184	interval		1.06	1.07	1.04	1.03	1.05	1.06	1.06	1.07	1.10	1.24			3.17	3.14	3.23
	velocity	4.76	8.02	7.94	8.17	8.25	8.10	8.02	8.02	7.94	7.73	8.47	7.40		8.04	8.12	7.89
Wang Dou (CHN) (1993)	time	2.74	3.80	4.86	5.92	6.98	8.02	9.09	10.16	11.26	12.34		13.58	2 / 2			
reaction time 0.227	interval		1.06	1.06	1.06	1.06	1.04	1.07	1.07	1.10	1.08	1.24			3.18	3.17	3.25
	velocity	4.74	8.02	8.02	8.02	8.02	8.17	7.94	7.94	7.73	7.87	8.47	7.36		8.02	8.04	7.85

2019 Chinese Indoor National Grand Prix Final (Hangzhou, CHN)

A-FINAL

date 20-Mar-19 *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
You Na (CHN) (1993)	time	2.69	3.77	4.84	5.89	7.04		8.36	3 / 1			
reaction time	interval		1.08	1.07	1.05	1.15	1.32	PB		3.20		
	velocity	4.83	7.87	7.94	8.10	7.39	9.85	7.18		7.97		
Shi Jiali (CHN) (1997)	time	2.65	3.74	4.81	5.87	6.94		8.39	4 / 2			
reaction time	interval		1.09	1.07	1.06	1.07	1.45			3.22		
	velocity	4.91	7.80	7.94	8.02	7.94	8.97	7.15		7.92		
Dai Yiru (CHN) (2001)	time	2.70	3.77	4.87	5.89	6.96		8.40	5 / 3			
reaction time	interval		1.07	1.10	1.02	1.07	1.44	PB		3.19		
	velocity	4.81	7.94	7.73	8.33	7.94	9.03	7.14		7.99		
Yu Jiaru (CHN) (1999)	time	2.74	3.84	4.91	5.99	7.04		8.47	2 / 4			
reaction time	interval		1.10	1.07	1.08	1.05	1.43			3.25		
	velocity	4.74	7.73	7.94	7.87	8.10	9.09	7.08		7.85		

B-FINAL

date 20-Mar-19 *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Chen Jiamin (CHN) (1996)	time	2.67	3.72	4.79	5.84	6.89		8.32	3 / 1			
reaction time	interval		1.05	1.07	1.05	1.05	1.43	PB		3.17		
	velocity	4.87	8.10	7.94	8.10	8.10	9.09	7.21		8.04		
Wang Dou (CHN) (1993)	time	2.71	3.79	4.86	5.90	6.96		8.35	5 / 2			
reaction time	interval		1.08	1.07	1.04	1.06	1.39			3.19		
	velocity	4.80	7.87	7.94	8.17	8.02	9.35	7.19		7.99		
Luo Xianyan (CHN) (1997)	time	2.70	3.80	4.89	5.94	7.01		8.51	4 / 3			
reaction time	interval		1.10	1.09	1.05	1.07	1.50			3.24		
	velocity	4.81	7.73	7.80	8.10	7.94	8.67	7.05		7.87		
Wang Li (CHN) (1999)	time	2.70	3.80	4.89	5.97	7.04		8.51	2 / 4			
reaction time	interval		1.10	1.09	1.08	1.07	1.47			3.27		
	velocity	4.81	7.73	7.80	7.87	7.94	8.84	7.05		7.80		

2019 NCAA Indoor Championships (Birmingham, AL) (TV Analysis)

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

FINAL

date 9-Mar-19

Henson (2020) - Athlete First: 2019 year end hurdle report

			H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Brissett, Chanel (USA) (1999)		time	2.53	3.53	4.53	5.51	6.49		7.90	3 / 1			
reaction time	0.190	interval		1.00	1.00	0.98	0.98	1.41	=PB		2.98		
		velocity	5.14	8.50	8.50	8.67	8.67	9.22	7.59		8.56		
White, Kayla (USA) (1996)		time	2.50	3.52	4.50	5.52	6.53		7.92	5 / 2			
reaction time	0.146	interval		1.02	0.98	1.02	1.01	1.39	PB		3.02		
			5.20	8.33	8.67	8.33	8.42	9.35	7.58		8.44		
Chadwick, Payton (USA) (199		time	2.53	3.60	4.60	5.58	6.58		7.97	4 / 3			
reaction time	0.165	interval		1.07	1.00	0.98	1.00	1.39			3.05		
		velocity	5.14	7.94	8.50	8.67	8.50	9.35	7.53		8.36		
Taylor, Naomi (USA) (1998)		time	2.53	3.55	4.58	5.58	6.56		8.01	8 / 4			
reaction time	0.170	interval		1.02	1.03	1.00	0.98	1.45			3.05		
		velocity	5.14	8.33	8.25	8.50	8.67	8.97	7.49		8.36		
Brown, Janeek (JAM) (1998)		time	2.50	3.53	4.58	5.60	6.60		8.04	7 / 5			
reaction time		interval		1.03	1.05	1.02	1.00	1.44			3.10		
	0.149	velocity	5.20	8.25	8.10	8.33	8.50	9.03	7.46		8.23		
Hall, Dior (USA) (1996)		time	2.48	3.54	4.56	5.58	6.62		8.11	2 / 6			
reaction time	0.155	interval		1.06	1.02	1.02	1.04	1.49			3.10		
		velocity	5.24	8.02	8.33	8.33	8.17	8.72	7.40		8.23		

2019 Chinese Indoor National Grand Prix 4 (Xi'an, CHN)

A-FINAL

date 4-Mar-19

CAA Hurdle Development (2019)

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
You Na (CHN) (1993)	time	2.72	3.80	4.87	5.90	6.96		8.41	3 / 1			
reaction time	interval		1.08	1.07	1.03	1.06	1.45	PB		3.18		
	velocity	4.78	7.87	7.94	8.25	8.02	8.97	7.13		8.02		
Dai Yiru (CHN) (2001)	time	2.67	3.75	4.82	5.84	6.87		8.41	5 / 2			
reaction time	interval		1.08	1.07	1.02	1.03	1.54	=PB		3.17		
	velocity	4.87	7.87	7.94	8.33	8.25	8.44	7.13		8.04		
Zhang Yi (CHN) (2000)	time	2.68	3.77	4.87	5.95	7.07		8.60	4 / 3			
reaction time	interval		1.09	1.10	1.08	1.12	1.53			3.27		
	velocity	4.85	7.80	7.73	7.87	7.59	8.50	6.98		7.80		
Guo Jinglei (CHN) (2000)	time	2.72	3.82	4.92	6.02	7.12		8.68	2 / 4			
reaction time	interval		1.10	1.10	1.10	1.10	1.56			3.30		
	velocity	4.78	7.73	7.73	7.73	7.73	8.33	6.91		7.73		

B-FINAL

date 4-Mar-19

CAA Hurdle Development (2019)

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Chen Jiamin (CHN) (1996)	time	2.66	3.74	4.80	5.86	6.94		8.37	3 / 1			
reaction time	interval		1.08	1.06	1.06	1.08	1.43	PB		3.20		
	velocity	4.89	7.87	8.02	8.02	7.87	9.09	7.17		7.97		
Li Danyang (CHN) (1997)	time	2.78	3.90	5.02	6.14	7.31		8.83	2 / 2			
reaction time	interval		1.12	1.12	1.12	1.17	1.52			3.36		
	velocity	4.68	7.59	7.59	7.59	7.26	8.55	6.80		7.59		
Li Mengyu (CHN) (2002)	time	2.77	3.93	5.09	6.24	7.36		8.89	5 / 3			
reaction time	interval		1.16	1.16	1.15	1.12	1.53			3.47		
	velocity	4.69	7.33	7.33	7.39	7.59	8.50	6.75		7.35		
Huo Xuanyi (CHN) (1998)	time	2.83	3.95	5.19	6.35	7.49		8.99	4 / 4			
reaction time	interval		1.12	1.24	1.16	1.14	1.50			3.52		
	velocity	4.59	7.59	6.85	7.33	7.46	8.67	6.67		7.24		

2019 Chinese Indoor National Grand Prix 3 (Xi'an, CHN)

A-FINAL

date 28-Feb-19

CAA Hurdle Development (2019)

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Chen Jiamin (CHN) (1996)	time	2.67	3.73	4.81	5.87	6.97		8.42	4 / 1			
reaction time	interval		1.06	1.08	1.06	1.10	1.45			3.20		
	velocity	4.87	8.02	7.87	8.02	7.73	8.97	7.13		7.97		
You Na (CHN) (1993)	time	2.69	3.79	4.87	5.93	7.02		8.46	5 / 2			
reaction time	interval		1.10	1.08	1.06	1.09	1.44	PB		3.24		
	velocity	4.83	7.73	7.87	8.02	7.80	9.03	7.09		7.87		
Dai Yiru (CHN) (2001)	time	2.72	3.82	4.90	5.96	7.02		8.48	3 / 3			
reaction time	interval		1.10	1.08	1.06	1.06	1.46			3.24		
	velocity	4.78	7.73	7.87	8.02	8.02	8.90	7.08		7.87		

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

Zhang Yi (CHN) (2000)	time	2.72	3.80	4.88	6.02	7.14			8.65	2 / 4		
reaction time	interval		1.08	1.08	1.14	1.12	1.51				3.30	
	velocity	4.78	7.87	7.87	7.46	7.59	8.61	6.94			7.73	

B-FINAL date 28-Feb-19 *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Jie Zhimao (CHN) (1998)	time	2.68	3.82	4.92	6.01	7.09		8.47	4 / 1			
reaction time	interval		1.14	1.10	1.09	1.08	1.38	PB		3.33		
	velocity	4.85	7.46	7.73	7.80	7.87	9.42	7.08		7.66		
Li Danyang (CHN) (1997)	time	2.77	3.90	5.02	6.14	7.26		8.65	2 / 2			
reaction time	interval		1.13	1.12	1.12	1.12	1.39	PB		3.37		
	velocity	4.69	7.52	7.59	7.59	7.59	9.35	6.94		7.57		
Li Mengyu (CHN) (2002)	time	2.76	3.92	5.08	6.22	7.36		8.80	5 / 3			
reaction time	interval		1.16	1.16	1.14	1.14	1.44			3.46		
	velocity	4.71	7.33	7.33	7.46	7.46	9.03	6.82		7.37		
Guo Jinglei (CHN) (2000)								DQ	4 / --			

2019 Chinese Indoor National Grand Prix 2 (Nanjing, CHN)

A-FINAL date 24-Feb-19 *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shi Jiali (CHN) (1997)	time	2.65	3.74	4.80	5.84	6.91		8.35	3 / 1			
reaction time	interval		1.09	1.06	1.04	1.07	1.44	PB		3.19		
	velocity	4.91	7.80	8.02	8.17	7.94	9.03	7.19		7.99		
Yu Jiaru (CHN) (1999)	time	2.73	3.84	4.92	6.01	7.09		8.50	2 / 2			
reaction time	interval		1.11	1.08	1.09	1.08	1.41			3.28		
	velocity	4.76	7.66	7.87	7.80	7.87	9.22	7.06		7.77		
Wang Li (CHN) (1999)	time	2.70	3.80	4.89	5.97	7.05		8.52	4 / 3			
reaction time	interval		1.10	1.09	1.08	1.08	1.47			3.27		
	velocity	4.81	7.73	7.80	7.87	7.87	8.84	7.04		7.80		
Luo Xianyan (CHN) (1997)	time	2.68	3.80	4.90	6.00	7.09		8.57	5 / 4			
reaction time	interval		1.12	1.10	1.10	1.09	1.48			3.32		
	velocity	4.85	7.59	7.73	7.73	7.80	8.78	7.00		7.68		

B-FINAL date 24-Feb-19 *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wang Dou (CHN) (1993)	time	2.73	3.84	4.92	5.99	7.06		8.47	4 / 1			
reaction time	interval		1.11	1.08	1.07	1.07	1.41			3.26		
	velocity	4.76	7.66	7.87	7.94	7.94	9.22	7.08		7.82		
Ge Ge (CHN) (2000)	time	2.72	3.83	4.94	6.04	7.16		8.65	2 / 2			
reaction time	interval		1.11	1.11	1.10	1.12	1.49	PB		3.32		
	velocity	4.78	7.66	7.66	7.73	7.59	8.72	6.94		7.68		
Li Jinyu (CHN) (1999)	time	2.80	3.93	5.05	6.19	7.34		8.80	5 / 3			
reaction time	interval		1.13	1.12	1.14	1.15	1.46			3.39		
	velocity	4.64	7.52	7.59	7.46	7.39	8.90	6.82		7.52		
Yao Hui (CHN) (2000)	time	2.77	3.93	5.07	6.19	7.32		8.82	3 / 4			
reaction time	interval		1.16	1.14	1.12	1.13	1.50			3.42		
	velocity	4.69	7.33	7.46	7.59	7.52	8.67	6.80		7.46		

2019 Chinese Indoor National Grand Prix 1 (Nanjing, CHN)

A-FINAL date 20-Feb-19 *CAA Hurdle Development (2019)*

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shi Jiali (CHN) (1997)	time	2.68	3.74	4.81	5.88	6.96		8.40	3 / 1			
reaction time	interval		1.06	1.07	1.07	1.08	1.44	PB		3.20		
	velocity	4.85	8.02	7.94	7.94	7.87	9.03	7.14		7.97		
Wang Dou (CHN) (1993)	time	2.73	3.82	4.89	5.96	7.00		8.43	4 / 2			
reaction time	interval		1.09	1.07	1.07	1.04	1.43			3.23		
	velocity	4.76	7.80	7.94	7.94	8.17	9.09	7.12		7.89		
Deng Xuelin (CHN) (1998)	time	2.73	3.82	4.89	5.96	7.00		8.46	2 / 3			
reaction time	interval		1.09	1.07	1.07	1.04	1.46			3.23		
	velocity	4.76	7.80	7.94	7.94	8.17	8.90	7.09		7.89		
Wang Li (CHN) (1999)	time	2.73	3.85	4.94	6.00	7.07		8.50	5 / 4			
reaction time	interval		1.12	1.09	1.06	1.07	1.43	PB		3.27		
	velocity	4.76	7.59	7.80	8.02	7.94	9.09	7.06		7.80		

B-FINAL

date 20-Feb-19

CAA Hurdle Development (2019)

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Yu Jiaru (CHN) (1999)	time	2.73	3.82	4.92	6.02	7.09		8.53	3 / 1			
reaction time	interval		1.09	1.10	1.10	1.07	1.44			3.29		
	velocity	4.76	7.80	7.73	7.73	7.94	9.03	7.03		7.75		
Xiao Juxiu (CHN) (1998)	time	2.77	3.87	4.99	6.10	7.19		8.60	2 / 2			
reaction time	interval		1.10	1.12	1.11	1.09	1.41			3.33		
	velocity	4.69	7.73	7.59	7.66	7.80	9.22	6.98		7.66		
Luo Xianyan (CHN) (1997)	time	2.70	3.82	4.92	6.02	7.11		8.62	4 / 3			
reaction time	interval		1.12	1.10	1.10	1.09	1.51			3.32		
	velocity	4.81	7.59	7.73	7.73	7.80	8.61	6.96		7.68		
Jiang Liyunzhe (CHN) (2002)	time	2.77	3.90	5.04	6.17	7.30		8.77	5 / 4			
reaction time	interval		1.13	1.14	1.13	1.13	1.47	PB		3.40		
	velocity	4.69	7.52	7.46	7.52	7.52	8.84	6.84		7.50		

2019 ISTAF Indoor (Berlin, GER) (TV Analysis)

FINAL

date 1-Feb-19

Henson (2020) - Athlete First: 2019 year end hurdle report

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Dutkiewicz, Pamela (GER) (19	time	2.54	3.56	4.56	5.54	6.52		7.89	4 / 1			
reaction time 0.121	interval		1.02	1.00	0.98	0.98	1.37			3.00		
	velocity	5.12	8.33	8.50	8.67	8.67	9.49	7.60		8.50		
Roleder, Cindy (GER) (1989)	time	2.58	3.58	4.58	5.56	6.54		7.91	3 / 2			
reaction time 0.126	interval		1.00	1.00	0.98	0.98	1.37			2.98		
	velocity	5.04	8.50	8.50	8.67	8.67	9.49	7.59		8.56		
Herman, Elvira (BLR) (1997)	time	2.60	3.62	4.62	5.60	6.58		7.97	5 / 3			
reaction time 0.142	interval		1.02	1.00	0.98	0.98	1.39	=PB		3.00		
	velocity	5.00	8.33	8.50	8.67	8.67	9.35	7.53		8.50		
Kozák, Luca (HUN) (1996)	time	2.60	3.62	4.66	5.68	6.68		8.07	2 / 4			
reaction time 0.153	interval		1.02	1.04	1.02	1.00	1.39	=PB		3.08		
	velocity	5.00	8.33	8.17	8.33	8.50	9.35	7.43		8.28		
Grauvogel, Louisa (GER) (199	time	2.62	3.66	4.70	5.72	6.74		8.12	1 / 5			
reaction time 0.138	interval		1.04	1.04	1.02	1.02	1.38	PB		3.10		
	velocity	4.96	8.17	8.17	8.33	8.33	9.42	7.39		8.23		

2018 National Sports Festival (Fukui, JPN)

FINAL

date 08-Oct-18 wind 2.5 m/s

Kota (2018) - Analysis of races of leading women's 100m hurdles at home and abroad

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kobayashi, Ayumi (JPN) (2001	time	2.70	3.75	4.80	5.83	6.83	7.86	8.88	9.89	10.93	11.96		13.13	5 / 1			
reaction time 0.140	interval		1.05	1.05	1.03	1.00	1.03	1.02	1.01	1.04	1.03	1.17			3.13	3.05	3.08
	velocity	4.81	8.10	8.10	8.25	8.50	8.25	8.33	8.42	8.17	8.25	8.97	7.62		8.15	8.36	8.28
Shibata, Aika (JPN) (2001)	time	2.66	3.71	4.75	5.79	6.81	7.82	8.85	9.90	10.99	12.10		13.31	4 / 2			
reaction time 0.149	interval		1.05	1.04	1.04	1.02	1.01	1.03	1.05	1.09	1.11	1.21			3.13	3.06	3.25
	velocity	4.89	8.10	8.17	8.17	8.33	8.42	8.25	8.10	7.80	7.66	8.68	7.51		8.15	8.33	7.85
Nagasaki, Sayuri (JPN) (2001)	time	2.68	3.77	4.83	5.89	6.94	8.00	9.05	10.12	11.23	12.34		13.56	3 / 3			
reaction time 0.139	interval		1.09	1.06	1.06	1.05	1.06	1.05	1.07	1.11	1.11	1.22			3.21	3.16	3.29
	velocity	4.85	7.80	8.02	8.02	8.10	8.02	8.10	7.94	7.66	7.66	8.61	7.37		7.94	8.07	7.75
Nakao, Ayumi (JPN) (2000)	time	2.70	3.82	4.90	5.98	7.05	8.12	9.19	10.25	11.33	12.44		13.63	7 / 4			
reaction time 0.134	interval		1.12	1.08	1.08	1.07	1.07	1.07	1.06	1.08	1.11	1.19			3.28	3.21	3.25
	velocity	4.81	7.59	7.87	7.87	7.94	7.94	7.94	8.02	7.87	7.66	8.82	7.34		7.77	7.94	7.85
Adachi, Karen (JPN) (2001)	time	2.75	3.82	4.89	5.96	7.02	8.07	9.14	10.24	11.33	12.45		13.64	6 / 5			
reaction time 0.145	interval		1.07	1.07	1.07	1.06	1.05	1.07	1.10	1.09	1.12	1.19	=PB		3.21	3.18	3.31
	velocity	4.73	7.94	7.94	7.94	8.02	8.10	7.94	7.73	7.80	7.59	8.82	7.33		7.94	8.02	7.70
Shishido, Riko (JPN) (2000)	time	2.66	3.74	4.83	5.92	6.97	8.02	9.10	10.19	11.26	12.38		13.65	8 / 6			
reaction time 0.173	interval		1.08	1.09	1.09	1.05	1.05	1.08	1.09	1.07	1.12	1.27			3.26	3.18	3.28
	velocity	4.89	7.87	7.80	7.80	8.10	8.10	7.87	7.80	7.94	7.59	8.27	7.33		7.82	8.02	7.77
Tamai, Nana (JPN) (2000)	time	2.69	3.79	4.88	5.95	7.03	8.09	9.22	10.38	11.51	12.66		13.94	2 / 7			
reaction time 0.132	interval		1.10	1.09	1.07	1.08	1.06	1.13	1.16	1.13	1.15	1.28			3.26	3.27	3.44
	velocity	4.83	7.73	7.80	7.94	7.87	8.02	7.52	7.33	7.52	7.39	8.20	7.17		7.82	7.80	7.41
Uenosono, Yuiko (JPN) (2000)	time	2.67	3.76	4.85	5.92	6.99	8.13	9.26	10.40	11.55	12.69		13.94	1 / 8			
reaction time 0.149	interval		1.09	1.09	1.07	1.07	1.14	1.13	1.14	1.15	1.14	1.25			3.25	3.34	3.43
	velocity	4.87	7.80	7.80	7.94	7.94	7.46	7.52	7.46	7.39	7.46	8.40	7.17		7.85	7.63	7.43

U18 FINAL (76cm)

date 07-Oct-18 wind 2.0 m/s

Kota (2018) - Analysis of races of leading women's 100m hurdles at home and abroad

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Iwasa, Mayuko (JPN) (2002)	time	2.72	3.83	4.90	5.98	7.04	8.11	9.20	10.26	11.35	12.46		13.71	6 / 1			
reaction time 0.149	interval		1.11	1.07	1.08	1.06	1.07	1.09	1.06	1.09	1.11	1.25			3.26	3.22	3.26
	velocity	4.78	7.66	7.94	7.87	8.02	7.94	7.80	8.02	7.80	7.66	8.40	7.29		7.82	7.92	7.82
Ayuhashi, Yumeka (JPN)	time	2.71	3.81	4.90	5.94	7.02	8.08	9.17	10.27	11.37	12.50		13.75	1 / 2			
reaction time 0.159	interval		1.10	1.09	1.04	1.08	1.06	1.09	1.10	1.10	1.13	1.25			3.23	3.23	3.33
	velocity	4.80	7.73	7.80	8.17	7.87	8.02	7.80	7.73	7.73	7.52	8.40	7.27		7.89	7.89	7.66
Toki, Asaki (JPN)	time	2.70	3.77	4.84	5.90	6.97	8.06	9.15	10.26	11.38	12.52		13.77	5 / 3			
reaction time 0.164	interval		1.07	1.07	1.06	1.07	1.09	1.09	1.11	1.12	1.14	1.25			3.20	3.25	3.37
	velocity	4.81	7.94	7.94	8.02	7.94	7.80	7.80	7.66	7.59	7.46	8.40	7.26		7.97	7.85	7.57
Matsumoto, Kaotaya (JPN)	time	2.67	3.76	4.85	5.92	6.99	8.07	9.18	10.28	11.40	12.53		13.80	7 / 4			
reaction time 0.152	interval		1.09	1.09	1.07	1.07	1.08	1.11	1.10	1.12	1.13	1.27			3.25	3.26	3.35
	velocity	4.87	7.80	7.80	7.94	7.94	7.87	7.66	7.73	7.59	7.52	8.27	7.25		7.85	7.82	7.61
Tsuchiya, Honoka (JPN) (2004	time	2.72	3.80	4.89	5.95	7.06	8.14	9.23	10.35	11.48	12.60		13.83	3 / 5			
reaction time 0.167	interval		1.08	1.09	1.06	1.11	1.08	1.09	1.12	1.13	1.12	1.23			3.23	3.28	3.37
	velocity	4.78	7.87	7.80	8.02	7.66	7.87	7.80	7.59	7.52	7.59	8.54	7.23		7.89	7.77	7.57
Chiba, Momoko (JPN) (1999)	time	2.78	3.88	4.97	6.02	7.10	8.20	9.28	10.36	11.47	12.59		13.84	8 / 6			
reaction time 0.167	interval		1.10	1.09	1.05	1.08	1.10	1.08	1.08	1.11	1.12	1.25	PB		3.24	3.26	3.31
	velocity	4.68	7.73	7.80	8.10	7.87	7.73	7.87	7.87	7.66	7.59	8.40	7.23		7.87	7.82	7.70
Ito, Ayaka (JPN)	time	2.62	3.71	4.80	5.87	6.95	8.03	9.12	10.23	11.34	12.52		13.85	4 / 7			
reaction time 0.177	interval		1.09	1.09	1.07	1.08	1.08	1.09	1.11	1.11	1.18	1.33			3.25	3.25	3.40
	velocity	4.96	7.80	7.80	7.94	7.87	7.87	7.80	7.66	7.66	7.20	7.89	7.22		7.85	7.85	7.50
Matata, Koki (JPN)	time	2.67	3.79	4.90	6.00	7.10	8.20	9.32	10.43	11.57	12.73		14.07	2 / 8			
reaction time 0.127	interval		1.12	1.11	1.10	1.10	1.10	1.12	1.11	1.14	1.16	1.34			3.33	3.32	3.41
	velocity	4.87	7.59	7.66	7.73	7.73	7.73	7.59	7.66	7.46	7.33	7.84	7.11		7.66	7.68	7.48

2018 Chinese National Championships (Taiyuan, CHN)

FINAL

date 16-Sep-18 wind -0.2 m/s

Henson (2018) - coaching observations

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Yanni (CHN) (1997)	time	2.69	3.75	4.78	5.80	6.81	7.81	8.84	9.88	10.93	12.00		13.17	3 / 1			
reaction time	interval		1.06	1.03	1.02	1.01	1.00	1.03	1.04	1.05	1.07	1.17	PB		3.11	3.04	3.16
	velocity	4.83	8.02	8.25	8.33	8.42	8.50	8.25	8.17	8.10	7.94	8.97	7.59		8.20	8.39	8.07
Deng Xuelin (CHN) (1998)	time	2.74	3.81	4.83	5.89	6.92	7.96	8.97	10.04	11.08	12.19		13.38	4 / 2			
reaction time	interval		1.07	1.02	1.06	1.03	1.04	1.01	1.07	1.04	1.11	1.19	PB		3.15	3.08	3.22
	velocity	4.74	7.94	8.33	8.02	8.25	8.17	8.42	7.94	8.17	7.66	8.82	7.47		8.10	8.28	7.92
Wang Dou (CHN) (1993)	time	2.72	3.80	4.85	5.90	6.96	8.01	9.06	10.14	11.23	12.32		13.48	7 / 3			
reaction time	interval		1.08	1.05	1.05	1.06	1.05	1.05	1.08	1.09	1.09	1.16			3.18	3.16	3.26
	velocity	4.78	7.87	8.10	8.10	8.02	8.10	8.10	7.87	7.80	7.80	9.05	7.42		8.02	8.07	7.82
Chen Jiamin (CHN) (1996)	time	2.68	3.74	4.82	5.87	6.92	7.98	9.03	10.11	11.20	12.31		13.53	5 / 4			
reaction time	interval		1.06	1.08	1.05	1.05	1.06	1.05	1.08	1.09	1.11	1.22			3.19	3.16	3.28
	velocity	4.85	8.02	7.87	8.10	8.10	8.02	8.10	7.87	7.80	7.66	8.61	7.39		7.99	8.07	7.77
Lin Yuwei (CHN) (1999)	time	2.67	3.73	4.80	5.86	6.93	7.98	9.04	10.13	11.25	12.36		13.57	6 / 5			
reaction time	interval		1.06	1.07	1.06	1.07	1.05	1.06	1.09	1.12	1.11	1.21			3.19	3.18	3.32
	velocity	4.87	8.02	7.94	8.02	7.94	8.10	8.02	7.80	7.59	7.66	8.68	7.37		7.99	8.02	7.68
Shi Jiali (CHN) (1997)	time	2.70	3.76	4.82	5.88	6.94	7.99	9.04	10.11	11.21	12.33		13.60	2 / 6			
reaction time	interval		1.06	1.06	1.06	1.06	1.05	1.05	1.07	1.10	1.12	1.27	PB		3.18	3.16	3.29
	velocity	4.81	8.02	8.02	8.02	8.02	8.10	8.10	7.94	7.73	7.59	8.27	7.35		8.02	8.07	7.75
Wang Li (CHN) (1999)	time	2.72	3.82	4.86	5.92	6.97	8.04	9.11	10.21	11.33	12.45		13.62	8 / 7			
reaction time	interval		1.10	1.04	1.06	1.05	1.07	1.07	1.10	1.12	1.12	1.17	PB		3.20	3.19	3.34
	velocity	4.78	7.73	8.17	8.02	8.10	7.94	7.94	7.73	7.59	7.59	8.97	7.34		7.97	7.99	7.63
Chen Yinfeng (CHN) (1998)	time	2.67	3.75	4.83	5.91	6.97	8.04	9.13	10.25	11.35	12.46		13.69	1 / 8			
reaction time	interval		1.08	1.08	1.08	1.06	1.07	1.09	1.12	1.10	1.11	1.23			3.24	3.22	3.33
	velocity	4.87	7.87	7.87	7.87	8.02	7.94	7.80	7.59	7.73	7.66	8.54	7.30		7.87	7.92	7.66

Heat 2

date 15-Sep-18 wind 0.0 m/s

Henson (2018) - coaching observations

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Yanni (CHN) (1997)	time	2.76	3.82	4.87	5.89	6.92	7.93	8.95	9.99	11.06	12.12		13.33	5 / 1			
reaction time	interval		1.06	1.05	1.02	1.03	1.01	1.02	1.04	1.07	1.06	1.21	PB		3.13	3.06	3.17
	velocity	4.71	8.02	8.10	8.33	8.25	8.42	8.33	8.17	7.94	8.02	8.68	7.50		8.15	8.33	8.04
Deng Xuelin (CHN) (1998)	time	2.72	3.79	4.82	5.91	6.93	7.98	9.01	10.06	11.13	12.23		13.45	3 / 2			
reaction time	interval		1.07	1.03	1.09	1.02	1.05	1.03	1.05	1.07	1.10	1.22	PB		3.19	3.10	3.22
	velocity	4.78	7.94	8.25	7.80	8.33	8.10	8.25	8.10	7.94	7.73	8.61	7.43		7.99	8.23	7.92

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wang Dou (CHN) (1993)	time	2.75	3.85	4.94	6.01	7.07	8.14	9.21	10.29	11.40	12.48		13.65	7 / 3			
reaction time	interval		1.10	1.09	1.07	1.06	1.07	1.07	1.08	1.11	1.08	1.17			3.26	3.20	3.27
	velocity	4.73	7.73	7.80	7.94	8.02	7.94	7.94	7.87	7.66	7.87	8.97	7.33		7.82	7.97	7.80
Shi Jiali (CHN) (1997)	time	2.68	3.76	4.82	5.87	6.96	8.03	9.09	10.21	11.33	12.46		13.72	4 / 4			
reaction time	interval		1.08	1.06	1.05	1.09	1.07	1.06	1.12	1.12	1.13	1.26	PB		3.19	3.22	3.37
	velocity	4.85	7.87	8.02	8.10	7.80	7.94	8.02	7.59	7.59	7.52	8.33	7.29		7.99	7.92	7.57
Chen Yinfeng (CHN) (1998)	time	2.68	3.81	4.87	5.97	7.03	8.13	9.21	10.31	11.40	12.53		13.73	1 / 5			
reaction time	interval		1.13	1.06	1.10	1.06	1.10	1.08	1.10	1.09	1.13	1.20			3.29	3.24	3.32
	velocity	4.85	7.52	8.02	7.73	8.02	7.73	7.87	7.73	7.80	7.52	8.75	7.28		7.75	7.87	7.68
Dai Yiru (CHN) (2001)	time	2.75	3.83	4.93	6.01	7.09	8.19	9.31	10.43	11.56	12.76		14.11	8 / 6			
reaction time	interval		1.08	1.10	1.08	1.08	1.10	1.12	1.12	1.13	1.20	1.35			3.26	3.30	3.45
	velocity	4.73	7.87	7.73	7.87	7.87	7.73	7.59	7.59	7.52	7.08	7.78	7.09		7.82	7.73	7.39
Jie Zhimao (CHN) (1998)	time	2.78	3.95	5.03	6.17	7.29	8.44	9.58	10.74	11.93	13.18		14.49	6 / 7			
reaction time	interval		1.17	1.08	1.14	1.12	1.15	1.14	1.16	1.19	1.25	1.31			3.39	3.41	3.60
	velocity	4.68	7.26	7.87	7.46	7.59	7.39	7.46	7.33	7.14	6.80	8.02	6.90		7.52	7.48	7.08
Zhuang Dongmei (CHN) (200	time	2.74	3.87	5.04	6.21	7.37	8.49	9.74	11.01	12.24	13.48		14.80	2 / 8			
reaction time	interval		1.13	1.17	1.17	1.16	1.12	1.25	1.27	1.23	1.24	1.32			3.47	3.53	3.74
	velocity	4.74	7.52	7.26	7.26	7.33	7.59	6.80	6.69	6.91	6.85	7.95	6.76		7.35	7.22	6.82

Heat 1

date 15-Sep-18 wind -0.6 m/s

Henson (2018) - coaching observations

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Chen Jiamin (CHN) (1996)	time	2.74	3.80	4.86	5.92	6.97	8.03	9.11	10.18	11.28	12.40		13.63	5 / 1			
reaction time	interval		1.06	1.06	1.06	1.05	1.06	1.08	1.07	1.10	1.12	1.23			3.18	3.19	3.29
	velocity	4.74	8.02	8.02	8.02	8.10	8.02	7.87	7.94	7.73	7.59	8.54	7.34		8.02	7.99	7.75
Lin Yuwei (CHN) (1999)	time	2.68	3.76	4.84	5.89	6.96	8.03	9.09	10.19	11.28	12.41		13.64	2 / 2			
reaction time	interval		1.08	1.08	1.05	1.07	1.07	1.06	1.10	1.09	1.13	1.23			3.21	3.20	3.32
	velocity	4.85	7.87	7.87	8.10	7.94	7.94	8.02	7.73	7.80	7.52	8.54	7.33		7.94	7.97	7.68
Wang Li (CHN) (1999)	time	2.72	3.80	4.89	5.94	7.01	8.06	9.14	10.24	11.35	12.46		13.64	6 / 3			
reaction time	interval		1.08	1.09	1.05	1.07	1.05	1.08	1.10	1.11	1.11	1.18	PB		3.22	3.20	3.32
	velocity	4.78	7.87	7.80	8.10	7.94	8.10	7.87	7.73	7.66	7.66	8.90	7.33		7.92	7.97	7.68
Lou Xianyan (CHN) (1997)	time	2.81	3.90	5.00	6.07	7.16	8.25	9.33	10.46	11.57	12.70		13.96	4 / 4			
reaction time	interval		1.09	1.10	1.07	1.09	1.09	1.08	1.13	1.11	1.13	1.26			3.26	3.26	3.37
	velocity	4.63	7.80	7.73	7.94	7.80	7.80	7.87	7.52	7.66	7.52	8.33	7.16		7.82	7.82	7.57
Yu Jiaru (CHN) (1999)	time	2.75	3.90	5.00	6.09	7.19	8.27	9.37	10.49	11.61	12.76		14.00	8 / 5			
reaction time	interval		1.15	1.10	1.09	1.10	1.08	1.10	1.12	1.12	1.15	1.24			3.34	3.28	3.39
	velocity	4.73	7.39	7.73	7.80	7.73	7.87	7.73	7.59	7.59	7.39	8.47	7.14		7.63	7.77	7.52
Xiao Juxiu (CHN) (1998)	time	2.81	3.94	5.04	6.14	7.22	8.34	9.44	10.58	11.73	12.91		14.10	7 / 6			
reaction time	interval		1.13	1.10	1.10	1.08	1.12	1.10	1.14	1.15	1.18	1.19			3.33	3.30	3.47
	velocity	4.63	7.52	7.73	7.73	7.87	7.59	7.73	7.46	7.39	7.20	8.82	7.09		7.66	7.73	7.35
Hao Ling (CHN) (1996)	time	2.80	3.94	5.02	6.10	7.19	8.31	9.43	10.58	11.76	12.98		14.34	3 / 7			
reaction time	interval		1.14	1.08	1.08	1.09	1.12	1.12	1.15	1.18	1.22	1.36			3.30	3.33	3.55
	velocity	4.64	7.46	7.87	7.87	7.80	7.59	7.59	7.39	7.20	6.97	7.72	6.97		7.73	7.66	7.18
Zhang Xueqing (CHN) (1997)	time	2.90	4.07	5.21	6.35	7.49	8.64	9.81	11.01	12.23	13.49		14.85	1 / 8			
reaction time	interval		1.17	1.14	1.14	1.14	1.15	1.17	1.20	1.22	1.26	1.36			3.45	3.46	3.68
	velocity	4.48	7.26	7.46	7.46	7.46	7.39	7.26	7.08	6.97	6.75	7.72	6.73		7.39	7.37	6.93

2018 IAAF Continental Cup (Ostrava, CZE) (TV Analysis)

FINAL

date 08-Sep-18 wind -0.1 m/s

Henson (2021) - Athlete First: 2018 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Williams, Danielle (JAM) (1992	time	2.44	3.44	4.44	5.40	6.36	7.34	8.32	9.30	10.28	11.28		12.49	7 / 1			
reaction time 0.127	interval		1.00	1.00	0.96	0.96	0.98	0.98	0.98	0.98	1.00	1.21			2.96	2.92	2.96
	velocity	5.33	8.50	8.50	8.85	8.85	8.67	8.67	8.67	8.67	8.50	8.68	8.01		8.61	8.73	8.61
Harrison, Kendra (USA) (1992	time	2.44	3.46	4.44	5.40	6.36	7.34	8.30	9.28	10.26	11.28		12.52	3 / 2			
reaction time 0.174	interval		1.02	0.98	0.96	0.96	0.98	0.96	0.98	0.98	1.02	1.24			2.96	2.90	2.98
	velocity	5.33	8.33	8.67	8.85	8.85	8.67	8.85	8.67	8.67	8.33	8.47	7.99		8.61	8.79	8.56
Dutkiewicz, Pamela (GER) (19	time	2.52	3.52	4.52	5.52	6.50	7.50	8.50	9.48	10.50	11.56		12.82	2 / 3			
reaction time 0.163	interval		1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.02	1.06	1.26			3.00	2.98	3.06
	velocity	5.16	8.50	8.50	8.50	8.67	8.50	8.50	8.67	8.33	8.02	8.33	7.80		8.50	8.56	8.33
Herman, Elvira (BLR) (1997)	time	2.60	3.64	4.66	5.64	6.62	7.62	8.62	9.62	10.62	11.66		12.91	6 / 4			
reaction time 0.173	interval		1.04	1.02	0.98	0.98	1.00	1.00	1.00	1.00	1.04	1.25			3.04	2.98	3.04
	velocity	5.00	8.17	8.33	8.67	8.67	8.50	8.50	8.50	8.50	8.17	8.40	7.75		8.39	8.56	8.39

Amusan, Tobi (NGR) (1997)	time	2.52	3.56	4.60	5.60	6.60	7.60	8.60	9.60	10.62	11.66		12.96	4 / 5				
reaction time 0.167	interval		1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.02	1.04	1.30			3.08	3.00	3.06	
	velocity	5.16	8.17	8.17	8.50	8.50	8.50	8.50	8.50	8.33	8.17	8.08	7.72		8.28	8.50	8.33	
Kimura, Ayako (JPN) (1988)	time	2.52	3.56	4.60	5.64	6.66	7.70	8.74	9.82	10.88	12.02		13.39	5 / 6				
reaction time 0.166	interval		1.04	1.04	1.04	1.02	1.04	1.04	1.08	1.06	1.14	1.37			3.12	3.10	3.28	
	velocity	5.16	8.17	8.17	8.17	8.33	8.17	8.17	7.87	8.02	7.46	7.66	7.47		8.17	8.23	7.77	
Koala, Martha Yasmine (BUR)	time	2.64	3.72	4.76	5.80	6.80	7.84	8.88	9.92	11.02	12.10		13.42	8 / 7				
reaction time 0.157	interval		1.08	1.04	1.04	1.00	1.04	1.04	1.04	1.10	1.08	1.32			3.16	3.08	3.22	
	velocity	4.92	7.87	8.17	8.17	8.50	8.17	8.17	8.17	7.73	7.87	7.95	7.45		8.07	8.28	7.92	
Jenneke, Michelle (AUS) (1993	time	2.56	3.60	4.64	5.66	6.70	7.76	8.82	9.90	11.02	12.12		13.50	1 / 8				
reaction time 0.158	interval		1.04	1.04	1.02	1.04	1.06	1.06	1.08	1.12	1.10	1.38			3.10	3.16	3.30	
	velocity	5.08	8.17	8.17	8.33	8.17	8.02	8.02	7.87	7.59	7.73	7.61	7.41		8.23	8.07	7.73	

2018 AG Memorial van Damme (Brussels, BEL) (TV Analysis)

FINAL date 31-Aug-18 wind 0.1 m/s

Henson (2020) - Athlete First: 2018 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
McNeal, Brianna (USA) (1991)	time	2.52	3.52	4.52	5.52	6.50	7.48	8.46	9.44	10.42	11.44		12.61	6 / 1			
reaction time 0.196	interval		1.00	1.00	1.00	0.98	0.98	0.98	0.98	0.98	1.02	1.17			3.00	2.94	2.98	
	velocity	5.16	8.50	8.50	8.50	8.67	8.67	8.67	8.67	8.67	8.33	8.97	7.93		8.50	8.67	8.56	
Harrison, Kendra (USA) (1992)	time	2.54	3.56	4.56	5.52	6.52	7.48	8.46	9.44	10.42	11.44		12.63	4 / 2			
reaction time 0.205	interval		1.02	1.00	0.96	1.00	0.96	0.98	0.98	0.98	1.02	1.19			2.98	2.94	2.98	
	velocity	5.12	8.33	8.50	8.85	8.50	8.85	8.67	8.67	8.67	8.33	8.82	7.92		8.56	8.67	8.56	
Williams, Danielle (JAM) (1992	time	2.52	3.52	4.52	5.52	6.48	7.46	8.44	9.44	10.42	11.46		12.64	5 / 3			
reaction time 0.143	interval		1.00	1.00	1.00	0.96	0.98	0.98	1.00	0.98	1.04	1.18			3.00	2.92	3.02	
	velocity	5.16	8.50	8.50	8.50	8.85	8.67	8.67	8.50	8.67	8.17	8.90	7.91		8.50	8.73	8.44	
Amusan, Tobi (NGR) (1997)	time	2.48	3.56	4.56	5.56	6.54	7.52	8.50	9.48	10.48	11.50		12.69	2 / 4			
reaction time 0.134	interval		1.08	1.00	1.00	0.98	0.98	0.98	0.98	1.00	1.02	1.19			3.08	2.94	3.00	
	velocity	5.24	7.87	8.50	8.50	8.67	8.67	8.67	8.67	8.50	8.33	8.82	7.88		8.28	8.67	8.50	
Nelvis, Sharika (USA) (1990)	time	2.46	3.48	4.48	5.46	6.44	7.40	8.40	9.44	10.48	11.54		12.80	3 / 5			
reaction time 0.142	interval		1.02	1.00	0.98	0.98	0.96	1.00	1.04	1.04	1.06	1.26			3.00	2.94	3.14	
	velocity	5.28	8.33	8.50	8.67	8.67	8.85	8.50	8.17	8.17	8.02	8.33	7.81		8.50	8.67	8.12	
Visser, Nadine (NED) (1995)	time	2.56	3.56	4.56	5.54	6.52	7.52	8.52	9.52	10.54	11.60		12.81	8 / 6			
reaction time 0.151	interval		1.00	1.00	0.98	0.98	1.00	1.00	1.00	1.02	1.06	1.21			2.98	2.98	3.08	
	velocity	5.08	8.50	8.50	8.67	8.67	8.50	8.50	8.50	8.33	8.02	8.68	7.81		8.56	8.56	8.28	
Berings, Eline (BEL) (1986)	time	2.52	3.54	4.54	5.56	6.56	7.58	8.58	9.62	10.66	11.74		12.94	9 / 7			
reaction time 0.107	interval		1.02	1.00	1.02	1.00	1.02	1.00	1.04	1.04	1.08	1.20			3.04	3.02	3.16	
	velocity	5.16	8.33	8.50	8.33	8.50	8.33	8.50	8.17	8.17	7.87	8.75	7.73		8.39	8.44	8.07	
Harper-Nelson, Dawn (USA) (	time	2.54	3.58	4.56	5.56	6.56	7.58	8.59	9.62	10.70	11.78		13.08	1 / 8			
reaction time 0.154	interval		1.04	0.98	1.00	1.00	1.02	1.01	1.03	1.08	1.08	1.30			3.02	3.03	3.19	
	velocity	5.12	8.17	8.67	8.50	8.50	8.33	8.43	8.24	7.87	7.87	8.08	7.65		8.44	8.42	7.99	
Manning, Christina (USA) (19	time	2.46	3.50	4.48	5.46	6.46	7.48	8.48	9.56	10.66	11.86		13.34	7 / 9			
reaction time 0.118	interval		1.04	0.98	0.98	1.00	1.02	1.00	1.08	1.10	1.20	1.48			3.00	3.02	3.38	
	velocity	5.28	8.17	8.67	8.67	8.50	8.33	8.50	7.87	7.73	7.08	7.09	7.50		8.50	8.44	7.54	

2018 Japanese National High School Championships (Nagoya, JPN)

FINAL date 02-Aug-18 wind -0.3 m/s

Kota (2018) - 71st high school championships: JAF scientific committee - biomechanics data collection

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kobayashi, Ayumi (JPN) (2001	time	2.66	3.73	4.78	5.83	6.87	7.90	8.95	10.01	11.07	12.15		13.34	7 / 1			
reaction time	interval		1.07	1.05	1.05	1.04	1.03	1.05	1.06	1.06	1.08	1.19	PB		3.17	3.12	3.20	
	velocity	4.89	7.94	8.10	8.10	8.17	8.25	8.10	8.02	8.02	7.87	8.82	7.50		8.04	8.17	7.97	
Adachi, Karen (JPN) (2001)	time	2.71	3.80	4.87	5.92	6.99	8.07	9.15	10.23	11.32	12.44		13.64	4 / 2			
reaction time	interval		1.09	1.07	1.05	1.07	1.08	1.08	1.08	1.09	1.12	1.20	PB		3.21	3.23	3.29	
	velocity	4.80	7.80	7.94	8.10	7.94	7.87	7.87	7.87	7.80	7.59	8.75	7.33		7.94	7.89	7.75	
Shibata, Aika (JPN) (2001)	time	2.65	3.72	4.80	5.87	6.94	8.02	9.06	10.18	11.32	12.43		13.68	3 / 3			
reaction time	interval		1.07	1.08	1.07	1.07	1.08	1.04	1.12	1.14	1.11	1.25	PB		3.22	3.19	3.37	
	velocity	4.91	7.94	7.87	7.94	7.94	7.87	8.17	7.59	7.46	7.66	8.40	7.31		7.92	7.99	7.57	
Ibaraki, Rin (JPN) (2001)	time	2.64	3.74	4.84	5.93	7.00	8.10	9.19	10.28	11.40	12.51		13.69	5 / 4			
reaction time	interval		1.10	1.10	1.09	1.07	1.10	1.09	1.09	1.12	1.11	1.18	PB		3.29	3.26	3.32	
	velocity	4.92	7.73	7.73	7.80	7.94	7.73	7.80	7.80	7.59	7.66	8.90	7.30		7.75	7.82	7.68	
Nagaskai, Sayuri (JPN) (2001)	time	2.70	3.80	4.89	5.98	7.06	8.14	9.24	10.34	11.45	12.58		13.80	6 / 5			
reaction time	interval		1.10	1.09	1.09	1.08	1.08	1.10	1.10	1.11	1.13	1.22			3.28	3.26	3.34	

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
	velocity	4.81	7.73	7.80	7.80	7.87	7.87	7.73	7.73	7.66	7.52	8.61	7.25		7.77	7.82	7.63
Nakao, Ayumi (JPN) (2000)	time	2.76	3.86	4.94	6.03	7.10	8.18	9.27	10.38	11.48	12.61		13.82	8 / 6			
reaction time	interval		1.10	1.08	1.09	1.07	1.08	1.09	1.11	1.10	1.13	1.21			3.27	3.24	3.34
	velocity	4.71	7.73	7.87	7.80	7.94	7.87	7.80	7.66	7.73	7.52	8.68	7.24		7.80	7.87	7.63
Ban, Nozumi (JPN) (2001)	time	2.69	3.81	4.92	6.00	7.12	8.20	9.32	10.44	11.55	12.68		13.95	2 / 7			
reaction time	interval		1.12	1.11	1.08	1.12	1.08	1.12	1.12	1.11	1.13	1.27			3.31	3.32	3.36
	velocity	4.83	7.59	7.66	7.87	7.59	7.87	7.59	7.59	7.66	7.52	8.27	7.17		7.70	7.68	7.59
Uenosono, Yuiko (JPN) (2000)	time	2.72	3.85	4.95	6.06	7.20	8.33	9.46	10.59	11.78	12.95		14.26	9 / 8			
reaction time	interval		1.13	1.10	1.11	1.14	1.13	1.13	1.13	1.19	1.17	1.31			3.34	3.40	3.49
	velocity	4.78	7.52	7.73	7.66	7.46	7.52	7.52	7.52	7.14	7.26	8.02	7.01		7.63	7.50	7.31

2018 Müller Anniversary Games (London, GBR) (TV Analysis)

FINAL date 22-Jul-18 wind 0.6 m/s

Henson (2020) - Athlete First: 2018 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.44	3.46	4.44	5.40	6.36	7.28	8.24	9.20	10.18	11.18		12.36	6 / 1			
reaction time 0.169	interval		1.02	0.98	0.96	0.96	0.92	0.96	0.96	0.98	1.00	1.18			2.96	2.84	2.94
	velocity	5.33	8.33	8.67	8.85	8.85	9.24	8.85	8.85	8.67	8.50	8.90	8.09		8.61	8.98	8.67
McNeal, Brianna (USA) (1991)	time	2.48	3.50	4.48	5.44	6.40	7.38	8.36	9.34	10.32	11.32		12.47	4 / 2			
reaction time 0.152	interval		1.02	0.98	0.96	0.96	0.98	0.98	0.98	0.98	1.00	1.15			2.96	2.92	2.96
	velocity	5.24	8.33	8.67	8.85	8.85	8.67	8.67	8.67	8.67	8.50	9.13	8.02		8.61	8.73	8.61
Nelvis, Sharika (USA) (1990)	time	2.44	3.44	4.44	5.42	6.38	7.34	8.34	9.30	10.32	11.32		12.51	9 / 3			
reaction time 0.139	interval		1.00	1.00	0.98	0.96	0.96	1.00	0.96	1.02	1.00	1.19			2.98	2.92	2.98
	velocity	5.33	8.50	8.50	8.67	8.85	8.85	8.50	8.85	8.33	8.50	8.82	7.99		8.56	8.73	8.56
Williams, Danielle (JAM) (1992	time	2.48	3.48	4.48	5.46	6.44	7.42	8.40	9.40	10.38	11.38		12.55	5 / 4			
reaction time 0.133	interval		1.00	1.00	0.98	0.98	0.98	0.98	1.00	0.98	1.00	1.17			2.98	2.94	2.98
	velocity	5.24	8.50	8.50	8.67	8.67	8.67	8.67	8.50	8.67	8.50	8.97	7.97		8.56	8.67	8.56
Manning, Christina (USA) (19	time	2.44	3.44	4.42	5.38	6.36	7.32	8.28	9.32	10.36	11.40		12.57	7 / 5			
reaction time 0.136	interval		1.00	0.98	0.96	0.98	0.96	0.96	1.04	1.04	1.04	1.17			2.94	2.90	3.12
	velocity	5.33	8.50	8.67	8.85	8.67	8.85	8.85	8.17	8.17	8.17	8.97	7.96		8.67	8.79	8.17
Harrison, Queen (USA) (1988)	time	2.52	3.54	4.56	5.50	6.48	7.48	8.46	9.44	10.42	11.44		12.63	3 / 6			
reaction time 0.167	interval		1.02	1.02	0.94	0.98	1.00	0.98	0.98	0.98	1.02	1.19			2.98	2.96	2.98
	velocity	5.16	8.33	8.33	9.04	8.67	8.50	8.67	8.67	8.67	8.33	8.82	7.92		8.56	8.61	8.56
Amusan, Tobi (NGR) (1997)	time	2.52	3.58	4.56	5.54	6.50	7.48	8.48	9.44	10.46	11.48		12.68	8 / 7			
reaction time 0.151	interval		1.06	0.98	0.98	0.96	0.98	1.00	0.96	1.02	1.02	1.20			3.02	2.94	3.00
	velocity	5.16	8.02	8.67	8.67	8.85	8.67	8.50	8.85	8.33	8.33	8.75	7.89		8.44	8.67	8.50
Pedersen, Isabelle (NOR) (199	time	2.52	3.52	4.50	5.48	6.46	7.44	8.44	9.44	10.46	11.52		12.73	2 / 8			
reaction time 0.172	interval		1.00	0.98	0.98	0.98	0.98	1.00	1.00	1.02	1.06	1.21			2.96	2.96	3.08
	velocity	5.16	8.50	8.67	8.67	8.67	8.67	8.50	8.50	8.33	8.02	8.68	7.86		8.61	8.61	8.28
Herman, Elvira (BLR) (1997)	time	2.60	3.62	4.64	5.62	6.60	7.60	8.60	9.60	10.60	11.60		12.78	1 / 9			
reaction time 0.147	interval		1.02	1.02	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.18			3.02	2.98	3.00
	velocity	5.00	8.33	8.33	8.67	8.67	8.50	8.50	8.50	8.50	8.50	8.90	7.82		8.44	8.56	8.50

2018 IAAF World Junior Championships (Tampere, FIN)

FINAL date 15-Jul-18 wind -1.0 m/s

Kota (2018) - Analysis of races of leading women's 100m hurdles at home and abroad

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Jones, Tia (USA) (2000)	time	2.59	3.64	4.67	5.67	6.66	7.67	8.69	9.71	10.76	11.83		13.01	5 / 1			
reaction time 0.161	interval		1.05	1.03	1.00	0.99	1.01	1.02	1.02	1.05	1.07	1.18			3.08	3.02	3.14
	velocity	5.02	8.10	8.25	8.50	8.59	8.42	8.33	8.33	8.10	7.94	8.90	7.69		8.28	8.44	8.12
Anderson, Britany (JAM) (200	time	2.66	3.67	4.70	5.69	6.70	7.70	8.72	9.73	10.78	11.84		13.01	6 / 2			
reaction time 0.190	interval		1.01	1.03	0.99	1.01	1.00	1.02	1.01	1.05	1.06	1.17	PB		3.03	3.03	3.12
	velocity	4.89	8.42	8.25	8.59	8.42	8.50	8.33	8.42	8.10	8.02	8.97	7.69		8.42	8.42	8.17
Jones, Cortney (USA) (1999)	time	2.63	3.70	4.71	5.71	6.69	7.68	8.68	9.73	10.80	11.91		13.19	4 / 3			
reaction time 0.156	interval		1.07	1.01	1.00	0.98	0.99	1.00	1.05	1.07	1.11	1.28			3.08	2.97	3.23
	velocity	4.94	7.94	8.42	8.50	8.67	8.59	8.50	8.10	7.94	7.66	8.20	7.58		8.28	8.59	7.89

Semi-Final 2 date 14-Jul-18 wind 0.9 m/s

Kota (2018) - Analysis of races of leading women's 100m hurdles at home and abroad

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Yoshita, Airi (JPN) (1999)	time	2.73	3.80	4.85	5.91	6.94	7.97	9.03	10.11	11.20	12.32		13.55	5 / 5			
reaction time 0.159	interval		1.07	1.05	1.06	1.03	1.03	1.06	1.08	1.09	1.12	1.23			3.18	3.12	3.29
	velocity	4.76	7.94	8.10	8.02	8.25	8.25	8.02	7.87	7.80	7.59	8.54	7.38		8.02	8.17	7.75

2018 Meeting International Mohammed VI d'Athlétisme (Rabat, MAR) (TV Analysis)

FINAL date 13-Jul-18 wind 0.1 m/s

Henson (2020) - Athlete First: 2018 year end hurdle report

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

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

McNeal, Brianna (USA) (1991)	time	2.44	3.46	4.44	5.42	6.38	7.34	8.32	9.32	10.30	11.30		12.51	5 / 1				
reaction time 0.131	interval		1.02	0.98	0.98	0.96	0.96	0.98	1.00	0.98	1.00	1.21			2.98	2.90	2.98	
	velocity	5.33	8.33	8.67	8.67	8.85	8.85	8.67	8.50	8.67	8.50	8.68	7.99		8.56	8.79	8.56	
Nelvis, Sharika (USA) (1990)	time	2.44	3.44	4.42	5.40	6.38	7.34	8.32	9.32	10.32	11.32		12.58	6 / 2				
reaction time 0.139	interval		1.00	0.98	0.98	0.98	0.96	0.98	1.00	1.00	1.00	1.26			2.96	2.92	3.00	
	velocity	5.33	8.50	8.67	8.67	8.67	8.85	8.67	8.50	8.50	8.50	8.33	7.95		8.61	8.73	8.50	
Manning, Christina (USA) (19	time	2.44	3.46	4.46	5.44	6.40	7.38	8.36	9.38	10.40	11.44		12.72	3 / 3				
reaction time 0.151	interval		1.02	1.00	0.98	0.96	0.98	0.98	1.02	1.02	1.04	1.28			3.00	2.92	3.08	
	velocity	5.33	8.33	8.50	8.67	8.85	8.67	8.67	8.33	8.33	8.17	8.20	7.86		8.50	8.73	8.28	
Harper-Nelson, Dawn (USA) (	time	2.52	3.52	4.52	5.52	6.52	7.52	8.52	9.54	10.56	11.60		12.86	2 / 4				
reaction time 0.170	interval		1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.04	1.26			3.00	3.00	3.08	
	velocity	5.16	8.50	8.50	8.50	8.50	8.50	8.50	8.33	8.33	8.17	8.33	7.78		8.50	8.50	8.28	
Amusan, Tobi (NGR) (1997)	time	2.52	3.54	4.56	5.56	6.56	7.56	8.56	9.56	10.58	11.62		12.87	8 / 5				
reaction time 0.190	interval		1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.02	1.04	1.25			3.04	3.00	3.06	
	velocity	5.16	8.33	8.33	8.50	8.50	8.50	8.50	8.50	8.33	8.17	8.40	7.77		8.39	8.50	8.33	
Roleder, Cindy (GER) (1989)	time	2.56	3.60	4.58	5.58	6.58	7.58	8.58	9.60	10.60	11.66		12.87	7 / 6				
reaction time 0.128	interval		1.04	0.98	1.00	1.00	1.00	1.00	1.02	1.00	1.06	1.21			3.02	3.00	3.08	
	velocity	5.08	8.17	8.67	8.50	8.50	8.50	8.50	8.33	8.50	8.02	8.68	7.77		8.44	8.50	8.28	
Dutkiewicz, Pamela (GER) (19	time	2.56	3.56	4.58	5.58	6.58	7.56	8.54	9.54	10.56	11.60		12.89	4 / 6				
reaction time 0.168	interval		1.00	1.02	1.00	1.00	0.98	0.98	1.00	1.02	1.04	1.29			3.02	2.96	3.06	
	velocity	5.08	8.50	8.33	8.50	8.50	8.67	8.67	8.50	8.33	8.17	8.14	7.76		8.44	8.61	8.33	
Thompson, Yanique (JAM) (1	time	2.56	3.58	4.62	5.62	6.62	7.62	8.60	9.62	10.62	11.64		12.93	1 / 8				
reaction time 0.155	interval		1.02	1.04	1.00	1.00	1.00	0.98	1.02	1.00	1.02	1.29			3.06	2.98	3.04	
	velocity	5.08	8.33	8.17	8.50	8.50	8.50	8.67	8.33	8.50	8.33	8.14	7.73		8.33	8.56	8.39	
Boons, Eefje (NED) (1994)	time	2.60	3.68	4.72	5.74	6.76	7.78	8.80	9.86	10.92	12.00		13.32	9 / 9				
reaction time 0.150	interval		1.08	1.04	1.02	1.02	1.02	1.02	1.06	1.06	1.08	1.32			3.14	3.06	3.20	
	velocity	5.00	7.87	8.17	8.33	8.33	8.33	8.33	8.02	8.02	7.87	7.95	7.51		8.12	8.33	7.97	

2018 Spitzen Leichtathletik (Luzern, SUI) (TV Analysis)

FINAL date 09-Jul-18 wind 0.9 m/s

Henson (2020) - Athlete First: 2018 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
McNeal, Brianna (USA) (1991)	time	2.48	3.46	4.44	5.42	6.40	7.36	8.32	9.28	10.26	11.28		12.44	4 / 1			
reaction time	interval		0.98	0.98	0.98	0.98	0.96	0.96	0.96	0.98	1.02	1.16			2.94	2.90	2.96
	velocity	5.24	8.67	8.67	8.67	8.67	8.85	8.85	8.85	8.67	8.33	9.05	8.04		8.67	8.79	8.61
Dutkiewicz, Pamela (GER) (19	time	2.56	3.56	4.54	5.52	6.48	7.48	8.46	9.44	10.48	11.50		12.67	2 / 2			
reaction time	interval		1.00	0.98	0.98	0.96	1.00	0.98	0.98	1.04	1.02	1.17			2.96	2.94	3.04
	velocity	5.08	8.50	8.67	8.67	8.85	8.50	8.67	8.67	8.17	8.33	8.97	7.89		8.61	8.67	8.39
Manning, Christina (USA) (19	time	2.48	3.52	4.48	5.48	6.48	7.44	8.44	9.44	10.48	11.50		12.71	6 / 3			
reaction time	interval		1.04	0.96	1.00	1.00	0.96	1.00	1.00	1.04	1.02	1.21			3.00	2.96	3.06
	velocity	5.24	8.17	8.85	8.50	8.50	8.85	8.50	8.50	8.17	8.33	8.68	7.87		8.50	8.61	8.33
Harrison, Queen (USA) (1988)	time	2.56	3.60	4.62	5.60	6.56	7.54	8.52	9.52	10.54	11.58		12.75	5 / 4			
reaction time	interval		1.04	1.02	0.98	0.96	0.98	0.98	1.00	1.02	1.04	1.17			3.04	2.92	3.06
	velocity	5.08	8.17	8.33	8.67	8.85	8.67	8.67	8.50	8.33	8.17	8.97	7.84		8.39	8.73	8.33
Amusan, Tobi (NGR) (1997)	time	2.56	3.56	4.60	5.56	6.52	7.52	8.52	9.54	10.56	11.60		12.80	3 / 5			
reaction time	interval		1.00	1.04	0.96	0.96	1.00	1.00	1.02	1.02	1.04	1.20			3.00	2.96	3.08
	velocity	5.08	8.50	8.17	8.85	8.85	8.50	8.50	8.33	8.33	8.17	8.75	7.81		8.50	8.61	8.28
Roleder, Cindy (GER) (1989)	time	2.60	3.60	4.60	5.60	6.60	7.56	8.58	9.60	10.60	11.64		12.81	7 / 6			
reaction time	interval		1.00	1.00	1.00	1.00	0.96	1.02	1.02	1.00	1.04	1.17			3.00	2.98	3.06
	velocity	5.00	8.50	8.50	8.50	8.50	8.85	8.33	8.33	8.50	8.17	8.97	7.81		8.50	8.56	8.33
Thompson, Yanique (JAM) (1	time	2.58	3.60	4.60	5.58	6.54	7.52	8.58	9.64	10.70	11.74		13.00	1 / 7			
reaction time	interval		1.02	1.00	0.98	0.96	0.98	1.06	1.06	1.06	1.04	1.26			3.00	3.00	3.16
	velocity	5.04	8.33	8.50	8.67	8.85	8.67	8.02	8.02	8.02	8.17	8.33	7.69		8.50	8.50	8.07
Kozák, Luca (HUN) (1996)	time	2.68											dnf	8 / 8			
reaction time	interval																
	velocity	4.85															

2018 Japanese National Championships (Yamaguchi, JPN)

FINAL date 24-Jun-18 wind 1.1 m/s

Kota (2018) - Analysis of races of leading women's 100m hurdles at home and abroad

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Aoki, Masumi (JPN) (1994)	time	2.65	3.70	4.73	5.77	6.79	7.81	8.83	9.86	10.90	11.96		13.17	7 / 1			
reaction time 0.174	interval		1.05	1.03	1.04	1.02	1.02	1.02	1.03	1.04	1.06	1.21	PB		3.12	3.06	3.13
	velocity	4.91	8.10	8.25	8.17	8.33	8.33	8.33	8.25	8.17	8.02	8.68	7.59		8.17	8.33	8.15

Shimura, Hitomi (JPN) (1990)	time	2.65	3.70	4.75	5.77	6.80	7.82	8.86	9.91	10.98	12.05		13.21	5 / 2			
reaction time 0.167	interval		1.05	1.05	1.02	1.03	1.02	1.04	1.05	1.07	1.07	1.16			3.12	3.09	3.19
	velocity	4.91	8.10	8.10	8.33	8.25	8.33	8.17	8.10	7.94	7.94	9.05	7.57		8.17	8.25	7.99
Kimura, Ayako (JPN) (1988)	time	2.61	3.62	4.65	5.66	6.67	7.68	8.73	9.78	10.86	11.96		13.21	4 / 3			
reaction time 0.164	interval		1.01	1.03	1.01	1.01	1.01	1.05	1.05	1.08	1.10	1.25			3.05	3.07	3.23
	velocity	4.98	8.42	8.25	8.42	8.42	8.42	8.10	8.10	7.87	7.73	8.40	7.57		8.36	8.31	7.89
Kiyoyama, Chisato (JPN) (199	time	2.69	3.78	4.84	5.86	6.89	7.92	8.94	10.00	11.05	12.13		13.31	2 / 4			
reaction time 0.183	interval		1.09	1.06	1.02	1.03	1.03	1.02	1.06	1.05	1.08	1.18	PB		3.17	3.08	3.19
	velocity	4.83	7.80	8.02	8.33	8.25	8.25	8.33	8.02	8.10	7.87	8.90	7.51		8.04	8.28	7.99
Nomura, Yuka (JPN) (1987)	time	2.63	3.70	4.76	5.83	6.90	7.95	9.03	10.11	11.19	12.31		13.51	3 / 5			
reaction time 0.174	interval		1.07	1.06	1.07	1.07	1.05	1.08	1.08	1.08	1.12	1.20			3.20	3.20	3.28
	velocity	4.94	7.94	8.02	7.94	7.94	8.10	7.87	7.87	7.87	7.59	8.75	7.40		7.97	7.97	7.77
Tanaka, Hikari (JPN) (1998)	time	2.68	3.79	4.87	5.92	6.97	8.03	9.08	10.14	11.22	12.31		13.52	6 / 6			
reaction time 0.190	interval		1.11	1.08	1.05	1.05	1.06	1.05	1.06	1.08	1.09	1.21			3.24	3.16	3.23
	velocity	4.85	7.66	7.87	8.10	8.10	8.02	8.10	8.02	7.87	7.80	8.68	7.40		7.87	8.07	7.89
Fukube, Mako (JPN) (1995)	time	2.70	3.78	4.87	5.94	6.98	8.03	9.08	10.15	11.25	12.36		13.56	9 / 7			
reaction time 0.144	interval		1.08	1.09	1.07	1.04	1.05	1.05	1.07	1.10	1.11	1.20			3.24	3.14	3.28
	velocity	4.81	7.87	7.80	7.94	8.17	8.10	8.10	7.94	7.73	7.66	8.75	7.37		7.87	8.12	7.77
Okubo, Yuri (JPN) (1997)	time	2.73	3.82	4.90	5.97	7.01	8.06	9.13	10.18	11.25	12.36		13.59	8 / 8			
reaction time 0.182	interval		1.09	1.08	1.07	1.04	1.05	1.07	1.05	1.07	1.11	1.23			3.24	3.16	3.23
	velocity	4.76	7.80	7.87	7.94	8.17	8.10	7.94	8.10	7.94	7.66	8.54	7.36		7.87	8.07	7.89

2018 USATF National Champinships (Des Moines, IA) (TV Analysis)

FINAL

date 23-Jun-18 wind -1.4 m/s

Henson (2020) - Athlete First: 2018 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.40	3.40	4.38	5.37	6.34	7.31	8.24	9.21	10.16	11.16		12.46	5 / 1			
reaction time	interval		1.00	0.98	0.99	0.97	0.97	0.93	0.97	0.95	1.00	1.30			2.97	2.87	2.92
	velocity	5.42	8.50	8.67	8.59	8.76	8.76	9.14	8.76	8.95	8.50	8.08	8.03		8.59	8.89	8.73
Manning, Christina (USA) (19	time	2.40	3.40	4.40	5.37	6.34	7.31	8.27	9.27	10.27	11.31		12.65	4 / 2			
reaction time	interval		1.00	1.00	0.97	0.97	0.97	0.96	1.00	1.00	1.04	1.34			2.97	2.90	3.04
	velocity	5.42	8.50	8.50	8.76	8.76	8.76	8.85	8.50	8.50	8.17	7.84	7.91		8.59	8.79	8.39
Nelvis, Sharika (USA) (1990)	time	2.43	3.43	4.41	5.39	6.37	7.37	8.34	9.31	10.34	11.37		12.68	3 / 3			
reaction time	interval		1.00	0.98	0.98	0.98	1.00	0.97	0.97	1.03	1.03	1.31			2.96	2.95	3.03
	velocity	5.35	8.50	8.67	8.67	8.67	8.50	8.76	8.76	8.25	8.25	8.02	7.89		8.61	8.64	8.42
Harrison, Queen (USA) (1988)	time	2.50	3.57	4.57	5.57	6.54	7.52	8.48	9.48	10.48	11.48		12.76	6 / 4			
reaction time	interval		1.07	1.00	1.00	0.97	0.98	0.96	1.00	1.00	1.00	1.28			3.07	2.91	3.00
	velocity	5.20	7.94	8.50	8.50	8.76	8.67	8.85	8.50	8.50	8.50	8.20	7.84		8.31	8.76	8.50
Harper-Nelson, Dawn (USA) (	time	2.43	3.52	4.53	5.52	6.50	7.50	8.48	9.50	10.51	11.57		12.93	7 / 5			
reaction time	interval		1.09	1.01	0.99	0.98	1.00	0.98	1.02	1.01	1.06	1.36			3.09	2.96	3.09
	velocity	5.35	7.80	8.42	8.59	8.67	8.50	8.67	8.33	8.42	8.02	7.72	7.73		8.25	8.61	8.25
Carter, Kori (USA) (1992)	time	2.50	3.53	4.57	5.60	6.60	7.57	8.57	9.67	10.71	11.77		13.11	2 / 6			
reaction time	interval		1.03	1.04	1.03	1.00	0.97	1.00	1.10	1.04	1.06	1.34			3.10	2.97	3.20
	velocity	5.20	8.25	8.17	8.25	8.50	8.76	8.50	7.73	8.17	8.02	7.84	7.63		8.23	8.59	7.97
Johnson, Alaysha (USA) (199	time	2.60	3.70	4.75	5.80	6.80	7.77	8.77	9.77	10.81	11.89		13.23	8 / 7			
reaction time	interval		1.10	1.05	1.05	1.00	0.97	1.00	1.00	1.04	1.08	1.34			3.20	2.97	3.12
	velocity	5.00	7.73	8.10	8.10	8.50	8.76	8.50	8.50	8.17	7.87	7.84	7.56		7.97	8.59	8.17

2018 Japanese National Multi-Event Championships (Nagano, JPN)

Heptathlon - Heat 3

date 16-Jun-18 wind 1.6 m/s

Matsubayashi (2018) - research on athlete performance and technique- 2018 data book

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Hemphill, Megu (JPN) (1996)	time	2.74	3.82	4.88	5.94	7.02	8.06	9.12	10.21	11.29	12.41		13.68	4 / 1			
reaction time	interval		1.08	1.06	1.06	1.08	1.04	1.06	1.09	1.08	1.12	1.27			3.20	3.18	3.29
	velocity	4.74	7.87	8.02	8.02	7.87	8.17	8.02	7.80	7.87	7.59	8.27	7.31		7.97	8.02	7.75
Kiriyama, Chie (JPN) (1991)	time	2.72	3.78	4.84	5.90	6.97	8.04	9.12	10.22	11.34	12.49		13.71	6 / 2			
reaction time	interval		1.06	1.06	1.06	1.07	1.07	1.08	1.10	1.12	1.15	1.22			3.18	3.22	3.37
	velocity	4.78	8.02	8.02	8.02	7.94	7.94	7.87	7.73	7.59	7.39	8.61	7.29		8.02	7.92	7.57
Utsunomiya, Eri (JPN) (1993)	time	2.74	3.83	4.94	6.02	7.09	8.19	9.31	10.39	11.49	12.62		13.80	5 / 3			
reaction time	interval		1.09	1.11	1.08	1.07	1.10	1.12	1.08	1.10	1.13	1.18	PB		3.28	3.29	3.31
	velocity	4.74	7.80	7.66	7.87	7.94	7.73	7.59	7.87	7.73	7.52	8.90	7.25		7.77	7.75	7.70
Yamasaki, Yuki (JPN) (1995)	time	2.68	3.78	4.88	5.95	7.03	8.12	9.22	10.34	11.47	12.61		13.84	8 / 4			
reaction time	interval		1.10	1.10	1.07	1.08	1.09	1.10	1.12	1.13	1.14	1.23	PB		3.27	3.27	3.39

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
	velocity	4.85	7.73	7.73	7.94	7.87	7.80	7.73	7.59	7.52	7.46	8.54	7.23		7.80	7.80	7.52

2018 Bauhaus Athletics (Stockholm, SWE) (TV Analysis)

FINAL date 10-Jun-18 wind 1.3 m/s

Henson (2020) - Athlete First: 2018 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
McNeal, Brianna (USA) (1991)	time	2.48	3.48	4.44	5.40	6.36	7.32	8.28	9.24	10.24	11.24		12.38	5 / 1			
reaction time 0.138	interval		1.00	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.14			2.92	2.88	2.96
	velocity	5.24	8.50	8.85	8.85	8.85	8.85	8.85	8.85	8.50	8.50	9.21	8.08		8.73	8.85	8.61
Williams, Danielle (JAM) (1992	time	2.52	3.52	4.50	5.48	6.44	7.40	8.36	9.32	10.30	11.32		12.48	6 / 2			
reaction time 0.135	interval		1.00	0.98	0.98	0.96	0.96	0.96	0.96	0.98	1.02	1.16	PB		2.96	2.88	2.96
	velocity	5.16	8.50	8.67	8.67	8.85	8.85	8.85	8.85	8.67	8.33	9.05	8.01		8.61	8.85	8.61
Talay, Alina (BLR) (1989)	time	2.58	3.60	4.60	5.56	6.52	7.48	8.44	9.42	10.42	11.42		12.55	4 / 3			
reaction time 0.132	interval		1.02	1.00	0.96	0.96	0.96	0.96	0.98	1.00	1.00	1.13			2.98	2.88	2.98
	velocity	5.04	8.33	8.50	8.85	8.85	8.85	8.85	8.67	8.50	8.50	9.29	7.97		8.56	8.85	8.56
Visser, Nadine (NED) (1995)	time	2.54	3.56	4.54	5.52	6.48	7.46	8.46	9.42	10.46	11.50		12.71	1 / 4			
reaction time 0.135	interval		1.02	0.98	0.98	0.96	0.98	1.00	0.96	1.04	1.04	1.21	NR PB		2.98	2.94	3.04
	velocity	5.12	8.33	8.67	8.67	8.85	8.67	8.50	8.85	8.17	8.17	8.68	7.87		8.56	8.67	8.39
Manning, Christina (USA) (19	time	2.48	3.48	4.48	5.46	6.44	7.44	8.42	9.42	10.42	11.48		12.75	3 / 5			
reaction time 0.148	interval		1.00	1.00	0.98	0.98	1.00	0.98	1.00	1.00	1.06	1.27			2.98	2.96	3.06
	velocity	5.24	8.50	8.50	8.67	8.67	8.50	8.67	8.50	8.50	8.02	8.27	7.84		8.56	8.61	8.33
Harper-Nelson, Dawn (USA) (	time	2.56	3.56	4.56	5.56	6.54	7.52	8.54	9.56	10.56	11.60		12.80	7 / 6			
reaction time 0.173	interval		1.00	1.00	1.00	0.98	0.98	1.02	1.02	1.00	1.04	1.20			3.00	2.98	3.06
	velocity	5.08	8.50	8.50	8.50	8.67	8.67	8.33	8.33	8.50	8.17	8.75	7.81		8.50	8.56	8.33
Pedersen, Isabelle (NOR) (199	time	2.54	3.56	4.52	5.50	6.48	7.46	8.46	9.50	10.54	11.60		12.82	2 / 7			
reaction time 0.167	interval		1.02	0.96	0.98	0.98	0.98	1.00	1.04	1.04	1.06	1.22			2.96	2.96	3.14
	velocity	5.12	8.33	8.85	8.67	8.67	8.67	8.50	8.17	8.17	8.02	8.61	7.80		8.61	8.61	8.12
Westerlund, Elin (SWE) (1990)	time	2.56	3.62	4.70	5.76	6.78	7.80	8.84	9.90	10.96	12.04		13.29	8 / 8			
reaction time 0.148	interval		1.06	1.08	1.06	1.02	1.02	1.04	1.06	1.06	1.08	1.25			3.20	3.08	3.20
	velocity	5.08	8.02	7.87	8.02	8.33	8.33	8.17	8.02	8.02	7.87	8.40	7.52		7.97	8.28	7.97

2018 NCAA Championships (Eugene, OR) (TV Analysis)

FINAL date 09-Jun-18 wind 0.9 m/s

Henson (2020) - Athlete First: 2018 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.53	3.56	4.56	5.53	6.50	7.46	8.46	9.43	10.43	11.46		12.70	5 / 1			
reaction time	interval		1.03	1.00	0.97	0.97	0.96	1.00	0.97	1.00	1.03	1.24			3.00	2.93	3.00
	velocity	5.14	8.25	8.50	8.76	8.76	8.85	8.50	8.76	8.50	8.25	8.47	7.87		8.50	8.70	8.50
Charlton, Devynne (BAH) (19	time	2.46	3.50	4.50	5.50	6.46	7.43	8.43	9.43	10.43	11.50		12.77	8 / 2			
reaction time	interval		1.04	1.00	1.00	0.96	0.97	1.00	1.00	1.00	1.07	1.27			3.04	2.93	3.07
	velocity	5.28	8.17	8.50	8.50	8.85	8.76	8.50	8.50	8.50	7.94	8.27	7.83		8.39	8.70	8.31
Jones, Cortney (USA) (1999)	time	2.56	3.60	4.63	5.63	6.63	7.63	8.66	9.66	10.66	11.73		13.04	2 / 3			
reaction time	interval		1.04	1.03	1.00	1.00	1.00	1.03	1.00	1.00	1.07	1.31			3.07	3.03	3.07
	velocity	5.08	8.17	8.25	8.50	8.50	8.50	8.25	8.50	8.50	7.94	8.02	7.67		8.31	8.42	8.31
Seymour, Pedrya (BAH) (1995)	time	2.56	3.63	4.66	5.66	6.66	7.66	8.66	9.70	10.73	11.76		13.04	6 / 4			
reaction time	interval		1.07	1.03	1.00	1.00	1.00	1.00	1.04	1.03	1.03	1.28			3.10	3.00	3.10
	velocity	5.08	7.94	8.25	8.50	8.50	8.50	8.50	8.17	8.25	8.25	8.20	7.67		8.23	8.50	8.23
Brown, Janeek (JAM) (1998)	time	2.53	3.56	4.60	5.63	6.66	7.66	8.66	9.70	10.73	11.80		13.05	7 / 5			
reaction time	interval		1.03	1.04	1.03	1.03	1.00	1.00	1.04	1.03	1.07	1.25			3.10	3.03	3.14
	velocity	5.14	8.25	8.17	8.25	8.25	8.50	8.50	8.17	8.25	7.94	8.40	7.66		8.23	8.42	8.12
Marshall, Tonea (USA) (1998)	time	2.53	3.56	4.60	5.63	6.63	7.63	8.66	9.70	10.73	11.80		13.09	1 / 6			
reaction time	interval		1.03	1.04	1.03	1.00	1.00	1.03	1.04	1.03	1.07	1.29			3.10	3.03	3.14
	velocity	5.14	8.25	8.17	8.25	8.50	8.50	8.25	8.17	8.25	7.94	8.14	7.64		8.23	8.42	8.12

2018 Bislett Games (Oslo, NOR) (TV Analysis)

FINAL date 07-Jun-18 wind 1.1 m/s

Henson (2020) - Athlete First: 2018 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Williams, Danielle (JAM) (1992	time	2.48	3.48	4.48	5.44	6.44	7.42	8.40	9.38	10.40	11.40		12.60	3 / 1			
reaction time 0.130	interval		1.00	1.00	0.96	1.00	0.98	0.98	0.98	1.02	1.00	1.20			2.96	2.96	3.00
	velocity	5.24	8.50	8.50	8.85	8.50	8.67	8.67	8.67	8.33	8.50	8.75	7.94		8.61	8.61	8.50
Talay, Alina (BLR) (1989)	time	2.56	3.56	4.56	5.52	6.48	7.46	8.44	9.40	10.42	11.44		12.63	5 / 2			
reaction time 0.231	interval		1.00	1.00	0.96	0.96	0.98	0.98	0.96	1.02	1.02	1.19			2.96	2.92	3.00
	velocity	5.08	8.50	8.50	8.85	8.85	8.67	8.67	8.85	8.33	8.33	8.82	7.92		8.61	8.73	8.50
Harrison, Queen (USA) (1988)	time	2.52	3.56	4.58	5.56	6.52	7.50	8.50	9.50	10.48	11.50		12.71	7 / 3			
reaction time 0.155	interval		1.04	1.02	0.98	0.96	0.98	1.00	1.00	0.98	1.02	1.21			3.04	2.94	3.00

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

	velocity	5.16	8.17	8.33	8.67	8.85	8.67	8.50	8.50	8.67	8.33	8.68	7.87		8.39	8.67	8.50
Pedersen, Isabelle (NOR) (199	time	2.46	3.46	4.46	5.44	6.42	7.42	8.44	9.46	10.50	11.54		12.78	4 / 4			
reaction time 0.150	interval		1.00	1.00	0.98	0.98	1.00	1.02	1.02	1.04	1.04	1.24			2.98	3.00	3.10
	velocity	5.28	8.50	8.50	8.67	8.67	8.50	8.33	8.33	8.17	8.17	8.47	7.82		8.56	8.50	8.23
Roleder, Cindy (GER) (1989)	time	2.56	3.56	4.54	5.52	6.52	7.52	8.50	9.48	10.48	11.50		12.81	2 / 5			
reaction time 0.152	interval		1.00	0.98	0.98	1.00	1.00	0.98	0.98	1.00	1.02	1.31			2.96	2.98	3.00
	velocity	5.08	8.50	8.67	8.67	8.50	8.50	8.67	8.67	8.50	8.33	8.02	7.81		8.61	8.56	8.50
Berings, Eline (BEL) (1986)	time	2.52	3.56	4.56	5.56	6.56	7.56	8.58	9.62	10.64	11.66		12.89	8 / 6			
reaction time 0.121	interval		1.04	1.00	1.00	1.00	1.00	1.02	1.04	1.02	1.02	1.23			3.04	3.02	3.08
	velocity	5.16	8.17	8.50	8.50	8.50	8.50	8.33	8.17	8.33	8.33	8.54	7.76		8.39	8.44	8.28
Owens, Bridgette (USA) (1992	time	2.56	3.60	4.62	5.62	6.60	7.60	8.62	9.64	10.66	11.72		12.98	1 / 7			
reaction time 0.232	interval		1.04	1.02	1.00	0.98	1.00	1.02	1.02	1.02	1.06	1.26			3.06	3.00	3.10
	velocity	5.08	8.17	8.33	8.50	8.67	8.50	8.33	8.33	8.33	8.02	8.33	7.70		8.33	8.50	8.23
Stowers, Jasmin (USA) (1991)	time	2.52	3.56	4.58	5.58	6.60	7.62	8.64	9.66	10.68	11.78		12.99	6 / 8			
reaction time 0.157	interval		1.04	1.02	1.00	1.02	1.02	1.02	1.02	1.02	1.10	1.21			3.06	3.06	3.14
	velocity	5.16	8.17	8.33	8.50	8.33	8.33	8.33	8.33	8.33	7.73	8.68	7.70		8.33	8.33	8.12

2018 Fuse Sprint (Tottori, JPN)

FINAL date 03-Jun-18 wind 0.6 m/s

Kota (2018) - Analysis of races of leading women's 100m hurdles at home and abroad

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Jung Hye-Lim (KOR) (1987)	time	2.58	3.64	4.65	5.68	6.69	7.72	8.75	9.78	10.83	11.89		13.11	/ 1			
reaction time	interval		1.06	1.01	1.03	1.01	1.03	1.03	1.03	1.05	1.06	1.22			3.10	3.07	3.14
	velocity	5.04	8.02	8.42	8.25	8.42	8.25	8.25	8.25	8.10	8.02	8.61	7.63		8.23	8.31	8.12
Shimura, Hitomi (JPN) (1990)	time	2.63	3.69	4.72	5.74	6.76	7.80	8.84	9.88	10.93	11.99		13.18	/ 2			
reaction time	interval		1.06	1.03	1.02	1.02	1.04	1.04	1.04	1.05	1.06	1.19			3.11	3.10	3.15
	velocity	4.94	8.02	8.25	8.33	8.33	8.17	8.17	8.17	8.10	8.02	8.82	7.59		8.20	8.23	8.10
Fukube, Mako (JPN) (1995)	time	2.66	3.73	4.78	5.83	6.87	7.90	8.95	10.00	11.07	12.13		13.34	/ 3			
reaction time	interval		1.07	1.05	1.05	1.04	1.03	1.05	1.05	1.07	1.06	1.21	PB		3.17	3.12	3.18
	velocity	4.89	7.94	8.10	8.10	8.17	8.25	8.10	8.10	7.94	8.02	8.68	7.50		8.04	8.17	8.02
Kimura, Ayako (JPN) (1988)	time	2.65	3.73	4.79	5.83	6.84	7.87	8.91	9.97	11.05	12.13		13.41	/ 4			
reaction time	interval		1.08	1.06	1.04	1.01	1.03	1.04	1.06	1.08	1.08	1.28			3.18	3.08	3.22
	velocity	4.91	7.87	8.02	8.17	8.42	8.25	8.17	8.02	7.87	7.87	8.20	7.46		8.02	8.28	7.92
Kiyoyama, Chisato (JPN) (199	time	2.67	3.73	4.80	5.84	6.88	7.91	8.95	9.99	11.08	12.21		13.44	/ 5			
reaction time	interval		1.06	1.07	1.04	1.04	1.03	1.04	1.04	1.09	1.13	1.23			3.17	3.11	3.26
	velocity	4.87	8.02	7.94	8.17	8.17	8.25	8.17	8.17	7.80	7.52	8.54	7.44		8.04	8.20	7.82
Fujimori, Nana (JPN) (1997)	time	2.68	3.77	4.84	5.90	6.95	8.03	9.10	10.20	11.31	12.44		13.66	/ 6			
reaction time	interval		1.09	1.07	1.06	1.05	1.08	1.07	1.10	1.11	1.13	1.22			3.22	3.20	3.34
	velocity	4.85	7.80	7.94	8.02	8.10	7.87	7.94	7.73	7.66	7.52	8.61	7.32		7.92	7.97	7.63
Nakamura, Yuki (JPN) (1995)	time	2.70	3.80	4.86	5.92	6.98	8.03	9.12	10.22	11.36	12.50		13.73	/ 7			
reaction time	interval		1.10	1.06	1.06	1.06	1.05	1.09	1.10	1.14	1.14	1.23			3.22	3.20	3.38
	velocity	4.81	7.73	8.02	8.02	8.02	8.10	7.80	7.73	7.46	7.46	8.54	7.28		7.92	7.97	7.54

2018 Golden Gala Pietro Mennea (Rome, ITA) (TV Analysis)

FINAL date 31-May-18 wind 0.0 m/s

Henson (2020) - Athlete First: 2018 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nelvis, Sharika (USA) (1990)	time	2.48	3.50	4.48	5.46	6.46	7.46	8.44	9.44	10.46	11.50		12.76	6 / 1			
reaction time 0.138	interval		1.02	0.98	0.98	1.00	1.00	0.98	1.00	1.02	1.04	1.26			2.98	2.98	3.06
	velocity	5.24	8.33	8.67	8.67	8.50	8.50	8.67	8.50	8.33	8.17	8.33	7.84		8.56	8.56	8.33
Williams, Danielle (JAM) (1992	time	2.52	3.56	4.58	5.58	6.58	7.58	8.58	9.56	10.60	11.62		12.82	4 / 2			
reaction time 0.125	interval		1.04	1.02	1.00	1.00	1.00	1.00	0.98	1.04	1.02	1.20			3.06	3.00	3.04
	velocity	5.16	8.17	8.33	8.50	8.50	8.50	8.50	8.67	8.17	8.33	8.75	7.80		8.33	8.50	8.39
Amusan, Tobi (NGR) (1997)	time	2.56	3.62	4.62	5.64	6.64	7.64	8.64	9.64	10.64	11.66		12.86	3 / 3			
reaction time 0.158	interval		1.06	1.00	1.02	1.00	1.00	1.00	1.00	1.00	1.02	1.20			3.08	3.00	3.02
	velocity	5.08	8.02	8.50	8.33	8.50	8.50	8.50	8.50	8.50	8.33	8.75	7.78		8.28	8.50	8.44
Visser, Nadine (NED) (1995)	time	2.56	3.60	4.58	5.60	6.60	7.60	8.60	9.60	10.62	11.66		12.90	8 / 4			
reaction time 0.156	interval		1.04	0.98	1.02	1.00	1.00	1.00	1.00	1.02	1.04	1.24			3.04	3.00	3.06
	velocity	5.08	8.17	8.67	8.33	8.50	8.50	8.50	8.50	8.33	8.17	8.47	7.75		8.39	8.50	8.33
Herman, Elvira (BLR) (1997)	time	2.56	3.62	4.60	5.60	6.58	7.56	8.54	9.54	10.64	11.70		12.97	2 / 5			
reaction time 0.155	interval		1.06	0.98	1.00	0.98	0.98	0.98	1.00	1.10	1.06	1.27			3.04	2.94	3.16
	velocity	5.08	8.02	8.67	8.50	8.67	8.67	8.67	8.50	7.73	8.02	8.27	7.71		8.39	8.67	8.07
Harper-Nelson, Dawn (USA) (	time	2.60	3.66	4.68	5.70	6.72	7.72	8.72	9.76	10.80	11.84		13.09	7 / 6			

reaction time 0.177	interval		1.06	1.02	1.02	1.02	1.00	1.00	1.04	1.04	1.04	1.25			3.10	3.02	3.12
	velocity	5.00	8.02	8.33	8.33	8.33	8.50	8.50	8.17	8.17	8.17	8.40	7.64		8.23	8.44	8.17
Valette, Laura (FRA) (1997)	time	2.60	3.68	4.72	5.76	6.80	7.84	8.86	9.88	10.94	12.04		13.30	9 / 7			
reaction time 0.138	interval		1.08	1.04	1.04	1.04	1.04	1.02	1.02	1.06	1.10	1.26			3.16	3.10	3.18
	velocity	5.00	7.87	8.17	8.17	8.17	8.17	8.33	8.33	8.02	7.73	8.33	7.52		8.07	8.23	8.02
di Lazzaro, Elisa Maria (ITA) (1	time	2.68	3.76	4.84	5.86	6.92	7.96	9.02	10.08	11.16	12.24		13.52	1 / 8			
reaction time 0.168	interval		1.08	1.08	1.02	1.06	1.04	1.06	1.06	1.08	1.08	1.28			3.18	3.16	3.22
	velocity	4.85	7.87	7.87	8.33	8.02	8.17	8.02	8.02	7.87	7.87	8.20	7.40		8.02	8.07	7.92
McNeal, Brianna (USA) (1991)	time	2.48	3.60	4.90									15.80	5 / 9			
reaction time 0.155	interval		1.12	1.30													
	velocity	5.24	7.59	6.54													

2018 Leise Prokop Memorial (St. Pölten, AUT) (TV Analysis)

FINAL

date 31-May-18 wind 0.5 m/s

Henson (2021) - Athlete First: 2018 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Talay, Alina (BLR) (1989)	time	2.52	3.52	4.50	5.46	6.42	7.38	8.34	9.30	10.26	11.26		12.41	4 / 1			
reaction time	interval		1.00	0.98	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.15	NR PB		2.94	2.88	2.92
	velocity	5.16	8.50	8.67	8.85	8.85	8.85	8.85	8.85	8.85	8.50	9.13	8.06		8.67	8.85	8.73

Heat 1

date 31-May-18 wind 0.1 m/s

Henson (2021) - Athlete First: 2018 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Talay, Alina (BLR) (1989)	time	2.56	3.58	4.58	5.56	6.52	7.48	8.46	9.42	10.42	11.40		12.61	3 / 1			
reaction time	interval		1.02	1.00	0.98	0.96	0.96	0.98	0.96	1.00	0.98	1.21	NR PB		3.00	2.90	2.94
	velocity	5.08	8.33	8.50	8.67	8.85	8.85	8.67	8.85	8.50	8.67	8.68	7.93		8.50	8.79	8.67

2018 Shimane High School Championships (Honshu, JPN)

FINAL

date 27-May-18 wind 1.2 m/s

Shimizu (2018) - shimane high school championships 2018 - biomechanics data analysis

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nagamine, Sayuri (JPN) (2001)	time	2.75	3.87	5.00	6.10	7.20	8.30	9.42	10.52	11.65	12.77		14.02	5 / 1			
reaction time	interval		1.12	1.13	1.10	1.10	1.10	1.12	1.10	1.13	1.12	1.25			3.35	3.32	3.35
	velocity	4.73	7.59	7.52	7.73	7.73	7.73	7.59	7.73	7.52	7.59	8.04	7.13		7.61	7.68	7.61
髙田 桃花	time	2.72	3.83	4.95	6.07	7.20	8.33	9.48	10.63	11.82	13.02		14.31	4 / 2			
reaction time	interval		1.11	1.12	1.12	1.13	1.13	1.15	1.15	1.19	1.20	1.29			3.35	3.41	3.54
	velocity	4.78	7.66	7.59	7.59	7.52	7.52	7.39	7.39	7.14	7.08	7.79	6.99		7.61	7.48	7.20
大下 愛梨	time	2.82	4.03	5.22	6.45	7.67	8.87	10.12	11.38	12.72	14.02		15.44	3 / 3			
reaction time	interval		1.21	1.19	1.23	1.22	1.20	1.25	1.26	1.34	1.30	1.42			3.63	3.67	3.90
	velocity	4.61	7.02	7.14	6.91	6.97	7.08	6.80	6.75	6.34	6.54	7.08	6.48		7.02	6.95	6.54
拝上 芽生	time	2.97	4.22	5.47	6.73	7.98	9.23	10.52	11.82	13.13	14.47		15.98	6 / 4			
reaction time	interval		1.25	1.25	1.26	1.25	1.25	1.29	1.30	1.31	1.34	1.51			3.76	3.79	3.95
	velocity	4.38	6.80	6.80	6.75	6.80	6.80	6.59	6.54	6.49	6.34	6.66	6.26		6.78	6.73	6.46
大林 里沙子	time	2.93	4.23	5.48	6.75	8.05	9.35	10.67	12.02	13.40	14.80		16.32	7 / 5			
reaction time	interval		1.30	1.25	1.27	1.30	1.30	1.32	1.35	1.38	1.40	1.52			3.82	3.92	4.13
	velocity	4.44	6.54	6.80	6.69	6.54	6.54	6.44	6.30	6.16	6.07	6.61	6.13		6.68	6.51	6.17
髙田 菜月	time	2.95	4.23	5.50	6.80	8.10	9.42	10.77	12.12	13.53	15.03		16.61	1 / 6			
reaction time	interval		1.28	1.27	1.30	1.30	1.32	1.35	1.35	1.41	1.50	1.58			3.85	3.97	4.26
	velocity	4.41	6.64	6.69	6.54	6.54	6.44	6.30	6.30	6.03	5.67	6.36	6.02		6.62	6.42	5.99

2018 Seiko Golden Grand Prix (Osaka, JPN)

FINAL

date 20-May-18 wind -0.6 m/s

Kota (2018) - Analysis of races of leading women's 100m hurdles at home and abroad

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Queen (USA) (1988)	time	2.72	3.78	4.79	5.80	6.79	7.78	8.78	9.80	10.81	11.85		13.01	4 / 1			
reaction time 0.213	interval		1.06	1.01	1.01	0.99	0.99	1.00	1.02	1.01	1.04	1.16			3.08	2.98	3.07
	velocity	4.78	8.02	8.42	8.42	8.59	8.59	8.50	8.33	8.42	8.17	9.05	7.69		8.28	8.56	8.31
Jung Hye-Lim (KOR) (1987)	time	2.62	3.65	4.68	5.68	6.70	7.72	8.76	9.79	10.86	11.92		13.13	8 / 2			
reaction time 0.152	interval		1.03	1.03	1.00	1.02	1.02	1.04	1.03	1.07	1.06	1.21			3.06	3.08	3.16
	velocity	4.96	8.25	8.25	8.50	8.33	8.33	8.17	8.25	7.94	8.02	8.68	7.62		8.33	8.28	8.07
Morgan, Monique (JAM) (198	time	2.69	3.75	4.80	5.82	6.86	7.87	8.91	9.95	10.98	12.06		13.20	7 / 3			
reaction time 0.157	interval		1.06	1.05	1.02	1.04	1.01	1.04	1.04	1.03	1.08	1.14			3.13	3.09	3.15
	velocity	4.83	8.02	8.10	8.33	8.17	8.42	8.17	8.17	8.25	7.87	9.21	7.58		8.15	8.25	8.10
Kimura, Ayako (JPN) (1988)	time	2.64	3.70	4.73	5.76	6.79	7.82	8.87	9.92	10.99	12.07		13.28	5 / 4			
reaction time 0.160	interval		1.06	1.03	1.03	1.03	1.03	1.05	1.05	1.07	1.08	1.21			3.12	3.11	3.20
	velocity	4.92	8.02	8.25	8.25	8.25	8.25	8.10	8.10	7.94	7.87	8.68	7.53		8.17	8.20	7.97
Shimura, Hitomi (JPN) (1990)	time	2.69	3.79	4.84	5.88	6.92	7.97	9.03	10.11	11.18	12.28		13.45	6 / 5			
reaction time 0.155	interval		1.10	1.05	1.04	1.04	1.05	1.06	1.08	1.07	1.10	1.17			3.19	3.15	3.25
	velocity	4.83	7.73	8.10	8.17	8.17	8.10	8.02	7.87	7.94	7.73	8.97	7.43		7.99	8.10	7.85

Aoki, Masumi (JPN) (1994)	time	2.63	3.69	4.76	5.81	6.86	7.90	8.95	10.03	11.15	12.27		13.51	2 / 6			
reaction time 0.141	interval		1.06	1.07	1.05	1.05	1.04	1.05	1.08	1.12	1.12	1.24			3.18	3.14	3.32
	velocity	4.94	8.02	7.94	8.10	8.10	8.17	8.10	7.87	7.59	7.59	8.47	7.40		8.02	8.12	7.68
Wallace, Sasha (USA) (1995)	time	2.63	3.68	4.74	5.80	6.84	7.91	9.00	10.09	11.21	12.34		13.57	3 / 7			
reaction time 0.141	interval	7 steps	1.05	1.06	1.06	1.04	1.07	1.09	1.09	1.12	1.13	1.23			3.17	3.20	3.34
	velocity	4.94	8.10	8.02	8.02	8.17	7.94	7.80	7.80	7.59	7.52	8.54	7.37		8.04	7.97	7.63
Soma, Eriko (JPN) (1991)	time	2.67	3.76	4.83	5.92	7.00	8.08	9.18	10.29	11.40	12.52		13.76	9 / 8			
reaction time 0.141	interval		1.09	1.07	1.09	1.08	1.08	1.10	1.11	1.11	1.12	1.24			3.25	3.26	3.34
	velocity	4.87	7.80	7.94	7.80	7.87	7.87	7.73	7.66	7.66	7.59	8.47	7.27		7.85	7.82	7.63

2018 South Eastern Conference Championships (Knoxville, TN) (TV Analysis)

FINAL date 13-May-18 wind 1.2 m/s

Henson (2020) - Athlete First: 2018 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Camacho-Quinn, Jasmine (PU	time	2.45	3.46	4.46	5.40	6.36	7.32	8.27	9.23	10.20	11.18		12.40	5 / 1			
reaction time	interval		1.01	1.00	0.94	0.96	0.96	0.95	0.96	0.97	0.98	1.22	AR PB		2.95	2.87	2.91
	velocity	5.31	8.42	8.50	9.04	8.85	8.85	8.95	8.85	8.76	8.67	8.61	8.06		8.64	8.89	8.76
Duncan, Alexis (USA) (1998)	time	2.50	3.54	4.57	5.53	6.55	7.53	8.53	9.53	10.56	11.56		12.79	4 / 2			
reaction time	interval		1.04	1.03	0.96	1.02	0.98	1.00	1.00	1.03	1.00	1.23	PB		3.03	3.00	3.03
	velocity	5.20	8.17	8.25	8.85	8.33	8.67	8.50	8.50	8.25	8.50	8.54	7.82		8.42	8.50	8.42
Brown, Janeek (JAM) (1998)	time	2.46	3.50	4.53	5.53	6.51	7.50	8.50	9.53	10.55	11.63		12.84	6 / 3			
reaction time	interval		1.04	1.03	1.00	0.98	0.99	1.00	1.03	1.02	1.08	1.21	PB		3.07	2.97	3.13
	velocity	5.28	8.17	8.25	8.50	8.67	8.59	8.50	8.25	8.33	7.87	8.68	7.79		8.31	8.59	8.15
Brooks, Taliyah (USA) (1995)	time	2.50	3.56	4.56	5.56	6.56	7.56	8.56	9.60	10.63	11.70		12.94	7 / 4			
reaction time	interval		1.06	1.00	1.00	1.00	1.00	1.00	1.04	1.03	1.07	1.24	PB		3.06	3.00	3.14
	velocity	5.20	8.02	8.50	8.50	8.50	8.50	8.50	8.17	8.25	7.94	8.47	7.73		8.33	8.50	8.12
Humphrey, Brittley (USA) (19	time	2.46	3.53	4.56	5.56	6.56	7.60	8.60	9.63	10.66	11.73		13.02	1 / 5			
reaction time	interval		1.07	1.03	1.00	1.00	1.04	1.00	1.03	1.03	1.07	1.29	PB		3.10	3.04	3.13
	velocity	5.28	7.94	8.25	8.50	8.50	8.17	8.50	8.25	8.25	7.94	8.14	7.68		8.23	8.39	8.15

2018 Shanghai Diamond League (Shanghai, CHN) (TV Analysis)

FINAL date 12-May-18 wind 0.9 m/s

Henson (2020) - Athlete First: 2018 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
McNeal, Brianna (USA) (1991)	time	2.44	3.44	4.44	5.40	6.40	7.36	8.34	9.32	10.30	11.30		12.50	4 / 1			
reaction time 0.156	interval		1.00	1.00	0.96	1.00	0.96	0.98	0.98	0.98	1.00	1.20			2.96	2.94	2.96
	velocity	5.33	8.50	8.50	8.85	8.50	8.85	8.67	8.67	8.67	8.50	8.75	8.00		8.61	8.67	8.61
Nelvis, Sharika (USA) (1990)	time	2.46	3.44	4.40	5.38	6.34	7.30	8.28	9.26	10.28	11.28		12.52	6 / 2			
reaction time 0.145	interval		0.98	0.96	0.98	0.96	0.96	0.98	0.98	1.02	1.00	1.24			2.92	2.90	3.00
	velocity	5.28	8.67	8.85	8.67	8.85	8.85	8.67	8.67	8.33	8.50	8.47	7.99		8.73	8.79	8.50
Harrison, Kendra (USA) (1992)	time	2.44	3.46	4.44	5.40	6.36	7.32	8.30	9.34	10.36	11.34		12.56	5 / 3			
reaction time 0.152	interval		1.02	0.98	0.96	0.96	0.96	0.98	1.04	1.02	0.98	1.22			2.96	2.90	3.04
	velocity	5.33	8.33	8.67	8.85	8.85	8.85	8.67	8.17	8.33	8.67	8.61	7.96		8.61	8.79	8.39
Stowers, Jasmin (USA) (1991)	time	2.50	3.52	4.52	5.50	6.48	7.46	8.46	9.46	10.46	11.50		12.71	7 / 4			
reaction time 0.150	interval		1.02	1.00	0.98	0.98	0.98	1.00	1.00	1.00	1.04	1.21			3.00	2.96	3.04
	velocity	5.20	8.33	8.48	8.69	8.67	8.67	8.50	8.50	8.50	8.17	8.68	7.87		8.50	8.61	8.39
Pedersen, Isabelle (NOR) (199	time	2.48	3.50	4.48	5.46	6.44	7.42	8.42	9.42	10.44	11.50		12.76	2 / 5			
reaction time 0.173	interval		1.02	0.98	0.98	0.98	0.98	1.00	1.00	1.02	1.06	1.26			2.98	2.96	3.08
	velocity	5.24	8.33	8.67	8.67	8.67	8.67	8.50	8.50	8.33	8.02	8.33	7.84		8.56	8.61	8.28
Visser, Nadine (NED) (1995)	time	2.52	3.54	4.52	5.50	6.50	7.50	8.50	9.50	10.52	11.58		12.81	3 / 6			
reaction time 0.137	interval		1.02	0.98	0.98	1.00	1.00	1.00	1.00	1.02	1.06	1.23			2.98	3.00	3.08
	velocity	5.16	8.33	8.67	8.67	8.50	8.50	8.50	8.50	8.33	8.02	8.54	7.81		8.56	8.50	8.28
Roleder, Cindy (GER) (1989)	time	2.56	3.58	4.58	5.56	6.56	7.54	8.56	9.56	10.60	11.62		12.81	1 / 7			
reaction time 0.130	interval		1.02	1.00	0.98	1.00	0.98	1.02	1.00	1.04	1.02	1.19			3.00	3.00	3.06
	velocity	5.08	8.33	8.50	8.67	8.50	8.67	8.33	8.50	8.17	8.33	8.82	7.81		8.50	8.50	8.33
Harper-Nelson, Dawn (USA) (	time	2.52	3.56	4.60	5.60	6.60	7.60	8.62	9.62	10.66	11.70		12.94	8 / 8			
reaction time 0.140	interval		1.04	1.04	1.00	1.00	1.00	1.02	1.00	1.04	1.04	1.24			3.08	3.02	3.08
	velocity	5.16	8.17	8.17	8.50	8.50	8.50	8.33	8.50	8.17	8.17	8.47	7.73		8.28	8.44	8.28
Wu Shujiao (CHN) (1991)	time	2.54	3.60	4.66	5.68	6.70	7.72	8.74	9.76	10.78	11.82		13.08	9 / 9			
reaction time 0.156	interval		1.06	1.06	1.02	1.02	1.02	1.02	1.02	1.02	1.04	1.26			3.14	3.06	3.08
	velocity	5.12	8.02	8.02	8.33	8.33	8.33	8.33	8.33	8.33	8.17	8.33	7.65		8.12	8.33	8.28

2018 Kinami Michitaka Memorial (Osaka, JPN)

FINAL date 06-May-18 wind -0.5 m/s

Kota (2018) - Analysis of races of leading women's 100m hurdles at home and abroad

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

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Jung Hye-Lim (KOR) (1987)	time	2.67	3.71	4.75	5.77	6.81	7.84	8.88	9.93	11.00	12.09		13.23	4 / 1			
reaction time	interval		1.04	1.04	1.02	1.04	1.03	1.04	1.05	1.07	1.09	1.14			3.10	3.11	3.21
	velocity	4.87	8.17	8.17	8.33	8.17	8.25	8.17	8.10	7.94	7.80	9.21	7.56		8.23	8.20	7.94
Shimura, Hitomi (JPN) (1990)	time	2.72	3.80	4.85	5.88	6.93	7.96	9.01	10.08	11.16	12.25		13.34	7 / 2			
reaction time	interval		1.08	1.05	1.03	1.05	1.03	1.05	1.07	1.08	1.09	1.09			3.16	3.13	3.24
	velocity	4.78	7.87	8.10	8.25	8.10	8.25	8.10	7.94	7.87	7.80	9.63	7.50		8.07	8.15	7.87
Kiyoyama, Chisato (JPN) (199	time	2.74	3.81	4.86	5.88	6.92	7.96	9.00	10.06	11.12	12.22		13.35	6 / 3			
reaction time	interval		1.07	1.05	1.02	1.04	1.04	1.04	1.06	1.06	1.10	1.13	**=PB**		3.14	3.12	3.22
	velocity	4.74	7.94	8.10	8.33	8.17	8.17	8.17	8.02	8.02	7.73	9.29	7.49		8.12	8.17	7.92
Tanaka, Yumi (JPN) (1998)	time	2.70	3.77	4.82	5.87	6.93	7.98	9.03	10.11	11.18	12.28		13.47	5 / 4			
reaction time	interval		1.07	1.05	1.05	1.06	1.05	1.05	1.08	1.07	1.10	1.19			3.17	3.16	3.25
	velocity	4.81	7.94	8.10	8.10	8.02	8.10	8.10	7.87	7.94	7.73	8.82	7.42		8.04	8.07	7.85
Nakamura, Yuki (JPN) (1995)	time	2.75	3.83	4.91	5.98	7.05	8.12	9.21	10.30	11.41	12.53		13.66	2 / 5			
reaction time	interval		1.08	1.08	1.07	1.07	1.07	1.09	1.09	1.11	1.12	1.13			3.23	3.23	3.32
	velocity	4.73	7.87	7.87	7.94	7.94	7.94	7.80	7.80	7.66	7.59	9.29	7.32		7.89	7.89	7.68
Sasaki, Takashi (JPN)	time	2.74	3.82	4.91	5.97	7.05	8.13	9.21	10.31	11.42	12.54		13.75	3 / 6			
reaction time	interval		1.08	1.09	1.06	1.08	1.08	1.08	1.10	1.11	1.12	1.21			3.23	3.24	3.33
	velocity	4.74	7.87	7.80	8.02	7.87	7.87	7.87	7.73	7.66	7.59	8.68	7.27		7.89	7.87	7.66
Aoki, Masumi (JPN) (1994)	time	2.73	3.82	4.90	5.95	7.01	8.07	9.16	10.26	11.37	12.51		13.76	9 / 7			
reaction time	interval		1.09	1.08	1.05	1.06	1.06	1.09	1.10	1.11	1.14	1.25			3.22	3.21	3.35
	velocity	4.76	7.80	7.87	8.10	8.02	8.02	7.80	7.73	7.66	7.46	8.40	7.27		7.92	7.94	7.61
Kataoka, Saki (JPN) (1996)	time	2.79	3.94	5.06	6.14	7.22	8.30	9.41	10.54	11.68	12.83		14.05	8 / 8			
reaction time	interval		1.15	1.12	1.08	1.08	1.08	1.11	1.13	1.14	1.15	1.22			3.35	3.27	3.42
	velocity	4.66	7.39	7.59	7.87	7.87	7.87	7.66	7.52	7.46	7.39	8.61	7.12		7.61	7.80	7.46

2018 Doha Diamond League (Doha, QAT) (TV Analysis)

FINAL date 04-May-18 wind 0.5 m/s

Henson (2020) - Athlete First: 2018 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.48	3.50	4.50	5.48	6.44	7.40	8.36	9.34	10.32	11.32		12.53	5 / 1			
reaction time 0.154	interval		1.02	1.00	0.98	0.96	0.96	0.96	0.98	0.98	1.00	1.21			3.00	2.88	2.96
	velocity	5.24	8.33	8.50	8.67	8.85	8.85	8.85	8.67	8.67	8.50	8.68	7.98		8.50	8.85	8.61
McNeal, Brianna (USA) (1991)	time	2.44	3.44	4.42	5.40	6.36	7.32	8.30	9.28	10.32	11.36		12.58	4 / 2			
reaction time 0.155	interval		1.00	0.98	0.98	0.96	0.96	0.98	0.98	1.04	1.04	1.22			2.96	2.90	3.06
	velocity	5.33	8.50	8.67	8.67	8.85	8.85	8.67	8.67	8.17	8.17	8.61	7.95		8.61	8.79	8.33
Nelvis, Sharika (USA) (1990)	time	2.44	3.44	4.44	5.40	6.38	7.42	8.44	9.44	10.48	11.50		12.75	3 / 3			
reaction time 0.153	interval		1.00	1.00	0.96	0.98	1.04	1.02	1.00	1.04	1.02	1.25			2.96	3.04	3.06
	velocity	5.33	8.50	8.50	8.85	8.67	8.17	8.33	8.50	8.17	8.33	8.40	7.84		8.61	8.39	8.33
Stowers, Jasmin (USA) (1991)	time	2.52	3.54	4.54	5.52	6.50	7.50	8.50	9.50	10.52	11.54		12.77	2 / 4			
reaction time 0.137	interval		1.02	1.00	0.98	0.98	1.00	1.00	1.00	1.02	1.02	1.23			3.00	2.98	3.04
	velocity	5.16	8.33	8.50	8.67	8.67	8.50	8.50	8.50	8.33	8.33	8.54	7.83		8.50	8.56	8.39
Williams, Danielle (JAM) (1992	time	2.48	3.50	4.54	5.50	6.50	7.50	8.50	9.48	10.48	11.54		12.82	7 / 5			
reaction time 0.124	interval		1.02	1.04	0.96	1.00	1.00	1.00	0.98	1.00	1.06	1.28			3.02	3.00	3.04
	velocity	5.24	8.33	8.17	8.85	8.50	8.50	8.50	8.67	8.50	8.02	8.20	7.80		8.44	8.50	8.39
Pedersen, Isabelle (NOR) (199	time	2.48	3.48	4.48	5.46	6.44	7.42	8.44	9.46	10.50	11.56		12.82	1 / 6			
reaction time 0.181	interval		1.00	1.00	0.98	0.98	0.98	1.02	1.02	1.04	1.06	1.26			2.98	2.98	3.12
	velocity	5.24	8.50	8.50	8.67	8.67	8.67	8.33	8.33	8.17	8.02	8.33	7.80		8.56	8.56	8.17
Visser, Nadine (NED) (1995)	time	2.56	3.60	4.60	5.60	6.60	7.58	8.60	9.60	10.64	11.68		12.94	8 / 7			
reaction time 0.160	interval		1.04	1.00	1.00	1.00	0.98	1.02	1.00	1.04	1.04	1.26			3.04	3.00	3.08
	velocity	5.08	8.17	8.50	8.50	8.50	8.67	8.33	8.50	8.17	8.17	8.33	7.73		8.39	8.50	8.28
Harper-Nelson, Dawn (USA) (	time	2.48	3.56	4.56	5.62	6.62	7.66	8.72	9.76	10.84	11.86		13.21	6 / 8			
reaction time 0.152	interval		1.08	1.00	1.06	1.00	1.04	1.06	1.04	1.08	1.02	1.35			3.14	3.10	3.14
	velocity	5.24	7.87	8.50	8.02	8.50	8.17	8.02	8.17	7.87	8.33	7.78	7.57		8.12	8.23	8.12

2018 Mikio Oda Memorial (Hiroshima, JPN)

FINAL date 29-Apr-18 wind 3.6 m/s

Kota (2018) - Analysis of races of leading women's 100m hurdles at home and abroad

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Barber, Jade (USA) (1993)	time	2.67	3.67	4.72	5.73	6.74	7.73	8.75	9.76	10.79	11.83		12.98	6 / 1			
reaction time	interval		1.00	1.05	1.01	1.01	0.99	1.02	1.01	1.03	1.04	1.15			3.06	3.02	3.08
	velocity	4.87	8.50	8.10	8.42	8.42	8.59	8.33	8.42	8.25	8.17	9.13	7.70		8.33	8.44	8.28
Kiyoyama, Chisato (JPN) (199	time	2.67	3.74	4.77	5.80	6.82	7.82	8.85	9.89	10.92	11.98		13.14	1 / 2			
reaction time	interval		1.07	1.03	1.03	1.02	1.00	1.03	1.04	1.03	1.06	1.16			3.13	3.05	3.13

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
	velocity	4.87	7.94	8.25	8.25	8.33	8.50	8.25	8.17	8.25	8.02	9.05	7.61		8.15	8.36	8.15
Shimura, Hitomi (JPN) (1990)	time	2.65	3.73	4.77	5.79	6.84	7.85	8.88	9.91	10.96	12.02		13.16	4 / 3			
reaction time	interval		1.08	1.04	1.02	1.05	1.01	1.03	1.03	1.05	1.06	1.14			3.14	3.09	3.14
	velocity	4.91	7.87	8.17	8.33	8.10	8.42	8.25	8.25	8.10	8.02	9.21	7.60		8.12	8.25	8.12
Fukube, Mako (JPN) (1995)	time	2.64	3.68	4.72	5.73	6.76	7.80	8.83	9.85	10.91	11.99		13.16	2 / 4			
reaction time	interval		1.04	1.04	1.01	1.03	1.04	1.03	1.02	1.06	1.08	1.17			3.09	3.10	3.16
	velocity	4.92	8.17	8.17	8.42	8.25	8.17	8.25	8.33	8.02	7.87	8.97	7.60		8.25	8.23	8.07
Barber, Kaila (USA) (1993)	time	2.59	3.68	4.72	5.76	6.78	7.80	8.85	9.88	10.92	12.00		13.21	8 / 5			
reaction time	interval		1.09	1.04	1.04	1.02	1.02	1.05	1.03	1.04	1.08	1.21			3.17	3.09	3.15
	velocity	5.02	7.80	8.17	8.17	8.33	8.33	8.10	8.25	8.17	7.87	8.68	7.57		8.04	8.25	8.10
Jung Hye-Lim (KOR) (1987)	time	2.61	3.66	4.69	5.71	6.74	7.76	8.84	9.88	10.97	12.09		13.33	5 / 6			
reaction time	interval		1.05	1.03	1.02	1.03	1.02	1.08	1.04	1.09	1.12	1.24			3.10	3.13	3.25
	velocity	4.98	8.10	8.25	8.33	8.25	8.33	7.87	8.17	7.80	7.59	8.47	7.50		8.23	8.15	7.85
Aoki, Masumi (JPN) (1994)	time	2.67	3.74	4.81	5.86	6.91	7.93	9.00	10.06	11.13	12.22		13.44	7 / 7			
reaction time	interval		1.07	1.07	1.05	1.05	1.02	1.07	1.06	1.07	1.09	1.22			3.19	3.14	3.22
	velocity	4.87	7.94	7.94	8.10	8.10	8.33	7.94	8.02	7.94	7.80	8.61	7.44		7.99	8.12	7.92

2018 Tokyo Combined Event Meeting (Tokyo, JPN)

Heptathlon - Heat 3

date 21-Apr-18 wind -4.5 m/s

Matsubayashi (2018) - research on athlete performance and technique- 2018 data book

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kiriyama, Chie (JPN) (1991)	time	2.79	3.92	5.06	6.17	7.30	8.41	9.55	10.70	11.89	13.12		14.45	5 / 1			
reaction time	interval		1.13	1.14	1.11	1.13	1.11	1.14	1.15	1.19	1.23	1.33			3.38	3.38	3.57
	velocity	4.66	7.52	7.46	7.66	7.52	7.66	7.46	7.39	7.14	6.91	7.89	6.92		7.54	7.54	7.14
Yamasaki, Yuki (JPN) (1995)	time	2.77	3.92	5.08	6.21	7.39	8.54	9.74	10.94	12.16	13.38		14.71	8 / 2			
reaction time	interval		1.15	1.16	1.13	1.18	1.15	1.20	1.20	1.22	1.22	1.33			3.44	3.53	3.64
	velocity	4.69	7.39	7.33	7.52	7.20	7.39	7.08	7.08	6.97	6.97	7.89	6.80		7.41	7.22	7.01
Hemphill, Megu (JPN) (1996)	time	2.84	4.03	5.21	6.39	7.55	8.70	9.86	11.04	12.24	13.47		14.84	4 / 3			
reaction time	interval		1.19	1.18	1.18	1.16	1.15	1.16	1.18	1.20	1.23	1.37			3.55	3.47	3.61
	velocity	4.58	7.14	7.20	7.20	7.33	7.39	7.33	7.20	7.08	6.91	7.66	6.74		7.18	7.35	7.06

Heptathlon - Heat 2

date 21-Apr-18 wind -2.4 m/s

Matsubayashi (2018) - research on athlete performance and technique- 2018 data book

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Utsunomiya, Eri (JPN) (1993)	time	2.74	3.89	4.98	6.08	7.17	8.29	9.40	10.51	11.61	12.72		13.92	4 / 1			
reaction time	interval		1.15	1.09	1.10	1.09	1.12	1.11	1.11	1.10	1.11	1.20	**=PB**		3.34	3.32	3.32
	velocity	4.74	7.39	7.80	7.73	7.80	7.59	7.66	7.66	7.73	7.66	8.75	7.18		7.63	7.68	7.68

2018 IAAF World Indoor Championships (Birmingham, GBR)

FINAL

date 03-Mar-18

Walker (2019) - Biomechanical Report for the IAAF World Indoor Championships 2018: 60 Metres Hurdles Women

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.61	3.63	4.58	5.54	6.49		7.70	5 / 1			
reaction time 0.168	interval		1.02	0.95	0.96	0.95	1.21	**CR / AR**		2.93		
	velocity	4.98	8.33	8.95	8.85	8.95	10.74	7.79		8.70		
Manning, Christina (USA) (19	time	2.57	3.61	4.57	5.55	6.51		7.79	6 / 2			
reaction time 0.137	interval		1.04	0.96	0.98	0.96	1.28			2.98		
	velocity	5.06	8.17	8.85	8.67	8.85	10.16	7.70		8.56		
Visser, Nadine (NED) (1995)	time	2.65	3.66	4.67	5.63	6.58		7.84	4 / 3			
reaction time 0.153	interval		1.01	1.01	0.96	0.95	1.26			2.98		
	velocity	4.91	8.42	8.42	8.85	8.95	10.32	7.65		8.56		
Nelvis, Sharika (USA) (1990)	time	2.62	3.65	4.65	5.62	6.58		7.86	3 / 4			
reaction time 0.163	interval		1.03	1.00	0.97	0.96	1.28			3.00		
	velocity	4.96	8.25	8.50	8.76	8.85	10.16	7.63		8.50		
Roleder, Cindy (GER) (1989)	time	2.65	3.68	4.68	5.65	6.61		7.87	7 / 5			
reaction time 0.141	interval		1.03	1.00	0.97	0.96	1.26			3.00		
	velocity	4.91	8.25	8.50	8.76	8.85	10.32	7.62		8.50		
Pedersen, Isabelle (NOR) (199	time	2.68	3.71	4.70	5.67	6.66		7.94	2 / 6			
reaction time 0.168	interval		1.03	0.99	0.97	0.99	1.28			2.99		
	velocity	4.85	8.25	8.59	8.76	8.59	10.16	7.56		8.53		
Amusan, Tobi (NGR) (1997)	time	2.67	3.69	4.74	5.72	6.69		8.05	1 / 7			
reaction time 0.149	interval		1.02	1.05	0.98	0.97	1.36			3.05		
	velocity	4.87	8.33	8.10	8.67	8.76	9.56	7.45		8.36		
Charlton, Devynne (BAH) (19	time	2.59	3.63	4.69	5.71	6.75		8.18	8 / 8			
reaction time 0.158	interval		1.04	1.06	1.02	1.04	1.43			3.12		
	velocity	5.02	8.17	8.02	8.33	8.17	9.09	7.33		8.17		

2017 National Sports Festival (Matsuyama, JPN)

FINAL date 09-Oct-17 wind 0.5 m/s *(2017.10.10) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Aoki, Masumi (JPN) (1994)	time	2.61	3.69	4.72	5.76	6.78	7.79	8.83	9.88	10.94	12.01		13.18	5 / 1			
reaction time 0.128	interval		1.08	1.03	1.04	1.02	1.01	1.04	1.05	1.06	1.07	1.17	PB		3.15	3.07	3.18
	velocity	4.98	7.87	8.25	8.17	8.33	8.42	8.17	8.10	8.02	7.94	8.97	7.59		8.10	8.31	8.02

2017 Chinese National Games (Tianjin, CHN)

FINAL date 04-Sep-17 wind -0.2 m/s *Henson (2017) - coaching observations*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Shuijiao (CHN) (1991)	time	2.65	3.69	4.69	5.69	6.69	7.70	8.70	9.72	10.76	11.82		12.97	7 / 1			
reaction time	interval		1.04	1.00	1.00	1.00	1.01	1.00	1.02	1.04	1.06	1.15			3.04	3.01	3.12
	velocity	4.91	8.17	8.50	8.50	8.50	8.42	8.50	8.33	8.17	8.02	9.13	7.71		8.39	8.47	8.17
Wang Dou (CHN) (1993)	time	2.68	3.75	4.82	5.85	6.86	7.93	8.97	10.03	11.11	12.19		13.34	6 / 2			
reaction time	interval		1.07	1.07	1.03	1.01	1.07	1.04	1.06	1.08	1.08	1.15			3.17	3.12	3.22
	velocity	4.85	7.94	7.94	8.25	8.42	7.94	8.17	8.02	7.87	7.87	9.13	7.50		8.04	8.17	7.92
Wu Yanni (CHN) (1997)	time	2.72	3.79	4.82	5.85	6.85	7.91	8.94	10.00	11.06	12.16		13.36	4 / 3			
reaction time	interval		1.07	1.03	1.03	1.00	1.06	1.03	1.06	1.06	1.10	1.20	PB		3.13	3.09	3.22
	velocity	4.78	7.94	8.25	8.25	8.50	8.02	8.25	8.02	8.02	7.73	8.75	7.49		8.15	8.25	7.92
Kang Ya (CHN) (1990)	time	2.70	3.75	4.80	5.82	6.85	7.89	8.94	9.98	11.05	12.15		13.37	5 / 4			
reaction time	interval		1.05	1.05	1.02	1.03	1.04	1.05	1.04	1.07	1.10	1.22			3.12	3.12	3.21
	velocity	4.81	8.10	8.10	8.33	8.25	8.17	8.10	8.17	7.94	7.73	8.61	7.48		8.17	8.17	7.94
Deng Ru (CHN) (1989)	time	2.76	3.85	4.92	5.97	7.00	8.06	9.12	10.19	11.29	12.39		13.59	8 / 5			
reaction time	interval		1.09	1.07	1.05	1.03	1.06	1.06	1.07	1.10	1.10	1.20			3.21	3.15	3.27
	velocity	4.71	7.80	7.94	8.10	8.25	8.02	8.02	7.94	7.73	7.73	8.75	7.36		7.94	8.10	7.80
Chen Jiamin (CHN) (1996)	time	2.67	3.79	4.87	5.93	6.99	8.04	9.11	10.19	11.26	12.41		13.71	3 / 6			
reaction time	interval		1.12	1.08	1.06	1.06	1.05	1.07	1.08	1.07	1.15	1.30			3.26	3.18	3.30
	velocity	4.87	7.59	7.87	8.02	8.02	8.10	7.94	7.87	7.94	7.39	8.08	7.29		7.82	8.02	7.73
Lui Lai Yiu (HKG) (1994)	time	2.72	3.82	4.88	5.93	7.01	8.07	9.17	10.26	11.35	12.49		13.74	2 / 7			
reaction time	interval		1.10	1.06	1.05	1.08	1.06	1.10	1.09	1.09	1.14	1.25			3.21	3.24	3.32
	velocity	4.78	7.73	8.02	8.10	7.87	8.02	7.73	7.80	7.80	7.46	8.40	7.28		7.94	7.87	7.68
Sun Minjing (CHN) (1988)	time	2.75	3.83	4.92	5.98	7.03	8.09	9.13	10.23	11.34	12.49		13.78	9 / 8			
reaction time	interval		1.08	1.09	1.06	1.05	1.06	1.04	1.10	1.11	1.15	1.29			3.23	3.15	3.36
	velocity	4.73	7.87	7.80	8.02	8.10	8.02	8.17	7.73	7.66	7.39	8.14	7.26		7.89	8.10	7.59

Heat 1 date 03-Sep-17 wind 0.0 m/s *Henson (2017) - coaching observations*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Shuijiao (CHN) (1991)	time	2.65	3.69	4.73	5.75	6.77	7.79	8.82	9.89	10.94	12.02		13.24	4 / 1			
reaction time	interval		1.04	1.04	1.02	1.02	1.02	1.03	1.07	1.05	1.08	1.22			3.10	3.07	3.20
	velocity	4.91	8.17	8.17	8.33	8.33	8.33	8.25	7.94	8.10	7.87	8.61	7.55		8.23	8.31	7.97

2017 Weltklasse (Zürich, SUI) (TV Analysis)

FINAL date 24-Aug-17 wind -0.3 m/s *Henson (2020) - Athlete First: 2017 year end hurdle report*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Pearson, Sally (AUS) (1986)	time	2.48	3.50	4.48	5.46	6.44	7.40	8.38	9.36	10.36	11.38		12.55	6 / 1			
reaction time 0.117	interval		1.02	0.98	0.98	0.98	0.96	0.98	0.98	1.00	1.02	1.17			2.98	2.92	3.00
	velocity	5.24	8.33	8.67	8.67	8.67	8.85	8.67	8.67	8.50	8.33	8.97	7.97		8.56	8.73	8.50
Nelvis, Sharika (USA) (1990)	time	2.50	3.48	4.46	5.44	6.42	7.40	8.38	9.38	10.36	11.38		12.55	5 / 2			
reaction time 0.135	interval		0.98	0.98	0.98	0.98	0.98	0.98	1.00	0.98	1.02	1.17			2.94	2.94	3.00
	velocity	5.20	8.67	8.67	8.67	8.67	8.67	8.67	8.50	8.67	8.33	8.97	7.97		8.67	8.67	8.50
Manning, Christina (USA) (19	time	2.50	3.50	4.48	5.46	6.44	7.42	8.40	9.40	10.42	11.48		12.67	7 / 3			
reaction time 0.117	interval		1.00	0.98	0.98	0.98	0.98	0.98	1.00	1.02	1.06	1.19			2.96	2.94	3.08
	velocity	5.20	8.50	8.67	8.67	8.67	8.67	8.67	8.50	8.33	8.02	8.82	7.89		8.61	8.67	8.28
Williams, Danielle (JAM) (1992	time	2.50	3.56	4.58	5.56	6.56	7.56	8.54	9.54	10.54	11.56		12.73	8 / 4			
reaction time 0.116	interval		1.06	1.02	0.98	1.00	1.00	0.98	1.00	1.00	1.02	1.17			3.06	2.98	3.02
	velocity	5.20	8.02	8.33	8.67	8.50	8.50	8.67	8.50	8.50	8.33	8.97	7.86		8.33	8.56	8.44
Talay, Alina (BLR) (1989)	time	2.56	3.58	4.56	5.54	6.52	7.50	8.50	9.54	10.54	11.58		12.80	2 / 5			
reaction time 0.134	interval		1.02	0.98	0.98	0.98	0.98	1.00	1.04	1.00	1.04	1.22			2.98	2.96	3.08
	velocity	5.08	8.33	8.67	8.67	8.67	8.67	8.50	8.17	8.50	8.17	8.61	7.81		8.56	8.61	8.28
Harper Nelson, Dawn (USA) (1	time	2.52	3.54	4.56	5.56	6.56	7.56	8.56	9.56	10.60	11.66		12.93	4 / 6			
reaction time 0.135	interval		1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.04	1.06	1.27			3.04	3.00	3.10
	velocity	5.16	8.33	8.33	8.50	8.50	8.50	8.50	8.50	8.17	8.02	8.27	7.73		8.39	8.50	8.23
Stowers, Jasmin (USA) (1991)	time	2.58	3.58	4.62	5.62	6.62	7.62	8.64	9.70	10.70	11.78		12.95	3 / 7			

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 0.135	interval		1.00	1.04	1.00	1.00	1.00	1.02	1.06	1.00	1.08	1.17			3.04	3.02	3.14
	velocity	5.04	8.50	8.17	8.50	8.50	8.50	8.33	8.02	8.50	7.87	8.97	7.72		8.39	8.44	8.12
Castlin, Kristi (USA) (1988)	time	2.58	3.64	4.68	5.68	6.68	7.68	8.68	9.70	10.74	11.78		13.03	9 / 8			
reaction time 0.138	interval		1.06	1.04	1.00	1.00	1.00	1.00	1.02	1.04	1.04	1.25			3.10	3.00	3.10
	velocity	5.04	8.02	8.17	8.50	8.50	8.50	8.50	8.33	8.17	8.17	8.40	7.67		8.23	8.50	8.23

2017 IAAF World Championships (London, GBR)

FINAL

date 12-Aug-17 wind 0.1 m/s *Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Women's 100m Hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Pearson, Sally (AUS) (1986)	time	2.41	3.45	4.46	5.45	6.43	7.39	8.36	9.35	10.35	11.37		12.59	4 / 1			
reaction time 0.127	interval		1.04	1.01	0.99	0.98	0.96	0.97	0.99	1.00	1.02	1.22			3.04	2.91	3.01
	velocity	5.39	8.17	8.42	8.59	8.67	8.85	8.76	8.59	8.50	8.33	8.61	7.94		8.39	8.76	8.47
Harper Nelson, Dawn (USA) (1	time	2.47	3.51	4.51	5.49	6.47	7.45	8.40	9.39	10.39	11.41		12.63	6 / 2			
reaction time 0.167	interval		1.04	1.00	0.98	0.98	0.98	0.95	0.99	1.00	1.02	1.22			3.02	2.91	3.01
	velocity	5.26	8.17	8.50	8.67	8.67	8.67	8.95	8.59	8.50	8.33	8.61	7.92		8.44	8.76	8.47
Dutkiewicz, Pamela (GER) (19	time	2.46	3.51	4.50	5.48	6.45	7.43	8.42	9.44	10.44	11.47		12.72	5 / 3			
reaction time 0.143	interval		1.05	0.99	0.98	0.97	0.98	0.99	1.02	1.00	1.03	1.25			3.02	2.94	3.05
	velocity	5.28	8.10	8.59	8.67	8.76	8.67	8.59	8.33	8.50	8.25	8.40	7.86		8.44	8.67	8.36
Harrison, Kendra (USA) (1992)	time	2.40	3.44	4.46	5.48	6.49	7.50	8.48	9.47	10.46	11.49		12.74	3 / 4			
reaction time 0.146	interval		1.04	1.02	1.02	1.01	1.01	0.98	0.99	0.99	1.03	1.25			3.08	3.00	3.01
	velocity	5.42	8.17	8.33	8.33	8.42	8.42	8.67	8.59	8.59	8.25	8.40	7.85		8.28	8.50	8.47
Manning, Christina (USA) (19	time	2.40	3.46	4.47	5.46	6.44	7.40	8.40	9.40	10.43	11.49		12.74	7 / 5			
reaction time 0.183	interval		1.06	1.01	0.99	0.98	0.96	1.00	1.00	1.03	1.06	1.25			3.06	2.94	3.09
	velocity	5.42	8.02	8.42	8.59	8.67	8.85	8.50	8.50	8.25	8.02	8.40	7.85		8.33	8.67	8.25
Talay, Alina (BLR) (1989)	time	2.46	3.49	4.49	5.47	6.46	7.47	8.48	9.49	10.50	11.54		12.81	8 / 6			
reaction time 0.139	interval		1.03	1.00	0.98	0.99	1.01	1.01	1.01	1.01	1.04	1.27			3.01	3.01	3.06
	velocity	5.28	8.25	8.50	8.67	8.59	8.42	8.42	8.42	8.42	8.17	8.27	7.81		8.47	8.47	8.33
Visser, Nadine (NED) (1995)	time	2.47	3.52	4.52	5.51	6.49	7.54	8.51	9.51	10.53	11.56		12.83	2 / 7			
reaction time 0.154	interval		1.05	1.00	0.99	0.98	1.05	0.97	1.00	1.02	1.03	1.27			3.04	3.00	3.05
	velocity	5.26	8.10	8.50	8.59	8.67	8.10	8.76	8.50	8.33	8.25	8.27	7.79		8.39	8.50	8.36
Ali, Nia (USA) (1988)	time	2.46	3.52	4.54	5.54	6.54	7.57	8.58	9.57	10.60	11.66		13.04	9 / 8			
reaction time 0.149	interval		1.06	1.02	1.00	1.00	1.03	1.01	0.99	1.03	1.06	1.38			3.08	3.04	3.08
	velocity	5.28	8.02	8.33	8.50	8.50	8.25	8.42	8.59	8.25	8.02	7.61	7.67		8.28	8.39	8.28

Semi-Final 3

date 11-Aug-17 wind 0.2 m/s *Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Women's 100m Hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harper Nelson, Dawn (USA) (1	time	2.42	3.47	4.48	5.46	6.44	7.41	8.37	9.36	10.36	11.38		12.63	7 / 1			
reaction time 0.109	interval		1.05	1.01	0.98	0.98	0.97	0.96	0.99	1.00	1.02	1.25			3.04	2.91	3.01
	velocity	5.37	8.10	8.42	8.67	8.67	8.76	8.85	8.59	8.50	8.33	8.40	7.92		8.39	8.76	8.47
Dutkiewicz, Pamela (GER) (19	time	2.48	3.52	4.53	5.51	6.48	7.47	8.46	9.44	10.42	11.45		12.71	4 / 2			
reaction time 0.156	interval		1.04	1.01	0.98	0.97	0.99	0.99	0.98	0.98	1.03	1.26			3.03	2.95	2.99
	velocity	5.24	8.17	8.42	8.67	8.76	8.59	8.59	8.67	8.67	8.25	8.33	7.87		8.42	8.64	8.53
Harrison, Kendra (USA) (1992)	time	2.40	3.52	4.57	5.60	6.59	7.56	8.55	9.53	10.53	11.58		12.86	6 / 3			
reaction time 0.148	interval		1.12	1.05	1.03	0.99	0.97	0.99	0.98	1.00	1.05	1.28			3.20	2.95	3.03
	velocity	5.42	7.59	8.10	8.25	8.59	8.76	8.59	8.67	8.50	8.10	8.20	7.78		7.97	8.64	8.42
Pedersen, Isabelle (NOR) (199	time	2.42	3.45	4.46	5.45	6.43	7.42	8.42	9.43	10.46	11.53		12.87	5 / 4			
reaction time 0.149	interval		1.03	1.01	0.99	0.98	0.99	1.00	1.01	1.03	1.07	1.34			3.03	2.97	3.11
	velocity	5.37	8.25	8.42	8.59	8.67	8.59	8.50	8.42	8.25	7.94	7.84	7.77		8.42	8.59	8.20
Burton, Rushelle (JAM) (1997)	time	2.41	3.46	4.49	5.49	6.50	7.49	8.49	9.54	10.59	11.65		12.94	9 / 5			
reaction time 0.180	interval		1.05	1.03	1.00	1.01	0.99	1.00	1.05	1.05	1.06	1.29			3.08	3.00	3.16
	velocity	5.39	8.10	8.25	8.50	8.42	8.59	8.50	8.10	8.10	8.02	8.14	7.73		8.28	8.50	8.07
Charlton, Devynne (BAH) (19	time	2.42	3.47	4.49	5.51	6.52	7.53	8.55	9.56	10.59	11.65		12.95	2 / 6			
reaction time 0.163	interval		1.05	1.02	1.02	1.01	1.01	1.02	1.01	1.03	1.06	1.30			3.09	3.04	3.10
	velocity	5.37	8.10	8.33	8.33	8.42	8.42	8.33	8.42	8.25	8.02	8.08	7.72		8.25	8.39	8.23
Plotitsyna, Hanna (UKR) (198	time	2.48	3.55	4.57	5.58	6.60	7.60	8.64	9.67	10.72	11.78		13.08	8 / 7			
reaction time 0.139	interval		1.07	1.02	1.01	1.02	1.00	1.04	1.03	1.05	1.06	1.30			3.10	3.06	3.14
	velocity	5.24	7.94	8.33	8.42	8.33	8.50	8.17	8.25	8.10	8.02	8.08	7.65		8.23	8.33	8.12
Bakker, Sharona (NED) (1990)	time	2.60	3.70	4.75	5.78	6.80	7.80	8.83	9.86	10.91	11.97		13.29	3 / 8			
reaction time 0.183	interval		1.10	1.05	1.03	1.02	1.00	1.03	1.03	1.05	1.06	1.32			3.18	3.05	3.14
	velocity	5.00	7.73	8.10	8.25	8.33	8.50	8.25	8.25	8.10	8.02	7.95	7.52		8.02	8.36	8.12

Semi-Final 2

date 11-Aug-17 wind 0.5 m/s *Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Women's 100m Hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Manning, Christina (USA) (19	time	2.38	3.42	4.43	5.42	6.40	7.35	8.33	9.33	10.35	11.41		12.71	5 / 1			
reaction time 0.149	interval		1.04	1.01	0.99	0.98	0.95	0.98	1.00	1.02	1.06	1.30			3.04	2.91	3.08
	velocity	5.46	8.17	8.42	8.59	8.67	8.95	8.67	8.50	8.33	8.02	8.08	7.87		8.39	8.76	8.28
Talay, Alina (BLR) (1989)	time	2.47	3.52	4.52	5.50	6.50	7.48	8.47	9.48	10.50	11.55		12.85	6 / 2			
reaction time 0.119	interval		1.05	1.00	0.98	1.00	0.98	0.99	1.01	1.02	1.05	1.30			3.03	2.97	3.08
	velocity	5.26	8.10	8.50	8.67	8.50	8.67	8.59	8.42	8.33	8.10	8.08	7.78		8.42	8.59	8.28
Thompson, Yanique (JAM) (1!	time	2.49	3.55	4.57	5.58	6.58	7.55	8.55	9.56	10.57	11.61		12.88	7 / 3			
reaction time 0.143	interval		1.06	1.02	1.01	1.00	0.97	1.00	1.01	1.01	1.04	1.27			3.09	2.97	3.06
	velocity	5.22	8.02	8.33	8.42	8.50	8.76	8.50	8.42	8.42	8.17	8.27	7.76		8.25	8.59	8.33
Amusan, Tobi (NGR) (1997)	time	2.52	3.61	4.64	5.66	6.67	7.69	8.69	9.71	10.72	11.75		13.04	9 / 4			
reaction time 0.137	interval		1.09	1.03	1.02	1.01	1.02	1.00	1.02	1.01	1.03	1.29			3.14	3.03	3.06
	velocity	5.16	7.80	8.25	8.33	8.42	8.33	8.50	8.33	8.42	8.25	8.14	7.67		8.12	8.42	8.33
Williams, Danielle (JAM) (1992	time	2.47	3.53	4.60	5.64	6.68	7.69	8.75	9.77	10.79	11.83		13.14	4 / 5			
reaction time 0.121	interval		1.06	1.07	1.04	1.04	1.01	1.06	1.02	1.02	1.04	1.31			3.17	3.11	3.08
	velocity	5.26	8.02	7.94	8.17	8.17	8.42	8.02	8.33	8.33	8.17	8.02	7.61		8.04	8.20	8.28
Herman, Elvira (BLR) (1997)	time	2.55	3.61	4.63	5.66	6.70	7.73	8.75	9.76	10.80	11.85		13.16	8 / 6			
reaction time 0.129	interval		1.06	1.02	1.03	1.04	1.03	1.02	1.01	1.04	1.05	1.31			3.11	3.09	3.10
	velocity	5.10	8.02	8.33	8.25	8.17	8.25	8.33	8.42	8.17	8.10	8.02	7.60		8.20	8.25	8.23
Jenneke, Michelle (AUS) (1993	time	2.51	3.58	4.60	5.63	6.65	7.65	8.68	9.73	10.80	11.89		13.25	3 / 7			
reaction time 0.145	interval		1.07	1.02	1.03	1.02	1.00	1.03	1.05	1.07	1.09	1.36			3.12	3.05	3.21
	velocity	5.18	7.94	8.33	8.25	8.33	8.50	8.25	8.10	7.94	7.80	7.72	7.55		8.17	8.36	7.94
Kimura, Ayako (JPN) (1988)	time	2.48	3.55	4.59	5.63	6.66	7.69	8.72	9.77	10.84	11.93		13.29	2 / 8			
reaction time 0.163	interval		1.07	1.04	1.04	1.03	1.03	1.03	1.05	1.07	1.09	1.36			3.15	3.09	3.21
	velocity	5.24	7.94	8.17	8.17	8.25	8.25	8.25	8.10	7.94	7.80	7.72	7.52		8.10	8.25	7.94

Semi-Final 1

date 11-Aug-17 wind 0.5 m/s

Pollitt (2018) - biomechanical report for the IAAF World Champs - London 2017 - Women's 100m Hurdles

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Pearson, Sally (AUS) (1986)	time	2.39	3.43	4.42	5.40	6.37	7.31	8.28	9.27	10.27	11.29		12.53	6 / 1			
reaction time 0.119	interval		1.04	0.99	0.98	0.97	0.94	0.97	0.99	1.00	1.02	1.24			3.01	2.88	3.01
	velocity	5.44	8.17	8.59	8.67	8.76	9.04	8.76	8.59	8.50	8.33	8.47	7.98		8.47	8.85	8.47
Ali, Nia (USA) (1988)	time	2.44	3.50	4.52	5.53	6.50	7.50	8.49	9.48	10.49	11.53		12.79	4 / 2			
reaction time 0.158	interval		1.06	1.02	1.01	0.97	1.00	0.99	0.99	1.01	1.04	1.26			3.09	2.96	3.04
	velocity	5.33	8.02	8.33	8.42	8.76	8.50	8.59	8.59	8.42	8.17	8.33	7.82		8.25	8.61	8.39
Visser, Nadine (NED) (1995)	time	2.48	3.53	4.54	5.54	6.53	7.50	8.49	9.49	10.50	11.54		12.83	7 / 3			
reaction time 0.175	interval		1.05	1.01	1.00	0.99	0.97	0.99	1.00	1.01	1.04	1.29			3.06	2.95	3.05
	velocity	5.24	8.10	8.42	8.50	8.59	8.76	8.59	8.50	8.42	8.17	8.14	7.79		8.33	8.64	8.36
Simmonds, Megan (JAM) (199	time	2.41	3.45	4.47	5.49	6.49	7.46	8.48	9.50	10.55	11.62		12.93	5 / 4			
reaction time 0.148	interval		1.04	1.02	1.02	1.00	0.97	1.02	1.02	1.05	1.07	1.31			3.08	2.99	3.14
	velocity	5.39	8.17	8.33	8.33	8.50	8.76	8.33	8.33	8.10	7.94	8.02	7.73		8.28	8.53	8.12
George, Phylicia (CAN) (1987)	time	2.47	3.53	4.54	5.54	6.52	7.52	8.56	9.59	10.64	11.72		13.04	8 / 5			
reaction time 0.117	interval		1.06	1.01	1.00	0.98	1.00	1.04	1.03	1.05	1.08	1.32			3.07	3.02	3.16
	velocity	5.26	8.02	8.42	8.50	8.67	8.50	8.17	8.25	8.10	7.87	7.95	7.67		8.31	8.44	8.07
Lobe, Ricarda (GER) (1994)	time	2.49	3.59	4.63	5.66	6.68	7.66	8.69	9.72	10.76	11.83		13.11	3 / 6			
reaction time 0.147	interval		1.10	1.04	1.03	1.02	0.98	1.03	1.03	1.04	1.07	1.28			3.17	3.03	3.14
	velocity	5.22	7.73	8.17	8.25	8.33	8.67	8.25	8.25	8.17	7.94	8.20	7.63		8.04	8.42	8.12
Lindley, Lindsay (NGR) (1989)	time	2.46	3.51	4.51	5.52	6.53	7.52	8.54	9.58	10.66	11.77		13.18	2 / 7			
reaction time 0.163	interval		1.05	1.00	1.01	1.01	0.99	1.02	1.04	1.08	1.11	1.41			3.06	3.02	3.23
	velocity	5.28	8.10	8.50	8.42	8.42	8.59	8.33	8.17	7.87	7.66	7.45	7.59		8.33	8.44	7.89
Zagré, Anne (BEL) (1990)	time	2.51	3.59	4.67	5.66	6.71	7.70	8.74	9.81	10.89	11.99		13.34	9 / 8			
reaction time 0.139	interval		1.08	1.08	0.99	1.05	0.99	1.04	1.07	1.08	1.10	1.35			3.15	3.08	3.25
	velocity	5.18	7.87	7.87	8.59	8.10	8.59	8.17	7.94	7.87	7.73	7.78	7.50		8.10	8.28	7.85

2017 Japanese National High School Championships (Yamagata, JPN)

FINAL

date 02-Aug-17 wind -2.9 m/s

Kota (2017) - 70th high school championships: JAF scientific committee - biomechanics data collection

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Yoshida, Yuiri (JPN) (1999)	time	2.65	3.75	4.83	5.89	6.95	8.01	9.10	10.20	11.29	12.43		13.68	6 / 1			
reaction time 0.140	interval		1.10	1.08	1.06	1.06	1.06	1.09	1.10	1.09	1.14	1.25			3.24	3.21	3.33
	velocity	4.91	7.73	7.87	8.02	8.02	8.02	7.80	7.73	7.80	7.46	8.40	7.31		7.87	7.94	7.66
Sato, Nodoka (JPN) (1999)	time	2.71	3.81	4.90	6.00	7.10	8.21	9.33	10.47	11.60	12.75		14.01	7 / 2			
reaction time 0.133	interval		1.10	1.09	1.10	1.10	1.11	1.12	1.14	1.13	1.15	1.26			3.29	3.33	3.42
	velocity	4.80	7.73	7.80	7.73	7.73	7.66	7.59	7.46	7.52	7.39	8.33	7.14		7.75	7.66	7.46

Ibaraki, Rin (JPN) (2001)	time	2.70	3.80	4.93	6.05	7.14	8.28	9.40	10.57	11.70	12.85		14.03	3 / 3			
reaction time 0.144	interval		1.10	1.13	1.12	1.09	1.14	1.12	1.17	1.13	1.15	1.18			3.35	3.35	3.45
	velocity	4.81	7.73	7.52	7.59	7.80	7.46	7.59	7.26	7.52	7.39	8.90	7.13		7.61	7.61	7.39
Oikawa, Yuka (JPN) (2000)	time	2.75	3.89	5.03	6.15	7.28	8.42	9.55	10.68	11.80	12.91		14.16	8 / 4			
reaction time 0.153	interval		1.14	1.14	1.12	1.13	1.14	1.13	1.13	1.12	1.11	1.25			3.40	3.40	3.36
	velocity	4.73	7.46	7.46	7.59	7.52	7.46	7.52	7.52	7.59	7.66	8.40	7.06		7.50	7.50	7.59
Nishimura, Kaho (JPN) (1999)	time	2.73	3.89	5.85	6.90	7.93	8.37	9.52	10.66	11.80	12.97		14.18	4 / 5			
reaction time 0.146	interval		1.16	1.96	1.05	1.03	0.44	1.15	1.14	1.14	1.17	1.21			4.17	2.62	3.45
	velocity	4.76	7.33	4.34	8.10	8.25	19.32	7.39	7.46	7.46	7.26	8.68	7.05		6.12	9.73	7.39
Kobayashi, Ayumi (JPN) (2001	time	2.78	3.91	5.04	6.16	7.27	8.38	9.50	10.66	11.82	12.99		14.23	5 / 6			
reaction time 0.174	interval		1.13	1.13	1.12	1.11	1.11	1.12	1.16	1.16	1.17	1.24			3.38	3.34	3.49
	velocity	4.68	7.52	7.52	7.59	7.66	7.66	7.59	7.33	7.33	7.26	8.47	7.03		7.54	7.63	7.31
Ban, Nozumi (JPN) (2001)	time	2.72	3.86	4.99	6.12	7.26	8.40	9.55	10.72	11.88	13.07		14.35	2 / 7			
reaction time 0.159	interval		1.14	1.13	1.13	1.14	1.14	1.15	1.17	1.16	1.19	1.28			3.40	3.43	3.52
	velocity	4.78	7.46	7.52	7.52	7.46	7.46	7.39	7.26	7.33	7.14	8.20	6.97		7.50	7.43	7.24
Kuroiwa, Kyoka (JPN) (1999)	time	2.72	3.86	4.99	6.11	7.25	8.43	9.61	10.77	11.94	13.12		14.44	9 / 8			
reaction time 0.146	interval		1.14	1.13	1.12	1.14	1.18	1.18	1.16	1.17	1.18	1.32			3.39	3.50	3.51
	velocity	4.78	7.46	7.52	7.59	7.46	7.20	7.20	7.33	7.26	7.20	7.95	6.93		7.52	7.29	7.26

2017 Windsprint (Sundsvall, SWE)

FINAL 2

date 30-Jul-17 wind 1.0 m/s *(2017) - www.windsprint/Splittider/*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Mossberg, Sofia (SWE) (1995)	time	2.74	3.84	4.95	6.04	7.12	8.22	9.33	10.46	11.59	12.74		14.18	/ 1			
reaction time	interval		1.10	1.11	1.09	1.08	1.10	1.11	1.13	1.13	1.15	1.44			3.30	3.29	3.41
	velocity	4.74	7.73	7.66	7.80	7.87	7.73	7.66	7.52	7.52	7.39	7.29	7.05		7.73	7.75	7.48
Fleischer, Caroline (NOR) (199	time	2.86	4.04	5.21	6.39	7.90	8.82			12.56	13.86		15.42	/ 2			
reaction time	interval		1.18	1.17	1.18	1.51	0.92			3.74	1.30	1.56			3.53		
	velocity	4.55	7.20	7.26	7.20	5.63	9.24			6.82	6.54	6.73	6.49		7.22		

FINAL

date 30-Jul-17 wind 0.8 m/s *(2017) - www.windsprint/Splittider/*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Mossberg, Sofia (SWE) (1995)	time	2.82	3.96	5.07	6.17	7.26	8.37	9.48	10.61	11.76	12.91		14.32	/ 1			
reaction time	interval		1.14	1.11	1.10	1.09	1.11	1.11	1.13	1.15	1.15	1.41			3.35	3.31	3.43
	velocity	4.61	7.46	7.66	7.73	7.80	7.66	7.66	7.52	7.39	7.39	7.45	6.98		7.61	7.70	7.43
Fleischer, Caroline (NOR) (199	time	2.85	4.04	5.22	6.42	7.58	8.80	10.04	11.40	12.70	14.02		15.56	/ 2			
reaction time	interval		1.19	1.18	1.20	1.16	1.22	1.24	1.36	1.30	1.32	1.54			3.57	3.62	3.98
	velocity	4.56	7.14	7.20	7.08	7.33	6.97	6.85	6.25	6.54	6.44	6.82	6.43		7.14	7.04	6.41

2017 Herculis Meeting International d'Athletisme (Monaco, MON) (TV Analysis)

FINAL

date 21-Jul-17 wind -0.2 m/s *Henson (2020) - Athlete First: 2017 year end hurdle report*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.52	3.56	4.54	5.50	6.46	7.44	8.40	9.38	10.38	11.40		12.51	4 / 1			
reaction time 0.161	interval		1.04	0.98	0.96	0.96	0.98	0.96	0.98	1.00	1.02	1.11			2.98	2.90	3.00
	velocity	5.16	8.17	8.67	8.85	8.85	8.67	8.85	8.67	8.50	8.33	9.46	7.99		8.56	8.79	8.50
Nelvis, Sharika (USA) (1990)	time	2.50	3.50	4.48	5.46	6.42	7.38	8.36	9.34	10.34	11.38		12.52	7 / 2			
reaction time 0.146	interval		1.00	0.98	0.98	0.96	0.96	0.98	0.98	1.00	1.04	1.14			2.96	2.90	3.02
	velocity	5.20	8.50	8.67	8.67	8.85	8.85	8.67	8.67	8.50	8.17	9.21	7.99		8.61	8.79	8.44
Williams, Danielle (JAM) (1992	time	2.52	3.54	4.52	5.50	6.48	7.46	8.46	9.44	10.46	11.48		12.58	2 / 3			
reaction time 0.127	interval		1.02	0.98	0.98	0.98	0.98	1.00	0.98	1.02	1.02	1.10			2.98	2.96	3.02
	velocity	5.16	8.33	8.67	8.67	8.67	8.67	8.50	8.67	8.33	8.33	9.55	7.95		8.56	8.61	8.44
Ali, Nia (USA) (1988)	time	2.54	3.56	4.56	5.56	6.54	7.52	8.50	9.50	10.52	11.54		12.68	6 / 4			
reaction time 0.136	interval		1.02	1.00	1.00	0.98	0.98	0.98	1.00	1.02	1.02	1.14			3.02	2.94	3.04
	velocity	5.12	8.33	8.50	8.50	8.67	8.67	8.67	8.50	8.33	8.33	9.21	7.89		8.44	8.67	8.39
Pearson, Sally (AUS) (1986)	time	2.52	3.54	4.56	5.56	6.54	7.54	8.52	9.50	10.50	11.54		12.68	5 / 5			
reaction time 0.134	interval		1.02	1.02	1.00	0.98	1.00	0.98	0.98	1.00	1.04	1.14			3.04	2.96	3.02
	velocity	5.16	8.33	8.33	8.50	8.67	8.50	8.67	8.67	8.50	8.17	9.21	7.89		8.39	8.61	8.44
Stowers, Jasmin (USA) (1991)	time	2.56	3.58	4.56	5.56	6.54	7.52	8.52	9.54	10.54	11.58		12.75	3 / 6			
reaction time 0.134	interval		1.02	0.98	1.00	0.98	0.98	1.00	1.02	1.00	1.04	1.17			3.00	2.96	3.06
	velocity	5.08	8.33	8.67	8.50	8.67	8.67	8.50	8.33	8.50	8.17	8.97	7.84		8.50	8.61	8.33
Dutkiewicz, Pamela (GER) (19	time	2.62	3.66	4.66	5.66	6.64	7.62	8.60	9.62	10.64	11.66		12.82	8 / 7			
reaction time 0.149	interval		1.04	1.00	1.00	0.98	0.98	0.98	1.02	1.02	1.02	1.16			3.04	2.94	3.06
	velocity	4.96	8.17	8.50	8.50	8.67	8.67	8.67	8.33	8.33	8.33	9.05	7.80		8.39	8.67	8.33

Pedersen, Isabelle (NOR) (199	time	2.60	3.64	4.64	5.62	6.62	7.62	8.64	9.66	10.74	11.82		13.03	1 / 8					
reaction time 0.187	interval	7 steps	1.04	1.00	0.98	1.00	1.00	1.02	1.02	1.08	1.08	1.21			3.02	3.02	3.18		
	velocity	5.00	8.17	8.50	8.67	8.50	8.50	8.33	8.33	7.87	7.87	8.68	7.67		8.44	8.44	8.02		

2017 Müller's Anniversary Games (London, GBR) (TV Analysis)

FINAL date 09-Jul-17 wind 0.2 m/s

Henson (2020) - Athlete First: 2017 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.42	3.42	4.40	5.36	6.32	7.30	8.26	9.22	10.24	11.24		12.39	5 / 1			
reaction time 0.131	interval		1.00	0.98	0.96	0.96	0.98	0.96	0.96	1.02	1.00	1.15			2.94	2.90	2.98
	velocity	5.37	8.50	8.67	8.85	8.85	8.67	8.85	8.85	8.33	8.50	9.13	8.07		8.67	8.79	8.56
Pearson, Sally (USA) (1986)	time	2.48	3.48	4.46	5.42	6.38	7.34	8.30	9.26	10.26	11.30		12.48	4 / 2			
reaction time 0.139	interval		1.00	0.98	0.96	0.96	0.96	0.96	0.96	1.00	1.04	1.18			2.94	2.88	3.00
	velocity	5.24	8.50	8.67	8.85	8.85	8.85	8.85	8.85	8.50	8.17	8.90	8.01		8.67	8.85	8.50
Nelvis, Sharika (USA) (1990)	time	2.50	3.52	4.50	5.48	6.44	7.42	8.38	9.40	10.40	11.42		12.62	8 / 3			
reaction time 0.144	interval	7 steps	1.02	0.98	0.98	0.96	0.98	0.96	1.02	1.00	1.02	1.20			2.98	2.90	3.04
	velocity	5.20	8.33	8.67	8.67	8.85	8.67	8.85	8.33	8.50	8.33	8.75	7.92		8.56	8.79	8.39
Manning, Christina (USA) (19	time	2.46	3.46	4.42	5.40	6.38	7.34	8.30	9.30	10.34	11.38		12.65	7 / 4			
reaction time 0.146	interval		1.00	0.96	0.98	0.98	0.96	0.96	1.00	1.04	1.04	1.27			2.94	2.90	3.08
	velocity	5.28	8.50	8.85	8.67	8.67	8.85	8.85	8.50	8.17	8.17	8.27	7.91		8.67	8.79	8.28
Ali, Nia (USA) (1988)	time	2.52	3.54	4.54	5.50	6.48	7.48	8.46	9.48	10.50	11.56		12.79	3 / 5			
reaction time 0.148	interval		1.02	1.00	0.96	0.98	1.00	0.98	1.02	1.02	1.06	1.23			2.98	2.96	3.10
	velocity	5.16	8.33	8.50	8.85	8.67	8.50	8.67	8.33	8.33	8.02	8.54	7.82		8.56	8.61	8.23
Visser, Nadine (NED) (1995)	time	2.54	3.56	4.58	5.56	6.54	7.52	8.54	9.54	10.58	11.62		12.86	9 / 6			
reaction time 0.146	interval		1.02	1.02	0.98	0.98	0.98	1.02	1.00	1.04	1.04	1.24			3.02	2.98	3.08
	velocity	5.12	8.33	8.33	8.67	8.67	8.67	8.33	8.50	8.17	8.17	8.47	7.78		8.44	8.56	8.28
Pedersen, Isabelle (NOR) (199	time	2.54	3.54	4.54	5.54	6.54	7.56	8.58	9.62	10.66	11.74		13.01	1 / 7			
reaction time 0.157	interval	7 steps	1.00	1.00	1.00	1.00	1.02	1.02	1.04	1.04	1.08	1.27			3.00	3.04	3.16
	velocity	5.12	8.50	8.50	8.50	8.50	8.33	8.33	8.17	8.17	7.87	8.27	7.69		8.50	8.39	8.07
Stowers, Jasmin (USA) (1991)	time	2.50	3.50	4.48	5.44	6.40	7.36	8.34	9.30	10.30			dnf	6 / --			
reaction time 0.124	interval		1.00	0.98	0.96	0.96	0.96	0.98	0.96	1.00					2.94	2.90	
	velocity	5.20	8.50	8.67	8.85	8.85	8.85	8.67	8.85	8.50					8.67	8.79	
Castlin, Kristi (USA) (1988)	time	2.56	3.80	5.12									dnf	2 / --			
reaction time 0.128	interval		1.24	1.32													
	velocity	5.08	6.85	6.44													

2017 Athletissima (Lausanne, SUI) (TV Analysis)

FINAL date 06-Jul-17 wind -0.1 m/s

Henson (2020) - Athlete First: 2017 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nelvis, Sharika (USA) (1990)	time	2.46	3.46	4.44	5.41	6.37	7.33	8.30	9.30	10.30	11.30		12.53	6 / 1			
reaction time 0.129	interval	7 Steps	1.00	0.98	0.97	0.96	0.96	0.97	1.00	1.00	1.00	1.23			2.95	2.89	3.00
	velocity	5.28	8.50	8.67	8.76	8.85	8.85	8.76	8.50	8.50	8.50	8.54	7.98		8.64	8.82	8.50
Stowers, Jasmin (USA) (1991)	time	2.46	3.46	4.44	5.43	6.40	7.35	8.33	9.32	10.32	11.33		12.57	5 / 2			
reaction time 0.119	interval		1.00	0.98	0.99	0.97	0.95	0.98	0.99	1.00	1.01	1.24			2.97	2.90	3.00
	velocity	5.28	8.50	8.67	8.59	8.76	8.95	8.67	8.59	8.50	8.42	8.47	7.96		8.59	8.79	8.50
Manning, Christina (USA) (19	time	2.46	3.46	4.44	5.43	6.40	7.35	8.33	9.30	10.32	11.35		12.58	2 / 3			
reaction time 0.132	interval		1.00	0.98	0.99	0.97	0.95	0.98	0.97	1.02	1.03	1.23			2.97	2.90	3.02
	velocity	5.28	8.50	8.67	8.59	8.76	8.95	8.67	8.76	8.33	8.25	8.54	7.95		8.59	8.79	8.44
Ali, Nia (USA) (1988)	time	2.48	3.52	4.50	5.50	6.48	7.46	8.43	9.43	10.43	11.43		12.61	4 / 4			
reaction time 0.135	interval		1.04	0.98	1.00	0.98	0.98	0.97	1.00	1.00	1.00	1.18			3.02	2.93	3.00
	velocity	5.24	8.17	8.67	8.50	8.67	8.67	8.76	8.50	8.50	8.50	8.90	7.93		8.44	8.70	8.50
Castlin, Kristi (USA) (1988)	time	2.50	3.60	4.57	5.53	6.50	7.47	8.47	9.43	10.43	11.43		12.61	7 / 5			
reaction time 0.133	interval		1.10	0.97	0.96	0.97	0.97	1.00	0.96	1.00	1.00	1.18			3.03	2.94	2.96
	velocity	5.20	7.73	8.76	8.85	8.76	8.76	8.50	8.85	8.50	8.50	8.90	7.93		8.42	8.67	8.61
Harper Nelson, Dawn (USA) (1	time	2.46	3.50	4.50	5.50	6.50	7.50	8.48	9.48	10.50	11.50		12.75	1 / 6			
reaction time 0.116	interval		1.04	1.00	1.00	1.00	1.00	0.98	1.00	1.02	1.00	1.25			3.04	2.98	3.02
	velocity	5.28	8.17	8.50	8.50	8.50	8.50	8.67	8.50	8.33	8.50	8.40	7.84		8.39	8.56	8.44
Boons Eefje (NED) (1994)	time	2.52	3.60	4.62	5.62	6.62	7.62	8.62	9.64	10.66	11.70		12.98	3 / 7			
reaction time 0.128	interval		1.08	1.02	1.00	1.00	1.00	1.00	1.02	1.02	1.04	1.28	PB		3.10	3.00	3.08
	velocity	5.16	7.87	8.33	8.50	8.50	8.50	8.50	8.33	8.33	8.17	8.20	7.70		8.23	8.50	8.28

2017 István Gyulai Memorial (Székesfehérvár, HUN) (TV Analysis)

FINAL date 04-Jul-17 wind 0.1 m/s

Henson (2020) - Athlete First: 2017 year end hurdle report

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

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

Harrison, Kendra (USA) (1992)	time	2.38	3.40	4.38	5.34	6.30	7.26	8.20	9.14	10.10	11.08		12.28	4 / 1			
reaction time 0.152	interval		1.02	0.98	0.96	0.96	0.96	0.94	0.94	0.96	0.98	1.20			2.96	2.86	2.88
	velocity	5.46	8.33	8.67	8.85	8.85	8.85	9.04	9.04	8.85	8.67	8.75	8.14		8.61	8.92	8.85
Stowers, Jasmin (USA) (1991)	time	2.50	3.50	4.50	5.46	6.42	7.40	8.38	9.38	10.40	11.42		12.66	6 / 2			
reaction time 0.148	interval		1.00	1.00	0.96	0.96	0.98	0.98	1.00	1.02	1.02	1.24			2.96	2.92	3.04
	velocity	5.20	8.50	8.50	8.85	8.85	8.67	8.67	8.50	8.33	8.33	8.47	7.90		8.61	8.73	8.39
Nelvis, Sharika (USA) (1990)	time	2.48	3.52	4.52	5.50	6.46	7.44	8.42	9.42	10.42	11.44		12.69	1 / 3			
reaction time 0.160	interval	7 steps	1.04	1.00	0.98	0.96	0.98	0.98	1.00	1.00	1.02	1.25			3.02	2.92	3.02
	velocity	5.24	8.17	8.50	8.67	8.85	8.67	8.67	8.50	8.50	8.33	8.40	7.88		8.44	8.73	8.44
Castlin, Kristi (USA) (1988)	time	2.56	3.60	4.60	5.60	6.58	7.56	8.54	9.52	10.52	11.52		12.74	3 / 4			
reaction time 0.165	interval		1.04	1.00	1.00	0.98	0.98	0.98	0.98	1.00	1.00	1.22			3.04	2.94	2.98
	velocity	5.08	8.17	8.50	8.50	8.67	8.67	8.67	8.67	8.50	8.50	8.61	7.85		8.39	8.67	8.56
Harper Nelson, Dawn (USA) (1	time	2.52	3.52	4.54	5.52	6.50	7.48	8.46	9.44	10.46	11.52		12.74	2 / 5			
reaction time 0.161	interval		1.00	1.02	0.98	0.98	0.98	0.98	0.98	1.02	1.06	1.22			3.00	2.94	3.06
	velocity	5.16	8.50	8.33	8.67	8.67	8.67	8.67	8.67	8.33	8.02	8.61	7.85		8.50	8.67	8.33
Pearson, Sally (AUS) (1986)	time	2.48	3.50	4.48	5.48	6.48	7.48	8.48	9.48	10.50	11.54		12.76	7 / 6			
reaction time 0.135	interval		1.02	0.98	1.00	1.00	1.00	1.00	1.00	1.02	1.04	1.22			3.00	3.00	3.06
	velocity	5.24	8.33	8.67	8.50	8.50	8.50	8.50	8.50	8.33	8.17	8.61	7.84		8.50	8.50	8.33
Ali, Nia (USA) (1988)	time	2.52	3.54	4.54	5.54	6.52	7.52	8.52	9.52	10.56	11.60		12.83	5 / 7			
reaction time 0.159	interval		1.02	1.00	1.00	0.98	1.00	1.00	1.00	1.04	1.04	1.23			3.02	2.98	3.08
	velocity	5.16	8.33	8.50	8.50	8.67	8.50	8.50	8.50	8.17	8.17	8.54	7.79		8.44	8.56	8.28

2017 Japanese National Championships (Osaka, JPN)

FINAL

date 25-Jun-17 wind 0.4 m/s

(2017) - tfdata-store.com/2017/07/19/post-1068/

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kimura, Ayako (JPN) (1988)	time	2.61	3.65	4.66	5.67	6.67	7.69	8.72	9.76	10.82	11.90		13.12	5 / 1			
reaction time 0.163	interval		1.04	1.01	1.01	1.00	1.02	1.03	1.04	1.06	1.08	1.22			3.06	3.05	3.18
	velocity	4.98	8.17	8.42	8.42	8.50	8.33	8.25	8.17	8.02	7.87	8.61	7.62		8.33	8.36	8.02
Shimura, Hitomi (JPN) (1990)	time	2.65	3.70	4.75	5.78	6.83	7.87	8.91	9.96	11.03	12.12		13.31	4 / 2			
reaction time 0.148	interval		1.05	1.05	1.03	1.05	1.04	1.04	1.05	1.07	1.09	1.19			3.13	3.13	3.21
	velocity	4.91	8.10	8.10	8.25	8.10	8.17	8.17	8.10	7.94	7.80	8.82	7.51		8.15	8.15	7.94
Soma, Eriko (JPN) (1991)	time	2.69	3.78	4.85	5.91	6.94	7.98	9.03	10.10	11.18	12.28		13.44	6 / 3			
reaction time 0.137	interval		1.09	1.07	1.06	1.03	1.04	1.05	1.07	1.08	1.10	1.16			3.22	3.12	3.25
	velocity	4.83	7.80	7.94	8.02	8.25	8.17	8.10	7.94	7.87	7.73	9.05	7.44		7.92	8.17	7.85
Fukube, Mako (JPN) (1995)	time	2.68	3.74	4.80	5.86	6.91	7.95	9.01	10.08	11.15	12.25		13.45	7 / 4			
reaction time 0.140	interval		1.06	1.06	1.06	1.05	1.04	1.06	1.07	1.07	1.10	1.20			3.18	3.15	3.24
	velocity	4.85	8.02	8.02	8.02	8.10	8.17	8.02	7.94	7.94	7.73	8.75	7.43		8.02	8.10	7.87
Nomura, Yuka (JPN) (1987)	time	2.61	3.68	4.73	5.79	6.83	7.88	8.95	10.04	11.15	12.27		13.49	8 / 5			
reaction time 0.146	interval		1.07	1.05	1.06	1.04	1.05	1.07	1.09	1.11	1.12	1.22			3.18	3.16	3.32
	velocity	4.98	7.94	8.10	8.02	8.17	8.10	7.94	7.80	7.66	7.59	8.61	7.41		8.02	8.07	7.68
Kiyoyama, Chisato (JPN) (199	time	2.75	3.85	4.93	6.00	7.06	8.12	9.20	10.28	11.38	12.49		13.71	3 / 6			
reaction time 0.167	interval		1.10	1.08	1.07	1.06	1.06	1.08	1.08	1.10	1.11	1.22			3.25	3.20	3.29
	velocity	4.73	7.73	7.87	7.94	8.02	8.02	7.87	7.87	7.73	7.66	8.61	7.29		7.85	7.97	7.75
Tanaka, Yumi (JPN) (1998)	time	2.67	3.75	4.82	5.88	6.94	8.01	9.09	10.20	11.32	12.44		13.71	2 / 7			
reaction time 0.156	interval		1.08	1.07	1.06	1.06	1.07	1.08	1.11	1.12	1.12	1.27			3.21	3.21	3.35
	velocity	4.87	7.87	7.94	8.02	8.02	7.94	7.87	7.66	7.59	7.59	8.27	7.29		7.94	7.94	7.61
Kobayashi, Sayaka (JPN) (199	time	2.67	3.77	4.86	5.94	7.01	8.07	9.14	10.26	11.39	12.50		13.72	9 / 8			
reaction time 0.134	interval		1.10	1.09	1.08	1.07	1.06	1.07	1.12	1.13	1.11	1.22			3.27	3.20	3.36
	velocity	4.87	7.73	7.80	7.87	7.94	8.02	7.94	7.59	7.52	7.66	8.61	7.29		7.80	7.97	7.59

Semi-Final 2

date 24-Jun-17 wind 0.3 m/s

(2017.07.20) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shimura, Hitomi (JPN) (1990)	time	2.59	3.64	4.66	5.67	6.69	7.69	8.73	9.76	10.81	11.87		13.03	4 / 1			
reaction time 0.128	interval		1.05	1.02	1.01	1.02	1.00	1.04	1.03	1.05	1.06	1.16			3.08	3.06	3.14
	velocity	5.02	8.10	8.33	8.42	8.33	8.50	8.17	8.25	8.10	8.02	9.05	7.67		8.28	8.33	8.12

Semi-Final 1

date 24-Jun-17 wind 0.4 m/s

(2017.06.24) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kimura, Ayako (JPN) (1988)	time	2.59	3.63	4.66	5.66	6.67	7.67	8.71	9.75	10.80	11.85		13.06	4 / 1			
reaction time 0.161	interval		1.04	1.03	1.00	1.01	1.00	1.04	1.04	1.05	1.05	1.21			3.07	3.05	3.14
	velocity	5.02	8.17	8.25	8.50	8.42	8.50	8.17	8.17	8.10	8.10	8.68	7.66		8.31	8.36	8.12

2017 Bislett Games (Oslo, NOR) (TV Analysis)

FINAL

date 15-Jun-17 wind 0.8 m/s

Henson (2020) - Athlete First: 2017 year end hurdle report

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

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Dutkiewicz, Pamela (GER) (19	time	2.54	3.54	4.56	5.54	6.52	7.50	8.54	9.52	10.52	11.54		12.73	4 / 1			
reaction time 0.127	interval		1.00	1.02	0.98	0.98	0.98	1.04	0.98	1.00	1.02	1.19			3.00	3.00	3.00
	velocity	5.12	8.50	8.33	8.67	8.67	8.67	8.17	8.67	8.50	8.33	8.82	7.86		8.50	8.50	8.50
Castlin, Kristi (USA) (1988)	time	2.56	3.62	4.62	5.60	6.58	7.56	8.54	9.52	10.54	11.58		12.75	6 / 2			
reaction time 0.140	interval		1.06	1.00	0.98	0.98	0.98	0.98	0.98	1.02	1.04	1.17			3.04	2.94	3.04
	velocity	5.08	8.02	8.50	8.67	8.67	8.67	8.67	8.67	8.33	8.17	8.97	7.84		8.39	8.67	8.39
Pedersen, Isabelle (NOR) (199	time	2.48	3.50	4.48	5.46	6.46	7.44	8.42	9.46	10.48	11.50		12.75	5 / 3			
reaction time 0.122	interval	7 steps	1.02	0.98	0.98	1.00	0.98	0.98	1.04	1.02	1.02	1.25	PB		2.98	2.96	3.08
	velocity	5.24	8.33	8.67	8.67	8.50	8.67	8.67	8.17	8.33	8.33	8.40	7.84		8.56	8.61	8.28
Talay, Alina (BLR) (1989)	time	2.60	3.62	4.62	5.62	6.60	7.58	8.58	9.60	10.64	11.72		12.90	7 / 4			
reaction time 0.141	interval		1.02	1.00	1.00	0.98	0.98	1.00	1.02	1.04	1.08	1.18			3.02	2.96	3.14
	velocity	5.00	8.33	8.50	8.50	8.67	8.67	8.50	8.33	8.17	7.87	8.90	7.75		8.44	8.61	8.12
Porter, Tiffany (GBR) (1987)	time	2.50	3.52	4.54	5.54	6.54	7.54	8.58	9.58	10.62	11.66		12.93	3 / 5			
reaction time 0.124	interval		1.02	1.02	1.00	1.00	1.00	1.04	1.00	1.04	1.04	1.27			3.04	3.04	3.08
	velocity	5.20	8.33	8.33	8.50	8.50	8.50	8.17	8.50	8.17	8.17	8.27	7.73		8.39	8.39	8.28
Zagré, Anne (BEL) (1990)	time	2.62	3.66	4.70	5.70	6.68	7.68	8.68	9.70	10.72	11.74		12.98	8 / 6			
reaction time 0.154	interval		1.04	1.04	1.00	0.98	1.00	1.00	1.02	1.02	1.02	1.24			3.08	2.98	3.06
	velocity	4.96	8.17	8.17	8.50	8.67	8.50	8.50	8.33	8.33	8.33	8.47	7.70		8.28	8.56	8.33
Hildebrand, Nadine (GER) (19	time	2.54	3.56	4.60	5.64	6.66	7.66	8.68	9.68	10.76	11.82		13.01	2 / 7			
reaction time 0.140	interval		1.02	1.04	1.04	1.02	1.00	1.02	1.00	1.08	1.06	1.19			3.10	3.04	3.14
	velocity	5.12	8.33	8.17	8.17	8.33	8.50	8.33	8.50	7.87	8.02	8.82	7.69		8.23	8.39	8.12
Clay, Raven (USA) (1990)	time	2.54	3.58	4.62	5.62	6.62	7.64	8.66	9.68	10.72	11.82		13.07	1 / 8			
reaction time 0.144	interval		1.04	1.04	1.00	1.00	1.02	1.02	1.02	1.04	1.10	1.25			3.08	3.04	3.16
	velocity	5.12	8.17	8.17	8.50	8.50	8.33	8.33	8.33	8.17	7.73	8.40	7.65		8.28	8.39	8.07

2017 Fuse Sprint (Tottori, JPN)

A FINAL

date 04-Jun-17 wind 3.7 m/s

(2017) - tfdata-store.com/2017/06/04/post-848/

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kimura, Ayako (JPN) (1988)	time	2.59	3.61	4.63	5.64	6.65	7.65	8.67	9.69	10.75	11.79		12.99	6 / 1			
reaction time	interval		1.02	1.02	1.01	1.01	1.00	1.02	1.02	1.06	1.04	1.20			3.05	3.03	3.12
	velocity	5.02	8.33	8.33	8.42	8.42	8.50	8.33	8.33	8.02	8.17	8.75	7.70		8.36	8.42	8.17
Shimura, Hitomi (JPN) (1990)	time	2.65	3.70	4.74	5.76	6.80	7.82	8.84	9.89	10.95	12.00		13.13	8 / 2			
reaction time	interval		1.05	1.04	1.02	1.04	1.02	1.02	1.05	1.06	1.05	1.13			3.11	3.08	3.16
	velocity	4.91	8.10	8.17	8.33	8.17	8.33	8.33	8.10	8.02	8.10	9.29	7.62		8.20	8.28	8.07
Kiyoyama, Chisato (JPN) (199	time	2.70	3.77	4.83	5.85	6.87	7.91	8.98	10.01	11.09	12.19		13.39	4 / 3			
reaction time	interval		1.07	1.06	1.02	1.02	1.04	1.07	1.03	1.08	1.10	1.20			3.15	3.13	3.21
	velocity	4.81	7.94	8.02	8.33	8.33	8.17	7.94	8.25	7.87	7.73	8.75	7.47		8.10	8.15	7.94
Soma, Eriko (JPN) (1991)	time	2.62	3.68	4.72	5.72	6.75	7.83	8.98	10.12	11.25	12.34		13.52	5 / 4			
reaction time	interval		1.06	1.04	1.00	1.03	1.08	1.15	1.14	1.13	1.09	1.18			3.10	3.26	3.36
	velocity	4.96	8.02	8.17	8.50	8.25	7.87	7.39	7.46	7.52	7.80	8.90	7.40		8.23	7.82	7.59
Fujimori, Nana (JPN) (1997)	time	2.74	3.81	4.89	5.95	6.99	8.04	9.11	10.18	11.27	12.40		13.59	9 / 5			
reaction time	interval		1.07	1.08	1.06	1.04	1.05	1.07	1.07	1.09	1.13	1.19			3.21	3.16	3.29
	velocity	4.74	7.94	7.87	8.02	8.17	8.10	7.94	7.94	7.80	7.52	8.82	7.36		7.94	8.07	7.75
Fujiwara, Miku (JPN) (1992)	time	2.74	3.85	4.94	6.03	7.12	8.20	9.30	10.39	11.49	12.60		13.77	7 / 6			
reaction time	interval		1.11	1.09	1.09	1.09	1.08	1.10	1.09	1.10	1.11	1.17			3.29	3.27	3.30
	velocity	4.74	7.66	7.80	7.80	7.80	7.87	7.73	7.80	7.73	7.66	8.97	7.26		7.75	7.80	7.73
Nomura, Yuka (JPN) (1987)	time	2.63	3.73	4.83	5.90	6.98	8.06	9.14	10.25	11.38	12.53		13.78	3 / 7			
reaction time	interval		1.10	1.10	1.07	1.08	1.08	1.08	1.11	1.13	1.15	1.25			3.27	3.24	3.39
	velocity	4.94	7.73	7.73	7.94	7.87	7.87	7.87	7.66	7.52	7.39	8.40	7.26		7.80	7.87	7.52
Okazaki, Nagisa (JPN) (2001)	time	2.68	3.78	4.88	5.97	7.06	8.15	9.25	10.35	11.46	12.60		13.85	2 / 8			
reaction time	interval		1.10	1.10	1.09	1.09	1.09	1.10	1.10	1.11	1.14	1.25			3.29	3.28	3.35
	velocity	4.85	7.73	7.73	7.80	7.80	7.80	7.73	7.73	7.66	7.46	8.40	7.22		7.75	7.77	7.61

Heat 3

date 04-Jun-17 wind 1.3 m/s

(2017) - tfdata-store.com/2017/06/04/post-848/

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kimura, Ayako (JPN) (1988)	time	2.63	3.68	4.70	5.73	6.75	7.78	8.83	9.89	10.94	12.01		13.23	6 / 1			
reaction time	interval		1.05	1.02	1.03	1.02	1.03	1.05	1.06	1.05	1.07	1.22			3.10	3.10	3.18
	velocity	4.94	8.10	8.33	8.25	8.33	8.25	8.10	8.02	8.10	7.94	8.61	7.56		8.23	8.23	8.02
Soma, Eriko (JPN) (1991)	time	2.66	3.74	4.78	5.81	6.84	7.88	8.96	10.02	11.08	12.17		13.34	5 / 2			
reaction time	interval		1.08	1.04	1.03	1.03	1.04	1.08	1.06	1.06	1.09	1.17			3.15	3.15	3.21
	velocity	4.89	7.87	8.17	8.25	8.25	8.17	7.87	8.02	8.02	7.80	8.97	7.50		8.10	8.10	7.94

Shimura, Hitomi (JPN) (1990)	time	2.67	3.75	4.82	5.87	6.93	7.98	9.05	10.13	11.21	12.31		13.49	4 / 3			
reaction time	interval		1.08	1.07	1.05	1.06	1.05	1.07	1.08	1.08	1.10	1.18			3.20	3.18	3.26
	velocity	4.87	7.87	7.94	8.10	8.02	8.10	7.94	7.87	7.87	7.73	8.90	7.41		7.97	8.02	7.82
Kiyoyama, Chisato (JPN) (199	time	2.72	3.82	4.90	5.96	7.01	8.06	9.14	10.21	11.31	12.43		13.66	8 / 4			
reaction time	interval		1.10	1.08	1.06	1.05	1.05	1.08	1.07	1.10	1.12	1.23			3.24	3.18	3.29
	velocity	4.78	7.73	7.87	8.02	8.10	8.10	7.87	7.94	7.73	7.59	8.54	7.32		7.87	8.02	7.75
Fujimori, Nana (JPN) (1997)	time	2.75	3.85	4.94	6.01	7.09	8.19	9.29	10.41	11.56	12.69		13.89	2 / 5			
reaction time	interval		1.10	1.09	1.07	1.08	1.10	1.10	1.12	1.15	1.13	1.20			3.26	3.28	3.40
	velocity	4.73	7.73	7.80	7.94	7.87	7.73	7.73	7.59	7.39	7.52	8.75	7.20		7.82	7.77	7.50
Nomura, Yuka (JPN) (1987)	time	2.64	3.76	4.87	5.95	7.03	8.12	9.22	10.34	11.49	12.65		13.91	9 / 6			
reaction time	interval		1.12	1.11	1.08	1.08	1.09	1.10	1.12	1.15	1.16	1.26			3.31	3.27	3.43
	velocity	4.92	7.59	7.66	7.87	7.87	7.80	7.73	7.59	7.39	7.33	8.33	7.19		7.70	7.80	7.43

2017 Shimane High School Championships (Honshu, JPN)

FINAL date 28-May-17 wind 2.6 m/s

Shimizu (2018) - shimane high school championships 2018 - biomechanics data analysis

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
大賀 結莉	time	2.80	3.97	5.10	6.23	7.37	8.50	9.63	10.80	11.97	13.17		14.58	7 / 1			
reaction time	interval		1.17	1.13	1.13	1.14	1.13	1.13	1.17	1.17	1.20	1.41			3.43	3.40	3.54
	velocity	4.64	7.26	7.52	7.52	7.46	7.52	7.52	7.26	7.26	7.08	7.13	6.86		7.43	7.50	7.20
髙田 桃花	time	2.70	3.87	5.03	6.17	7.30	8.47	9.60	10.80	12.00	13.27		14.69	5 / 2			
reaction time	interval		1.17	1.16	1.14	1.13	1.17	1.13	1.20	1.20	1.27	1.42			3.47	3.43	3.67
	velocity	4.81	7.26	7.33	7.46	7.52	7.26	7.52	7.08	7.08	6.69	7.08	6.81		7.35	7.43	6.95
大下 愛梨	time	2.87	4.10	5.30	6.57	7.87	9.13	10.37	11.70	13.00	14.30		15.80	6 / 3			
reaction time	interval		1.23	1.20	1.27	1.30	1.26	1.24	1.33	1.30	1.30	1.50			3.70	3.80	3.93
	velocity	4.53	6.91	7.08	6.69	6.54	6.75	6.85	6.39	6.54	6.54	6.70	6.33		6.89	6.71	6.49
大林 里沙子	time	2.83	4.03	5.27	6.53	7.83	9.13	10.47	11.77	13.10	14.50		16.10	8 / 4			
reaction time	interval		1.20	1.24	1.26	1.30	1.30	1.34	1.30	1.33	1.40	1.60			3.70	3.94	4.03
	velocity	4.59	7.08	6.85	6.75	6.54	6.54	6.34	6.54	6.39	6.07	6.28	6.21		6.89	6.47	6.33

2017 Kanto Collegiate Championships (Yokohama, JPN)

Division 1 FINAL date 26-May-17 wind 1.9 m/s

(2017) - tfdata-store.com/2017/06/08/post-920/

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Fukube, Mako (JPN) (1995)	time	2.70	3.78	4.83	5.87	6.91	7.94	9.00	10.07	11.15	12.25		13.46	7 / 1			
reaction time 0.151	interval		1.08	1.05	1.04	1.04	1.03	1.06	1.07	1.08	1.10	1.21	PB		3.17	3.13	3.25
	velocity	4.81	7.87	8.10	8.17	8.17	8.25	8.02	7.94	7.87	7.73	8.68	7.43		8.04	8.15	7.85
Hemphill, Megu (JPN) (1996)	time	2.73	3.82	4.87	5.91	6.95	7.98	9.02	10.09	11.18	12.28		13.53	5 / 2			
reaction time 0.155	interval		1.09	1.05	1.04	1.04	1.03	1.04	1.07	1.09	1.10	1.25			3.18	3.11	3.26
	velocity	4.76	7.80	8.10	8.17	8.17	8.25	8.17	7.94	7.80	7.73	8.40	7.39		8.02	8.20	7.82
Horiike, Kaho (JPN) (1996)	time	2.72	3.80	4.89	5.93	7.01	8.07	9.13	10.18	11.27	12.37		13.59	6 / 3			
reaction time 0.173	interval		1.08	1.09	1.04	1.08	1.06	1.06	1.05	1.09	1.10	1.22			3.21	3.20	3.24
	velocity	4.78	7.87	7.80	8.17	7.87	8.02	8.02	8.10	7.80	7.73	8.61	7.36		7.94	7.97	7.87
Sasaki, Aogi (JPN) (1997)	time	2.66	3.74	4.79	5.84	6.90	7.98	9.07	10.17	11.28	12.44		13.69	4 / 4			
reaction time 0.194	interval		1.08	1.05	1.05	1.06	1.08	1.09	1.10	1.11	1.16	1.25	=PB		3.18	3.23	3.37
	velocity	4.89	7.87	8.10	8.10	8.02	7.87	7.80	7.73	7.66	7.33	8.40	7.30		8.02	7.89	7.57

2017 Prefontaine Classic (Eugene, OR) (TV Analysis)

FINAL date 27-May-17 wind 0.8 m/s

Henson (2020) - Athlete First: 2017 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Stowers, Jasmin (USA) (1991)	time	2.50	3.50	4.48	5.46	6.42	7.40	8.40	9.40	10.40	11.40		12.59	2 / 1			
reaction time 0.154	interval		1.00	0.98	0.98	0.96	0.98	1.00	1.00	1.00	1.00	1.19			2.96	2.94	3.00
	velocity	5.20	8.50	8.67	8.67	8.85	8.67	8.50	8.50	8.50	8.50	8.82	7.94		8.61	8.67	8.50
Harrison, Queen (USA) (1988)	time	2.56	3.60	4.60	5.58	6.56	7.52	8.48	9.46	10.44	11.44		12.64	8 / 2			
reaction time 0.172	interval		1.04	1.00	0.98	0.98	0.96	0.96	0.98	0.98	1.00	1.20			3.02	2.90	2.96
	velocity	5.08	8.17	8.50	8.67	8.67	8.85	8.85	8.67	8.67	8.50	8.75	7.91		8.44	8.79	8.61
Harper Nelson, Dawn (USA) (1	time	2.50	3.54	4.54	5.52	6.50	7.48	8.46	9.44	10.44	11.44		12.66	3 / 3			
reaction time 0.154	interval		1.04	1.00	0.98	0.98	0.98	0.98	0.98	1.00	1.00	1.22			3.02	2.94	2.98
	velocity	5.20	8.17	8.50	8.67	8.67	8.67	8.67	8.67	8.50	8.50	8.61	7.90		8.44	8.67	8.56
Manning, Christina (USA) (19	time	2.46	3.46	4.48	5.46	6.44	7.40	8.36	9.34	10.34	11.38		12.66	7 / 4			
reaction time 0.157	interval		1.00	1.02	0.98	0.98	0.96	0.96	0.98	1.00	1.04	1.28			3.00	2.90	3.02
	velocity	5.28	8.50	8.33	8.67	8.67	8.85	8.85	8.67	8.50	8.17	8.20	7.90		8.50	8.79	8.44
Nelvis, Sharika (USA) (1990)	time	2.52	3.56	4.56	5.54	6.52	7.50	8.48	9.46	10.46	11.46		12.68	4 / 5			
reaction time 0.187	interval	7 steps	1.04	1.00	0.98	0.98	0.98	0.98	0.98	1.00	1.00	1.22			3.02	2.94	2.98
	velocity	5.16	8.17	8.50	8.67	8.67	8.67	8.67	8.67	8.50	8.50	8.61	7.89		8.44	8.67	8.56

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

Castlin, Kristi (USA) (1988)	time	2.56	3.60	4.62	5.64	6.62	7.60	8.60	9.60	10.60	11.60		12.82	6 / 6			
reaction time 0.163	interval		1.04	1.02	1.02	0.98	0.98	1.00	1.00	1.00	1.00	1.22			3.08	2.96	3.00
	velocity	5.08	8.17	8.33	8.33	8.67	8.67	8.50	8.50	8.50	8.50	8.61	7.80		8.28	8.61	8.50
Ali, Nia (USA) (1988)	time	2.52	3.56	4.60	5.62	6.60	7.58	8.58	9.60	10.60	11.64		12.90	5 / 7			
reaction time 0.178	interval		1.04	1.04	1.02	0.98	0.98	1.00	1.02	1.00	1.04	1.26			3.10	2.96	3.06
	velocity	5.16	8.17	8.17	8.33	8.67	8.67	8.50	8.33	8.50	8.17	8.33	7.75		8.23	8.61	8.33
Talay, Alina (BLR) (1989)	time	2.54	3.58	4.58	5.58	6.58	7.56	8.56	9.58	10.64	11.68		12.97	1 / 8			
reaction time 0.159	interval		1.04	1.00	1.00	1.00	0.98	1.00	1.02	1.06	1.04	1.29			3.04	2.98	3.12
	velocity	5.12	8.17	8.50	8.50	8.50	8.67	8.50	8.33	8.02	8.17	8.14	7.71		8.39	8.56	8.17

2017 Seiko Golden Grand Prix (Kawasaki, JPN)

FINAL date 21-May-17 wind 0.0 m/s *(2017) - tfdata-store.com/2017/05/22/post-599/*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Queen (USA) (1988)	time	2.63	3.65	4.65	5.62	6.58	7.55	8.53	9.52	10.50	11.52		12.65	4 / 1			
reaction time 0.172	interval		1.02	1.00	0.97	0.96	0.97	0.98	0.99	0.98	1.02	1.13			2.99	2.91	2.99
	velocity	4.94	8.33	8.50	8.76	8.85	8.76	8.67	8.59	8.67	8.33	9.29	7.91		8.53	8.76	8.53
Kimura, Ayako (JPN) (1988)	time	2.61	3.65	4.68	5.70	6.71	7.73	8.75	9.80	10.86	11.92		13.10	2 / 4			
reaction time 0.167	interval		1.04	1.03	1.02	1.01	1.02	1.02	1.05	1.06	1.06	1.18			3.09	3.05	3.17
	velocity	4.98	8.17	8.25	8.33	8.42	8.33	8.33	8.10	8.02	8.02	8.90	7.63		8.25	8.36	8.04

2017 Kansai Regional University Championships (Osaka, JPN)

FINAL date 11-May-17 wind -1.2 m/s *(2017) - tfdata-store.com/2017/05/13/post-441/*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tanaka, Yumi (JPN) (1998)	time	2.66	3.76	4.84	5.92	6.98	8.04	9.12	10.20	11.31	12.43		13.70	6 / 1			
reaction time	interval		1.10	1.08	1.08	1.06	1.06	1.08	1.08	1.11	1.12	1.27			3.26	3.20	3.31
	velocity	4.89	7.73	7.87	7.87	8.02	8.02	7.87	7.87	7.66	7.59	8.27	7.30		7.82	7.97	7.70
Nakamura, Yuki (JPN) (1995)	time	2.73	3.83	4.94	6.01	7.09	8.17	9.25	10.35	11.47	12.61		13.85	4 / 2			
reaction time	interval	7 steps	1.10	1.11	1.07	1.08	1.08	1.08	1.10	1.12	1.14	1.24			3.28	3.24	3.36
	velocity	4.76	7.73	7.66	7.94	7.87	7.87	7.87	7.73	7.59	7.46	8.47	7.22		7.77	7.87	7.59
Nakajima, Hitomi (JPN) (1995)	time	2.78	3.89	5.00	6.09	7.16	8.25	9.35	10.48	11.59	12.73		13.88	7 / 3			
reaction time	interval		1.11	1.11	1.09	1.07	1.09	1.10	1.13	1.11	1.14	1.15			3.31	3.26	3.38
	velocity	4.68	7.66	7.66	7.80	7.94	7.80	7.73	7.52	7.66	7.46	9.13	7.20		7.70	7.82	7.54
Yasui, Ayana (JPN) (1997)	time	2.71	3.82	4.93	6.02	7.15		9.38					13.95	9 / 4			
reaction time	interval		1.11	1.11	1.09	1.13		2.23				4.57			3.31	3.36	
	velocity	4.80	7.66	7.66	7.80	7.52		7.62				7.88	7.17		7.70	7.59	
Kataoka, Saki (JPN) (1996)	time	2.74	3.88	5.00		7.22	8.33	9.43	10.54	11.67	12.79		14.00	8 / 5			
reaction time	interval		1.14	1.12		2.22	1.11	1.10	1.11	1.13	1.12	1.21					3.36
	velocity	4.74	7.46	7.59		7.66	7.66	7.73	7.66	7.52	7.59	8.68	7.14				7.59
Mouri, Hikari (JPN)	time	2.78	3.91	5.02	6.12	7.20	8.32	9.43	10.56	11.71	12.88		14.18	3 / 6			
reaction time	interval		1.13	1.11	1.10	1.08	1.12	1.11	1.13	1.15	1.17	1.30			3.34	3.31	3.45
	velocity	4.68	7.52	7.66	7.73	7.87	7.59	7.66	7.52	7.39	7.26	8.08	7.05		7.63	7.70	7.39
Sakaguchi, Risako (JPN) (1996	time	2.82	3.94	5.05	6.16	7.28	8.39	9.51	10.64	11.77	12.94		14.20	2 / 7			
reaction time	interval		1.12	1.11	1.11	1.12	1.11	1.12	1.13	1.13	1.17	1.26			3.34	3.35	3.43
	velocity	4.61	7.59	7.66	7.66	7.59	7.66	7.59	7.52	7.52	7.26	8.33	7.04		7.63	7.61	7.43
Matsuo, Mika (JPN) (1995)	time	2.73	3.84	4.97	6.09	7.23	8.36	9.47	10.60	11.74	12.95		14.27	5 / 8			
reaction time	interval		1.11	1.13	1.12	1.14	1.13	1.11	1.13	1.14	1.21	1.32			3.36	3.38	3.48
	velocity	4.76	7.66	7.52	7.59	7.46	7.52	7.66	7.52	7.46	7.02	7.95	7.01		7.59	7.54	7.33

2017 Michitaka Memorial (Osaka, JPN)

Open FINAL date 07-May-17 wind -0.2 m/s *(2017) - tfdata-store.com/2017/05/08/post-413/*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kimura, Ayako (JPN) (1988)	time	2.65	3.71	4.75	5.76	6.80	7.81	8.86	9.90	10.94	12.01		13.21	6 / 1			
reaction time	interval		1.06	1.04	1.01	1.04	1.01	1.05	1.04	1.04	1.07	1.20			3.11	3.10	3.15
	velocity	4.91	8.02	8.17	8.42	8.17	8.42	8.10	8.17	8.17	7.94	8.75	7.57		8.20	8.23	8.10
Aoki, Masumi (JPN) (1994)	time	2.64	3.71	4.77	5.80	6.84	7.88	8.93	9.98	11.03	12.10		13.27	2 / 2			
reaction time	interval		1.07	1.06	1.03	1.04	1.04	1.05	1.05	1.05	1.07	1.17	PB		3.16	3.13	3.17
	velocity	4.92	7.94	8.02	8.25	8.17	8.17	8.10	8.10	8.10	7.94	8.97	7.54		8.07	8.15	8.04
Jung Hye-Lim (KOR) (1988)	time	2.60	3.66	4.69	5.72	6.75	7.79	8.84	9.88	10.94	12.05		13.27	4 / 3			
reaction time	interval		1.06	1.03	1.03	1.03	1.04	1.05	1.04	1.06	1.11	1.22			3.12	3.12	3.21
	velocity	5.00	8.02	8.25	8.25	8.25	8.17	8.10	8.17	8.02	7.66	8.61	7.54		8.17	8.17	7.94
Kiyoyama, Chisato (JPN) (199	time	2.74	3.83	4.89	5.94	6.97	8.00	9.05	10.11	11.18	12.28		13.47	9 / 4			
reaction time	interval		1.09	1.06	1.05	1.03	1.03	1.05	1.06	1.07	1.10	1.19			3.20	3.11	3.23
	velocity	4.74	7.80	8.02	8.10	8.25	8.25	8.10	8.02	7.94	7.73	8.82	7.42		7.97	8.20	7.89

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Fujimori, Nana (JPN) (1997)	time	2.71	3.82	4.89	5.95	7.02	8.09	9.19	10.29	11.40	12.53		13.73	8 / 5			
reaction time	interval		1.11	1.07	1.06	1.07	1.07	1.10	1.10	1.11	1.13	1.20			3.24	3.24	3.34
	velocity	4.80	7.66	7.94	8.02	7.94	7.94	7.73	7.73	7.66	7.52	8.75	7.28		7.87	7.87	7.63
Fujiwara, Miku (JPN) (1992)	time	2.77	3.89	5.00	6.10	7.21	8.31	9.41	10.53	11.65	12.77		13.97	3 / 6			
reaction time	interval		1.12	1.11	1.10	1.11	1.10	1.10	1.12	1.12	1.12	1.20			3.33	3.31	3.36
	velocity	4.69	7.59	7.66	7.73	7.66	7.73	7.73	7.59	7.59	7.59	8.75	7.16		7.66	7.70	7.59
Tanaka, Hikari (JPN) (1998)	time	2.76	3.89	5.01	6.13	7.25	8.36	9.49	10.64	11.78	12.94		14.21	7 / 7			
reaction time	interval		1.13	1.12	1.12	1.12	1.11	1.13	1.15	1.14	1.16	1.27			3.37	3.36	3.45
	velocity	4.71	7.52	7.59	7.59	7.59	7.66	7.52	7.39	7.46	7.33	8.27	7.04		7.57	7.59	7.39

FINAL date 07-May-17 wind -0.6 m/s *(2017) - tfdata-store.com/2017/05/08/post-413/*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Jung Hye-Lim (KOR) (1988)	time	2.62	3.67	4.70	5.73	6.75	7.77	8.81	9.88	10.95	12.04		13.24	6 / 1			
reaction time	interval		1.05	1.03	1.03	1.02	1.02	1.04	1.07	1.07	1.09	1.20			3.11	3.08	3.23
	velocity	4.96	8.10	8.25	8.25	8.33	8.33	8.17	7.94	7.94	7.80	8.75	7.55		8.20	8.28	7.89
Kimura, Ayako (JPN) (1988)	time	2.62	3.68	4.71	5.73	6.76	7.78	8.83	9.88	10.95	12.04		13.25	4 / 2			
reaction time	interval		1.06	1.03	1.02	1.03	1.02	1.05	1.05	1.07	1.09	1.21			3.11	3.10	3.21
	velocity	4.96	8.02	8.25	8.33	8.25	8.33	8.10	8.10	7.94	7.80	8.68	7.55		8.20	8.23	7.94
Kiyoyama, Chisato (JPN) (199	time	2.72	3.80	4.85	5.87	6.89	7.92	8.97	10.01	11.08	12.18		13.35	8 / 3			
reaction time	interval		1.08	1.05	1.02	1.02	1.03	1.05	1.04	1.07	1.10	1.17	PB		3.15	3.10	3.21
	velocity	4.78	7.87	8.10	8.33	8.33	8.25	8.10	8.17	7.94	7.73	8.97	7.49		8.10	8.23	7.94
Aoki, Masumi (JPN) (1994)	time	2.69	3.75	4.81	5.86	6.91	7.95	9.04	10.12	11.20	12.30		13.52	7 / 4			
reaction time	interval		1.06	1.06	1.05	1.05	1.04	1.09	1.08	1.08	1.10	1.22			3.17	3.18	3.26
	velocity	4.83	8.02	8.02	8.10	8.10	8.17	7.80	7.87	7.87	7.73	8.61	7.40		8.04	8.02	7.82
Nakamura, Yuki (JPN) (1995)	time	2.70	3.81	4.92	5.99	7.07	8.15	9.25	10.35	11.46	12.59		13.80	5 / 5			
reaction time	interval		1.11	1.11	1.07	1.08	1.08	1.10	1.10	1.11	1.13	1.21			3.29	3.26	3.34
	velocity	4.81	7.66	7.66	7.94	7.87	7.87	7.73	7.73	7.66	7.52	8.68	7.25		7.75	7.82	7.63
Fujimori, Nana (JPN) (1997)	time	2.77	3.87	4.97	6.04	7.12	8.21	9.30	10.41	11.53	12.69		13.96	1 / 6			
reaction time	interval		1.10	1.10	1.07	1.08	1.09	1.09	1.11	1.12	1.16	1.27			3.27	3.26	3.39
	velocity	4.69	7.73	7.73	7.94	7.87	7.80	7.80	7.66	7.59	7.33	8.27	7.16		7.80	7.82	7.52
Kobayashi, Sayaka (JPN) (199	time	2.75	3.88	4.98	6.07	7.19	8.30	9.39	10.51	11.66	12.80		14.02	9 / 7			
reaction time	interval		1.13	1.10	1.09	1.12	1.11	1.09	1.12	1.15	1.14	1.22			3.32	3.32	3.41
	velocity	4.73	7.52	7.73	7.80	7.59	7.66	7.80	7.59	7.39	7.46	8.61	7.13		7.68	7.68	7.48
Tanaka, Hikari (JPN) (1998)	time	2.75	3.87	4.99	6.11	7.23	8.34	9.47	10.61	11.75	12.92		14.18	3 / 8			
reaction time	interval		1.12	1.12	1.12	1.12	1.11	1.13	1.14	1.14	1.17	1.26			3.36	3.36	3.45
	velocity	4.73	7.59	7.59	7.59	7.59	7.66	7.52	7.46	7.46	7.26	8.33	7.05		7.59	7.59	7.39
Fujiwara, Miku (JPN) (1992)	time	2.78	3.92	5.03	6.15	7.26	8.38	9.50	10.65	11.78	12.95		14.19	2 / 9			
reaction time	interval		1.14	1.11	1.12	1.11	1.12	1.12	1.15	1.13	1.17	1.24			3.37	3.35	3.45
	velocity	4.68	7.46	7.66	7.59	7.66	7.59	7.59	7.39	7.52	7.26	8.47	7.05		7.57	7.61	7.39

2017 Doha Diamond League (Doha, QAT) (TV Analysis)

FINAL date 05-May-17 wind -2.3 m/s *Henson (2020) - Athlete First: 2017 year end hurdle report*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.50	3.54	4.52	5.50	6.46	7.44	8.42	9.40	10.40	11.40		12.59	5 / 1			
reaction time 0.128	interval		1.04	0.98	0.98	0.96	0.98	0.98	0.98	1.00	1.00	1.19			3.00	2.92	2.98
	velocity	5.20	8.17	8.67	8.67	8.85	8.67	8.67	8.67	8.50	8.50	8.82	7.94		8.50	8.73	8.56
Roleder, Cindy (GER) (1989)	time	2.58	3.62	4.64	5.64	6.64	7.64	8.66	9.68	10.70	11.74		12.90	3 / 2			
reaction time 0.138	interval		1.04	1.02	1.00	1.00	1.00	1.02	1.02	1.02	1.04	1.16			3.06	3.02	3.08
	velocity	5.04	8.17	8.33	8.50	8.50	8.50	8.33	8.33	8.33	8.17	9.05	7.75		8.33	8.44	8.28
Nelvis, Sharika (USA) (1990)	time	2.52	3.58	4.62	5.62	6.64	7.64	8.64	9.64	10.66	11.70		12.91	2 / 3			
reaction time 0.142	interval	7 steps	1.06	1.04	1.00	1.02	1.00	1.00	1.00	1.02	1.04	1.21			3.10	3.02	3.06
	velocity	5.16	8.02	8.17	8.50	8.33	8.50	8.50	8.50	8.33	8.17	8.68	7.75		8.23	8.44	8.33
Manning, Christina (USA) (19	time	2.50	3.54	4.56	5.56	6.58	7.56	8.60	9.64	10.72	11.82		13.05	6 / 4			
reaction time 0.148	interval		1.04	1.02	1.00	1.02	0.98	1.04	1.04	1.08	1.10	1.23			3.06	3.04	3.22
	velocity	5.20	8.17	8.33	8.50	8.33	8.67	8.17	8.17	7.87	7.73	8.54	7.66		8.33	8.39	7.92
Simmonds, Megan (JAM) (199	time	2.52	3.52	4.56	5.60	6.60	7.62	8.66	9.72	10.80	11.88		13.13	8 / 5			
reaction time 0.185	interval		1.00	1.04	1.04	1.00	1.02	1.04	1.06	1.08	1.08	1.25			3.08	3.06	3.22
	velocity	5.16	8.50	8.17	8.17	8.50	8.33	8.17	8.02	7.87	7.87	8.40	7.62		8.28	8.33	7.92
George, Phylicia (CAN) (1987)	time	2.60	3.66	4.70	5.70	6.70	7.72	8.74	9.78	10.82	11.90		13.14	1 / 6			
reaction time 0.162	interval		1.06	1.04	1.00	1.00	1.02	1.02	1.04	1.04	1.08	1.24			3.10	3.04	3.16
	velocity	5.00	8.02	8.17	8.50	8.50	8.33	8.33	8.17	8.17	7.87	8.47	7.61		8.23	8.39	8.07

Ofili, Cindy (GBR) (1994)		time	2.64	3.70	4.78	5.84	6.88	7.92	8.96	10.00	11.04	12.14		13.42	7 / 7			
reaction time	0.158	interval		1.06	1.08	1.06	1.04	1.04	1.04	1.04	1.04	1.10	1.28			3.20	3.12	3.18
		velocity	4.92	8.02	7.87	8.02	8.17	8.17	8.17	8.17	8.17	7.73	8.20	7.45		7.97	8.17	8.02
Ali, Nia (USA) (1988)		time	2.54	3.64	4.72	5.92	7.08	8.26	9.42	10.54				14.34	4 / 8			
reaction time	0.143	interval		1.10	1.08	1.20	1.16	1.18	1.16	1.12						3.38	3.50	
		velocity	5.12	7.73	7.87	7.08	7.33	7.20	7.33	7.59				6.97		7.54	7.29	

2017 Mito Invitational (Mito, JPN)

FINAL

date 05-May-17 wind 1.0 m/s

(2017) - tfdata-store.com/2017/05/06/post-423/

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Soma, Eriko (JPN) (1991)	time	2.67	3.76	4.83	5.88	6.94	7.99	9.07	10.13	11.21	12.30		13.47	6 / 1			
reaction time	interval		1.09	1.07	1.05	1.06	1.05	1.08	1.06	1.08	1.09	1.17			3.21	3.19	3.23
	velocity	4.87	7.80	7.94	8.10	8.02	8.10	7.87	8.02	7.87	7.80	8.97	7.42		7.94	7.99	7.89
Sasaki, Ten (JPN) (1997)	time	2.67	3.76	4.85	5.91	6.98	8.06	9.16	10.24	11.36	12.51		13.81	4 / 2			
reaction time	interval		1.09	1.09	1.06	1.07	1.08	1.10	1.08	1.12	1.15	1.30			3.24	3.25	3.35
	velocity	4.87	7.80	7.80	8.02	7.94	7.87	7.73	7.87	7.59	7.39	8.08	7.24		7.87	7.85	7.61
Nakatuka, Natsuki (JPN) (1998	time	2.81	3.94	5.09	6.21	7.34	8.49	9.63	10.77	11.95	13.15		14.47	5 / 3			
reaction time	interval		1.13	1.15	1.12	1.13	1.15	1.14	1.14	1.18	1.20	1.32			3.40	3.42	3.52
	velocity	4.63	7.52	7.39	7.59	7.52	7.39	7.46	7.46	7.20	7.08	7.95	6.91		7.50	7.46	7.24

Heat 1

date 05-May-17 wind -2.7 m/s

(2017) - tfdata-store.com/2017/05/06/post-423/

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Soma, Eriko (JPN) (1991)	time	2.66	3.76	4.83	5.89	6.96	8.03	9.12	10.21	11.31	12.43		13.65	5 / 1			
reaction time	interval		1.10	1.07	1.06	1.07	1.07	1.09	1.09	1.10	1.12	1.22			3.23	3.23	3.31
	velocity	4.89	7.73	7.94	8.02	7.94	7.94	7.80	7.80	7.73	7.59	8.61	7.33		7.89	7.89	7.70
Sasaki, Ten (JPN) (1997)	time	2.70	3.81	4.90	6.01	7.11	8.22	9.36	10.49	11.70	12.87		14.22	7 / 2			
reaction time	interval		1.11	1.09	1.11	1.10	1.11	1.14	1.13	1.21	1.17	1.35			3.31	3.35	3.51
	velocity	4.81	7.66	7.80	7.66	7.73	7.66	7.46	7.52	7.02	7.26	7.78	7.03		7.70	7.61	7.26
Nakatuka, Natsuki (JPN) (1998	time	2.80	3.95	5.10	6.23	7.40	8.57	9.76	10.96	12.19	13.43		14.83	4 / 3			
reaction time	interval		1.15	1.15	1.13	1.17	1.17	1.19	1.20	1.23	1.24	1.40			3.43	3.53	3.67
	velocity	4.64	7.39	7.39	7.52	7.26	7.26	7.14	7.08	6.91	6.85	7.50	6.74		7.43	7.22	6.95

2017 Drake Relays (Des Moines, IA) (TV Analysis)

FINAL

date 29-Apr-17 wind 1.0 m/s

Henson (2020) - Athlete First: 2017 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.50	3.55	4.53	5.53	6.50	7.45	8.41	9.37	10.35	11.35		12.56	4 / 1			
reaction time	interval		1.05	0.98	1.00	0.97	0.95	0.96	0.96	0.98	1.00	1.21			3.03	2.88	2.94
	velocity	5.20	8.10	8.67	8.50	8.76	8.95	8.85	8.85	8.67	8.50	8.68	7.96		8.42	8.85	8.67
Stowers, Jasmin (USA) (1991)	time	2.56	3.58	4.56	5.56	6.53	7.53	8.53	9.53	10.53	11.53		12.76	2 / 2			
reaction time	interval		1.02	0.98	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.23			3.00	2.97	3.00
	velocity	5.08	8.33	8.67	8.50	8.76	8.50	8.50	8.50	8.50	8.50	8.54	7.84		8.50	8.59	8.50
Harper Nelson, Dawn (USA) (1	time	2.53	3.56	4.56	5.56	6.56	7.56	8.53	9.53	10.53	11.56		12.79	3 / 3			
reaction time	interval		1.03	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.03	1.23			3.03	2.97	3.03
	velocity	5.14	8.25	8.50	8.50	8.50	8.50	8.76	8.50	8.50	8.25	8.54	7.82		8.42	8.59	8.42
Harrison, Queen (USA) (1988)	time	2.56	3.63	4.63	5.63	6.60	7.60	8.60	9.60	10.66	11.63		12.86	7 / 4			
reaction time	interval		1.07	1.00	1.00	0.97	1.00	1.00	1.00	1.06	0.97	1.23			3.07	2.97	3.03
	velocity	5.08	7.94	8.50	8.50	8.76	8.50	8.50	8.50	8.02	8.76	8.54	7.78		8.31	8.59	8.42
Ofili, Cindy (GBR) (1994)	time	2.53	3.60	4.60	5.63	6.63	7.63	8.63	9.63	10.63	11.66		12.92	6 / 6			
reaction time	interval		1.07	1.00	1.03	1.00	1.00	1.00	1.00	1.00	1.03	1.26			3.10	3.00	3.03
	velocity	5.14	7.94	8.50	8.25	8.50	8.50	8.50	8.50	8.50	8.25	8.33	7.74		8.23	8.50	8.42
Castlin, Kristi (USA) (1988)	time	2.60	3.66	4.70	5.73	6.73	7.73	8.75	9.75	10.77	11.83		13.10	5 / 7			
reaction time	interval		1.06	1.04	1.03	1.00	1.00	1.02	1.00	1.02	1.06	1.27			3.13	3.02	3.08
	velocity	5.00	8.02	8.17	8.25	8.50	8.50	8.33	8.50	8.33	8.02	8.27	7.63		8.15	8.44	8.28
Porter, Tiffany (GBR) (1987)	time	2.53	3.63	4.66	5.68	6.70	7.73	8.73	9.76	10.83	11.90		13.20	1 / 8			
reaction time	interval		1.10	1.03	1.02	1.02	1.03	1.00	1.03	1.07	1.07	1.30			3.15	3.05	3.17
	velocity	5.14	7.73	8.25	8.33	8.33	8.25	8.50	8.25	7.94	7.94	8.08	7.58		8.10	8.36	8.04

2017 Mikio Oda Memorial (Hiroshima, JPN)

FINAL

date 29-Apr-17 wind 2.0 m/s

(2017) - tfdata-store.com/2017/05/01/458/

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Barber, Jade (USA) (1993)	time	2.64	3.71	4.77	5.81	6.84	7.87	8.89	9.88	10.94	12.00		13.13	5 / 1			
reaction time	interval		1.07	1.06	1.04	1.03	1.03	1.02	0.99	1.06	1.06	1.13			3.17	3.08	3.11
	velocity	4.92	7.94	8.02	8.17	8.25	8.25	8.33	8.59	8.02	8.02	9.29	7.62		8.04	8.28	8.20
Kimura, Ayako (JPN) (1988)	time	2.63	3.69	4.74	5.77	6.82	7.85	8.90	9.93	10.98	12.05		13.21	7 / 2			

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	interval		1.06	1.05	1.03	1.05	1.03	1.05	1.03	1.05	1.07	1.16			3.14	3.13	3.15
	velocity	4.94	8.02	8.10	8.25	8.10	8.25	8.10	8.25	8.10	7.94	9.05	7.57		8.12	8.15	8.10
Jung Hye-Lim (KOR) (1988)	time	2.64	3.73	4.80	5.86	6.90	7.92	8.96	10.00	11.06	12.12		13.33	6 / 3			
reaction time	interval		1.09	1.07	1.06	1.04	1.02	1.04	1.04	1.06	1.06	1.21			3.22	3.10	3.16
	velocity	4.92	7.80	7.94	8.02	8.17	8.33	8.17	8.17	8.02	8.02	8.68	7.50		7.92	8.23	8.07
Hemphill, Megumi (JPN) (1996	time	2.71	3.81	4.88	5.92	6.98	8.02	9.05	10.10	11.16	12.23		13.40	2 / 4			
reaction time	interval		1.10	1.07	1.04	1.06	1.04	1.03	1.05	1.06	1.07	1.17			3.21	3.13	3.18
	velocity	4.80	7.73	7.94	8.17	8.02	8.17	8.25	8.10	8.02	7.94	8.97	7.46		7.94	8.15	8.02
Soma, Eriko (JPN) (1991)	time	2.70	3.79	4.87	5.94	7.02	8.08	9.15	10.22	11.28	12.36		13.52	8 / 5			
reaction time	interval		1.09	1.08	1.07	1.08	1.06	1.07	1.07	1.06	1.08	1.16			3.24	3.21	3.21
	velocity	4.81	7.80	7.87	7.94	7.87	8.02	7.94	7.94	8.02	7.87	9.05	7.40		7.87	7.94	7.94
Horiike, Kaho (JPN) (1996)	time	2.68	3.78	4.86	5.93	7.03	8.11	9.17	10.25	11.33	12.44		13.58	1 / 6			
reaction time	interval		1.10	1.08	1.07	1.10	1.08	1.06	1.08	1.08	1.11	1.14			3.25	3.24	3.27
	velocity	4.85	7.73	7.87	7.94	7.73	7.87	8.02	7.87	7.87	7.66	9.21	7.36		7.85	7.87	7.80

B FINAL

date 29-Apr-17 wind 4.1 m/s *(2017) - tfdata-store.com/2017/05/01/458/*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kiyoyama, Chisato (JPN) (199	time	2.71	3.79	4.85	5.87	6.90	7.92	8.96	9.98	11.05	12.13		13.29	5 / 1			
reaction time	interval		1.08	1.06	1.02	1.03	1.02	1.04	1.02	1.07	1.08	1.16			3.16	3.09	3.17
	velocity	4.80	7.87	8.02	8.33	8.25	8.33	8.17	8.33	7.94	7.87	9.05	7.52		8.07	8.25	8.04
Sasaki, Aogi (JPN) (1997)	time	2.68	3.75	4.79	5.84	6.87	7.90	8.97	10.07	11.16	12.28		13.53	4 / 2			
reaction time	interval		1.07	1.04	1.05	1.03	1.03	1.07	1.10	1.09	1.12	1.25			3.16	3.13	3.31
	velocity	4.85	7.94	8.17	8.10	8.25	8.25	7.94	7.73	7.80	7.59	8.40	7.39		8.07	8.15	7.70
Fukube, Mako (JPN) (1995)	time	2.72	3.81	4.87	5.92	6.98	8.06	9.14	10.21	11.29	12.40		13.58	6 / 3			
reaction time	interval		1.09	1.06	1.05	1.06	1.08	1.08	1.07	1.08	1.11	1.18			3.20	3.22	3.26
	velocity	4.78	7.80	8.02	8.10	8.02	7.87	7.87	7.94	7.87	7.66	8.90	7.36		7.97	7.92	7.82
Okubo, Yuri (JPN) (1997)	time	2.77	3.85	4.92	5.98	7.04	8.10	9.18	10.26	11.36	12.48		13.67	3 / 4			
reaction time	interval		1.08	1.07	1.06	1.06	1.06	1.08	1.08	1.10	1.12	1.19			3.21	3.20	3.30
	velocity	4.69	7.87	7.94	8.02	8.02	8.02	7.87	7.87	7.73	7.59	8.82	7.32		7.94	7.97	7.73
Kobayashi, Sayaka (JPN) (199	time	2.68	3.77	4.86	5.94	7.01	8.08	9.15	10.24	11.35	12.46		13.68	2 / 5			
reaction time	interval		1.09	1.09	1.08	1.07	1.07	1.07	1.09	1.11	1.11	1.22			3.26	3.21	3.31
	velocity	4.85	7.80	7.80	7.87	7.94	7.94	7.94	7.80	7.66	7.66	8.61	7.31		7.82	7.94	7.70
Takebe, Mao (JPN) (1995)	time	2.71	3.79	4.85	5.91	6.98	8.01	9.09	10.16	11.26	12.39		13.73	7 / 6			
reaction time	interval		1.08	1.06	1.06	1.07	1.03	1.08	1.07	1.10	1.13	1.34			3.20	3.18	3.30
	velocity	4.80	7.87	8.02	8.02	7.94	8.25	7.87	7.94	7.73	7.52	7.84	7.28		7.97	8.02	7.73
Kiriyama, Chie (JPN) (1991)	time	2.72	3.80	4.87	5.92	6.98	8.07	9.16	10.27	11.39	12.54		13.74	1 / 7			
reaction time	interval		1.08	1.07	1.05	1.06	1.09	1.09	1.11	1.12	1.15	1.20			3.20	3.24	3.38
	velocity	4.78	7.87	7.94	8.10	8.02	7.80	7.80	7.66	7.59	7.39	8.75	7.28		7.97	7.87	7.54
Tanaka, Hikari (JPN) (1998)	time	2.72	3.84	4.93	6.00	7.08	8.17	9.25	10.36	11.47	12.59		13.80	8 / 8			
reaction time	interval		1.12	1.09	1.07	1.08	1.09	1.08	1.11	1.11	1.12	1.21			3.28	3.25	3.34
	velocity	4.78	7.59	7.80	7.94	7.87	7.80	7.87	7.66	7.66	7.59	8.68	7.25		7.77	7.85	7.63

2017 Osaka University Athletics Championships (Osaka, JPN)

FINAL

date 06-Apr-17 wind -1.8 m/s *(2017) - tfdata-store.com/2017/04/07/post-249/*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Matsuo, Mika (JPN) (1995)	time	2.73	3.85	4.96	6.05	7.15	8.25	9.35	10.46	11.59	12.73		14.01	4 / 1			
reaction time	interval		1.12	1.11	1.09	1.10	1.10	1.10	1.11	1.13	1.14	1.28			3.32	3.30	3.38
	velocity	4.76	7.59	7.66	7.80	7.73	7.73	7.73	7.66	7.52	7.46	8.20	7.14		7.68	7.73	7.54
Kataoka, Saki (JPN) (1996)	time	2.72	3.85	4.98	6.09	7.19	8.28	9.41	10.54	11.66	12.82		14.07	5 / 2			
reaction time	interval		1.13	1.13	1.11	1.10	1.09	1.13	1.13	1.12	1.16	1.25			3.37	3.32	3.41
	velocity	4.78	7.52	7.52	7.66	7.73	7.80	7.52	7.52	7.59	7.33	8.40	7.11		7.57	7.68	7.48
Yasui, Ayana (JPN) (1997)	time	2.76	3.89	5.00	6.12	7.24	8.34	9.46	10.61	11.73	12.89		14.12	6 / 3			
reaction time	interval		1.13	1.11	1.12	1.12	1.10	1.12	1.15	1.12	1.16	1.23			3.36	3.34	3.43
	velocity	4.71	7.52	7.66	7.59	7.59	7.73	7.59	7.39	7.59	7.33	8.54	7.08		7.59	7.63	7.43
Nakamura, Reina (JPN) (1998)	time	2.80	3.95	5.09	6.20	7.31	8.43	9.58	10.73	11.91	13.10		14.42	7 / 5			
reaction time	interval		1.15	1.14	1.11	1.11	1.12	1.15	1.15	1.18	1.19	1.32			3.40	3.38	3.52
	velocity	4.64	7.39	7.46	7.66	7.66	7.59	7.39	7.39	7.20	7.14	7.95	6.93		7.50	7.54	7.24
Yamanaka, Aya (JPN) (1995)	time	2.77				7.31	8.45	9.60	10.79	11.99	13.19		14.51	2 / 6			
reaction time	interval					4.54	1.14	1.15	1.19	1.20	1.20	1.32					3.59
	velocity	4.69				7.49	7.46	7.39	7.14	7.08	7.08	7.95	6.89				7.10
Asba, Haruka (JPN)	time	2.78	3.98	5.20	6.40	7.59	8.80	10.01	11.27	12.52	13.76		15.16	3 / 7			

reaction time	interval		1.20	1.22	1.20	1.19	1.21	1.21	1.26	1.25	1.24	1.40			3.62	3.61	3.75
	velocity	4.68	7.08	6.97	7.08	7.14	7.02	7.02	6.75	6.80	6.85	7.50	6.60		7.04	7.06	6.80

2017 European Indoor Championships (Beograd, SRB)

FINAL date 03-Mar-17 *(2017.03.05) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Roleder, Cindy (GER) (1989)	time	2.68	3.67	4.64	5.63	6.60		7.88	6 / 1			
reaction time	interval		0.99	0.97	0.99	0.97	1.28			2.95		
	velocity	4.85	8.59	8.76	8.59	8.76	10.16	12.69		8.64		

2017 Karlsruhe Indoor (Karlsruhe, GER)

FINAL date 04-Feb-17 *(2017.02.10) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.50	3.52	4.51	5.47	6.44		7.76	5 / 1			
reaction time 0.152	interval		1.02	0.99	0.96	0.97	1.32			2.97		
	velocity	5.20	8.33	8.59	8.85	8.76	9.85	12.89		8.59		

2017 Japanese National Indoor Junior Championships (Osaka, JPN)

FINAL date 04-Feb-17 *(2017.02.04) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tanaka, Hikari (JPN) (1998)	time	2.70	3.82	4.92	6.02	7.10		8.55	3 / 1			
reaction time	interval		1.12	1.10	1.10	1.08	1.45	PB		3.32		
	velocity	4.81	7.59	7.73	7.73	7.87	8.97	11.70		7.68		

2017 Rod McCravy Memorial (Lexington, KY)

FINAL date 21-Jan-17 *(2017.01.28) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.58	3.57	4.52	5.48	6.42		7.75	5 / 1			
reaction time	interval		0.99	0.95	0.96	0.94	1.33	PB		2.90		
	velocity	5.04	8.59	8.95	8.85	9.04	9.77	12.90		8.79		

2016 Japanese Junior Olympics (Yokohama, JPN) (A - 76cm) (B - 76cm / 8.0m)

FINAL - B date 30-Oct-16 wind -1.1 m/s *(2016.10.30) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nakayama, Riko (JPN) (2002)	time	2.68	3.71	4.74	5.77	6.81	7.85	8.90	9.98	11.06	12.16		14.04	5 / 1			
reaction time	interval		1.03	1.03	1.03	1.04	1.04	1.05	1.08	1.08	1.10	1.88			3.09	3.13	3.26
	velocity	4.85	7.77	7.77	7.77	7.69	7.69	7.62	7.41	7.41	7.27	7.98	7.12		7.77	7.67	7.36

Heat 4 - B date 30-Oct-16 wind 1.1 m/s *(2016.10.29) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nakayama, Riko (JPN) (2002)	time	2.71	3.73	4.74	5.77	6.79	7.82	8.86	9.91	10.98	12.07		13.95	4 / 1			
reaction time	interval		1.02	1.01	1.03	1.02	1.03	1.04	1.05	1.07	1.09	1.88			3.06	3.09	3.21
	velocity	4.80	7.84	7.92	7.77	7.84	7.77	7.69	7.62	7.48	7.34	7.98	7.17		7.84	7.77	7.48

FINAL - A date 28-Oct-16 wind -0.4 m/s *(2016.10.28) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nagasaki, Sayuri (JPN) (2001)	time	2.70	3.82	4.93	6.02	7.09	8.18	9.28	10.40	11.53	12.67		13.93	4 / 1			
reaction time	interval		1.12	1.11	1.09	1.07	1.09	1.10	1.12	1.13	1.14	1.26			3.32	3.26	3.39
	velocity	4.81	7.59	7.66	7.80	7.94	7.80	7.73	7.59	7.52	7.46	8.33	7.18		7.68	7.82	7.52

Heat 3 - A date 28-Oct-16 wind -2.2 m/s *(2016.10.27) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nagasaki, Sayuri (JPN) (2001)	time	2.76	3.89	5.02	6.13	7.24	8.36	9.50	10.63	11.77	12.93		14.24	4 / 1			
reaction time	interval		1.13	1.13	1.11	1.11	1.12	1.14	1.13	1.14	1.16	1.31			3.37	3.37	3.43
	velocity	4.71	7.52	7.52	7.66	7.66	7.59	7.46	7.52	7.46	7.33	8.02	7.02		7.57	7.57	7.43

2016 Japanese National Junior Championships (Mizuho, JPN)

Semi-Final 3 date 21-Oct-16 wind 0.9 m/s *(2016.10.22) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tanaka, Yumi (JPN) (1998)	time	2.67	3.76	4.86	5.91	6.98	8.05	9.13	10.20	11.27	12.39		13.65	4 / 1			
reaction time	interval		1.09	1.10	1.05	1.07	1.07	1.08	1.07	1.07	1.12	1.26			3.24	3.22	3.26
	velocity	4.87	7.80	7.73	8.10	7.94	7.94	7.87	7.94	7.94	7.59	8.33	7.33		7.87	7.92	7.82
Tanaka, Yuzo (JPN)	time	2.72	3.83	4.93	6.03	7.12	8.22	9.32	10.44	11.56	12.70		13.93	5 / 2			
reaction time	interval		1.11	1.10	1.10	1.09	1.10	1.10	1.12	1.12	1.14	1.23			3.31	3.29	3.38
	velocity	4.78	7.66	7.73	7.73	7.80	7.73	7.73	7.59	7.59	7.46	8.54	7.18		7.70	7.75	7.54

Semi-Final 2 date 21-Oct-16 wind 1.0 m/s *(2016.10.21) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Fujimori, Nana (JPN) (1997)	time	2.69	3.77	4.84	5.91	6.99	8.08	9.16	10.25	11.36	12.51		13.72	4 / 1			
reaction time	interval		1.08	1.07	1.07	1.08	1.09	1.08	1.09	1.11	1.15	1.21			3.22	3.25	3.35
	velocity	4.83	7.87	7.94	7.94	7.87	7.80	7.87	7.80	7.66	7.39	8.68	7.29		7.92	7.85	7.61
Furuhashi, Kana (JPN) (1999)	time	2.73	3.82	4.90	6.00	7.09	8.19	9.26	10.35	11.48	12.64		13.89	3 / 2			
reaction time	interval		1.09	1.08	1.10	1.09	1.10	1.07	1.09	1.13	1.16	1.25			3.27	3.26	3.38

	velocity	4.76	7.80	7.87	7.73	7.80	7.73	7.94	7.80	7.52	7.33	8.40	7.20		7.80	7.82	7.54

Semi-Final 1

date 21-Oct-16 wind 1.2 m/s *(2016.10.21) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ono, Yui (JPN) (1999)	time	2.68	3.76	4.83	5.89	6.94	8.02	9.09	10.18	11.27	12.40		13.64	3 / 1			
reaction time	interval		1.08	1.07	1.06	1.05	1.08	1.07	1.09	1.09	1.13	1.24			3.21	3.20	3.31
	velocity	4.85	7.87	7.94	8.02	8.10	7.87	7.94	7.80	7.80	7.52	8.47	7.33		7.94	7.97	7.70
Sasaki, Ten (JPN) (1997)	time	2.66	3.74	4.82	5.88	6.95	8.02	9.11	10.21	11.32	12.49		13.80	5 / 2			
reaction time	interval		1.08	1.08	1.06	1.07	1.07	1.09	1.10	1.11	1.17	1.31			3.22	3.23	3.38
	velocity	4.89	7.87	7.87	8.02	7.94	7.94	7.80	7.73	7.66	7.26	8.02	7.25		7.92	7.89	7.54

Heat 6

date 21-Oct-16 wind 2.1 m/s *(2016.11.03) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Yasui, Ayana (JPN) (1997)	time	2.72	3.82	4.93	6.04	7.14	8.26	9.37	10.50	11.64	12.79		14.01	6 / 1			
reaction time	interval		1.10	1.11	1.11	1.10	1.12	1.11	1.13	1.14	1.15	1.22			3.32	3.33	3.42
	velocity	4.78	7.27	7.21	7.21	7.27	7.14	7.21	7.08	7.02	6.96	12.30	7.14		7.23	7.21	7.02
Kamada, Saki (JPN) (1997)	time	2.73	3.86	4.98	6.07	7.17	8.25	9.36	10.48	11.61	12.76		14.04	3 / 4			
reaction time	interval		1.13	1.12	1.09	1.10	1.08	1.11	1.12	1.13	1.15	1.28			3.34	3.29	3.40
	velocity	4.76	7.08	7.14	7.34	7.27	7.41	7.21	7.14	7.08	6.96	11.72	7.12		7.19	7.29	7.06
Oshiro, Yurika (JPN) (1998)	time	2.75	3.87	4.99	6.09	7.21	8.33	9.44	10.57	11.72	12.86		14.09	4 / 3			
reaction time	interval		1.12	1.12	1.10	1.12	1.12	1.11	1.13	1.15	1.14	1.23			3.34	3.35	3.42
	velocity	4.73	7.14	7.14	7.27	7.14	7.14	7.21	7.08	6.96	7.02	12.20	7.10		7.19	7.16	7.02

Heat 5

date 21-Oct-16 wind 0.9 m/s *(2016.11.02) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shunji, Natsuki (JPN)	time	2.79	3.90	5.01	6.12	7.22	8.36	9.48	10.64	11.80	12.96		14.24	3 / 1			
reaction time	interval		1.11	1.11	1.11	1.10	1.14	1.12	1.16	1.16	1.16	1.28			3.33	3.36	3.48
	velocity	4.66	7.66	7.66	7.66	7.73	7.46	7.59	7.33	7.33	7.33	8.20	7.02		7.66	7.59	7.33
Fujiwara, Rui (JPN)	time	2.78	3.89	4.99	6.10	7.21	8.33	9.46	10.62	11.78	12.97		14.28	2 / 2			
reaction time	interval		1.11	1.10	1.11	1.11	1.12	1.13	1.16	1.16	1.19	1.31			3.32	3.36	3.51
	velocity	4.68	7.66	7.73	7.66	7.66	7.59	7.52	7.33	7.33	7.14	8.02	7.00		7.68	7.59	7.26
Yasuda, Shiori (JPN) (1998)	time	2.73	3.89	5.02	6.16	7.30	8.43	9.58	10.73	11.90	13.08		14.38	8 / 3			
reaction time	interval		1.16	1.13	1.14	1.14	1.13	1.15	1.15	1.17	1.18	1.30			3.43	3.42	3.50
	velocity	4.76	7.33	7.52	7.46	7.46	7.52	7.39	7.39	7.26	7.20	8.08	6.95		7.43	7.46	7.29

Heat 4

date 21-Oct-16 wind 1.5 m/s *(2016.11.02) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tanaka, Yumi (JPN) (1998)	time	2.66	3.75	4.82	5.89	6.95	8.03	9.12	10.21	11.31	12.44		13.73	8 / 1			
reaction time	interval		1.09	1.07	1.07	1.06	1.08	1.09	1.09	1.10	1.13	1.29			3.23	3.23	3.32
	velocity	4.89	7.80	7.94	7.94	8.02	7.87	7.80	7.80	7.73	7.52	8.14	7.28		7.89	7.89	7.68
Sasaki, Aogi (JPN) (1997)	time	2.68	3.78	4.86	5.94	7.03	8.11	9.21	10.32	11.50	12.67		13.97	3 / 2			
reaction time	interval		1.10	1.08	1.08	1.09	1.08	1.10	1.11	1.18	1.17	1.30			3.26	3.27	3.46
	velocity	4.85	7.73	7.87	7.87	7.80	7.87	7.73	7.66	7.20	7.26	8.08	7.16		7.82	7.80	7.37
Higa, Kazuki (JPN) (1998)	time	2.80	3.93	5.03	6.13	7.24	8.35	9.45	10.57	11.73	12.87		14.09	6 / 3			
reaction time	interval		1.13	1.10	1.10	1.11	1.11	1.10	1.12	1.16	1.14	1.22			3.33	3.32	3.42
	velocity	4.64	7.52	7.73	7.73	7.66	7.66	7.73	7.59	7.33	7.46	8.61	7.10		7.66	7.68	7.46

Heat 3

date 21-Oct-16 wind 1.5 m/s *(2016.11.01) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ono, Yui (JPN) (1999)	time	2.68	3.77	4.84	5.92	6.99	8.05	9.13	10.22	11.32	12.45		13.68	6 / 1			
reaction time	interval		1.09	1.07	1.08	1.07	1.06	1.08	1.09	1.10	1.13	1.23			3.24	3.21	3.32
	velocity	4.85	7.80	7.94	7.87	7.94	8.02	7.87	7.80	7.73	7.52	8.54	7.31		7.87	7.94	7.68
Tanaka, Yoko (JPN)	time	2.74	3.88	4.99	6.09	7.19	8.30	9.42	10.54	11.67	12.82		14.13	3 / 2			
reaction time	interval		1.14	1.11	1.10	1.10	1.11	1.12	1.12	1.13	1.15	1.31			3.35	3.33	3.40
	velocity	4.74	7.46	7.66	7.73	7.73	7.66	7.59	7.59	7.52	7.39	8.02	7.08		7.61	7.66	7.50
Ozaki, Saki (JPN) (1999)	time	2.79	3.93	5.05	6.16	7.26	8.39	9.52	10.64	11.79	12.98		14.29	2 / 3			
reaction time	interval		1.14	1.12	1.11	1.10	1.13	1.13	1.12	1.15	1.19	1.31			3.37	3.36	3.46
	velocity	4.66	7.46	7.59	7.66	7.73	7.52	7.52	7.59	7.39	7.14	8.02	7.00		7.57	7.59	7.37

Heat 2

date 21-Oct-16 wind 1.3 m/s *(2016.11.01) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Furuhashi, Kana (JPN)	time	2.70	3.81	4.90	6.00	7.11	8.19	9.29	10.42	11.56	12.73		13.96	2 / 1			
reaction time	interval		1.11	1.09	1.10	1.11	1.08	1.10	1.13	1.14	1.17	1.23			3.30	3.29	3.44
	velocity	4.81	7.66	7.80	7.73	7.66	7.87	7.73	7.52	7.46	7.26	8.54	7.16		7.73	7.75	7.41
Takahashi, Makato (JPN)	time	2.80	3.93	5.05	6.15	7.25	8.35	9.45	10.56	11.70	12.83		14.02	3 / 2			
reaction time	interval		1.13	1.12	1.10	1.10	1.10	1.10	1.11	1.14	1.13	1.19			3.35	3.30	3.38
	velocity	4.64	7.52	7.59	7.73	7.73	7.73	7.73	7.66	7.46	7.52	8.82	7.13		7.61	7.73	7.54

Chiba, Momoka (JPN) (1999)	time	2.76	3.87	4.98	6.08	7.19	8.29	9.41	10.54	11.68	12.85		14.05	6 / 3			
reaction time	interval		1.11	1.11	1.10	1.11	1.10	1.12	1.13	1.14	1.17	1.20			3.32	3.33	3.44
	velocity	4.71	7.66	7.66	7.73	7.66	7.73	7.59	7.52	7.46	7.26	8.75	7.12		7.68	7.66	7.41

Heat 1

date 21-Oct-16 wind 1.7 m/s *(2016.11.01) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Fujimori, Nana (JPN) (1997)	time	2.76	3.85	4.93	5.99	7.06	8.14	9.22	10.32	11.45	12.58		13.82	2 / 1			
reaction time	interval		1.09	1.08	1.06	1.07	1.08	1.08	1.10	1.13	1.13	1.24			3.23	3.23	3.36
	velocity	4.71	7.80	7.87	8.02	7.94	7.87	7.87	7.73	7.52	7.52	8.47	7.24		7.89	7.89	7.59
Okamoto, Rika (JPN) (1997)	time	2.78	3.87	4.95	6.02	7.09	8.16	9.26	10.38	11.53	12.70		13.99	8 / 2			
reaction time	interval		1.09	1.08	1.07	1.07	1.07	1.10	1.12	1.15	1.17	1.29			3.24	3.24	3.44
	velocity	4.68	7.80	7.87	7.94	7.94	7.94	7.73	7.59	7.39	7.26	8.14	7.15		7.87	7.87	7.41
Fujimori, Shiori (JPN)	time	2.72	3.92	5.05	6.16	7.28	8.40	9.52	10.63	11.78	12.94		14.18	7 / 3			
reaction time	interval		1.20	1.13	1.11	1.12	1.12	1.12	1.11	1.15	1.16	1.24			3.44	3.36	3.42
	velocity	4.78	7.08	7.52	7.66	7.59	7.59	7.59	7.66	7.39	7.33	8.47	7.05		7.41	7.59	7.46

2016 Japanese National Youth Championships (Mizuho, JPN) (76cm)

FINAL

date 21-Oct-16 wind 0.8 m/s *(2016.10.25) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Yuidori, Yuida (JPN)	time	2.64	3.73	4.77	5.80	6.83	7.89	8.93	9.99	11.07	12.17		13.39	6 / 1			
reaction time	interval		1.09	1.04	1.03	1.03	1.06	1.04	1.06	1.08	1.10	1.22	NYR		3.16	3.13	3.24
	velocity	4.92	7.34	7.69	7.77	7.77	7.55	7.69	7.55	7.41	7.27	12.30	7.47		7.59	7.67	7.41

Semi-Final 1

date 21-Oct-16 wind 1.2 m/s *(2016.10.22) & (2016.11.06) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Yuidori, Yuida (JPN)	time	2.66	3.77	4.83	5.87	6.92	7.96	9.01	10.05	11.14	12.24		13.45	5 / 1			*(2016.10.22)*
reaction time	interval		1.11	1.06	1.04	1.05	1.04	1.05	1.04	1.09	1.10	1.21	NYR		3.21	3.14	3.23
	velocity	4.89	7.21	7.55	7.69	7.62	7.69	7.62	7.69	7.34	7.27	12.40	7.43		7.48	7.64	7.43
Oikawa, Yuka (JPN) (2000)	time	2.70	3.81	4.92	6.00	7.08	8.15	9.23	10.33	11.45	12.57		13.83	4 / 2			*(2016.11.06)*
reaction time	interval		1.11	1.11	1.08	1.08	1.07	1.08	1.10	1.12	1.12	1.26			3.30	3.23	3.34
	velocity	4.81	7.21	7.21	7.41	7.41	7.48	7.41	7.27	7.14	7.14	11.90	7.23		7.27	7.43	7.19
Nihonmatsu, Yui (JPN) (1999)	time	2.66	3.77	4.86	5.93	7.01	8.10	9.19	10.29	11.40	12.55		13.84	6 / 3			*(2016.11.06)*
reaction time	interval		1.11	1.09	1.07	1.08	1.09	1.09	1.10	1.11	1.15	1.29			3.27	3.26	3.36
	velocity	4.89	7.21	7.34	7.48	7.41	7.34	7.34	7.27	7.21	6.96	11.63	7.23		7.34	7.36	7.14

Heat 4

date 21-Oct-16 wind 1.3 m/s *(2016.11.06) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shichibu, Miki (JPN)	time	2.73	3.80	4.87	5.95	7.02	8.10	9.19	10.29	11.42	12.57		13.86	6 / 1			
reaction time	interval		1.07	1.07	1.08	1.07	1.08	1.09	1.10	1.13	1.15	1.29			3.22	3.24	3.38
	velocity	4.76	7.48	7.48	7.41	7.48	7.41	7.34	7.27	7.08	6.96	11.63	7.22		7.45	7.41	7.10
Egashira, Ami (JPN) (1999)	time	2.73	3.82	4.92	6.01	7.09	8.18	9.29	10.42	11.58	12.79		14.12	4 / 2			
reaction time	interval		1.09	1.10	1.09	1.08	1.09	1.11	1.13	1.16	1.21	1.33			3.28	3.28	3.50
	velocity	4.76	7.34	7.27	7.34	7.41	7.34	7.21	7.08	6.90	6.61	11.28	7.08		7.32	7.32	6.86

Heat 3

date 21-Oct-16 wind 1.1 m/s *(2016.11.06) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Oikawa, Yuka (JPN) (2000)	time	2.70	3.81	4.93	6.03	7.13	8.22	9.33	10.45	11.59	12.73		14.01	5 / 1			
reaction time	interval		1.11	1.12	1.10	1.10	1.09	1.11	1.12	1.14	1.14	1.28			3.33	3.30	3.40
	velocity	4.81	7.21	7.14	7.27	7.27	7.34	7.21	7.14	7.02	7.02	11.72	7.14		7.21	7.27	7.06
Saito, Ukiyoshi (JPN)	time	2.70	3.79	4.89	6.01	7.09	8.20	9.30	10.45	11.59	12.76		14.06	7 / 2			
reaction time	interval		1.09	1.10	1.12	1.08	1.11	1.10	1.15	1.14	1.17	1.30			3.31	3.29	3.46
	velocity	4.81	7.34	7.27	7.14	7.41	7.21	7.27	6.96	7.02	6.84	11.54	7.11		7.25	7.29	6.94
Muraoka, Kakehiro (JPN)	time	2.70	3.82	4.92	6.02	7.15	8.25	9.38	10.53	11.72	12.91		14.19	4 / 3			
reaction time	interval		1.12	1.10	1.10	1.13	1.10	1.13	1.15	1.19	1.19	1.28			3.32	3.36	3.53
	velocity	4.81	7.14	7.27	7.27	7.08	7.27	7.08	6.96	6.72	6.72	11.72	7.05		7.23	7.14	6.80

Heat 2

date 21-Oct-16 wind 0.4 m/s *(2016.11.06) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Miyoshi, Minami (JPN)	time	2.77	3.89	4.98	6.06	7.14	8.22	9.31	10.41	11.52	12.68		13.93	4 / 1			
reaction time	interval		1.12	1.09	1.08	1.08	1.08	1.09	1.10	1.11	1.16	1.25			3.29	3.25	3.37
	velocity	4.69	7.14	7.34	7.41	7.41	7.41	7.34	7.27	7.21	6.90	12.00	7.18		7.29	7.38	7.12
Kasahara, Riko (JPN) (1999)	time	2.74	3.86	4.95	6.05	7.14	8.25	9.35	10.47	11.61	12.76		13.98	6 / 2			
reaction time	interval		1.12	1.09	1.10	1.09	1.11	1.10	1.12	1.14	1.15	1.22			3.31	3.30	3.41
	velocity	4.74	7.14	7.34	7.27	7.34	7.21	7.27	7.14	7.02	6.96	12.30	7.15		7.25	7.27	7.04
Oyamada, Tamaki (JPN)	time	2.74	3.83	4.91	5.99	7.10	8.22	9.34	10.48	11.63	12.84		14.15	8 / 3			
reaction time	interval		1.09	1.08	1.08	1.11	1.12	1.12	1.14	1.15	1.21	1.31			3.25	3.35	3.50
	velocity	4.74	7.34	7.41	7.41	7.21	7.14	7.14	7.02	6.96	6.61	11.45	7.07		7.38	7.16	6.86

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

date 21-Oct-16 wind 1.6 m/s (2016.11.06) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Yoshida, Yuiri (JPN) (1999)	time	2.72	3.80	4.86	5.91	6.93	8.02	9.07	10.16	11.22	12.34		13.56	3 / 1			
reaction time	interval		1.08	1.06	1.05	1.02	1.09	1.05	1.09	1.06	1.12	1.22			3.19	3.16	3.27
	velocity	4.78	7.41	7.55	7.62	7.84	7.34	7.62	7.34	7.55	7.14	12.30	7.37		7.52	7.59	7.34
Nihonmatsu, Yui (JPN) (1999)	time	2.66	3.79	4.88	5.95	7.03	8.10	9.18	10.27	11.39	12.52		13.82	6 / 2			
reaction time	interval		1.13	1.09	1.07	1.08	1.07	1.08	1.09	1.12	1.13	1.30			3.29	3.23	3.34
	velocity	4.89	7.08	7.34	7.48	7.41	7.48	7.41	7.34	7.14	7.08	11.54	7.24		7.29	7.43	7.19
Kita, Ayane (JPN) (2000)	time	2.85	3.98	5.07	6.17	7.25	8.36	9.44	10.54	11.65	12.80		14.07	2 / 4			
reaction time	interval		1.13	1.09	1.10	1.08	1.11	1.08	1.10	1.11	1.15	1.27			3.32	3.27	3.36
	velocity	4.56	7.08	7.34	7.27	7.41	7.21	7.41	7.27	7.21	6.96	11.81	7.11		7.23	7.34	7.14

2016 Kansai Student Athletics Championships (Osaka, JPN)

FINAL

date 19-Oct-16 wind 0.5 m/s (2016.10.20) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Yamanaka, Aya (JPN) (1995)	time	2.75	3.89	5.03	6.19	7.33	8.50	9.66	10.83	12.02	13.23		14.55	6 / 1			
reaction time	interval		1.14	1.14	1.16	1.14	1.17	1.16	1.17	1.19	1.21	1.32			3.44	3.47	3.57
	velocity	4.73	7.46	7.46	7.33	7.46	7.26	7.33	7.26	7.14	7.02	7.95	6.87		7.41	7.35	7.14

2016 National Sports Festival (Kitakami, JPN)

FINAL

date 10-Oct-16 wind 2.8 m/s (2016.11.14) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Hemphill, Megu (JPN) (1996)	time	2.69	3.76	4.80	5.84	6.87	7.90	8.92	9.97	11.04	12.13		13.35	7 / 1			
reaction time 0.129	interval		1.07	1.04	1.04	1.03	1.03	1.02	1.05	1.07	1.09	1.22			3.15	3.08	3.21
	velocity	4.83	7.94	8.17	8.17	8.25	8.25	8.33	8.10	7.94	7.80	8.61	7.49		8.10	8.28	7.94
Kobayashi, Sayaka (JPN) (199	time	2.65	3.72	4.78	5.83	6.87	7.91	8.95	10.04	11.11	12.23		13.46	4 / 2			
reaction time 0.153	interval		1.07	1.06	1.05	1.04	1.04	1.04	1.09	1.07	1.12	1.23			3.18	3.12	3.28
	velocity	4.91	7.94	8.02	8.10	8.17	8.17	8.17	7.80	7.94	7.59	8.54	7.43		8.02	8.17	7.77
Kiyoyama, Chisato (JPN) (199	time	2.72	3.80	4.86	5.90	6.93	7.99	9.05	10.12	11.23	12.34		13.53	2 / 3			
reaction time 0.145	interval		1.08	1.06	1.04	1.03	1.06	1.06	1.07	1.11	1.11	1.19			3.18	3.15	3.29
	velocity	4.78	7.87	8.02	8.17	8.25	8.02	8.02	7.94	7.66	7.66	8.82	7.39		8.02	8.10	7.75
Soma, Eriko (JPN) (1991)	time	2.68	3.76	4.80	5.86	6.91	7.97	9.05	10.14	11.27	12.40		13.61	8 / 4			
reaction time 0.155	interval		1.08	1.04	1.06	1.05	1.06	1.08	1.09	1.13	1.13	1.21			3.18	3.19	3.35
	velocity	4.85	7.87	8.17	8.02	8.10	8.02	7.87	7.80	7.52	7.52	8.68	7.35		8.02	7.99	7.61
Takebe, Mao (JPN) (1995)	time	2.71	3.80	4.86	5.92	6.96	8.03	9.11	10.20	11.30	12.43		13.66	5 / 5			
reaction time 0.172	interval		1.09	1.06	1.06	1.04	1.07	1.08	1.09	1.10	1.13	1.23			3.21	3.19	3.32
	velocity	4.80	7.80	8.02	8.02	8.17	7.94	7.87	7.80	7.73	7.52	8.54	7.32		7.94	7.99	7.68

2016 Tokai Student Autumn Championships (Gifu, JPN)

FINAL

date 09-Oct-16 wind 1.3 m/s (2016.10.10) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Fujiwara, Rika (JPN)	time	2.75	3.88	4.99	6.09	7.17	8.28	9.41	10.53	11.67	12.84		14.18	6 / 1			
reaction time	interval		1.13	1.11	1.10	1.08	1.11	1.13	1.12	1.14	1.17	1.34			3.34	3.32	3.43
	velocity	4.73	7.52	7.66	7.73	7.87	7.66	7.52	7.59	7.46	7.26	7.84	7.05		7.63	7.68	7.43

2016 Japanese National Corporate Championships (Osaka, JPN)

FINAL

date 25-Sep-16 wind 1.0 m/s (2016.09.28) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shimura, Hitomi (JPN) (1990)	time	2.64	3.68	4.71	5.73	6.75	7.77	8.80	9.84	10.88	11.96		13.10	7 / 1			
reaction time 0.141	interval		1.04	1.03	1.02	1.02	1.02	1.03	1.04	1.04	1.08	1.14			3.09	3.07	3.16
	velocity	4.92	8.17	8.25	8.33	8.33	8.33	8.25	8.17	8.17	7.87	9.21	7.63		8.25	8.31	8.07
Soma, Eriko (JPN) (1991)	time	2.67	3.74	4.79	5.82	6.85	7.89	8.94	9.98	11.05	12.15		13.32	6 / 2			
reaction time 0.141	interval		1.07	1.05	1.03	1.03	1.04	1.05	1.04	1.07	1.10	1.17			3.15	3.12	3.21
	velocity	4.87	7.94	8.10	8.25	8.25	8.17	8.10	8.17	7.94	7.73	8.97	7.51		8.10	8.17	7.94
Kiyoyama, Chisato (JPN) (199	time	2.69	3.77	4.83	5.88	6.92	7.97	9.03	10.11	11.20	12.30		13.50	5 / 3			
reaction time 0.118	interval		1.08	1.06	1.05	1.04	1.05	1.06	1.08	1.09	1.10	1.20			3.19	3.15	3.27
	velocity	4.83	7.87	8.02	8.10	8.17	8.10	8.02	7.87	7.80	7.73	8.75	7.41		7.99	8.10	7.80

2016 Gunma Perfecture High School Championships (Gunma, JPN)

FINAL

date 24-Sep-16 wind -0.3 m/s (2016.10.25) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ukiya, Saito (JPN)	time	2.70	3.85	4.97	6.09	7.20	8.31	9.46	10.61	11.76	12.94		14.22	5 / 1			
reaction time	interval		1.15	1.12	1.12	1.11	1.11	1.15	1.15	1.15	1.18	1.28			3.39	3.37	3.48
	velocity	4.81	7.39	7.59	7.59	7.66	7.66	7.39	7.39	7.39	7.20	8.20	7.03		7.52	7.57	7.33

2016 Chiba Perfecture High School Championships (Chiba, JPN)

FINAL

date 22-Sep-16 wind 0.5 m/s (2016.10.26) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shinga, Chiori (JPN)	time	2.81	3.93	5.05	6.19	7.31	8.46	9.60	10.77	11.95	13.14		14.46	4 / 1			
reaction time	interval		1.12	1.12	1.14	1.12	1.15	1.14	1.17	1.18	1.19	1.32			3.38	3.41	3.54
	velocity	4.63	7.59	7.59	7.46	7.59	7.39	7.46	7.26	7.20	7.14	7.95	6.92		7.54	7.48	7.20

2016 Kanto Student Championships (Sagamihara, JPN)

FINAL date 17-Sep-16 wind 3.2 m/s *(2016.09.17) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Fujimori, Nana (JPN) (1997)	time	2.71	3.81	4.88	5.94	6.99	8.05	9.12	10.22	11.32	12.42		13.64	5 / 1			
reaction time	interval		1.10	1.07	1.06	1.05	1.06	1.07	1.10	1.10	1.10	1.22			3.23	3.18	3.30
	velocity	4.80	7.73	7.94	8.02	8.10	8.02	7.94	7.73	7.73	7.73	8.61	7.33		7.89	8.02	7.73
Yuri, Ohiko (JPN)	time	2.75	3.85	4.94	6.01	7.08	8.15	9.19	10.32	11.46	12.59		13.84	4 / 2			
reaction time	interval		1.10	1.09	1.07	1.07	1.07	1.04	1.13	1.14	1.13	1.25			3.26	3.18	3.40
	velocity	4.73	7.73	7.80	7.94	7.94	7.94	8.17	7.52	7.46	7.52	8.40	7.23		7.82	8.02	7.50
Sasaki, Ten (JPN) (1997)	time	2.70	3.80	4.89	5.95	7.05	8.14	9.24	10.36	11.51	12.66		13.97	6 / 3			
reaction time	interval		1.10	1.09	1.06	1.10	1.09	1.10	1.12	1.15	1.15	1.31			3.25	3.29	3.42
	velocity	4.81	7.73	7.80	8.02	7.73	7.80	7.73	7.59	7.39	7.39	8.02	7.16		7.85	7.75	7.46

2016 Miyazaki Perfecture High School Championships (Miyazaki, JPN)

FINAL date 16-Sep-16 wind -0.4 m/s *(2016.10.26) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Koto, Koenoson (JPN)	time	2.71	3.88	5.05	6.21	7.37	8.55	9.75	10.95	12.18	13.45		14.82	4 / 1			
reaction time	interval		1.17	1.17	1.16	1.16	1.18	1.20	1.20	1.23	1.27	1.37			3.50	3.54	3.70
	velocity	4.80	7.26	7.26	7.33	7.33	7.20	7.08	7.08	6.91	6.69	7.66	6.75		7.29	7.20	6.89

2016 Memorial van Damme (Brussels, BEL) (TV Analysis)

FINAL date 09-Sep-16 wind 0.1 m/s *Henson (2021) - Athlete First: 2016 year end hurdle report*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Stowers, Jasmin (USA) (1991)	time	2.56	3.58	4.56	5.56	6.54	7.52	8.50	9.50	10.52	11.54		12.78	6 / 1			
reaction time 0.186	interval		1.02	0.98	1.00	0.98	0.98	0.98	1.00	1.02	1.02	1.24			3.00	2.94	3.04
	velocity	5.08	8.33	8.67	8.50	8.67	8.67	8.67	8.50	8.33	8.33	8.47	7.82		8.50	8.67	8.39
Zagré, Anne (BEL) (1990)	time	2.56	3.60	4.58	5.56	6.56	7.54	8.54	9.54	10.54	11.58		12.82	5 / 2			
reaction time 0.152	interval		1.04	0.98	0.98	1.00	0.98	1.00	1.00	1.00	1.04	1.24			3.00	2.98	3.04
	velocity	5.08	8.17	8.67	8.67	8.50	8.67	8.50	8.50	8.50	8.17	8.47	7.80		8.50	8.56	8.39
Hildebrand, Nadine (GER) (19	time	2.52	3.56	4.56	5.56	6.56	7.54	8.54	9.56	10.58	11.62		12.83	7 / 3			
reaction time 0.141	interval		1.04	1.00	1.00	1.00	0.98	1.00	1.02	1.02	1.04	1.21			3.04	2.98	3.08
	velocity	5.16	8.17	8.50	8.50	8.50	8.67	8.50	8.33	8.33	8.17	8.68	7.79		8.39	8.56	8.28
Roleder, Cindy (GER) (1989)	time	2.60	3.64	4.64	5.62	6.62	7.62	8.64	9.66	10.66	11.72		12.91	4 / 4			
reaction time 0.125	interval		1.04	1.00	0.98	1.00	1.00	1.02	1.02	1.00	1.06	1.19			3.02	3.02	3.08
	velocity	5.00	8.17	8.50	8.67	8.50	8.50	8.33	8.33	8.50	8.02	8.82	7.75		8.44	8.44	8.28
Neziri, Nooralotta (FIN) (1992)	time	2.58	3.60	4.58	5.58	6.58	7.58	8.58	9.60	10.62	11.70		12.94	8 / 5			
reaction time 0.146	interval		1.02	0.98	1.00	1.00	1.00	1.00	1.02	1.02	1.08	1.24			3.00	3.00	3.12
	velocity	5.04	8.33	8.67	8.50	8.50	8.50	8.50	8.33	8.33	7.87	8.47	7.73		8.50	8.50	8.17
George, Phylicia (CAN) (1987)	time	2.56	3.62	4.62	5.62	6.62	7.62	8.64	9.66	10.68	11.76		12.97	3 / 6			
reaction time 0.120	interval		1.06	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.08	1.21			3.06	3.02	3.12
	velocity	5.08	8.02	8.50	8.50	8.50	8.50	8.33	8.33	8.33	7.87	8.68	7.71		8.33	8.44	8.17
Kallur, Susanna (SWE) (1981)	time	2.52	3.56	4.56	5.56	6.56	7.58	8.58	9.62	10.68	11.76		13.02	1 / 7			
reaction time 0.144	interval		1.04	1.00	1.00	1.00	1.02	1.00	1.04	1.06	1.08	1.26			3.04	3.02	3.18
	velocity	5.16	8.17	8.50	8.50	8.50	8.33	8.50	8.17	8.02	7.87	8.33	7.68		8.39	8.44	8.02
Ivančević, Andrea (CRO) (1984	time	2.56	3.60	4.64	5.64	6.66	7.66	8.68	9.72	10.76	11.80		13.04	2 / 8			
reaction time 0.141	interval		1.04	1.04	1.00	1.02	1.00	1.02	1.04	1.04	1.04	1.24			3.08	3.04	3.12
	velocity	5.08	8.17	8.17	8.50	8.33	8.50	8.33	8.17	8.17	8.17	8.47	7.67		8.28	8.39	8.17

2016 Japanese University Championships (Kumagaya, JPN)

FINAL date 04-Sep-16 wind -0.2 m/s *(2016.09.06) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kobayashi, Sayaka (JPN) (199	time	2.68	3.75	4.82	5.88	6.92	7.98	9.06	10.13	11.21	12.31		13.50	6 / 1			
reaction time 0.185	interval		1.07	1.07	1.06	1.04	1.06	1.08	1.07	1.08	1.10	1.19	**PB**		3.20	3.18	3.25
	velocity	4.85	7.94	7.94	8.02	8.17	8.02	7.87	7.94	7.87	7.73	8.82	7.41		7.97	8.02	7.85
Nakamura, Yuki (JPN) (1995)	time	2.73	3.80	4.86	5.91	6.97	8.03	9.09	10.17	11.27	12.39		13.59	9 / 2			
reaction time 0.159	interval		1.07	1.06	1.05	1.06	1.06	1.06	1.08	1.10	1.12	1.20			3.18	3.18	3.30
	velocity	4.76	7.94	8.02	8.10	8.02	8.02	8.02	7.87	7.73	7.59	8.75	7.36		8.02	8.02	7.73
Fukube, Mako (JPN) (1995)	time	2.72	3.79	4.85	5.91	6.95	8.01	9.08	10.17	11.27	12.39		13.59	5 / 3			
reaction time 0.146	interval		1.07	1.06	1.06	1.04	1.06	1.07	1.09	1.10	1.12	1.20			3.19	3.17	3.31
	velocity	4.78	7.94	8.02	8.02	8.17	8.02	7.94	7.80	7.73	7.59	8.75	7.36		7.99	8.04	7.70

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

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Umahara, Satsuki (JPN) (1994)	time	2.69	3.77	4.83	5.90	6.95	8.02	9.09	10.17	11.27	12.39		13.59	7 / 4			
reaction time 0.166	interval		1.08	1.06	1.07	1.05	1.07	1.07	1.08	1.10	1.12	1.20			3.21	3.19	3.30
	velocity	4.83	7.87	8.02	7.94	8.10	7.94	7.94	7.87	7.73	7.59	8.75	7.36		7.94	7.99	7.73
Horiike, Kaho (JPN) (1996)	time	2.72	3.81	4.89	5.96	7.05	8.15	9.26	10.35	11.46	12.59		13.79	8 / 5			
reaction time 0.165	interval		1.09	1.08	1.07	1.09	1.10	1.11	1.09	1.11	1.13	1.20			3.24	3.30	3.33
	velocity	4.78	7.80	7.87	7.94	7.80	7.73	7.66	7.80	7.66	7.52	8.75	7.25		7.87	7.73	7.66

2016 Weltklasse (Zürich, SUI) (TV Analysis)

FINAL date 01-Sep-16 wind 0.4 m/s

Henson (2020) - Athlete First: 2016 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.48	3.48	4.48	5.48	6.46	7.44	8.42	9.40	10.38	11.38		12.63	5 / 1			
reaction time 0.168	interval		1.00	1.00	1.00	0.98	0.98	0.98	0.98	0.98	1.00	1.25			3.00	2.94	2.96
	velocity	5.24	8.50	8.50	8.50	8.67	8.67	8.67	8.67	8.67	8.50	8.40	7.92		8.50	8.67	8.61
Ofili, Cindy (GBR) (1994)	time	2.46	3.48	4.48	5.48	6.46	7.44	8.44	9.44	10.44	11.44		12.70	6 / 2			
reaction time 0.139	interval		1.02	1.00	1.00	0.98	0.98	1.00	1.00	1.00	1.00	1.26			3.02	2.96	3.00
	velocity	5.28	8.33	8.50	8.50	8.67	8.67	8.50	8.50	8.50	8.50	8.33	7.87		8.44	8.61	8.50
Harper-Nelson, Dawn (USA) (	time	2.48	3.48	4.52	5.50	6.50	7.48	8.46	9.44	10.44	11.48		12.73	7 / 3			
reaction time 0.148	interval		1.00	1.04	0.98	1.00	0.98	0.98	0.98	1.00	1.04	1.25			3.02	2.96	3.02
	velocity	5.24	8.50	8.17	8.67	8.50	8.67	8.67	8.67	8.50	8.17	8.40	7.86		8.44	8.61	8.44
Stowers, Jasmin (USA) (1991)	time	2.48	3.52	4.50	5.50	6.50	7.50	8.48	9.50	10.52	11.56		12.78	3 / 4			
reaction time 0.120	interval		1.04	0.98	1.00	1.00	1.00	0.98	1.02	1.02	1.04	1.22			3.02	2.98	3.08
	velocity	5.24	8.17	8.67	8.50	8.50	8.50	8.67	8.33	8.33	8.17	8.61	7.82		8.44	8.56	8.28
Roleder, Cindy (GER) (1989)	time	2.58	3.60	4.58	5.58	6.58	7.56	8.56	9.56	10.58	11.60		12.80	4 / 5			
reaction time 0.120	interval		1.02	0.98	1.00	1.00	0.98	1.00	1.00	1.02	1.02	1.20			3.00	2.98	3.04
	velocity	5.04	8.33	8.67	8.50	8.50	8.67	8.50	8.50	8.33	8.33	8.75	7.81		8.50	8.56	8.39
Simmonds, Megan (JAM) (199	time	2.56	3.56	4.58	5.58	6.56	7.56	8.56	9.58	10.62	11.66		12.90	8 / 6			
reaction time 0.180	interval		1.00	1.02	1.00	0.98	1.00	1.00	1.02	1.04	1.04	1.24			3.02	2.98	3.10
	velocity	5.08	8.50	8.33	8.50	8.67	8.50	8.50	8.33	8.17	8.17	8.47	7.75		8.44	8.56	8.23
George, Phylicia (CAN) (1987)	time	2.56	3.58	4.58	5.58	6.58	7.58	8.58	9.62	10.66	11.72		12.93	2 / 7			
reaction time 0.102	interval		1.02	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.06	1.21			3.02	3.00	3.14
	velocity	5.08	8.33	8.50	8.50	8.50	8.50	8.50	8.17	8.17	8.02	8.68	7.73		8.44	8.50	8.12
Zagré, Anne (BEL) (1990)	time	2.60	3.64	4.64	5.64	6.64	7.64	8.66	9.70	10.72	11.74		12.98	9 / 8			
reaction time 0.146	interval		1.04	1.00	1.00	1.00	1.00	1.02	1.04	1.02	1.02	1.24			3.04	3.02	3.08
	velocity	5.00	8.17	8.50	8.50	8.50	8.50	8.33	8.17	8.33	8.33	8.47	7.70		8.39	8.44	8.28
Hildebrand, Nadine (GER) (19	time	2.56	3.62	4.62	5.64	6.66	7.66	8.66	9.68	10.74	11.78		12.99	1 / 9			
reaction time 0.149	interval		1.06	1.00	1.02	1.02	1.00	1.00	1.02	1.06	1.04	1.21			3.08	3.02	3.12
	velocity	5.08	8.02	8.50	8.33	8.33	8.50	8.50	8.33	8.02	8.17	8.68	7.70		8.28	8.44	8.17

2016 Meeting Paris (Saint-Denis, FRA) (TV Analysis)

FINAL date 27-Aug-16 wind 0.2 m/s

Henson (2020) - Athlete First: 2016 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.46	3.48	4.48	5.44	6.40	7.36	8.32	9.28	10.26	11.24		12.44	5 / 1			
reaction time 0.178	interval		1.02	1.00	0.96	0.96	0.96	0.96	0.96	0.98	0.98	1.20			2.98	2.88	2.92
	velocity	5.28	8.33	8.50	8.85	8.85	8.85	8.85	8.85	8.67	8.67	8.75	8.04		8.56	8.85	8.73
Harper-Nelson, Dawn (USA) (	time	2.52	3.52	4.52	5.52	6.50	7.48	8.46	9.44	10.46	11.46		12.65	3 / 2			
reaction time 0.132	interval		1.00	1.00	1.00	0.98	0.98	0.98	0.98	1.02	1.00	1.19			3.00	2.94	3.00
	velocity	5.16	8.50	8.50	8.50	8.67	8.67	8.67	8.67	8.33	8.50	8.82	7.91		8.50	8.67	8.50
Ofili, Cindy (GBR) (1994)	time	2.52	3.56	4.56	5.56	6.52	7.50	8.48	9.46	10.46	11.48		12.66	7 / 3			
reaction time 0.146	interval		1.04	1.00	1.00	0.96	0.98	0.98	0.98	1.00	1.02	1.18			3.04	2.92	3.00
	velocity	5.16	8.17	8.50	8.50	8.85	8.67	8.67	8.67	8.50	8.33	8.90	7.90		8.39	8.73	8.50
Stowers, Jasmin (USA) (1991)	time	2.54	3.58	4.58	5.56	6.54	7.52	8.52	9.52	10.54	11.58		12.76	6 / 4			
reaction time 0.140	interval		1.04	1.00	0.98	0.98	0.98	1.00	1.00	1.02	1.04	1.18			3.02	2.96	3.06
	velocity	5.12	8.17	8.50	8.67	8.67	8.67	8.50	8.50	8.33	8.17	8.90	7.84		8.44	8.61	8.33
Roleder, Cindy (GER) (1989)	time	2.54	3.58	4.58	5.58	6.56	7.54	8.54	9.54	10.56	11.60		12.78	4 / 5			
reaction time 0.129	interval		1.04	1.00	1.00	0.98	0.98	1.00	1.00	1.02	1.04	1.18			3.04	2.96	3.06
	velocity	5.12	8.17	8.50	8.50	8.67	8.67	8.50	8.50	8.33	8.17	8.90	7.82		8.39	8.61	8.33
Billaud, Cindy (FRA) (1986)	time	2.54	3.58	4.62	5.64	6.66	7.66	8.66	9.70	10.74	11.80		13.02	2 / 6			
reaction time 0.106	interval		1.04	1.04	1.02	1.02	1.00	1.00	1.04	1.04	1.06	1.22			3.10	3.02	3.14
	velocity	5.12	8.17	8.17	8.33	8.33	8.50	8.50	8.17	8.17	8.02	8.61	7.68		8.23	8.44	8.12
Hildebrand, Nadine (GER) (19	time	2.52	3.60	4.64	5.64	6.64	7.66	8.68	9.70	10.76	11.82		13.04	8 / 7			
reaction time 0.142	interval		1.08	1.04	1.00	1.00	1.02	1.02	1.02	1.06	1.06	1.22			3.12	3.04	3.14
	velocity	5.16	7.87	8.17	8.50	8.50	8.33	8.33	8.33	8.02	8.02	8.61	7.67		8.17	8.39	8.12

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Gomis, Sandra (FRA) (1983)	time		2.54	3.60	4.64	5.64	6.64	7.70	8.74	9.82	10.86	11.98		13.18	9 / 8			
reaction time 0.161	interval			1.06	1.04	1.00	1.00	1.06	1.04	1.08	1.04	1.12	1.20			3.10	3.10	3.24
	velocity		5.12	8.02	8.17	8.50	8.50	8.02	8.17	7.87	8.17	7.59	8.75	7.59		8.23	8.23	7.87

2016 Athletissime (Luasanne, SUI) (TV Analysis)

FINAL date 25-Aug-16 wind 0.7 m/s

Henson (2020) - Athlete First: 2016 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time		2.48	3.50	4.48	5.44	6.40	7.36	8.32	9.28	10.26	11.26		12.42	5 / 1			
reaction time 0.148	interval			1.02	0.98	0.96	0.96	0.96	0.96	0.96	0.98	1.00	1.16			2.96	2.88	2.94
	velocity		5.24	8.33	8.67	8.85	8.85	8.85	8.85	8.85	8.67	8.50	9.05	8.05		8.61	8.85	8.67
Harper-Nelson, Dawn (USA) (1	time		2.54	3.56	4.56	5.56	6.54	7.52	8.52	9.52	10.52	11.52		12.71	8 / 2			
reaction time 0.145	interval			1.02	1.00	1.00	0.98	0.98	1.00	1.00	1.00	1.00	1.19			3.02	2.96	3.00
	velocity		5.12	8.33	8.50	8.50	8.67	8.67	8.50	8.50	8.50	8.50	8.82	7.87		8.44	8.61	8.50
Stowers, Jasmin (USA) (1991)	time		2.56	3.58	4.58	5.56	6.54	7.54	8.54	9.54	10.56	11.58		12.75	6 / 3			
reaction time 0.135	interval			1.02	1.00	0.98	0.98	1.00	1.00	1.00	1.02	1.02	1.17			3.00	2.98	3.04
	velocity		5.08	8.33	8.50	8.67	8.67	8.50	8.50	8.50	8.33	8.33	8.97	7.84		8.50	8.56	8.39
Ofili, Cindy (GBR) (1994)	time		2.56	3.58	4.60	5.58	6.54	7.52	8.52	9.54	10.56	11.60		12.80	7 / 4			
reaction time 0.145	interval			1.02	1.02	0.98	0.96	0.98	1.00	1.02	1.02	1.04	1.20			3.02	2.94	3.08
	velocity		5.08	8.33	8.33	8.67	8.85	8.67	8.50	8.33	8.33	8.17	8.75	7.81		8.44	8.67	8.28
Nelvis, Sharika (USA) (1990)	time		2.48	3.50	4.52	5.52	6.52	7.54	8.56	9.56	10.62	11.66		12.88	4 / 5			
reaction time 0.137	interval	7 steps		1.02	1.02	1.00	1.00	1.02	1.02	1.00	1.06	1.04	1.22			3.04	3.04	3.10
	velocity		5.24	8.33	8.33	8.50	8.50	8.33	8.33	8.50	8.02	8.17	8.61	7.76		8.39	8.39	8.23
Rard-Reuse, Clélia (SUI) (1988	time		2.56	3.60	4.62	5.64	6.66	7.66	8.70	9.72	10.74	11.78		13.00	3 / 6			
reaction time 0.142	interval			1.04	1.02	1.02	1.02	1.00	1.04	1.02	1.02	1.04	1.22			3.08	3.06	3.08
	velocity		5.08	8.17	8.33	8.33	8.33	8.50	8.17	8.33	8.33	8.17	8.61	7.69		8.28	8.33	8.28
Simmonds, Megan (JAM) (199	time		2.48	3.52	4.52	5.50	6.52	7.54	8.58	9.64	10.74	11.88		13.15	2 / 7			
reaction time 0.174	interval			1.04	1.00	0.98	1.02	1.02	1.04	1.06	1.10	1.14	1.27			3.02	3.08	3.30
	velocity		5.24	8.17	8.50	8.67	8.33	8.33	8.17	8.02	7.73	7.46	8.27	7.60		8.44	8.28	7.73

2016 Japanese National High School Championships (Okayama, JPN)

FINAL date 02-Aug-16 wind 1.5 m/s

Kota (2016) - 69th high school championships: JAF scientific committee - biomechanics data collection

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tanaka, Yumi (JPN) (1998)	time		2.64	3.71	4.78	5.84	6.89	7.94	9.00	10.09	11.18	12.26		13.50	7 / 1			
reaction time 0.156	interval			1.07	1.07	1.06	1.05	1.05	1.06	1.09	1.09	1.08	1.24			3.20	3.16	3.26
	velocity		4.92	7.94	7.94	8.02	8.10	8.10	8.02	7.80	7.80	7.87	8.47	7.41		7.97	8.07	7.82
Tanaka, Hikari (JPN) (1998)	time		2.71	3.82	4.90	5.97	7.02	8.09	9.16	10.23	11.34	12.42		13.64	4 / 2			
reaction time 0.153	interval			1.11	1.08	1.07	1.05	1.07	1.07	1.07	1.11	1.08	1.22	PB		3.26	3.19	3.26
	velocity		4.80	7.66	7.87	7.94	8.10	7.94	7.94	7.94	7.66	7.87	8.61	7.33		7.82	7.99	7.82
Fujiwara, Rui (JPN) (1998)	time		2.73	3.82	4.88	5.95	7.03	8.09	9.16	10.25	11.33	12.45		13.68	8 / 3			
reaction time 0.146	interval			1.09	1.06	1.07	1.08	1.06	1.07	1.09	1.08	1.12	1.23	PB		3.22	3.21	3.29
	velocity		4.76	7.80	8.02	7.94	7.87	8.02	7.94	7.80	7.87	7.59	8.54	7.31		7.92	7.94	7.75
Yoshita, Airi (JPN) (1999)	time		2.69	3.80	4.90	5.96	7.01	8.07	9.12	10.24	11.33	12.46		13.69	5 / 4			
reaction time 0.157	interval			1.11	1.10	1.06	1.05	1.06	1.05	1.12	1.09	1.13	1.23	PB		3.27	3.16	3.34
	velocity		4.83	7.66	7.73	8.02	8.10	8.02	8.10	7.59	7.80	7.52	8.54	7.30		7.80	8.07	7.63
Furuhashi, Kana (JPN) (1999)	time		2.75	3.87	4.98	6.08	7.15	8.20	9.31	10.41	11.52	12.66		13.88	2 / 5			
reaction time 0.150	interval			1.12	1.11	1.10	1.07	1.05	1.11	1.10	1.11	1.14	1.22			3.33	3.23	3.35
	velocity		4.73	7.59	7.66	7.73	7.94	8.10	7.66	7.73	7.66	7.46	8.61	7.20		7.66	7.89	7.61
Nakatuka, Natsuki (JPN) (1998	time		2.74	3.85	4.96	6.04	7.14	8.24	9.32	10.44	11.55	12.68		13.94	3 / 6			
reaction time 0.171	interval			1.11	1.11	1.08	1.10	1.10	1.08	1.12	1.11	1.13	1.26			3.30	3.28	3.36
	velocity		4.74	7.66	7.66	7.87	7.73	7.73	7.87	7.59	7.66	7.52	8.33	7.17		7.73	7.77	7.59
Takahashi, Natsuki (JPN) (199	time		2.79	3.91	5.02	6.14	7.24	8.34	9.44	10.54	11.65	12.76		13.95	6 / 7			
reaction time 0.183	interval			1.12	1.11	1.12	1.10	1.10	1.10	1.10	1.11	1.11	1.19	PB		3.35	3.30	3.32
	velocity		4.66	7.59	7.66	7.59	7.73	7.73	7.73	7.73	7.66	7.66	8.82	7.17		7.61	7.73	7.68
Fujimori, Kanna (JPN) (1999)	time		2.71	3.81	4.90	6.01	7.10	8.18	9.31	10.43	11.57	12.73		13.98	9 / 8			
reaction time 0.142	interval			1.10	1.09	1.11	1.09	1.08	1.13	1.12	1.14	1.16	1.25	=PB		3.30	3.30	3.42
	velocity		4.80	7.73	7.80	7.66	7.80	7.87	7.52	7.59	7.46	7.33	8.40	7.15		7.73	7.73	7.46

2016 Olympic Games (Rio de Janeiro, BRA) (TV Analysis)

FINAL date 17-Aug-16 wind 0.0 m/s

Henson (2020) - Athlete First: 2016 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Rollins, Brianna (USA) (1991)	time		2.30	3.32	4.30	5.27	6.24	7.20	8.17	9.15	10.14	11.14		12.48	6 / 1			
reaction time 0.158	interval			1.02	0.98	0.97	0.97	0.96	0.97	0.98	0.99	1.00	1.34			2.97	2.90	2.97
	velocity		5.65	8.33	8.67	8.76	8.76	8.85	8.76	8.67	8.59	8.50	7.84	8.01		8.59	8.79	8.59

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

Ali, Nia (USA) (1988)		time	2.37	3.37	4.36	5.36	6.33	7.30	8.27	9.24	10.24	11.27		12.59	4 / 2			
reaction time	0.154	interval		1.00	0.99	1.00	0.97	0.97	0.97	0.97	1.00	1.03	1.32			2.99	2.91	3.00
		velocity	5.49	8.50	8.59	8.50	8.76	8.76	8.76	8.76	8.50	8.25	7.95	7.94		8.53	8.76	8.50
Castlin, Kristi (USA) (1988)		time	2.37	3.40	4.43	5.40	6.37	7.37	8.34	9.31	10.31	11.31		12.61	7 / 3			
reaction time	0.152	interval		1.03	1.03	0.97	0.97	1.00	0.97	0.97	1.00	1.00	1.30			3.03	2.94	2.97
		velocity	5.49	8.25	8.25	8.76	8.76	8.50	8.76	8.76	8.50	8.50	8.08	7.93		8.42	8.67	8.59
Ofili, Cindy (GBR) (1994)		time	2.37	3.40	4.40	5.37	6.34	7.31	8.31	9.31	10.31	11.34		12.63	8 / 4			
reaction time	0.161	interval		1.03	1.00	0.97	0.97	0.97	1.00	1.00	1.00	1.03	1.29			3.00	2.94	3.03
		velocity	5.49	8.25	8.50	8.76	8.76	8.76	8.50	8.50	8.50	8.25	8.14	7.92		8.50	8.67	8.42
Roleder, Cindy (GER) (1989)		time	2.43	3.44	4.44	5.40	6.42	7.42	8.40	9.40	10.41	11.44		12.74	2 / 5			
reaction time	0.130	interval		1.01	1.00	0.96	1.02	1.00	0.98	1.00	1.01	1.03	1.30			2.97	3.00	3.04
		velocity	5.35	8.42	8.50	8.85	8.33	8.50	8.67	8.50	8.42	8.25	8.08	7.85		8.59	8.50	8.39
Seymour, Pedrya (BAH) (1995)		time	2.38	3.43	4.45	5.43	6.41	7.40	8.37	9.37	10.34	11.34		12.76	5 / 6			
reaction time	0.179	interval		1.05	1.02	0.98	0.98	0.99	0.97	1.00	0.97	1.00	1.42			3.05	2.94	2.97
		velocity	5.46	8.10	8.33	8.67	8.67	8.59	8.76	8.50	8.76	8.50	7.39	7.84		8.36	8.67	8.59
Porter, Tiffany (GBR) (1987)		time	2.40	3.40	4.40	5.37	6.34	7.34	8.34	9.34	10.37	11.41		12.76	3 / 7			
reaction time	0.142	interval		1.00	1.00	0.97	0.97	1.00	1.00	1.00	1.03	1.04	1.35			2.97	2.97	3.07
		velocity	5.42	8.50	8.50	8.76	8.76	8.50	8.50	8.50	8.25	8.17	7.78	7.84		8.59	8.59	8.31
George, Phylicia (CAN) (1987)		time	2.40	3.43	4.43	5.40	6.40	7.40	8.41	9.43	10.46	11.51		12.89	9 / 8			
reaction time	0.143	interval		1.03	1.00	0.97	1.00	1.00	1.01	1.02	1.03	1.05	1.38			3.00	3.01	3.10
		velocity	5.42	8.25	8.50	8.76	8.50	8.50	8.42	8.33	8.25	8.10	7.61	7.76		8.50	8.47	8.23

2016 IAAF World Junior Championships (Bydgoszcz, POL)

FINAL

date 24-Jul-16 wind 2.0 m/s *(2016.07.25) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Herman, Elvira (BLR) (1997)		time	2.66	3.69	4.69	5.67	6.65	7.63	8.64	9.63	10.66	11.68		12.85	4 / 1			
reaction time	0.160	interval		1.03	1.00	0.98	0.98	0.98	1.01	0.99	1.03	1.02	1.17	AJR		3.01	2.97	3.04
		velocity	4.89	8.25	8.50	8.67	8.67	8.67	8.42	8.59	8.25	8.33	8.97	7.78		8.47	8.59	8.39
Burton, Rushelle (JAM) (1997)		time	2.58	3.64	4.66	5.68	6.68	7.70	8.70	9.71	10.73	11.74		12.87	8 / 2			
reaction time	0.161	interval		1.06	1.02	1.02	1.00	1.02	1.00	1.01	1.02	1.01	1.13	NJR		3.10	3.02	3.04
		velocity	5.04	8.02	8.33	8.33	8.50	8.33	8.50	8.42	8.33	8.42	9.29	7.77		8.23	8.44	8.39
Jones, Tia (USA) (2000)		0.180	no information available											12.89	7 / 3			
Duncan, Alexis (USA) (1998)		time	2.57	3.60	4.62	5.61	6.61	7.62	8.65	9.70	10.72	11.78		12.93	6 / 4			
reaction time	0.159	interval		1.03	1.02	0.99	1.00	1.01	1.03	1.05	1.02	1.06	1.15	PB		3.04	3.04	3.13
		velocity	5.06	8.25	8.33	8.59	8.50	8.42	8.25	8.10	8.33	8.02	9.13	7.73		8.39	8.39	8.15
Amusan, Oluwatobiloba (NGR		0.197	no information available											12.95	5 / 5			
Barrett, Alicia (GBR) (1998)		0.175	no information available										PB	13.15	2 / 6			
Bieldt, Taylon (RSA) (1998)		0.150	no information available											13.37	3 / 7			
Valette, Laura (FRA) (1997)		0.183	no information available											13.42	9 / 8			

Semi-Final 1

date 23-Jul-16 wind 0.6 m/s *(2016.07.25) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tanaka, Yumi (JPN) (1998)		time	2.63	3.69	4.75	5.80	6.82	7.90	8.95	10.03	11.14	12.25		13.46	9 / 4			
reaction time	0.138	interval		1.06	1.06	1.05	1.02	1.08	1.05	1.08	1.11	1.11	1.21	PB		3.17	3.15	3.30
		velocity	4.94	8.02	8.02	8.10	8.33	7.87	8.10	7.87	7.66	7.66	8.68	7.43		8.04	8.10	7.73

2016 All-Star Night Athletics (Hiratsuka, JPN)

FINAL

date 23-Jul-16 wind 1.1 m/s *(2016.07.23) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Hemphill, Megu (JPN) (1996)		time	2.69	3.77	4.81	5.86	6.88	7.91	8.96	10.01	11.08	12.17		13.38	2 / 1			
reaction time	0.138	interval		1.08	1.04	1.05	1.02	1.03	1.05	1.05	1.07	1.09	1.21	PB		3.17	3.10	3.21
		velocity	4.83	7.87	8.17	8.10	8.33	8.25	8.10	8.10	7.94	7.80	8.68	7.47		8.04	8.23	7.94
Shimura, Hitomi (JPN) (1990)		time	2.67	3.74	4.82	5.87	6.90	7.94	8.99	10.05	11.14	12.23		13.39	5 / 2			
reaction time	0.153	interval		1.07	1.08	1.05	1.03	1.04	1.05	1.06	1.09	1.09	1.16			3.20	3.12	3.24
		velocity	4.87	7.94	7.87	8.10	8.25	8.17	8.10	8.02	7.80	7.80	9.05	7.47		7.97	8.17	7.87

2016 London Anniversary Games (London, GBR)

Henson (2020) - Athlete First: 2016 year end hurdle report (TV Analysis)

FINAL

date 22-Jul-16 wind 0.3 m/s *Vazel (2016) - Analysis of Keni Harrison's World Record 100m Hurdles Race*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (Keni) (USA		time	2.49	3.49	4.45	5.40	6.33	7.27	8.21	9.15	10.11	11.10		12.20	6 / 1		*Vazel (2016)*	
reaction time	0.149	interval		1.00	0.96	0.95	0.93	0.94	0.94	0.94	0.96	0.99	1.10	WR		2.91	2.81	2.89
		velocity	5.22	8.50	8.85	8.95	9.14	9.04	9.04	9.04	8.85	8.59	9.55	8.20		8.76	9.07	8.82
Rollins, Brianna (USA) (1991)		time	2.46	3.46	4.44	5.42	6.38	7.36	8.34	9.34	10.38	11.40		12.57	7 / 2		*Henson (2020)*	
reaction time	0.140	interval		1.00	0.98	0.98	0.96	0.98	0.98	1.00	1.04	1.02	1.17			2.96	2.92	3.06

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

		velocity	5.28	8.50	8.67	8.67	8.85	8.67	8.67	8.50	8.17	8.33	8.97	7.96		8.61	8.73	8.33
Castlin, Kristi (USA) (1988)		time	2.54	3.58	4.60	5.58	6.56	7.54	8.50	9.46	10.46	11.46		12.59	9 / 3			*Henson (2020)*
reaction time	0.144	interval		1.04	1.02	0.98	0.98	0.98	0.96	0.96	1.00	1.00	1.13			3.04	2.92	2.96
		velocity	5.12	8.17	8.33	8.67	8.67	8.67	8.85	8.85	8.50	8.50	9.29	7.94		8.39	8.73	8.61
Ali, Nia (USA) (1988)		time	2.48	3.48	4.46	5.42	6.44	7.42	8.40	9.38	10.40	11.42		12.63	5 / 4			*Henson (2020)*
reaction time	0.145	interval		1.00	0.98	0.96	1.02	0.98	0.98	0.98	1.02	1.02	1.21			2.94	2.98	3.02
		velocity	5.24	8.50	8.67	8.85	8.33	8.67	8.67	8.67	8.33	8.33	8.68	7.92		8.67	8.56	8.44
Talay, Alina (BLR) (1989)		time	2.52	3.52	4.50	5.48	6.44	7.42	8.40	9.40	10.42	11.46		12.66	3 / 5			*Henson (2020)*
reaction time	0.118	interval		1.00	0.98	0.98	0.96	0.98	0.98	1.00	1.02	1.04	1.20			2.96	2.92	3.06
		velocity	5.16	8.50	8.67	8.67	8.85	8.67	8.67	8.50	8.33	8.17	8.75	7.90		8.61	8.73	8.33
Porter, Tiffany (GBR) (1987)		time	2.48	3.50	4.50	5.50	6.48	7.46	8.46	9.46	10.46	11.48		12.70	2 / 6			*Henson (2020)*
reaction time	0.119	interval		1.02	1.00	1.00	0.98	0.98	1.00	1.00	1.00	1.02	1.22			3.02	2.96	3.02
		velocity	5.24	8.33	8.50	8.50	8.67	8.67	8.50	8.50	8.50	8.33	8.61	7.87		8.44	8.61	8.44
Zagré, Anne (BEL) (1990)		time	2.64	3.68	4.70	5.72	6.70	7.68	8.68	9.68	10.68	11.72		12.94	1 / 7			*Henson (2020)*
reaction time	0.160	interval		1.04	1.02	1.02	0.98	0.98	1.00	1.00	1.00	1.04	1.22			3.08	2.96	3.04
		velocity	4.92	8.17	8.33	8.33	8.67	8.67	8.50	8.50	8.50	8.17	8.61	7.73		8.28	8.61	8.39
Ennis-Hill, Jessica (GBR) (198		time	2.58	3.60	4.62	5.62	6.62	7.64	8.64	9.70	10.80	11.86		13.04	8 / 8			*Henson (2020)*
reaction time	0.155	interval		1.02	1.02	1.00	1.00	1.02	1.00	1.06	1.10	1.06	1.18			3.04	3.02	3.22
		velocity	5.04	8.33	8.33	8.50	8.50	8.33	8.50	8.02	7.73	8.02	8.90	7.67		8.39	8.44	7.92
Stowers, Jasmin (USA) (1991)		time	2.52	3.52	4.50	5.50								dnf	4 / --			*Henson (2020)*
reaction time	0.132	interval		1.00	0.98	1.00										2.98		
		velocity	5.16	8.50	8.67	8.50										8.56		

Henson (2020) - Athlete First: 2016 year end hurdle report (TV Analysis)

Brice (2017) - critical determinants of sprint hurdle performance

Heat 2

date 22-Jul-16 wind 0.2 m/s

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (Keni) (USA		time	2.55	3.56	4.55	5.53	6.47	7.42	8.38	9.34	10.33	11.33		12.40	4 / 1			*Brice (2017)*
reaction time	0.143	interval		1.01	0.99	0.98	0.94	0.95	0.96	0.96	0.99	1.00	1.07			2.98	2.85	2.95
		velocity	5.10	8.42	8.59	8.67	9.04	8.95	8.85	8.85	8.59	8.50	9.81	8.06		8.56	8.95	8.64
Stowers, Jasmin (USA) (1991)		time	2.56	3.56	4.56	5.54	6.52	7.48	8.44	9.44	10.40	11.44		12.58	7 / 2			*Henson (2020)*
reaction time	0.143	interval		1.00	1.00	0.98	0.98	0.96	0.96	1.00	0.96	1.04	1.14			2.98	2.90	3.00
		velocity	5.08	8.50	8.50	8.67	8.67	8.85	8.85	8.50	8.85	8.17	9.21	7.95		8.56	8.79	8.50
Castlin, Kristi (USA) (1988)		time	2.54	3.58	4.60	5.56	6.52	7.48	8.44	9.44	10.44	11.48		12.67	5 / 3			*Henson (2020)*
reaction time	0.140	interval		1.04	1.02	0.96	0.96	0.96	0.96	1.00	1.00	1.04	1.19			3.02	2.88	3.04
		velocity	5.12	8.17	8.33	8.85	8.85	8.85	8.85	8.50	8.50	8.17	8.82	7.89		8.44	8.85	8.39

Henson (2020) - Athlete First: 2016 year end hurdle report (TV Analysis)

Heat 1

date 22-Jul-16 wind 0.3 m/s

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ali, Nia (USA) (1988)		time	2.52	3.54	4.54	5.50	6.50	7.48	8.48	9.48	10.48	11.50		12.69	7 / 1			
reaction time	0.156	interval		1.02	1.00	0.96	1.00	0.98	1.00	1.00	1.00	1.02	1.19			2.98	2.98	3.02
		velocity	5.16	8.33	8.50	8.85	8.50	8.67	8.50	8.50	8.50	8.33	8.82	7.88		8.56	8.56	8.44
Rollins, Brianna (USA) (1991)		time	2.48	3.44	4.44	5.42	6.40	7.38	8.40	9.46	10.50	11.54		12.74	6 / 2			
reaction time	0.135	interval		0.96	1.00	0.98	0.98	0.98	1.02	1.06	1.04	1.04	1.20			2.94	2.98	3.14
		velocity	5.24	8.85	8.50	8.67	8.67	8.67	8.33	8.02	8.17	8.17	8.75	7.85		8.67	8.56	8.12
Ennis-Hill, Jessica (GBR) (198		time	2.58	3.60	4.60	5.60	6.60	7.60	8.58	9.60	10.60	11.64		12.76	9 / 3			
reaction time	0.152	interval		1.02	1.00	1.00	1.00	1.00	0.98	1.02	1.00	1.04	1.12			3.02	2.98	3.06
		velocity	5.04	8.33	8.50	8.50	8.50	8.50	8.67	8.33	8.50	8.17	9.38	7.84		8.44	8.56	8.33

2016 USA Olympic Trials (Eugene, OR) (TV Analysis)

FINAL

date 08-Jul-16 wind 1.2 m/s

Henson (2020) - Athlete First: 2016 year end hurdle report

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Rollins, Brianna (USA) (1991)		time	2.40	3.40	4.37	5.34	6.27	7.20	8.14	9.11	10.11	11.11		12.34	4 / 1			
reaction time	0.200	interval		1.00	0.97	0.97	0.93	0.93	0.94	0.97	1.00	1.00	1.23			2.94	2.80	2.97
		velocity	5.42	8.50	8.76	8.76	9.14	9.14	9.04	8.76	8.50	8.50	8.54	8.10		8.67	9.11	8.59
Castlin, Kristi (USA) (1988)		time	2.50	3.53	4.53	5.50	6.47	7.40	8.37	9.34	10.34	11.31		12.50	3 / 2			
reaction time	0.175	interval		1.03	1.00	0.97	0.97	0.93	0.97	0.97	1.00	0.97	1.19	PB		3.00	2.87	2.94
		velocity	5.20	8.25	8.50	8.76	8.76	9.14	8.76	8.76	8.50	8.76	8.82	8.00		8.50	8.89	8.67
Ali, Nia (USA) (1988)		time	2.46	3.47	4.47	5.44	6.41	7.37	8.34	9.31	10.31	11.33		12.55	6 / 3			
reaction time	0.167	interval		1.01	1.00	0.97	0.97	0.96	0.97	0.97	1.00	1.02	1.22			2.98	2.90	2.99
		velocity	5.28	8.42	8.50	8.76	8.76	8.85	8.76	8.76	8.50	8.33	8.61	7.97		8.56	8.79	8.53
Harrison, Queen (USA) (1988)		time	2.50	3.53	4.50	5.47	6.44	7.41	8.37	9.34	10.35	11.35		12.57	5 / 4			
reaction time	0.154	interval		1.03	0.97	0.97	0.97	0.97	0.96	0.97	1.01	1.00	1.22			2.97	2.90	2.98
		velocity	5.20	8.25	8.76	8.76	8.76	8.76	8.85	8.76	8.42	8.50	8.61	7.96		8.59	8.79	8.56

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nelvis, Sharika (USA) (1990)	time	2.50	3.52	4.50	5.50	6.47	7.41	8.37	9.34	10.37	11.37		12.60	8 / 5			
reaction time 0.159	interval	7 Steps	1.02	0.98	1.00	0.97	0.94	0.96	0.97	1.03	1.00	1.23			3.00	2.87	3.00
	velocity	5.20	8.33	8.67	8.50	8.76	9.04	8.85	8.76	8.25	8.50	8.54	7.94		8.50	8.89	8.50
Harrison, Kendra (USA) (1992)	time	2.47	3.50	4.50	5.47	6.44	7.41	8.37	9.37	10.37	11.37		12.62	2 / 6			
reaction time 0.229	interval		1.03	1.00	0.97	0.97	0.97	0.96	1.00	1.00	1.00	1.25			3.00	2.90	3.00
	velocity	5.26	8.25	8.50	8.76	8.76	8.76	8.85	8.50	8.50	8.50	8.40	7.92		8.50	8.79	8.50
Coward, Jackie (USA) (1989)	time	2.53	3.57	4.57	5.57	6.54	7.51	8.47	9.47	10.49	11.51		12.75	1 / 7			
reaction time 0.168	interval		1.04	1.00	1.00	0.97	0.97	0.96	1.00	1.02	1.02	1.24			3.04	2.90	3.04
	velocity	5.14	8.17	8.50	8.50	8.76	8.76	8.85	8.50	8.33	8.33	8.47	7.84		8.39	8.79	8.39
Stowers, Jasmin (USA) (1991)	time	2.53	3.53	4.50	5.48	6.44	7.40	8.37	9.34	10.34	11.31		17.13	7 / 8			
reaction time 0.190	interval		1.00	0.97	0.98	0.96	0.96	0.97	0.97	1.00	0.97	5.82			2.95	2.89	2.94
	velocity	5.14	8.50	8.76	8.67	8.85	8.85	8.76	8.76	8.50	8.76	1.80	5.84		8.64	8.82	8.67

2016 European Championships (Amsterdam, NED) (TV Analysis

FINAL date 07-Jul-16 wind -0.7 m/s

Henson (2020) - Athlete First: 2016 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Roleder, Cindy (GER) (1989)	time	2.58	3.58	4.56	5.54	6.52	7.50	8.50	9.48	10.48	11.50		12.62	7 / 1			
reaction time 0.135	interval		1.00	0.98	0.98	0.98	0.98	1.00	0.98	1.00	1.02	1.12			2.96	2.96	3.00
	velocity	5.04	8.50	8.67	8.67	8.67	8.67	8.50	8.67	8.50	8.33	9.38	7.92		8.61	8.61	8.50
Talay, Alina (BLR) (1989)	time	2.52	3.54	4.52	5.50	6.48	7.44	8.42	9.44	10.46	11.48		12.68	5 / 2			
reaction time 0.153	interval		1.02	0.98	0.98	0.98	0.96	0.98	1.02	1.02	1.02	1.20			2.98	2.92	3.06
	velocity	5.16	8.33	8.67	8.67	8.67	8.85	8.67	8.33	8.33	8.33	8.75	7.89		8.56	8.73	8.33
Porter, Tiffany (GBR) (1987)	time	2.52	3.54	4.52	5.50	6.50	7.48	8.46	9.48	10.50	11.54		12.76	4 / 3			
reaction time 0.133	interval		1.02	0.98	0.98	1.00	0.98	0.98	1.02	1.02	1.04	1.22			2.98	2.96	3.08
	velocity	5.16	8.33	8.67	8.67	8.50	8.67	8.67	8.33	8.33	8.17	8.61	7.84		8.56	8.61	8.28
Rard-Reuse, Clélia (SUI) (1988	time	2.54	3.58	4.60	5.62	6.62	7.62	8.62	9.66	10.70	11.76		12.96	6 / 4			
reaction time 0.133	interval		1.04	1.02	1.02	1.00	1.00	1.00	1.04	1.04	1.06	1.20			3.08	3.00	3.14
	velocity	5.12	8.17	8.33	8.33	8.50	8.50	8.50	8.17	8.17	8.02	8.75	7.72		8.28	8.50	8.12
Zagré, Anne (BEL) (1990)	time	2.56	3.62	4.66	5.68	6.68	7.66	8.64	9.66	10.70	11.76		12.97	2 / 5			
reaction time 0.126	interval		1.06	1.04	1.02	1.00	0.98	0.98	1.02	1.04	1.06	1.21			3.12	2.96	3.12
	velocity	5.08	8.02	8.17	8.33	8.50	8.67	8.67	8.33	8.17	8.02	8.68	7.71		8.17	8.61	8.17
Pesiridou, Elisávet (GRE) (199	time	2.62	3.68	4.72	5.72	6.72	7.74	8.76	9.76	10.80	11.84		13.05	8 / 6			
reaction time 0.142	interval	7 steps	1.06	1.04	1.00	1.00	1.02	1.02	1.00	1.04	1.04	1.21			3.10	3.04	3.08
	velocity	4.96	8.02	8.17	8.50	8.50	8.33	8.33	8.50	8.17	8.17	8.68	7.66		8.23	8.39	8.28
Billaud, Cindy (FRA) (1986)	time	2.62	3.66	4.70	5.70	6.68	7.70	8.72	9.78	10.84	11.94		13.29	3 / 7			
reaction time 0.143	interval		1.04	1.04	1.00	0.98	1.02	1.02	1.06	1.06	1.10	1.35			3.08	3.02	3.22
	velocity	4.96	8.17	8.17	8.50	8.67	8.33	8.33	8.02	8.02	7.73	7.78	7.52		8.28	8.44	7.92
Dutkiewicz, Pamela (GER) (19	time	2.60											dnf	9 / --			
reaction time 0.145	interval																
	velocity	5.00															

2016 Japanese National Championships (Nagoya, JPN)

FINAL date 26-Jun-16 wind 2.1 m/s

Kota (2016) - race analysis of japanese top-ranked men 110m and women 100m hurdlers

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kimura, Ayako (JPN) (1988)	time	2.62	3.65	4.68	5.70	6.71	7.74	8.79	9.86	10.94	12.02		13.23	5 / 1			
reaction time 0.159	interval		1.03	1.03	1.02	1.01	1.03	1.05	1.07	1.08	1.08	1.21			3.08	3.09	3.23
	velocity	4.96	8.25	8.25	8.33	8.42	8.25	8.10	7.94	7.87	7.87	8.68	7.56		8.28	8.25	7.89
Abe, Haruka (JPN) (1994)	time	2.59	3.68	4.74	5.76	6.82	7.89	8.94	10.01	11.10	12.20		13.38	4 / 2			
reaction time 0.122	interval		1.09	1.06	1.02	1.06	1.07	1.05	1.07	1.09	1.10	1.18			3.17	3.18	3.26
	velocity	5.02	7.80	8.02	8.33	8.02	7.94	8.10	7.94	7.80	7.73	8.90	7.47		8.04	8.02	7.82
Aoki, Masumi (JPN) (1994)	time	2.65	3.73	4.76	5.79	6.84	7.88	8.96	10.03	11.12	12.22		13.38	3 / 3			
reaction time 0.146	interval		1.08	1.03	1.03	1.05	1.04	1.08	1.07	1.09	1.10	1.16			3.14	3.17	3.26
	velocity	4.91	7.87	8.25	8.25	8.10	8.17	7.87	7.94	7.80	7.73	9.05	7.47		8.12	8.04	7.82
Shimura, Hitomi (JPN) (1990)	time	2.67	3.75	4.80	5.86	6.91	7.97	9.04	10.11	11.19	12.27		13.43	7 / 4			
reaction time 0.140	interval		1.08	1.05	1.06	1.05	1.06	1.07	1.07	1.08	1.08	1.16			3.19	3.18	3.23
	velocity	4.87	7.87	8.10	8.02	8.10	8.02	7.94	7.94	7.87	7.87	9.05	7.45		7.99	8.02	7.89
Soma, Eriko (JPN) (1990)	time	2.66	3.74	4.80	5.86	6.93	7.98	9.03	10.11	11.18	12.27		13.43	6 / 5			
reaction time 0.134	interval		1.08	1.06	1.06	1.07	1.05	1.05	1.08	1.07	1.09	1.16			3.20	3.17	3.24
	velocity	4.89	7.87	8.02	8.02	7.94	8.10	8.10	7.87	7.94	7.80	9.05	7.45		7.97	8.04	7.87
Tanaka, Yumi (JPN) (1998)	time	2.64	3.72	4.77	5.82	6.87	7.93	9.00	10.07	11.16	12.26		13.45	2 / 6			
reaction time 0.151	interval		1.08	1.05	1.05	1.05	1.06	1.07	1.07	1.09	1.10	1.19			3.18	3.18	3.26
	velocity	4.92	7.87	8.10	8.10	8.10	8.02	7.94	7.94	7.80	7.73	8.82	7.43		8.02	8.02	7.82

Kobayashi, Sayaka (JPN) (1998	time	2.66	3.75	4.83	5.91	6.97	8.02	9.08	10.14	11.22	12.31		13.49	8 / 7				
reaction time 0.141	interval		1.09	1.08	1.08	1.06	1.05	1.06	1.06	1.08	1.09	1.18			3.25	3.17	3.23	
	velocity	4.89	7.80	7.87	7.87	8.02	8.10	8.02	8.02	7.87	7.80	8.90	7.41		7.85	8.04	7.89	
Kiyoyama, Chisato (JPN) (199	time	2.71	3.80	4.87	5.91	6.97	8.02	9.09	10.17	11.26	12.40		13.65	1 / 8				
reaction time 0.158	interval		1.09	1.07	1.04	1.06	1.05	1.07	1.08	1.09	1.14	1.25			3.20	3.18	3.31	
	velocity	4.80	7.80	7.94	8.17	8.02	8.10	7.94	7.87	7.80	7.46	8.40	7.33		7.97	8.02	7.70	

2016 Kinki Area High School Championships (Kobe, JPN)

FINAL date 19-Jun-16 wind -0.6 m/s *(2016.06.19) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tanaka, Yumi (JPN) (1998)	time	2.63	3.73	4.81	5.87	6.94	8.01	9.13	10.23	11.34	12.49		13.77	7 / 1			
reaction time	interval		1.10	1.08	1.06	1.07	1.07	1.12	1.10	1.11	1.15	1.28			3.24	3.26	3.36	
	velocity	4.94	7.73	7.87	8.02	7.94	7.94	7.59	7.73	7.66	7.39	8.20	7.26		7.87	7.82	7.59	

2016 Tokai High School Meeting (Gifu, JPN)

FINAL date 18-Jun-16 wind 0.9 m/s *(2016.06.18) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Furuhashi, Kana (JPN) (1999)	time	2.69	3.81	4.91	6.00	7.09	8.20	9.31	10.43	11.56	12.69		13.91	4 / 1			
reaction time	interval		1.12	1.10	1.09	1.09	1.11	1.11	1.12	1.13	1.13	1.22			3.31	3.31	3.38	
	velocity	4.83	7.59	7.73	7.80	7.80	7.66	7.66	7.59	7.52	7.52	8.61	7.19		7.70	7.70	7.54	

2016 Kanto Area High School Championships (Tokyo, JPN)

FINAL date 17-Jun-16 wind -1.5 m/s *(2016.06.20) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ono, Yui (JPN) (1999)	time	2.74	3.84	4.98	6.10	7.23	8.37	9.52	10.65	11.81	13.00		14.26	5 / 1			
reaction time	interval		1.10	1.14	1.12	1.13	1.14	1.15	1.13	1.16	1.19	1.26			3.36	3.42	3.48	
	velocity	4.74	7.73	7.46	7.59	7.52	7.46	7.39	7.52	7.33	7.14	8.33	7.01		7.59	7.46	7.33	
Takahashi, Makato (JPN)	time	2.79	3.92	5.11	6.24	7.36	8.48	9.63	10.77	11.88	13.04		14.27	3 / 1			
reaction time	interval		1.13	1.19	1.13	1.12	1.12	1.15	1.14	1.11	1.16	1.23			3.45	3.39	3.41	
	velocity	4.66	7.52	7.14	7.52	7.59	7.59	7.39	7.46	7.66	7.33	8.54	7.01		7.39	7.52	7.48	

2016 Bauhaus Athletics (Stockholm, SWE) (TV Analysis)

FINAL date 16-Jun-16 wind -0.4 m/s *Henson (2020) - Athlete First: 2016 year end hurdle report*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.46	3.48	4.48	5.46	6.42	7.38	8.38	9.38	10.38	11.38		12.66	5 / 1			
reaction time 0.185	interval		1.02	1.00	0.98	0.96	0.96	1.00	1.00	1.00	1.00	1.28			3.00	2.92	3.00	
	velocity	5.28	8.33	8.50	8.67	8.85	8.85	8.50	8.50	8.50	8.50	8.20	7.90		8.50	8.73	8.50	
Ali, Nia (USA) (1988)	time	2.46	3.46	4.48	5.44	6.44	7.44	8.44	9.48	10.50	11.56		12.85	2 / 2			
reaction time 0.145	interval		1.00	1.02	0.96	1.00	1.00	1.00	1.04	1.02	1.06	1.29			2.98	3.00	3.12	
	velocity	5.28	8.50	8.33	8.85	8.50	8.50	8.50	8.17	8.33	8.02	8.14	7.78		8.56	8.50	8.17	
Harrison, Queen (USA) (1988)	time	2.54	3.64	4.64	5.64	6.60	7.60	8.58	9.58	10.58	11.62		12.87	6 / 3			
reaction time 0.175	interval		1.10	1.00	1.00	0.96	1.00	0.98	1.00	1.00	1.04	1.25			3.10	2.94	3.04	
	velocity	5.12	7.73	8.50	8.50	8.85	8.50	8.67	8.50	8.50	8.17	8.40	7.77		8.23	8.67	8.39	
Talay, Alina (BLR) (1989)	time	2.50	3.52	4.52	5.52	6.50	7.50	8.50	9.52	10.54	11.58		12.90	3 / 4			
reaction time 0.148	interval		1.02	1.00	1.00	0.98	1.00	1.00	1.02	1.02	1.04	1.32			3.02	2.98	3.08	
	velocity	5.20	8.33	8.50	8.50	8.67	8.50	8.50	8.33	8.33	8.17	7.95	7.75		8.44	8.56	8.28	
Kallur, Susanna (SWE) (1981)	time	2.48	3.50	4.53	5.50	6.50	7.50	8.52	9.54	10.57	11.64		13.00	4 / 5			
reaction time 0.163	interval		1.02	1.03	0.97	1.00	1.00	1.02	1.02	1.03	1.07	1.36			3.02	3.02	3.12	
	velocity	5.24	8.33	8.25	8.76	8.50	8.50	8.33	8.33	8.25	7.94	7.72	7.69		8.44	8.44	8.17	
Pedersen, Isabelle (NOR) (199	time	2.57	3.60	4.60	5.60	6.62	7.64	8.67	9.71	10.77	11.84		13.15	8 / 6			
reaction time 0.190	interval	7 steps	1.03	1.00	1.00	1.02	1.02	1.03	1.04	1.06	1.07	1.31			3.03	3.07	3.17	
	velocity	5.06	8.25	8.50	8.50	8.33	8.33	8.25	8.17	8.02	7.94	8.02	7.60		8.42	8.31	8.04	
Zagré, Anne (BEL) (1990)	time	2.60	3.67	4.70	5.70	6.72	7.72	8.74	9.77	10.81	11.86		13.19	7 / 7			
reaction time 0.192	interval		1.07	1.03	1.00	1.02	1.00	1.02	1.03	1.04	1.05	1.33			3.10	3.04	3.12	
	velocity	5.00	7.94	8.25	8.50	8.33	8.50	8.33	8.25	8.17	8.10	7.89	7.58		8.23	8.39	8.17	
Westerlund, Elin (SWE) (1990)	time	2.53	3.57	4.60	5.64	6.68	7.72	8.77	9.91	11.02	12.17		13.55	1 / 8			
reaction time 0.148	interval		1.04	1.03	1.04	1.04	1.04	1.05	1.14	1.11	1.15	1.38			3.11	3.13	3.40	
	velocity	5.14	8.17	8.25	8.17	8.17	8.17	8.10	7.46	7.66	7.39	7.61	7.38		8.20	8.15	7.50	

2016 Japanese University Championships (Hiratsuka, JPN)

FINAL date 10-Jun-16 wind 1.9 m/s *(2016.06.11) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Aoki, Masumi (JPN) (1994)	time	2.65	3.70	4.76	5.79	6.83	7.89	8.94	10.00	11.09	12.19		13.33	3 / 1			
reaction time 0.141	interval		1.05	1.06	1.03	1.04	1.06	1.05	1.06	1.09	1.10	1.14			3.14	3.15	3.25	
	velocity	4.91	8.10	8.02	8.25	8.17	8.02	8.10	8.02	7.80	7.73	9.21	7.50		8.12	8.10	7.85	

2016 Bislett Games (Oslo, NOR) (TV Analysis)

FINAL date 09-Jun-16 wind -0.4 m/s

Henson (2020) - Athlete First: 2016 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Rollins, Brianna (USA) (1991)	time	2.44	3.44	4.42	5.40	6.36	7.38	8.34	9.32	10.34	11.34		12.56	5 / 1			
reaction time 0.143	interval		1.00	0.98	0.98	0.96	1.02	0.96	0.98	1.02	1.00	1.22			2.96	2.94	3.00
	velocity	5.33	8.50	8.67	8.67	8.85	8.33	8.85	8.67	8.33	8.50	8.61	7.96		8.61	8.67	8.50
Harper-Nelson, Dawn (USA) (	time	2.50	3.54	4.54	5.52	6.52	7.50	8.50	9.52	10.52	11.54		12.75	3 / 2			
reaction time 0.161	interval		1.04	1.00	0.98	1.00	0.98	1.00	1.02	1.00	1.02	1.21			3.02	2.98	3.04
	velocity	5.20	8.17	8.50	8.67	8.50	8.67	8.50	8.33	8.50	8.33	8.68	7.84		8.44	8.56	8.39
Stowers, Jasmin (USA) (1991)	time	2.60	3.64	4.62	5.60	6.58	7.54	8.56	9.56	10.58	11.60		12.79	6 / 3			
reaction time 0.188	interval		1.04	0.98	0.98	0.98	0.96	1.02	1.00	1.02	1.02	1.19			3.00	2.96	3.04
	velocity	5.00	8.17	8.67	8.67	8.67	8.85	8.33	8.50	8.33	8.33	8.82	7.82		8.50	8.61	8.39
Porter, Tiffany (GBR) (1987)	time	2.52	3.54	4.56	5.56	6.54	7.54	8.54	9.56	10.60	11.68		12.94	7 / 4			
reaction time 0.143	interval		1.02	1.02	1.00	0.98	1.00	1.00	1.02	1.04	1.08	1.26			3.04	2.98	3.14
	velocity	5.16	8.33	8.33	8.50	8.67	8.50	8.50	8.33	8.17	7.87	8.33	7.73		8.39	8.56	8.12
Roleder, Cindy (GER) (1989)	time	2.64	3.68	4.68	5.68	6.68	7.68	8.68	9.70	10.72	11.78		12.94	8 / 5			
reaction time 0.145	interval		1.04	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.06	1.16			3.04	3.00	3.10
	velocity	4.92	8.17	8.50	8.50	8.50	8.50	8.50	8.33	8.33	8.02	9.05	7.73		8.39	8.50	8.23
Pedersen, Isabelle (NOR) (199	time	2.52	3.56	4.56	5.58	6.58	7.60	8.60	9.66	10.72	11.82		13.12	2 / 6			
reaction time 0.156	interval	7 steps	1.04	1.00	1.02	1.00	1.02	1.00	1.06	1.06	1.10	1.30			3.06	3.02	3.22
	velocity	5.16	8.17	8.50	8.33	8.50	8.33	8.50	8.02	8.02	7.73	8.08	7.62		8.33	8.44	7.92
Pearson, Sally (AUS) (1986)	time	2.54	3.56	4.60	5.62	6.64	7.66	8.68	9.72	10.80	11.86		13.14	1 / 7			
reaction time 0.116	interval		1.02	1.04	1.02	1.02	1.02	1.02	1.04	1.08	1.06	1.28			3.08	3.06	3.18
	velocity	5.12	8.33	8.17	8.33	8.33	8.33	8.33	8.17	7.87	8.02	8.20	7.61		8.28	8.33	8.02

2016 Birmingham Diamond League (Birmingham, GBR) (TV Analysis)

FINAL date 05-Jun-16 wind -0.3 m/s

Henson (2020) - Athlete First: 2016 year end hurdle report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.46	3.48	4.46	5.43	6.40	7.33	8.30	9.27	10.27	11.27		12.46	6 / 1			
reaction time 0.212	interval		1.02	0.98	0.97	0.97	0.93	0.97	0.97	1.00	1.00	1.19			2.97	2.87	2.97
	velocity	5.28	8.33	8.67	8.76	8.76	9.14	8.76	8.76	8.50	8.50	8.82	8.03		8.59	8.89	8.59
Rollins, Brianna (USA) (1991)	time	2.43	3.46	4.43	5.40	6.40	7.35	8.30	9.30	10.33	11.33		12.57	7 / 2			
reaction time 0.144	interval		1.03	0.97	0.97	1.00	0.95	0.95	1.00	1.03	1.00	1.24			2.97	2.90	3.03
	velocity	5.35	8.25	8.76	8.76	8.50	8.95	8.95	8.50	8.25	8.50	8.47	7.96		8.59	8.79	8.42
Castlin, Kristi (USA) (1988)	time	2.46	3.56	4.56	5.58	6.52	7.48	8.48	9.48	10.48	11.48		12.75	5 / 3			
reaction time 0.164	interval		1.10	1.00	1.02	0.94	0.96	1.00	1.00	1.00	1.00	1.27			3.12	2.90	3.00
	velocity	5.28	7.73	8.50	8.33	9.04	8.85	8.50	8.50	8.50	8.50	8.27	7.84		8.17	8.79	8.50
Harper-Nelson, Dawn (USA) (	time	2.50	3.53	4.53	5.56	6.53	7.53	8.50	9.48	10.50	11.53		12.78	2 / 4			
reaction time 0.151	interval		1.03	1.00	1.03	0.97	1.00	0.97	0.98	1.02	1.03	1.25			3.06	2.94	3.03
	velocity	5.20	8.25	8.50	8.25	8.76	8.50	8.76	8.67	8.33	8.25	8.40	7.82		8.33	8.67	8.42
Porter, Tiffany (GBR) (1987)	time	2.50	3.53	4.53	5.56	6.53	7.53	8.53	9.53	10.53	11.60		12.86	3 / 5			
reaction time 0.136	interval		1.03	1.00	1.03	0.97	1.00	1.00	1.00	1.00	1.07	1.26			3.06	2.97	3.07
	velocity	5.20	8.25	8.50	8.25	8.76	8.50	8.50	8.50	8.50	7.94	8.33	7.78		8.33	8.59	8.31
Ali, Nia (USA) (1988)	time	2.53	3.56	4.58	5.58	6.56	7.56	8.56	9.58	10.56	11.64		12.95	8 / 6			
reaction time 0.198	interval		1.03	1.02	1.00	0.98	1.00	1.00	1.02	0.98	1.08	1.31			3.05	2.98	3.08
	velocity	5.14	8.25	8.33	8.50	8.67	8.50	8.50	8.33	8.67	7.87	8.02	7.72		8.36	8.56	8.28
Pearson, Sally (AUS) (1986)	time	2.53	3.56	4.60	5.63	6.66	7.68	8.70	9.74	10.80	11.93		13.25	4 / 7			
reaction time 0.129	interval		1.03	1.04	1.03	1.03	1.02	1.02	1.04	1.06	1.13	1.32			3.10	3.07	3.23
	velocity	5.14	8.25	8.17	8.25	8.25	8.33	8.33	8.17	8.02	7.52	7.95	7.55		8.23	8.31	7.89
Hatton, Lucy (GBR) (1994)	time	2.63	3.70	4.73	5.76	6.80	7.83	8.86	9.93	11.00	12.06		13.36	9 / 8			
reaction time 0.232	interval		1.07	1.03	1.03	1.04	1.03	1.03	1.07	1.07	1.06	1.30			3.13	3.10	3.20
	velocity	4.94	7.94	8.25	8.25	8.17	8.25	8.25	7.94	7.94	8.02	8.08	7.49		8.15	8.23	7.97

2016 Sparkassen Gala (Regensburg, GER)

FINAL date 05-Jun-16 wind 0.0 m/s

Unfried (2016) - Austrian Athletics: athlete compeititon analysis

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Talay, Alina (1989) (BLR)	time	2.58	3.58	4.58	5.55	6.51	7.48	8.47	9.47	10.49	11.51		12.63	/ 1			
reaction time	interval		1.00	1.00	0.97	0.96	0.97	0.99	1.00	1.02	1.02	1.12	NR		2.97	2.92	3.04
	velocity	5.04	8.50	8.50	8.76	8.85	8.76	8.59	8.50	8.33	8.33	9.37	7.92		8.59	8.73	8.39

2016 Fuse Sprint (Tottori, JPN)

FINAL date 05-Jun-16 wind 2.2 m/s

(2016.06.06) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kimura, Ayako (JPN) (1988)	time	2.59	3.63	4.67	5.70	6.74	7.76	8.80	9.86	10.91	12.00		13.19	7 / 1			

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	interval		1.04	1.04	1.03	1.04	1.02	1.04	1.06	1.05	1.09	1.19			3.11	3.10	3.20
	velocity	5.02	8.17	8.17	8.25	8.17	8.33	8.17	8.02	8.10	7.80	8.82	7.58		8.20	8.23	7.97

Heat 3 date 05-Jun-16 wind 2.2 m/s *(2016.06.07) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kimura, Ayako (JPN) (1988)	time	2.66	3.72	4.77	5.79	6.81	7.85	8.89	9.95	11.02	12.12		13.31	5 / 1			
reaction time	interval		1.06	1.05	1.02	1.02	1.04	1.04	1.06	1.07	1.10	1.19			3.13	3.10	3.23
	velocity	4.89	8.02	8.10	8.33	8.33	8.17	8.17	8.02	7.94	7.73	8.82	7.51		8.15	8.23	7.89

2016 Prefontaine Classic (Eugene, OR) (TV Analysis)

FINAL date 28-May-16 wind 0.7 m/s *Henson (2020) - Athlete First: 2016 year end hurdle report*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Kendra (USA) (1992)	time	2.42	3.42	4.38	5.32	6.26	7.22	8.14	9.10	10.06	11.02		12.24	6 / 1			
reaction time	interval		1.00	0.96	0.94	0.94	0.96	0.92	0.96	0.96	0.96	1.22	AR PB		2.90	2.82	2.88
	velocity	5.37	8.50	8.85	9.04	9.04	8.85	9.24	8.85	8.85	8.85	8.61	8.17		8.79	9.04	8.85
Rollins, Brianna (USA) (1991)	time	2.44	3.44	4.38	5.34	6.30	7.30	8.30	9.28	10.30	11.32		12.53	3 / 2			
reaction time	interval		1.00	0.94	0.96	0.96	1.00	1.00	0.98	1.02	1.02	1.21			2.90	2.96	3.02
	velocity	5.33	8.50	9.04	8.85	8.85	8.50	8.50	8.67	8.33	8.33	8.68	7.98		8.79	8.61	8.44
Stowers, Jasmin (USA) (1991)	time	2.54	3.54	4.50	5.46	6.42	7.38	8.34	9.34	10.32	11.32		12.55	7 / 3			
reaction time	interval		1.00	0.96	0.96	0.96	0.96	0.96	1.00	0.98	1.00	1.23			2.92	2.88	2.98
	velocity	5.12	8.50	8.85	8.85	8.85	8.85	8.85	8.50	8.67	8.50	8.54	7.97		8.73	8.85	8.56
Ali, Nia (USA) (1988)	time	2.48	3.48	4.46	5.46	6.44	7.42	8.42	9.42	10.44	11.46		12.72	1 / 4			
reaction time	interval		1.00	0.98	1.00	0.98	0.98	1.00	1.00	1.02	1.02	1.26			2.98	2.96	3.04
	velocity	5.24	8.50	8.67	8.50	8.67	8.67	8.50	8.50	8.33	8.33	8.33	7.86		8.56	8.61	8.39
Nelvis, Sharika (USA) (1990)	time	2.44	3.46	4.50	5.48	6.48	7.48	8.48	9.48	10.52	11.56		12.82	5 / 5			
reaction time	interval	7 steps	1.02	1.04	0.98	1.00	1.00	1.00	1.00	1.04	1.04	1.26			3.04	3.00	3.08
	velocity	5.33	8.33	8.17	8.67	8.50	8.50	8.50	8.50	8.17	8.17	8.33	7.80		8.39	8.50	8.28
Talay, Alina (BLR) (1989)	time	2.52	3.52	4.54	5.52	6.50	7.50	8.48	9.50	10.54	11.58		12.85	8 / 6			
reaction time	interval		1.00	1.02	0.98	0.98	1.00	0.98	1.02	1.04	1.04	1.27			3.00	2.96	3.10
	velocity	5.16	8.50	8.33	8.67	8.67	8.50	8.67	8.33	8.17	8.17	8.27	7.78		8.50	8.61	8.23
Porter, Tiffany (GBR) (1987)	time	2.48	3.52	4.52	5.50	6.48	7.48	8.48	9.50	10.54	11.60		12.90	7 / 7			
reaction time	interval		1.04	1.00	0.98	0.98	1.00	1.00	1.02	1.04	1.06	1.30			3.02	2.98	3.12
	velocity	5.24	8.17	8.50	8.67	8.67	8.50	8.50	8.33	8.17	8.02	8.08	7.75		8.44	8.56	8.17
Harper-Nelson, Dawn (USA) (	time	2.52	3.56	4.56	5.58	6.58	7.56	8.56	9.58	10.62	11.70		13.01	4 / 8			
reaction time	interval		1.04	1.00	1.02	1.00	0.98	1.00	1.02	1.04	1.08	1.31			3.06	2.98	3.14
	velocity	5.16	8.17	8.50	8.33	8.50	8.67	8.50	8.33	8.17	7.87	8.02	7.69		8.33	8.56	8.12

2016 Fukui Perfecture High School Meeting (Fukui, JPN)

FINAL date 28-May-16 wind 1.1 m/s *(2016.06.02) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wada, Yuki (JPN) (1998)	time	2.73	3.88	4.99	6.10	7.20	8.31	9.44	10.57	11.73	12.90		14.18	5 / 1			
reaction time	interval		1.15	1.11	1.11	1.10	1.11	1.13	1.13	1.16	1.17	1.28			3.37	3.34	3.46
	velocity	4.76	7.39	7.66	7.66	7.73	7.66	7.52	7.52	7.33	7.26	8.20	7.05		7.57	7.63	7.37

2016 Schweizer Verein Meisterschaften (St. Gallen, SUI)

FINAL date 21-May-16 wind -0.4 m/s *Swiss Athletics (2016) - sprint and hurdle analysis*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Rard-Reuse, Clélia (SUI) (1988	time	2.70	3.72	4.74	5.76	6.76	7.78	8.82	9.84	10.88	11.94		13.09	/ 1			
reaction time	interval		1.02	1.02	1.02	1.00	1.02	1.04	1.02	1.04	1.06	1.15			3.06	3.06	3.12
	velocity	4.81	8.33	8.33	8.33	8.50	8.33	8.17	8.33	8.17	8.02	9.13	7.64		8.33	8.33	8.17

2016 Aichi Perfecture High School Meeting (Nagoya, JPN)

FINAL date 20-May-16 wind -1.5 m/s *(2016.05.29) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Furuhashi, Kana (JPN) (1999)	time	2.75	3.85	4.98	6.10	7.21	8.33	9.45	10.58	11.72	12.89		14.11	3 / 1			
reaction time	interval		1.10	1.13	1.12	1.11	1.12	1.12	1.13	1.14	1.17	1.22			3.35	3.35	3.44
	velocity	4.73	7.73	7.52	7.59	7.66	7.59	7.59	7.52	7.46	7.26	8.61	7.09		7.61	7.61	7.41

2016 Kanto Collegiate Championships (Yokohama, JPN)

Division 1 FINAL date 20-May-16 wind -0.4 m/s *(2016.05.20) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Hemphill, Megu (JPN) (1996)	time	2.73	3.82	4.88	5.93	6.99	8.05	9.10	10.17	11.25	12.33		13.53	4 / 1			
reaction time 0.146	interval		1.09	1.06	1.05	1.06	1.06	1.05	1.07	1.08	1.08	1.20			3.20	3.17	3.23
	velocity	4.76	7.80	8.02	8.10	8.02	8.02	8.10	7.94	7.87	7.87	8.75	7.39		7.97	8.04	7.89

2016 Saitama Perfecture High School Meeting (Kumagaya, JPN)

FINAL date 10-May-16 wind 1.8 m/s *(2016.05.29) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tanaka, Hikari (JPN) (1998)	time	2.73	3.85	4.96	6.04	7.13	8.23	9.33	10.45	11.57	12.71		13.92	4 / 1			

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	interval		1.12	1.11	1.08	1.09	1.10	1.10	1.12	1.12	1.14	1.21			3.31	3.29	3.38
	velocity	4.76	7.59	7.66	7.87	7.80	7.73	7.73	7.59	7.59	7.46	8.68	7.18		7.70	7.75	7.54

2016 Kinan Memorial (Osaka, JPN)

FINAL date 08-May-16 wind 0.6 m/s *(2016.05.11) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kimura, Ayako (JPN) (1988)	time	2.62	3.67	4.72	5.73	6.76	7.80	8.83	9.86	10.94	12.03		13.25	6 / 1			
reaction time	interval		1.05	1.05	1.01	1.03	1.04	1.03	1.03	1.08	1.09	1.22			3.11	3.10	3.20
	velocity	4.96	8.10	8.10	8.42	8.25	8.17	8.25	8.25	7.87	7.80	8.61	7.55		8.20	8.23	7.97

2016 Hürden-und Sprintmeeting (Basel, SUI)

FINAL date 07-May-16 wind 1.0 m/s *Swiss Athletics (2016) - sprint and hurdle analysis*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Rard-Reuse, Clélia (SUI) (1988	time	2.68	3.70	4.72	5.72	6.74	7.76	8.78	9.82	10.84	11.90		13.06	/ 1			
reaction time	interval		1.02	1.02	1.00	1.02	1.02	1.02	1.04	1.02	1.06	1.16	PB		3.04	3.06	3.12
	velocity	4.85	8.33	8.33	8.50	8.33	8.33	8.33	8.17	8.33	8.02	9.05	7.66		8.39	8.33	8.17

2016 Mikio Oda Memorial (Hiroshima, JPN)

FINAL date 29-Apr-16 wind 1.1 m/s *Kota (2016) - race analysis of japanese top-ranked men 110m and women 100m hurdlers*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Jung Hye-Lim (KOR) (1988)	time	2.62	3.69	4.73	5.75	6.77	7.79	8.82	9.88	10.94	12.00		13.20	6 / 1			
reaction time	interval		1.07	1.04	1.02	1.02	1.02	1.03	1.06	1.06	1.06	1.20			3.13	3.07	3.18
	velocity	4.96	7.94	8.17	8.33	8.33	8.33	8.25	8.02	8.02	8.02	8.75	7.58		8.15	8.31	8.02
Shimura, Hitomi (JPN) (1990)	time	2.65	3.75	4.81	5.85	6.88	7.91	8.95	9.99	11.04	12.11		13.24	4 / 2			
reaction time	interval		1.10	1.06	1.04	1.03	1.03	1.04	1.04	1.05	1.07	1.13			3.20	3.10	3.16
	velocity	4.91	7.73	8.02	8.17	8.25	8.25	8.17	8.17	8.10	7.94	9.29	7.55		7.97	8.23	8.07
Kimura, Ayako (JPN) (1988)	time	2.65	3.72	4.75	5.77	6.82	7.85	8.90	9.94	11.00	12.08		13.27	5 / 3			
reaction time	interval		1.07	1.03	1.02	1.05	1.03	1.05	1.04	1.06	1.08	1.19			3.12	3.13	3.18
	velocity	4.91	7.94	8.25	8.33	8.10	8.25	8.10	8.17	8.02	7.87	8.82	7.54		8.17	8.15	8.02
Fujiwara, Miku (JPN) (1992)	time	2.72	3.83	4.93	6.02	7.09	8.17	9.23	10.31	11.37	12.45		13.63	2 / 4			
reaction time	interval		1.11	1.10	1.09	1.07	1.08	1.06	1.08	1.06	1.08	1.18			3.30	3.21	3.22
	velocity	4.78	7.66	7.73	7.80	7.94	7.87	8.02	7.87	8.02	7.87	8.90	7.34		7.73	7.94	7.92
Tanaka, Anri (JPN) (1994)	time	2.66	3.78	4.86	5.92	6.99	8.06	9.12	10.20	11.28	12.40		13.66	7 / 5			
reaction time	interval		1.12	1.08	1.06	1.07	1.07	1.06	1.08	1.08	1.12	1.26			3.26	3.20	3.28
	velocity	4.89	7.59	7.87	8.02	7.94	7.94	8.02	7.87	7.87	7.59	8.33	7.32		7.82	7.97	7.77
Kobayashi, Sayaka (JPN) (199	time	2.72	3.85	4.95	6.05	7.14	8.20	9.26	10.35	11.42	12.53		13.68	3 / 6			
reaction time	interval		1.13	1.10	1.10	1.09	1.06	1.06	1.09	1.07	1.11	1.15			3.33	3.21	3.27
	velocity	4.78	7.52	7.73	7.73	7.80	8.02	8.02	7.80	7.94	7.66	9.13	7.31		7.66	7.94	7.80
Kiyoyama, Chisato (JPN) (199	time	2.76	3.90	4.98	6.04	7.12	8.19	9.25	10.35	11.43	12.56		13.79	1 / 7			
reaction time	interval		1.14	1.08	1.06	1.08	1.07	1.06	1.10	1.08	1.13	1.23			3.28	3.21	3.31
	velocity	4.71	7.46	7.87	8.02	7.87	7.94	8.02	7.73	7.87	7.52	8.54	7.25		7.77	7.94	7.70
Aoki, Masumi (JPN) (1994)	time	2.69	3.80	4.95	6.06	7.14	8.23	9.33	10.42	11.54	12.69		13.96	8 / 8			
reaction time	interval		1.11	1.15	1.11	1.08	1.09	1.10	1.09	1.12	1.15	1.27			3.37	3.27	3.36
	velocity	4.83	7.66	7.39	7.66	7.87	7.80	7.73	7.80	7.59	7.39	8.27	7.16		7.57	7.80	7.59

2015 IAAF World Championships (Beijing, CHN)

Henson (2021) - Athlete First: major championships report (TV Analysis)

FINAL date 28-Aug-15 wind -0.3 m/s Мирзоев (2015) - Временные характеристики технического мастерства бега на 100м с барьерами

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Williams, Danielle (JAM) (1992	time	2.54	3.53	4.54	5.51	6.47	7.45	8.43	9.42	10.43	11.43		12.57	5 / 1		*Мирзоев (2015)*	
reaction time 0.142	interval		0.99	1.01	0.97	0.96	0.98	0.98	0.99	1.01	1.00	1.14	PB		2.97	2.92	3.00
	velocity	5.12	8.59	8.42	8.76	8.85	8.67	8.67	8.59	8.42	8.50	9.21	7.96		8.59	8.73	8.50
Roleder, Cindy (GER) (1989)	time	2.59	3.59	4.56	5.53	6.51	7.49	8.45	9.44	10.45	11.46		12.59	8 / 2		*Мирзоев (2015)*	
reaction time 0.145	interval		1.00	0.97	0.97	0.98	0.98	0.96	0.99	1.01	1.01	1.13	PB		2.94	2.92	3.01
	velocity	5.02	8.50	8.76	8.76	8.67	8.67	8.85	8.59	8.42	8.42	9.29	7.94		8.67	8.73	8.47
Talay, Alina (BLR) (1989)	time	2.60	3.60	4.57	5.54	6.51	7.48	8.46	9.45	10.46	11.49		12.66	2 / 3		*Мирзоев (2015)*	
reaction time 0.146	interval		1.00	0.97	0.97	0.97	0.97	0.98	0.99	1.01	1.03	1.17	NR		2.94	2.92	3.03
	velocity	5.00	8.50	8.76	8.76	8.76	8.76	8.67	8.59	8.42	8.25	8.97	7.90		8.67	8.73	8.42
Rollns, Brianna (USA) (1991)	time	2.50	3.58	4.54	5.52	6.50	7.46	8.46	9.46	10.46	11.48		12.67	4 / 4		*Henson (2021)*	
reaction time 0.148	interval		1.08	0.96	0.98	0.98	0.96	1.00	1.00	1.00	1.02	1.19			3.02	2.94	3.02
	velocity	5.20	7.87	8.85	8.67	8.67	8.85	8.50	8.50	8.50	8.33	8.82	7.89		8.44	8.67	8.44
Porter, Tiffany (GBR) (1987)	time	2.52	3.52	4.50	5.48	6.46	7.42	8.40	9.38	10.38	11.46		12.68	7 / 5		*Henson (2021)*	
reaction time 0.140	interval		1.00	0.98	0.98	0.98	0.96	0.98	0.98	1.00	1.08	1.22			2.96	2.92	3.06
	velocity	5.16	8.50	8.67	8.67	8.67	8.85	8.67	8.67	8.50	7.87	8.61	7.89		8.61	8.73	8.33
Zbären, Noemi (SUI) (1994)	time	2.62	3.64	4.66	5.64	6.64	7.64	8.64	9.64	10.68	11.76		12.95	3 / 6		*Henson (2021)*	
reaction time 0.165	interval		1.02	1.02	0.98	1.00	1.00	1.00	1.00	1.04	1.08	1.19			3.02	3.00	3.12

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

		velocity	4.96	8.33	8.33	8.67	8.50	8.50	8.50	8.50	8.17	7.87	8.82	7.72			8.44	8.50	8.17
Williams, Shermaine (JAM) (1		time	2.58	3.60	4.60	5.60	6.60	7.58	8.60	9.60	10.66	11.74		12.95	9 / 7			*Henson (2021)*	
reaction time 0.177		interval	7 steps	1.02	1.00	1.00	1.00	0.98	1.02	1.00	1.06	1.08	1.21				3.02	3.00	3.14
		velocity	5.04	8.33	8.50	8.50	8.50	8.67	8.33	8.50	8.02	7.87	8.68	7.72			8.44	8.50	8.12
Nelvis, Sharika (USA) (1990)		time	2.52	3.56	4.56	5.56	6.52	7.50	8.48	9.46	10.46	11.58		13.06	6 / 8			*Henson (2021)*	
reaction time 0.168		interval	7 steps	1.04	1.00	1.00	0.96	0.98	0.98	0.98	1.00	1.12	1.48				3.04	2.92	3.10
		velocity	5.16	8.17	8.50	8.50	8.85	8.67	8.67	8.67	8.50	7.59	7.09	7.66			8.39	8.73	8.23

Semi-Final 3

date 28-Aug-15 wind -0.8 m/s

Xu (2015) - the 15th world track and field special report: Men's and women's hurdle project

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Shuijiao (CHN) (1991)		time			4.67				8.71			11.63		13.06	2 / 7			
reaction time 0.179		interval							4.04			2.92	1.43					2.92
		velocity			6.42				8.42			8.73	7.34	7.66				8.73

2015 Japanese National High School Championships (Wakayama, JPN)

FINAL

date 02-Aug-15 wind 0.9 m/s

Enomoto (2015) - 68th high school championships: JAF scientific committee - biomechanics data collection

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tanaka, Yumi (JPN) (1998)		time	2.67	3.75	4.84	5.92	6.99	8.04	9.22	10.35	11.47	12.60		13.87	6 / 1			
reaction time		interval		1.08	1.09	1.08	1.07	1.05	1.18	1.13	1.12	1.13	1.27			3.25	3.30	3.38
		velocity	4.87	7.87	7.80	7.87	7.94	8.10	7.20	7.52	7.59	7.52	8.27	7.21		7.85	7.73	7.54
Sasaki, Aogi (JPN) (1997)		time	2.67	3.75	4.83	5.90	7.00	8.07	9.19	10.32	11.46	12.63		13.93	7 / 2			
reaction time		interval		1.08	1.08	1.07	1.10	1.07	1.12	1.13	1.14	1.17	1.30	PB		3.23	3.29	3.44
		velocity	4.87	7.87	7.87	7.94	7.73	7.94	7.59	7.52	7.46	7.26	8.08	7.18		7.89	7.75	7.41
Kamada, Saki (JPN) (1997)		time	2.75	3.86	4.97	6.06	7.14	8.24	9.34	10.43	11.59	12.74		13.98	3 / 3			
reaction time		interval		1.11	1.11	1.09	1.08	1.10	1.10	1.09	1.16	1.15	1.24			3.31	3.28	3.40
		velocity	4.73	7.66	7.66	7.80	7.87	7.73	7.73	7.80	7.33	7.39	8.47	7.15		7.70	7.77	7.50
Nakamura, Reina (JPN) (1998)		time	2.71	3.87	4.96	6.05	7.14	8.22	9.31	10.42	11.57	12.73		14.00	5 / 4			
reaction time		interval		1.16	1.09	1.09	1.09	1.08	1.09	1.11	1.15	1.16	1.27	PB		3.34	3.26	3.42
		velocity	4.80	7.33	7.80	7.80	7.80	7.87	7.80	7.66	7.39	7.33	8.27	7.14		7.63	7.82	7.46
Kanai, Marumi (JPN) (1997)		time	2.71	3.85	4.97	6.09	7.20	8.29	9.42	10.54	11.67	12.81		14.03	8 / 5			
reaction time		interval		1.14	1.12	1.12	1.11	1.09	1.13	1.12	1.13	1.14	1.22	PB		3.38	3.33	3.39
		velocity	4.80	7.46	7.59	7.59	7.66	7.80	7.52	7.59	7.52	7.46	8.61	7.13		7.54	7.66	7.52
Okamoto, Rika (JPN) (1997)		time	2.70	3.79	4.88	5.99	7.08	8.18	9.31	10.44	11.58	12.75		14.07	9 / 6			
reaction time		interval		1.09	1.09	1.11	1.09	1.10	1.13	1.13	1.14	1.17	1.32	PB		3.29	3.32	3.44
		velocity	4.81	7.80	7.80	7.66	7.80	7.73	7.52	7.52	7.46	7.26	7.95	7.11		7.75	7.68	7.41
Nakatuka, Natsuki (JPN) (1998		time	2.71	3.82	4.92	6.01	7.11	8.21	9.31	10.47	11.63	12.80		14.12	4 / 7			
reaction time		interval		1.11	1.10	1.09	1.10	1.10	1.10	1.16	1.16	1.17	1.32			3.30	3.30	3.49
		velocity	4.80	7.66	7.73	7.80	7.73	7.73	7.73	7.33	7.33	7.26	7.95	7.08		7.73	7.73	7.31
Negi, Mariko (JPN) (1997)		time	2.74	3.85	5.00	6.14	7.27	8.39	9.50	10.62	11.76	12.88		14.13	1 / 8			
reaction time		interval		1.11	1.15	1.14	1.13	1.12	1.11	1.12	1.14	1.12	1.25			3.40	3.36	3.38
		velocity	4.74	7.66	7.39	7.46	7.52	7.59	7.66	7.59	7.46	7.59	8.40	7.08		7.50	7.59	7.54
Kato, Saaya (JPN) (1997)		time	2.72	3.84	4.97	6.10	7.21	8.35	9.48	10.62	11.78	12.95		14.25	2 / 9			
reaction time		interval		1.12	1.13	1.13	1.11	1.14	1.13	1.14	1.16	1.17	1.30			3.38	3.38	3.47
		velocity	4.78	7.59	7.52	7.52	7.66	7.46	7.52	7.46	7.33	7.26	8.08	7.02		7.54	7.54	7.35

2015 Italian National Championships (Torino, ITA)

FINAL

date 25-Jul-15 wind 1.7 m/s

Incalza (FIDAL - Centro Studi & Ricerche) (2015) - https://www.youtube.com/watch?v=E1vh3mZh5kw

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Pennella, Giulia (ITA) (1989)		time	2.80	3.87	4.89	5.90	6.90	7.91	8.93	9.92	10.96	12.01		13.12	7 / 1			
reaction time		interval		1.07	1.02	1.01	1.00	1.01	1.02	0.99	1.04	1.05	1.11	PB		3.10	3.03	3.08
		velocity	4.64	7.94	8.33	8.42	8.50	8.42	8.33	8.59	8.17	8.10	9.46	7.62		8.23	8.42	8.28

2015 Japanese National Championships (Niigata, JPN)

FINAL

date 27-Jun-15 wind -0.2 m/s

Takashima (2015) - race analysis of 110m & 100m hurdles in Japan- results of main 2015 competitions

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shimura, Hitomi (JPN) (1990)		time	2.64	3.69	4.73	5.75	6.80	7.82	8.85	9.92	10.99	12.07		13.27	6 / 1			
reaction time 0.147		interval		1.05	1.04	1.02	1.05	1.02	1.03	1.07	1.07	1.08	1.20			3.11	3.10	3.22
		velocity	4.92	8.10	8.17	8.33	8.10	8.33	8.25	7.94	7.94	7.87	8.75	7.54		8.20	8.23	7.92
Tanaka, Anri (JPN) (1994)		time	2.65	3.69	4.73	5.75	6.77	7.80	8.83	9.88	10.94	12.05		13.30	9 / 2			
reaction time 0.159		interval		1.04	1.04	1.02	1.02	1.03	1.03	1.05	1.06	1.11	1.25	PB		3.10	3.08	3.22
		velocity	4.91	8.17	8.17	8.33	8.33	8.25	8.25	8.10	8.02	7.66	8.40	7.52		8.23	8.28	7.92
Aoki, Masumi (JPN) (1994)		time	2.67	3.71	4.76	5.83	6.87	7.92	8.97	10.04	11.15	12.24		13.42	7 / 3			
reaction time 0.163		interval		1.04	1.05	1.07	1.04	1.05	1.05	1.07	1.11	1.09	1.18			3.16	3.14	3.27
		velocity	4.87	8.17	8.10	7.94	8.17	8.10	8.10	7.94	7.66	7.80	8.90	7.45		8.07	8.12	7.80

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Fujiwara, Miru (JPN) (1992)	time	2.65	3.73	4.80	5.86	6.92	7.98	9.03	10.10	11.18	12.29		13.46	8 / 4			
reaction time 0.133	interval		1.08	1.07	1.06	1.06	1.06	1.05	1.07	1.08	1.11	1.17			3.21	3.17	3.26
	velocity	4.91	7.87	7.94	8.02	8.02	8.02	8.10	7.94	7.87	7.66	8.97	7.43		7.94	8.04	7.82
Hemphill, Megu (JPN) (1996)	time	2.69	3.77	4.81	5.85	6.89	7.93	8.98	10.05	11.14	12.26		13.52	3 / 5			
reaction time 0.145	interval		1.08	1.04	1.04	1.04	1.04	1.05	1.07	1.09	1.12	1.26			3.16	3.13	3.28
	velocity	4.83	7.87	8.17	8.17	8.17	8.17	8.10	7.94	7.80	7.59	8.33	7.40		8.07	8.15	7.77
Kiyoyama, Chisato (JPN) (199	time	2.69	3.77	4.82	5.88	6.93	7.97	9.02	10.11	11.22	12.35		13.57	4 / 6			
reaction time 0.159	interval		1.08	1.05	1.06	1.05	1.04	1.05	1.09	1.11	1.13	1.22			3.19	3.14	3.33
	velocity	4.83	7.87	8.10	8.02	8.10	8.17	8.10	7.80	7.66	7.52	8.61	7.37		7.99	8.12	7.66
Ito, Airi (JPN) (1989)	time	2.68	3.78	4.86	5.92	6.99	8.05	9.12	10.21	11.31	12.45		13.67	2 / 7			
reaction time 0.153	interval		1.10	1.08	1.06	1.07	1.06	1.07	1.09	1.10	1.14	1.22			3.24	3.20	3.33
	velocity	4.85	7.73	7.87	8.02	7.94	8.02	7.94	7.80	7.73	7.46	8.61	7.32		7.87	7.97	7.66

2015 World Challenge (Beijing, CHN)

FINAL date 20-May-15 wind 0.8 m/s

Liu (2017) - study on the characteristics of speed rhythm of athletes at different levels of women's 100m hurdles

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wu Shuijiao (CHN) (1991)	time	2.39	3.41	4.42	5.42	6.39	7.39	8.38	9.39	10.42	11.47		12.85	/ 1			
reaction time	interval		1.02	1.01	1.00	0.97	1.00	0.99	1.01	1.03	1.05	1.38			3.03	2.96	3.09
	velocity	5.44	8.33	8.42	8.50	8.76	8.50	8.59	8.42	8.25	8.10	7.61	7.78		8.42	8.61	8.25

2015 Seiko Golden Grand Prix (Kawasaki, JPN)

FINAL date 10-May-15 wind 0.9 m/s

Takashima (2015) - race analysis of 110m & 100m hurdles in Japan- results of main 2015 competitions

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Pearson, Sally (AUS) (1986)	time	2.57	3.59	4.58	5.56	6.54	7.51	8.49	9.49	10.49	11.54		12.66	4 / 1			
reaction time 0.144	interval		1.02	0.99	0.98	0.98	0.97	0.98	1.00	1.00	1.05	1.12			2.99	2.93	3.05
	velocity	5.06	8.33	8.59	8.67	8.67	8.76	8.67	8.50	8.50	8.10	9.37	7.90		8.53	8.70	8.36
Harrison, Queen (USA) (1988)	time	2.62	3.63	4.63	5.61	6.56	7.52	8.55	9.55	10.58	11.62		12.75	5 / 2			
reaction time 0.189	interval		1.01	1.00	0.98	0.95	0.96	1.03	1.00	1.03	1.04	1.13			2.99	2.94	3.07
	velocity	4.96	8.42	8.50	8.67	8.95	8.85	8.25	8.50	8.25	8.17	9.29	7.84		8.53	8.67	8.31
Jones, Tenaya (USA) (1989)	time	2.66	3.72	4.71	5.69	6.68	7.66	8.65	9.65	10.65	11.68		12.83	6 / 3			
reaction time 0.173	interval		1.06	0.99	0.98	0.99	0.98	0.99	1.00	1.00	1.03	1.15			3.03	2.96	3.03
	velocity	4.89	8.02	8.59	8.67	8.59	8.67	8.59	8.50	8.50	8.25	9.13	7.79		8.42	8.61	8.42
Castlin, Kristi (USA) (1988)	time	2.63	3.71	4.73	5.73	6.72	7.69	8.68	9.70	10.70	11.74		12.92	3 / 4			
reaction time 0.171	interval		1.08	1.02	1.00	0.99	0.97	0.99	1.02	1.00	1.04	1.18			3.10	2.95	3.06
	velocity	4.94	7.87	8.33	8.50	8.59	8.76	8.59	8.33	8.50	8.17	8.90	7.74		8.23	8.64	8.33
Idlette, Lavonne (DOM) (1985)	time	2.65	3.72	4.75	5.77	6.76	7.76	8.78	9.81	10.84	11.90		13.05	7 / 5			
reaction time 0.194	interval		1.07	1.03	1.02	0.99	1.00	1.02	1.03	1.03	1.06	1.15			3.12	3.01	3.12
	velocity	4.91	7.94	8.25	8.33	8.59	8.50	8.33	8.25	8.25	8.02	9.13	7.66		8.17	8.47	8.17
Kimura, Ayako (JPN) (1988)	time	2.63	3.68	4.69	5.71	6.74	7.74	8.78	9.82	10.87	11.93		13.13	2 / 6			
reaction time 0.172	interval		1.05	1.01	1.02	1.03	1.00	1.04	1.04	1.05	1.06	1.20			3.08	3.07	3.15
	velocity	4.94	8.10	8.42	8.33	8.25	8.50	8.17	8.17	8.10	8.02	8.75	7.62		8.28	8.31	8.10
Aoki, Masumi (JPN) (1994)	time	2.68	3.75	4.81	5.86	6.90	7.95	9.04	10.13	11.23	12.35		13.59	8 / 7			
reaction time 0.167	interval		1.07	1.06	1.05	1.04	1.05	1.09	1.09	1.10	1.12	1.24			3.18	3.18	3.31
	velocity	4.85	7.94	8.02	8.10	8.17	8.10	7.80	7.80	7.73	7.59	8.47	7.36		8.02	8.02	7.70
Ito, Airi (JPN) (1989)	time	2.74	3.86	4.94	6.00	7.04	8.09	9.15	10.23	11.31	12.40		13.59	1 / 8			
reaction time 0.177	interval		1.12	1.08	1.06	1.04	1.05	1.06	1.08	1.08	1.09	1.19			3.26	3.15	3.25
	velocity	4.74	7.59	7.87	8.02	8.17	8.10	8.02	7.87	7.87	7.80	8.82	7.36		7.82	8.10	7.85

2015 Shizuoka International Athletics Meeting (Fukuroi, JPN)

FINAL date 03-May-15 wind 0.2 m/s

Takashima (2015) - race analysis of 110m & 100m hurdles in Japan- results of main 2015 competitions

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kimura, Ayoko (JPN) (1988)	time	2.65	3.71	4.75	5.78	6.82	7.84	8.89	9.93	10.98	12.07		13.27	/ 1			
reaction time	interval		1.06	1.04	1.03	1.04	1.02	1.05	1.04	1.05	1.09	1.20			3.13	3.11	3.18
	velocity	4.91	8.02	8.17	8.25	8.17	8.33	8.10	8.17	8.10	7.80	8.75	7.54		8.15	8.20	8.02
Shimura, Hitomi (JPN) (1990)	time	2.65	3.73	4.78	5.82	6.84	7.89	8.94	10.01	11.08	12.15		13.32	/ 2			
reaction time	interval		1.08	1.05	1.04	1.02	1.05	1.05	1.07	1.07	1.07	1.17			3.17	3.12	3.21
	velocity	4.91	7.87	8.10	8.17	8.33	8.10	8.10	7.94	7.94	7.94	8.97	7.51		8.04	8.17	7.94
Ito, Airi (JPN) (1989)	time	2.70	3.79	4.86	5.92	6.96	8.01	9.08	10.18	11.25	12.33		13.58	/ 5			
reaction time	interval		1.09	1.07	1.06	1.04	1.05	1.07	1.10	1.07	1.08	1.25			3.22	3.16	3.25
	velocity	4.81	7.80	7.94	8.02	8.17	8.10	7.94	7.73	7.94	7.87	8.40	7.36		7.92	8.07	7.85
Aoki, Masumi (JPN) (1994)	time	2.65	3.76	4.85	5.90	6.95	8.00	9.08	10.18	11.30	12.42		13.65	/ 6			
reaction time	interval		1.11	1.09	1.05	1.05	1.05	1.08	1.10	1.12	1.12	1.23			3.25	3.18	3.34
	velocity	4.91	7.66	7.80	8.10	8.10	8.10	7.87	7.73	7.59	7.59	8.54	7.33		7.85	8.02	7.63

2015 Czech Republic National U20 Indoor Championships (Praha, CZE)

FINAL date 14-Feb-15

Feher (2015) - Final report from the U18 & U20 Czech Republic indoor national championships

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Dvoráková, Katerina (CZE) (19	time	2.81	3.94	5.05	6.15	7.26		8.67	5 / 1			
reaction time 0.146	interval		1.13	1.11	1.10	1.11	1.41			3.34		
	velocity	4.63	7.52	7.66	7.73	7.66	9.22	6.92		7.63		
Skálová, Annemarie (CZE) (19	time	2.80	3.93	5.09	6.26	7.42		8.95	4 / 2			
reaction time 0.148	interval		1.13	1.16	1.17	1.16	1.53			3.46		
	velocity	4.64	7.52	7.33	7.26	7.33	8.50	6.70		7.37		
Prochová, Hana (CZE) (1996)	time	2.87	4.03	5.20	6.33	7.52		8.96	2 / 3			
reaction time 0.132	interval		1.16	1.17	1.13	1.19	1.44			3.46		
	velocity	4.53	7.33	7.26	7.52	7.14	9.03	6.70		7.37		
Nečinová, Anna (CZE) (1996)	time	2.90	4.04	5.18	6.35	7.45		8.98	6 / 4			
reaction time 0.220	interval		1.14	1.14	1.17	1.10	1.53			3.45		
	velocity	4.48	7.46	7.46	7.26	7.73	8.50	6.68		7.39		
Čaladi, Tereza (CZE) (1996)	time	2.92	4.12	5.31	6.48	7.74		9.35	1 / 5			
reaction time 0.143	interval		1.20	1.19	1.17	1.26	1.61			3.56		
	velocity	4.45	7.08	7.14	7.26	6.75	8.07	6.42		7.16		
Odvárková, Lucie (CZE) (1996)	time	2.82	4.07	5.31	6.53	7.82		9.43	8 / 6			
reaction time 0.359	interval		1.25	1.24	1.22	1.29	1.61			3.71		
	velocity	4.61	6.80	6.85	6.97	6.59	8.07	6.36		6.87		
Dostálová, Veronika (CZE) (19	time	2.98	4.21	5.41	6.66	7.93		9.68	7 / 7			
reaction time 0.369	interval		1.23	1.20	1.25	1.27	1.75			3.68		
	velocity	4.36	6.91	7.08	6.80	6.69	7.43	6.20		6.93		

2015 Czech Republic National U18 Indoor Championships (Praha, CZE) (76cm)

FINAL date 14-Feb-15

Feher (2015) - Final report from the U18 & U20 Czech Republic indoor national championships

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Vokálová, Tereza (CZE) (1998)	time	2.72	3.79	4.87	5.94	7.04		8.45	5 / 1			
reaction time 0.179	interval		1.07	1.08	1.07	1.10	1.41			3.22		
	velocity	4.78	7.94	7.87	7.94	7.73	9.22	7.10		7.92		
Semecká, Tereza (CZE) (1998)	time	2.85	3.93	5.01	6.08	7.16		8.59	4 / 2			
reaction time 0.160	interval		1.08	1.08	1.07	1.08	1.43			3.23		
	velocity	4.56	7.87	7.87	7.94	7.87	9.09	6.98		7.89		
Žitná, Venuše (CZE) (1998)	time	2.73	3.90	5.04	6.15	7.31		8.78	7 / 3			
reaction time 0.243	interval		1.17	1.14	1.11	1.16	1.47			3.42		
	velocity	4.76	7.26	7.46	7.66	7.33	8.84	6.83		7.46		
Jirmanová, Karolína (CZE) (19	time	2.80	3.94	5.06	6.22	7.34		8.82	3 / 4			
reaction time 0.475	interval		1.14	1.12	1.16	1.12	1.48			3.42		
	velocity	4.64	7.46	7.59	7.33	7.59	8.78	6.80		7.46		
Vávrová, Denisa (CZE) (1998)	time	2.78	3.94	5.05	6.23	7.38		8.94	2 / 5			
reaction time 0.149	interval		1.16	1.11	1.18	1.15	1.56			3.45		
	velocity	4.68	7.33	7.66	7.20	7.39	8.33	6.71		7.39		
Barborová, Michaela (CZE) (1	time	2.82	3.97	5.13	6.29	7.47		9.01	8 / 6			
reaction time 0.357	interval		1.15	1.16	1.16	1.18	1.54			3.47		
	velocity	4.61	7.39	7.33	7.33	7.20	8.44	6.66		7.35		
Duchonová, Andrea (CZE) (19	time	2.81	4.00	5.19	6.35	7.50		9.09	1 / 7			
reaction time 0.157	interval		1.19	1.19	1.16	1.15	1.59			3.54		
	velocity	4.63	7.14	7.14	7.33	7.39	8.18	6.60		7.20		
Minárová, Pavlína (CZE) (1999)	time	2.74	3.86					dnf	6 / --			
reaction time 0.165	interval		1.12									
	velocity	4.74	7.59									

2014 Chinese National Championships (Suzhou, CHN)

FINAL date 11-Oct-14 wind 1.6 m/s

Deng (2016) - research on the 2014 winter training of chinese excellent 100m hurdler Deng Ru

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Deng Ru (CHN) (1989)	time	2.27	3.33	4.41	5.53	6.57	7.69	8.80	9.88	10.96	12.08		13.86	/ 6			
reaction time	interval		1.06	1.08	1.12	1.04	1.12	1.11	1.08	1.08	1.12	1.78			3.26	3.27	3.28
	velocity	5.73	8.02	7.87	7.59	8.17	7.59	7.66	7.87	7.87	7.59	5.90	7.22		7.82	7.80	7.77

2014 Japanese National High School Championships (Kofu, JPN)

FINAL date 03-Aug-14 wind -0.9 m/s

Yanagiya (2014) - research on athlete performance and technique- 2014 data book

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Hemphill, Megu (JPN) (1996)	time	2.75	3.87	4.95	6.00	7.07	8.12	9.19	10.27	11.35	12.46		13.72	6 / 1			

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	interval		1.12	1.08	1.05	1.07	1.05	1.07	1.08	1.08	1.11	1.26			3.25	3.19	3.27
	velocity	4.73	7.59	7.87	8.10	7.94	8.10	7.94	7.87	7.87	7.66	8.33	7.29		7.85	7.99	7.80
Kobayashi, Sayaka (JPN) (199	time	2.77	3.88	4.98	6.07	7.14	8.22	9.30	10.39	11.47	12.59		13.83	3 / 2			
reaction time	interval		1.11	1.10	1.09	1.07	1.08	1.08	1.09	1.08	1.12	1.24	PB		3.30	3.23	3.29
	velocity	4.69	7.66	7.73	7.80	7.94	7.87	7.87	7.80	7.87	7.59	8.47	7.23		7.73	7.89	7.75
Fujimori, Nana (JPN) (1997)	time	2.70	3.83	4.91	5.97	7.05	8.12	9.21	10.32	11.46	12.61		13.88	5 / 3			
reaction time	interval		1.13	1.08	1.06	1.08	1.07	1.09	1.11	1.14	1.15	1.27			3.27	3.24	3.40
	velocity	4.81	7.52	7.87	8.02	7.87	7.94	7.80	7.66	7.46	7.39	8.27	7.20		7.80	7.87	7.50

2014 Czech Republic National Championships (Ostrava, CZE)

FINAL

date 02-Aug-14 wind 0.4 m/s

Feher (2014) - Final report from the Czech Republic national championships

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Škrobáková, Lucie (CZE) (198	time	2.62	3.66	4.68	5.66	6.65	7.65	8.68	9.69	10.74	11.79		12.99	4 / 1			
reaction time 0.113	interval		1.04	1.02	0.98	0.99	1.00	1.03	1.01	1.05	1.05	1.20			3.04	3.02	3.11
	velocity	4.96	8.17	8.33	8.67	8.59	8.50	8.25	8.42	8.10	8.10	8.75	7.70		8.39	8.44	8.20
Koudelová, Lucie (CZE) (1994)	time	2.68	3.72	4.78	5.79	6.80	7.81	8.82	9.87	10.90	11.96		13.15	5 / 2			
reaction time 0.141	interval		1.04	1.06	1.01	1.01	1.01	1.01	1.05	1.03	1.06	1.19	PB		3.11	3.03	3.14
	velocity	4.85	8.17	8.02	8.42	8.42	8.42	8.42	8.10	8.25	8.02	8.82	7.60		8.20	8.42	8.12
Tomková, Helena (CZE) (1992)	time	2.81	3.91	4.98	6.05	7.11	8.18	9.27	10.35	11.45	12.56		13.76	6 / 3			
reaction time 0.176	interval		1.10	1.07	1.07	1.06	1.07	1.09	1.08	1.10	1.11	1.20			3.24	3.22	3.29
	velocity	4.63	7.73	7.94	7.94	8.02	7.94	7.80	7.87	7.73	7.66	8.75	7.27		7.87	7.92	7.75
Hamáčková, Barbora (CZE) (1	time	2.77	3.89	4.96	6.03	7.09	8.18	9.24	10.33	11.44	12.57		13.82	7 / 4			
reaction time 0.209	interval		1.12	1.07	1.07	1.06	1.09	1.06	1.09	1.11	1.13	1.25			3.26	3.21	3.33
	velocity	4.69	7.59	7.94	7.94	8.02	7.80	8.02	7.80	7.66	7.52	8.40	7.24		7.82	7.94	7.66
Hlavatá, Karolina (CZE) (1994)	time	2.74	3.80	4.87	5.97	7.05	8.12	9.23	10.32	11.44	12.61		13.82	8 / 5			
reaction time 0.186	interval		1.06	1.07	1.10	1.08	1.07	1.11	1.09	1.12	1.17	1.21			3.23	3.26	3.38
	velocity	4.74	8.02	7.94	7.73	7.87	7.94	7.66	7.80	7.59	7.26	8.68	7.24		7.89	7.82	7.54
Cachová, Katerina (CZE) (199	time	2.82	3.93	5.01	6.08	7.13	8.20	9.32	10.40	11.49	12.61		13.82	3 / 6			
reaction time 0.221	interval		1.11	1.08	1.07	1.05	1.07	1.12	1.08	1.09	1.12	1.21			3.26	3.24	3.29
	velocity	4.61	7.66	7.87	7.94	8.10	7.94	7.59	7.87	7.80	7.59	8.68	7.24		7.82	7.87	7.75
Sotáková, Jana (CZE) (1992)	time	2.74	3.84	4.94	6.00	7.08	8.16	9.27	10.37	11.50	12.63		13.89	2 / 7			
reaction time 0.150	interval		1.10	1.10	1.06	1.08	1.08	1.11	1.10	1.13	1.13	1.26			3.26	3.27	3.36
	velocity	4.74	7.73	7.73	8.02	7.87	7.87	7.66	7.73	7.52	7.52	8.33	7.20		7.82	7.80	7.59
Galertová, Alena (CZE) (1992)	time	2.86	4.06	5.22	6.38	7.53	8.68	9.82	10.97	12.13	13.31		14.63	1 / 8			
reaction time 0.186	interval		1.20	1.16	1.16	1.15	1.15	1.14	1.15	1.16	1.18	1.32			3.52	3.44	3.49
	velocity	4.55	7.08	7.33	7.33	7.39	7.39	7.46	7.39	7.33	7.20	7.95	6.84		7.24	7.41	7.31

Heat 2

date 02-Aug-14 wind -1.0 m/s

Feher (2014) - Final report from the Czech Republic national championships

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Koudelová, Lucie (CZE) (1994)	time	2.77	3.90	4.98	6.03	7.08	8.13	9.18	10.25	11.31	12.40		13.51	4 / 1			
reaction time 0.135	interval		1.13	1.08	1.05	1.05	1.05	1.05	1.07	1.06	1.09	1.11			3.26	3.15	3.22
	velocity	4.69	7.52	7.87	8.10	8.10	8.10	8.10	7.94	8.02	7.80	9.46	7.40		7.82	8.10	7.92
Tomková, Helena (CZE) (1992)	time	2.89	4.04	5.12	6.26	7.35	8.44	9.52	10.62	11.74	12.90		14.07	6 / 2			
reaction time 0.178	interval		1.15	1.08	1.14	1.09	1.09	1.08	1.10	1.12	1.16	1.17			3.37	3.26	3.38
	velocity	4.50	7.39	7.87	7.46	7.80	7.80	7.87	7.73	7.59	7.33	8.97	7.11		7.57	7.82	7.54
Hlavatá, Karolina (CZE) (1994)	time	2.82	3.95	5.09	6.22	7.35	8.47	9.59	10.71	11.88	13.07		14.29	5 / 3			
reaction time 0.148	interval		1.13	1.14	1.13	1.13	1.12	1.12	1.12	1.17	1.19	1.22			3.40	3.37	3.48
	velocity	4.61	7.52	7.46	7.52	7.52	7.59	7.59	7.59	7.26	7.14	8.61	7.00		7.50	7.57	7.33
Klučinová, Eliška (CZE) (1988)	time	2.89	4.05	5.16	6.28	7.41	8.53	9.64	10.80	11.96	13.21		14.43	3 / 4			
reaction time 0.151	interval		1.16	1.11	1.12	1.13	1.12	1.11	1.16	1.16	1.25	1.22			3.39	3.36	3.57
	velocity	4.50	7.33	7.66	7.59	7.52	7.59	7.66	7.33	7.33	6.80	8.61	6.93		7.52	7.59	7.14
Šimečková, Michaela (CZE) (1	time	2.91	4.05	5.21	6.36	7.48	8.64	9.78	10.95	12.14	13.36		14.57	7 / 5			
reaction time 0.159	interval		1.14	1.16	1.15	1.12	1.16	1.14	1.17	1.19	1.22	1.21			3.45	3.42	3.58
	velocity	4.47	7.46	7.33	7.39	7.59	7.33	7.46	7.26	7.14	6.97	8.68	6.86		7.39	7.46	7.12
Komrsková, Aneta (CZE) (199	time	2.90	4.06	5.20	6.35	7.49	8.61	9.77	10.94	12.13	13.38		14.69	2 / 6			
reaction time 0.213	interval		1.16	1.14	1.15	1.14	1.12	1.16	1.17	1.19	1.25	1.31			3.45	3.42	3.61
	velocity	4.48	7.33	7.46	7.39	7.46	7.59	7.33	7.26	7.14	6.80	8.02	6.81		7.39	7.46	7.06
Vytlačilová, Tereza (CZE) (199	time	2.95	4.16	5.36	6.57	7.77	9.00	10.21	11.45	12.72	14.02		15.41	8 / 7			
reaction time 0.141	interval		1.21	1.20	1.21	1.20	1.23	1.21	1.24	1.27	1.30	1.39			3.62	3.64	3.81
	velocity	4.41	7.02	7.08	7.02	7.08	6.91	7.02	6.85	6.69	6.54	7.55	6.49		7.04	7.01	6.69
Landová, Barbora (CZE) (1989	time	2.94	4.20	5.48	6.78	8.06	9.39	10.73	12.23	13.69	15.40		17.33	1 / 8			

reaction time 0.170	interval		1.26	1.28	1.30	1.28	1.33	1.34	1.50	1.46	1.71	1.93				3.84	3.95	4.67
	velocity	4.42	6.75	6.64	6.54	6.64	6.39	6.34	5.67	5.82	4.97	5.44	5.77			6.64	6.46	5.46

Heat 1

date 02-Aug-14 wind 0.2 m/s

Feher (2014) - Final report from the Czech Republic national championships

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Škrobáková, Lucie (CZE) (198	time	2.68	3.73	4.74	5.74	6.73	7.73	8.75	9.76	10.81	11.85		13.06	4 / 1			
reaction time 0.201	interval		1.05	1.01	1.00	0.99	1.00	1.02	1.01	1.05	1.04	1.21			3.06	3.01	3.10
	velocity	4.85	8.10	8.42	8.50	8.59	8.50	8.33	8.42	8.10	8.17	8.68	7.66		8.33	8.47	8.23
Cachová, Katerina (CZE) (199	time	2.79	3.88	4.95	6.02	7.10	8.14	9.20	10.35	11.43	12.56		13.80	6 / 2			
reaction time 0.204	interval		1.09	1.07	1.07	1.08	1.04	1.06	1.15	1.08	1.13	1.24			3.23	3.18	3.36
	velocity	4.66	7.80	7.94	7.94	7.87	8.17	8.02	7.39	7.87	7.52	8.47	7.25		7.89	8.02	7.59
Hamáčková, Barbora (CZE) (1	time	2.76	3.88	4.96	6.01	7.07	8.13	9.21	10.27	11.38	12.51		13.80	3 / 3			
reaction time 0.184	interval		1.12	1.08	1.05	1.06	1.06	1.08	1.06	1.11	1.13	1.29	**=PB**		3.25	3.20	3.30
	velocity	4.71	7.59	7.87	8.10	8.02	8.02	7.87	8.02	7.66	7.52	8.14	7.25		7.85	7.97	7.73
Sotáková, Jana (CZE) (1992)	time	2.72	3.84	4.91	5.99	7.05	8.13	9.20	10.30	11.41	12.55		13.84	5 / 4			
reaction time 0.143	interval		1.12	1.07	1.08	1.06	1.08	1.07	1.10	1.11	1.14	1.29			3.27	3.21	3.35
	velocity	4.78	7.59	7.94	7.87	8.02	7.87	7.94	7.73	7.66	7.46	8.14	7.23		7.80	7.94	7.61
Galertová, Alena (CZE) (1992)	time	2.82	3.98	5.12	6.23	7.34	8.47	9.60	10.73	11.89	13.08		14.39	2 / 5			
reaction time 0.189	interval		1.16	1.14	1.11	1.11	1.13	1.13	1.13	1.16	1.19	1.31			3.41	3.37	3.48
	velocity	4.61	7.33	7.46	7.66	7.66	7.52	7.52	7.52	7.33	7.14	8.02	6.95		7.48	7.57	7.33
Šebestíková, Nikol (CZE) (199	time	2.71	3.81	4.96	6.07	7.20	8.35	9.51	10.66	11.85	13.05		14.39	1 / 6			
reaction time 0.187	interval		1.10	1.15	1.11	1.13	1.15	1.16	1.15	1.19	1.20	1.34			3.36	3.44	3.54
	velocity	4.80	7.73	7.39	7.66	7.52	7.39	7.33	7.39	7.14	7.08	7.84	6.95		7.59	7.41	7.20
Škaloudová, Eliška (CZE) (199	time	2.80	3.97	5.11	6.26	7.42	8.58	9.75	10.93	12.13	13.32		14.67	7 / 7			
reaction time 0.209	interval		1.17	1.14	1.15	1.16	1.16	1.17	1.18	1.20	1.19	1.35			3.46	3.49	3.57
	velocity	4.64	7.26	7.46	7.39	7.33	7.33	7.26	7.20	7.08	7.14	7.78	6.82		7.37	7.31	7.14
Plíhalová, Katerina (CZE) (199	time	2.94	4.19	5.43	6.66	7.89	9.13	10.40	11.69	12.98	14.30		15.79	8 / 8			
reaction time 0.343	interval		1.25	1.24	1.23	1.23	1.24	1.27	1.29	1.29	1.32	1.49			3.72	3.74	3.90
	velocity	4.42	6.80	6.85	6.91	6.91	6.85	6.69	6.59	6.59	6.44	7.05	6.33		6.85	6.82	6.54

2014 Czech Republic National U20 Championships (Trinec, CZE)

FINAL

date 28-Jun-14 wind -3.9 m/s

Feher (2014) - Final report from the U18 & U20 Czech Republic national championships

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Zekuciová, Anna (CZE) (1995)	time	2.75	3.87	4.98	6.10	7.21	8.35	9.48	10.63	11.79	12.98		14.31	4 / 1			
reaction time 0.161	interval		1.12	1.11	1.12	1.11	1.14	1.13	1.15	1.16	1.19	1.33			3.35	3.38	3.50
	velocity	4.73	7.59	7.66	7.59	7.66	7.46	7.52	7.39	7.33	7.14	7.89	6.99		7.61	7.54	7.29
Svobodová, Lenka (CZE) (199	time	2.75	3.89	5.05	6.21	7.36	8.51	9.65	10.85	12.04	13.24		14.57	5 / 2			
reaction time 0.123	interval		1.14	1.16	1.16	1.15	1.15	1.14	1.20	1.19	1.20	1.33			3.46	3.44	3.59
	velocity	4.73	7.46	7.33	7.33	7.39	7.39	7.46	7.08	7.14	7.08	7.89	6.86		7.37	7.41	7.10
Vachová, Anna (CZE) (1995)	time	2.85	4.01	5.18	6.34	7.53	8.71	9.89	11.10	12.30	13.55		14.81	3 / 3			
reaction time 0.171	interval		1.16	1.17	1.16	1.19	1.18	1.18	1.21	1.20	1.25	1.26			3.49	3.55	3.66
	velocity	4.56	7.33	7.26	7.33	7.14	7.20	7.20	7.02	7.08	6.80	8.33	6.75		7.31	7.18	6.97
Hofmanová, Martina (CZE) (1	time	2.85	4.06	5.25	6.45	7.68	8.93	10.18	11.50	12.78	14.01		15.33	2 / 4			
reaction time 0.167	interval		1.21	1.19	1.20	1.23	1.25	1.25	1.32	1.28	1.23	1.32			3.60	3.73	3.83
	velocity	4.56	7.02	7.14	7.08	6.91	6.80	6.80	6.44	6.64	6.91	7.95	6.52		7.08	6.84	6.66
Dobrovolná, Kristyna (CZE) (1	time	2.88	4.08	5.29	6.49	7.73	8.96	10.19	11.46	12.72	14.00		15.44	6 / 5			
reaction time 0.152	interval		1.20	1.21	1.20	1.24	1.23	1.23	1.27	1.26	1.28	1.44			3.61	3.70	3.81
	velocity	4.51	7.08	7.02	7.08	6.85	6.91	6.91	6.69	6.75	6.64	7.29	6.48		7.06	6.89	6.69
Skálová, Annemarie (CZE) (19	time	2.95	4.14	5.36	6.58	7.83	9.07	10.29	11.58	12.90	14.22		15.65	7 / 6			
reaction time 0.241	interval		1.19	1.22	1.22	1.25	1.24	1.22	1.29	1.32	1.32	1.43			3.63	3.71	3.93
	velocity	4.41	7.14	6.97	6.97	6.80	6.85	6.97	6.59	6.44	6.44	7.34	6.39		7.02	6.87	6.49
Králová, Adéla (CZE) (1996)	time	2.99	4.22	5.47	6.69	7.96	9.20	10.56	11.93	13.37	14.94		16.68	8 / 7			
reaction time 0.220	interval		1.23	1.25	1.22	1.27	1.24	1.36	1.37	1.44	1.57	1.74			3.70	3.87	4.38
	velocity	4.35	6.91	6.80	6.97	6.69	6.85	6.25	6.20	5.90	5.41	6.03	6.00		6.89	6.59	5.82

Heat 2

date 28-Jun-14 wind -1.5 m/s

Feher (2014) - Final report from the U18 & U20 Czech Republic national championships

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Svobodová, Lenka (CZE) (199	time	2.77	3.93	5.08	6.24	7.40	8.56	9.74	10.91	12.11	13.34		14.76	7 / 1			
reaction time 0.389	interval		1.16	1.15	1.16	1.16	1.16	1.18	1.17	1.20	1.23	1.42			3.47	3.50	3.60
	velocity	4.69	7.33	7.39	7.33	7.33	7.33	7.20	7.26	7.08	6.91	7.39	6.78		7.35	7.29	7.08
Vachová, Anna (CZE) (1995)	time	2.83	4.00	5.15	6.30	7.49	8.65	9.86	11.07	12.27	13.54		14.89	4 / 2			
reaction time 0.184	interval		1.17	1.15	1.15	1.19	1.16	1.21	1.21	1.20	1.27	1.35			3.47	3.56	3.68
	velocity	4.59	7.26	7.39	7.39	7.14	7.33	7.02	7.02	7.08	6.69	7.78	6.72		7.35	7.16	6.93

Hofmanová, Martina (CZE) (1	time	2.79	3.96	5.11	6.31	7.50	8.72	9.95	11.22	12.47	13.76		15.14	6 / 3			
reaction time 0.155	interval		1.17	1.15	1.20	1.19	1.22	1.23	1.27	1.25	1.29	1.38			3.52	3.64	3.81
	velocity	4.66	7.26	7.39	7.08	7.14	6.97	6.91	6.69	6.80	6.59	7.61	6.61		7.24	7.01	6.69
Čaladi, Tereza (CZE) (1996)	time	3.04	4.27	5.51	6.78	8.03	9.32	10.65	11.96	13.33	14.70		16.26	3 / 4			
reaction time 0.195	interval		1.23	1.24	1.27	1.25	1.29	1.33	1.31	1.37	1.37	1.56			3.74	3.87	4.05
	velocity	4.28	6.91	6.85	6.69	6.80	6.59	6.39	6.49	6.20	6.20	6.73	6.15		6.82	6.59	6.30
Votinská, Barbora (CZE) (1996	time	3.04	4.37	5.69	7.00	8.28	9.59	10.91	12.25	13.62	15.04		16.48	1 / 5			
reaction time 0.156	interval		1.33	1.32	1.31	1.28	1.31	1.32	1.34	1.37	1.42	1.44			3.96	3.91	4.13
	velocity	4.28	6.39	6.44	6.49	6.64	6.49	6.44	6.34	6.20	5.99	7.29	6.07		6.44	6.52	6.17
Remešová, Dominika (CZE) (1	time	3.04	4.27	5.57	6.83	8.10	9.42	10.75	12.09	13.47	15.08		16.79	2 / 6			
reaction time 0.225	interval		1.23	1.30	1.26	1.27	1.32	1.33	1.34	1.38	1.61	1.71			3.79	3.92	4.33
	velocity	4.28	6.91	6.54	6.75	6.69	6.44	6.39	6.34	6.16	5.28	6.14	5.96		6.73	6.51	5.89

Heat 1

date 28-Jun-14 wind -4.5 m/s

Feher (2014) - Final report from the U18 & U20 Czech Republic national championships

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Zekuciová, Anna (CZE) (1995)	time	2.76	3.88	4.98	6.09	7.21	8.35	9.48	10.65	11.81	13.10		14.32	4 / 1			
reaction time 0.162	interval		1.12	1.10	1.11	1.12	1.14	1.13	1.17	1.16	1.29	1.22			3.33	3.39	3.62
	velocity	4.71	7.59	7.73	7.66	7.59	7.46	7.52	7.26	7.33	6.59	8.61	6.98		7.66	7.52	7.04
Dobrovolná, Kristyna (CZE) (1	time	2.93	4.12	5.30	6.49	7.69	8.90	10.11	11.35	12.58	13.85		15.26	5 / 2			
reaction time 0.185	interval		1.19	1.18	1.19	1.20	1.21	1.21	1.24	1.23	1.27	1.41			3.56	3.62	3.74
	velocity	4.44	7.14	7.20	7.14	7.08	7.02	7.02	6.85	6.91	6.69	7.45	6.55		7.16	7.04	6.82
Skálová, Annemarie (CZE) (19	time	2.89	3.96	5.17	6.35	7.59	8.80	10.06	11.34	12.63	13.93		15.31	3 / 3			
reaction time 0.149	interval		1.07	1.21	1.18	1.24	1.21	1.26	1.28	1.29	1.30	1.38			3.46	3.71	3.87
	velocity	4.50	7.94	7.02	7.20	6.85	7.02	6.75	6.64	6.59	6.54	7.61	6.53		7.37	6.87	6.59
Vytačilová, Tereza (CZE) (1995	time	2.92	4.13	5.33	6.56	7.81	9.07	10.36	11.65	12.93	14.23		15.67	7 / 4			
reaction time 0.149	interval		1.21	1.20	1.23	1.25	1.26	1.29	1.29	1.28	1.30	1.44			3.64	3.80	3.87
	velocity	4.45	7.02	7.08	6.91	6.80	6.75	6.59	6.59	6.64	6.54	7.29	6.38		7.01	6.71	6.59
Králová, Adéla (CZE) (1996)	time	2.92	4.17	5.35	6.59	7.82	9.07	10.37	11.63	12.94	14.23		15.68	6 / 5			
reaction time 0.178	interval		1.25	1.18	1.24	1.23	1.25	1.30	1.26	1.31	1.29	1.45			3.67	3.78	3.86
	velocity	4.45	6.80	7.20	6.85	6.91	6.80	6.54	6.75	6.49	6.59	7.24	6.38		6.95	6.75	6.61
Reháková, Karolína (CZE) (19	time	2.96	4.20	5.48	6.74	8.01	9.29	10.63	11.93	13.23	14.57		15.94	1 / 6			
reaction time 0.233	interval		1.24	1.28	1.26	1.27	1.28	1.34	1.30	1.30	1.34	1.37			3.78	3.89	3.94
	velocity	4.39	6.85	6.64	6.75	6.69	6.64	6.34	6.54	6.54	6.34	7.66	6.27		6.75	6.56	6.47
Hlavonová, Michaela (CZE) (1	time	2.88	4.13	5.45	6.72	8.11	9.42	10.84	12.15	13.55	14.89		16.45	2 / 7			
reaction time 0.140	interval		1.25	1.32	1.27	1.39	1.31	1.42	1.31	1.40	1.34	1.56			3.84	4.12	4.05
	velocity	4.51	6.80	6.44	6.69	6.12	6.49	5.99	6.49	6.07	6.34	6.73	6.08		6.64	6.19	6.30

2014 Czech Republic National U18 Championships (Trinec, CZE) (76cm)

FINAL

date 28-Jun-14 wind -3.6 m/s

Feher (2014) - Final report from the U18 & U20 Czech Republic national championships

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Semecká, Tereza (CZE) (1998)	time	2.84	3.99	5.09	6.16	7.25	8.33	9.42	10.51	11.62	12.73		13.98	5 / 1			
reaction time 0.160	interval		1.15	1.10	1.07	1.09	1.08	1.09	1.09	1.11	1.11	1.25			3.32	3.26	3.31
	velocity	4.58	7.39	7.73	7.94	7.80	7.87	7.80	7.80	7.66	7.66	8.40	7.15		7.68	7.82	7.70
Vokálová, Tereza (CZE) (1998)	time	2.75	3.87	4.98	6.08	7.18	8.27	9.39	10.50	11.65	12.79		14.05	6 / 2			
reaction time 0.149	interval		1.12	1.11	1.10	1.10	1.09	1.12	1.11	1.15	1.14	1.26			3.33	3.31	3.40
	velocity	4.73	7.59	7.66	7.73	7.73	7.80	7.59	7.66	7.39	7.46	8.33	7.12		7.66	7.70	7.50
Šimečková, Michaela (CZE) (1	time	2.83	3.98	5.08	6.16	7.25	8.33	9.43	10.56	11.71	12.90		14.17	7 / 3			
reaction time 0.213	interval		1.15	1.10	1.08	1.09	1.08	1.10	1.13	1.15	1.19	1.27			3.33	3.27	3.47
	velocity	4.59	7.39	7.73	7.87	7.80	7.87	7.73	7.52	7.39	7.14	8.27	7.06		7.66	7.80	7.35
Dvoráková, Katerina (CZE) (19	time	2.84	3.97	5.08	6.18	7.30	8.40	9.52	10.66	11.80	12.98		14.24	4 / 4			
reaction time 0.168	interval		1.13	1.11	1.10	1.12	1.10	1.12	1.14	1.14	1.18	1.26			3.34	3.34	3.46
	velocity	4.58	7.52	7.66	7.73	7.59	7.73	7.59	7.46	7.46	7.20	8.33	7.02		7.63	7.63	7.37
Janíčková, Veronika (CZE) (19	time	2.79	3.94	5.07	6.18	7.31	8.42	9.54	10.68	11.84	13.01		14.28	3 / 5			
reaction time 0.186	interval		1.15	1.13	1.11	1.13	1.11	1.12	1.14	1.16	1.17	1.27			3.39	3.36	3.47
	velocity	4.66	7.39	7.52	7.66	7.52	7.66	7.59	7.46	7.33	7.26	8.27	7.00		7.52	7.59	7.35
Dostálová, Veronika (CZE) (19	time	2.81	3.98	5.13	6.28	7.42	8.60	9.78	10.98	12.20	13.50		14.87	2 / 6			
reaction time 0.214	interval		1.17	1.15	1.15	1.14	1.18	1.18	1.20	1.22	1.30	1.37			3.47	3.50	3.72
	velocity	4.63	7.26	7.39	7.39	7.46	7.20	7.20	7.08	6.97	6.54	7.66	6.72		7.35	7.29	6.85
Vávrová, Denisa (CZE) (1998)	time	2.76	3.89	5.03	6.20	7.40	8.58	9.78	11.16	12.39	13.74		15.15	1 / 7			
reaction time 0.138	interval		1.13	1.14	1.17	1.20	1.18	1.20	1.38	1.23	1.35	1.41			3.44	3.58	3.96
	velocity	4.71	7.52	7.46	7.26	7.08	7.20	7.08	6.16	6.91	6.30	7.45	6.60		7.41	7.12	6.44

Jedličková, Petra (CZE) (1998)	time	2.96	4.16	5.38	6.62	7.82	9.06	10.30	11.55	12.80	14.09		15.52	8 / 8			
reaction time 0.209	interval		1.20	1.22	1.24	1.20	1.24	1.24	1.25	1.25	1.29	1.43			3.66	3.68	3.79
	velocity	4.39	7.08	6.97	6.85	7.08	6.85	6.85	6.80	6.80	6.59	7.34	6.44		6.97	6.93	6.73

Heat 3

date 28-Jun-14 wind -1.3 m/s

Feher (2014) - Final report from the U18 & U20 Czech Republic national championships

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Semecká, Tereza (CZE) (1998)	time	2.93	4.01	5.10	6.20	7.29	8.39	9.47	10.57	11.67	12.83		14.06	3 / 1			
reaction time 0.242	interval		1.08	1.09	1.10	1.09	1.10	1.08	1.10	1.10	1.16	1.23			3.27	3.27	3.36
	velocity	4.44	7.87	7.80	7.73	7.80	7.73	7.87	7.73	7.73	7.33	8.54	7.11		7.80	7.80	7.59
Janíčková, Veronika (CZE) (19	time	2.80	3.91	5.02	6.12	7.24	8.36	9.48	10.64	11.77	12.93		14.19	7 / 2			
reaction time 0.212	interval		1.11	1.11	1.10	1.12	1.12	1.12	1.16	1.13	1.16	1.26			3.32	3.36	3.45
	velocity	4.64	7.66	7.66	7.73	7.59	7.59	7.59	7.33	7.52	7.33	8.33	7.05		7.68	7.59	7.39
Jedličková, Petra (CZE) (1998)	time	3.00	4.18	5.37	6.56	7.75	8.94	10.14	11.35	12.56	13.81		15.18	6 / 3			
reaction time 0.225	interval		1.18	1.19	1.19	1.19	1.19	1.20	1.21	1.21	1.25	1.37			3.56	3.58	3.67
	velocity	4.33	7.20	7.14	7.14	7.14	7.14	7.08	7.02	7.02	6.80	7.66	6.59		7.16	7.12	6.95
Bendová, Daniela (CZE) (1997)	time	2.91	4.13	5.32	6.53	7.74	8.95	10.20	11.43	12.64	13.90		15.26	4 / 4			
reaction time 0.202	interval		1.22	1.19	1.21	1.21	1.21	1.25	1.23	1.21	1.26	1.36			3.62	3.67	3.70
	velocity	4.47	6.97	7.14	7.02	7.02	7.02	6.80	6.91	7.02	6.75	7.72	6.55		7.04	6.95	6.89
Majerová, Denisa (CZE) (1997)	time	3.03	4.23	5.41	6.63	7.85	9.07	10.30	11.53	12.78	14.10		15.55	5 / 5			
reaction time 0.261	interval		1.20	1.18	1.22	1.22	1.22	1.23	1.23	1.25	1.32	1.45			3.60	3.67	3.80
	velocity	4.29	7.08	7.20	6.97	6.97	6.97	6.91	6.91	6.80	6.44	7.24	6.43		7.08	6.95	6.71
Kopečná, Kristyna (CZE) (199	time	2.90	4.08	5.27	6.50	7.75	9.00	10.30	11.60	12.88	14.15		15.59	8 / 6			
reaction time 0.181	interval		1.18	1.19	1.23	1.25	1.25	1.30	1.30	1.28	1.27	1.44			3.60	3.80	3.85
	velocity	4.48	7.20	7.14	6.91	6.80	6.80	6.54	6.54	6.64	6.69	7.29	6.41		7.08	6.71	6.62
Burdová, Magdalena (CZE) (1	time	2.90	4.17	5.40	6.66	7.90	9.18	10.45	11.75	13.03	14.33		15.75	2 / 7			
reaction time 0.180	interval		1.27	1.23	1.26	1.24	1.28	1.27	1.30	1.28	1.30	1.42			3.76	3.79	3.88
	velocity	4.48	6.69	6.91	6.75	6.85	6.64	6.69	6.54	6.64	6.54	7.39	6.35		6.78	6.73	6.57
Švehláková, Eva (CZE) (1998)	time	3.01	4.27	5.54	6.81	8.08	9.38	10.66	11.95	13.23	14.55		15.98	1 / 8			
reaction time 0.239	interval		1.26	1.27	1.27	1.27	1.30	1.28	1.29	1.28	1.32	1.43			3.80	3.85	3.89
	velocity	4.32	6.75	6.69	6.69	6.69	6.54	6.64	6.59	6.64	6.44	7.34	6.26		6.71	6.62	6.56

Heat 2

date 28-Jun-14 wind -7.3 m/s

Feher (2014) - Final report from the U18 & U20 Czech Republic national championships

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Vokálová, Tereza (CZE) (1998)	time	2.74	3.89	5.00	6.14	7.29	8.44	9.60	10.76	11.93	13.13		14.42	5 / 1			
reaction time 0.156	interval		1.15	1.11	1.14	1.15	1.15	1.16	1.16	1.17	1.20	1.29			3.40	3.46	3.53
	velocity	4.74	7.39	7.66	7.46	7.39	7.39	7.33	7.33	7.26	7.08	8.14	6.93		7.50	7.37	7.22
Šimečková, Michaela (CZE) (1	time	2.80	3.94	5.06	6.22	7.34	8.50	9.67	10.86	12.07	13.31		14.67	7 / 2			
reaction time 0.170	interval		1.14	1.12	1.16	1.12	1.16	1.17	1.19	1.21	1.24	1.36			3.42	3.45	3.64
	velocity	4.64	7.46	7.59	7.33	7.59	7.33	7.26	7.14	7.02	6.85	7.72	6.82		7.46	7.39	7.01
Žitná, Venuše (CZE) (1998)	time	2.83	4.04	5.21	6.44	7.68	8.93	10.20	11.53	12.80	14.07		15.53	1 / 3			
reaction time 0.186	interval		1.21	1.17	1.23	1.24	1.25	1.27	1.33	1.27	1.27	1.46			3.61	3.76	3.87
	velocity	4.59	7.02	7.26	6.91	6.85	6.80	6.69	6.39	6.69	6.69	7.19	6.44		7.06	6.78	6.59
Rákosníková, Iveta (CZE) (199	time	2.92	4.13	5.36	6.61	7.87	9.16	10.46	11.79	13.11	14.48		16.04	8 / 4			
reaction time 0.192	interval		1.21	1.23	1.25	1.26	1.29	1.30	1.33	1.32	1.37	1.56			3.69	3.85	4.02
	velocity	4.45	7.02	6.91	6.80	6.75	6.59	6.54	6.39	6.44	6.20	6.73	6.23		6.91	6.62	6.34
Májová, Veronika (CZE) (1998)	time	2.88	4.09	5.31	6.55	7.85	9.14	10.57	11.95	13.37	14.79		16.40	4 / 5			
reaction time 0.168	interval		1.21	1.22	1.24	1.30	1.29	1.43	1.38	1.42	1.42	1.61			3.67	4.02	4.22
	velocity	4.51	7.02	6.97	6.85	6.54	6.59	5.94	6.16	5.99	5.99	6.52	6.10		6.95	6.34	6.04
Valášková, Tereza (CZE) (1998)	time	2.84	4.06	5.31	6.62	8.00	9.35	10.73	12.14	13.63	15.09		16.82	6 / 6			
reaction time 0.166	interval		1.22	1.25	1.31	1.38	1.35	1.38	1.41	1.49	1.46	1.73			3.78	4.11	4.36
	velocity	4.58	6.97	6.80	6.49	6.16	6.30	6.16	6.03	5.70	5.82	6.07	5.95		6.75	6.20	5.85
Malá, Patricie (CZE) (1998)	time	2.98	4.25	5.56	6.87	8.25	9.65	11.07	12.51	14.14	15.75		17.31	3 / 7			
reaction time 0.141	interval		1.27	1.31	1.31	1.38	1.40	1.42	1.44	1.63	1.61	1.56			3.89	4.20	4.68
	velocity	4.36	6.69	6.49	6.49	6.16	6.07	5.99	5.90	5.21	5.28	6.73	5.78		6.56	6.07	5.45

Heat 1

date 28-Jun-14 wind -1.8 m/s

Feher (2014) - Final report from the U18 & U20 Czech Republic national championships

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Dvoráková, Katerina (CZE) (19	time	2.82	3.95	5.03	6.14	7.23	8.31	9.43	10.53	11.65	12.78		14.04	1 / 1			
reaction time 0.174	interval		1.13	1.08	1.11	1.09	1.08	1.12	1.10	1.12	1.13	1.26			3.32	3.29	3.35
	velocity	4.61	7.52	7.87	7.66	7.80	7.87	7.59	7.73	7.59	7.52	8.33	7.12		7.68	7.75	7.61
Dostálová, Veronika (CZE) (19	time	2.84	3.99	5.12	6.24	7.39	8.51	9.65	10.86	12.03	13.22		14.55	4 / 2			
reaction time 0.371	interval		1.15	1.13	1.12	1.15	1.12	1.14	1.21	1.17	1.19	1.33			3.40	3.41	3.57

	velocity	4.58	7.39	7.52	7.59	7.39	7.59	7.46	7.02	7.26	7.14	7.89	6.87		7.50	7.48	7.14
Vávrová, Denisa (CZE) (1998)	time	2.78	3.91	5.05	6.19	7.35	8.54	9.72	10.95	12.18	13.47		14.94	8 / 3			
reaction time 0.141	interval		1.13	1.14	1.14	1.16	1.19	1.18	1.23	1.23	1.29	1.47			3.41	3.53	3.75
	velocity	4.68	7.52	7.46	7.46	7.33	7.14	7.20	6.91	6.91	6.59	7.14	6.69		7.48	7.22	6.80
Nemčeková, Nikola (CZE) (199	time	2.88	4.05	5.23	6.43	7.65	8.85	10.07	11.32	12.60	13.90		15.33	3 / 4			
reaction time 0.179	interval		1.17	1.18	1.20	1.22	1.20	1.22	1.25	1.28	1.30	1.43			3.55	3.64	3.83
	velocity	4.51	7.26	7.20	7.08	6.97	7.08	6.97	6.80	6.64	6.54	7.34	6.52		7.18	7.01	6.66
Hysková, Dominika (CZE) (199	time	3.07	4.27	5.50	6.73	7.95	9.17	10.42	11.65	12.89	14.20		15.64	7 / 5			
reaction time 0.243	interval		1.20	1.23	1.23	1.22	1.22	1.25	1.23	1.24	1.31	1.44			3.66	3.69	3.78
	velocity	4.23	7.08	6.91	6.91	6.97	6.97	6.80	6.91	6.85	6.49	7.29	6.39		6.97	6.91	6.75
Viková, Natálie (CZE) (1998)	time	2.96	4.22	5.49	6.74	8.01	9.26	10.53	11.78	13.06	14.37		15.69	5 / 6			
reaction time 0.149	interval		1.26	1.27	1.25	1.27	1.25	1.27	1.25	1.28	1.31	1.32			3.78	3.79	3.84
	velocity	4.39	6.75	6.69	6.80	6.69	6.80	6.69	6.80	6.64	6.49	7.95	6.37		6.75	6.73	6.64
Jarešová, Lucie (CZE) (1998)	time	2.95	4.17	5.41	6.67	7.95	9.20	10.50	11.82	13.13	14.50		16.04	2 / 7			
reaction time 0.198	interval		1.22	1.24	1.26	1.28	1.25	1.30	1.32	1.31	1.37	1.54			3.72	3.83	4.00
	velocity	4.41	6.97	6.85	6.75	6.64	6.80	6.54	6.44	6.49	6.20	6.82	6.23		6.85	6.66	6.38
Rašková, Adéla (CZE) (1998)	time	3.08	4.44	5.77	7.13	8.48	9.87	11.21	12.61	13.97	15.36		16.83	6 / 8			
reaction time 0.210	interval		1.36	1.33	1.36	1.35	1.39	1.34	1.40	1.36	1.39	1.47			4.05	4.08	4.15
	velocity	4.22	6.25	6.39	6.25	6.30	6.12	6.34	6.07	6.25	6.12	7.14	5.94		6.30	6.25	6.14

2014 Sparkassen Gala (Regensburg, GER)

FINAL

date 07-Jun-14 wind 0.1 m/s

Buckwitz (2014) - OSP Berlin / DLV frauen hürden report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Hofmann, Franziska (GER) (1!	time	2.64	3.68	4.70	5.69	6.68	7.70	8.72	9.74	10.80	11.90		13.02	4 / 1			
reaction time	interval		1.04	1.02	0.99	0.99	1.02	1.02	1.02	1.06	1.10	1.12	PB		3.05	3.03	3.18
	velocity	4.92	8.17	8.33	8.59	8.59	8.33	8.33	8.33	8.02	7.73	9.38	7.68		8.36	8.42	8.02
Pederson, Isabelle (NOR) (199	*7 steps*	no information available											13.07	5 / 8			
Lindenmayer, Sabrina (GER) (	time	2.72	3.80	4.88	5.92	6.98	8.00	9.04	10.09	11.14	12.26		13.44	8 / 3			
reaction time	interval		1.08	1.08	1.04	1.06	1.02	1.04	1.05	1.05	1.12	1.18			3.20	3.12	3.22
	velocity	4.78	7.87	7.87	8.17	8.02	8.33	8.17	8.10	8.10	7.59	8.90	7.44		7.97	8.17	7.92
Ferguen, Amina (ALG) (1989)	time	2.68	3.74	4.80	5.82	6.86	7.90	8.96	10.02	11.10	12.20		13.47	6 / 4			
reaction time	interval		1.06	1.06	1.02	1.04	1.04	1.06	1.06	1.08	1.10	1.27			3.14	3.14	3.24
	velocity	4.85	8.02	8.02	8.33	8.17	8.17	8.02	8.02	7.87	7.73	8.27	7.42		8.12	8.12	7.87
Pletsch, Jenna (GER) (1991)	time	2.68	3.78	4.84	5.88	6.94	8.00	9.04	10.10	11.18	12.30		13.51	3 / 5			
reaction time	interval		1.10	1.06	1.04	1.06	1.06	1.04	1.06	1.08	1.12	1.21			3.20	3.16	3.26
	velocity	4.85	7.73	8.02	8.17	8.02	8.02	8.17	8.02	7.87	7.59	8.68	7.40		7.97	8.07	7.82

Heat 2

date 07-Jun-14 wind -0.5 m/s

Buckwitz (2014) - OSP Berlin / DLV frauen hürden report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Hofmann, Franziska (GER) (1!	time	2.66	3.70	4.74	5.75	6.76	7.76	8.80	9.86	10.92	12.00		13.22	/ 1			
reaction time	interval		1.04	1.04	1.01	1.01	1.00	1.04	1.06	1.06	1.08	1.22			3.09	3.05	3.20
	velocity	4.89	8.17	8.17	8.42	8.42	8.50	8.17	8.02	8.02	7.87	8.61	7.56		8.25	8.36	7.97
Lindenmayer, Sabrina (GER) (	time	2.74	3.81	4.91	6.00	7.08	8.16	9.24	10.32	11.45	12.56		13.77	/ 3			
reaction time	interval		1.07	1.10	1.09	1.08	1.08	1.08	1.08	1.13	1.11	1.21			3.26	3.24	3.32
	velocity	4.74	7.94	7.73	7.80	7.87	7.87	7.87	7.87	7.52	7.66	8.68	7.26		7.82	7.87	7.68

Heat 1

date 07-Jun-14 wind -1.6 m/s

Buckwitz (2014) - OSP Berlin / DLV frauen hürden report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ferguen, Amina (ALG) (1989)	time	2.66	3.76	4.84	5.90	6.96	8.04	9.10	10.22	11.28	12.44		13.70	/ 2			
reaction time	interval		1.10	1.08	1.06	1.06	1.08	1.06	1.12	1.06	1.16	1.26			3.24	3.20	3.34
	velocity	4.89	7.73	7.87	8.02	8.02	7.87	8.02	7.59	8.02	7.33	8.33	7.30		7.87	7.97	7.63
Pletsch, Jenna (GER) (1991)	time	2.66		4.84	5.92	7.00	8.08	9.16	10.26	11.36	12.48		13.70	/ 3			
reaction time	interval			2.18	1.08	1.08	1.08	1.08	1.10	1.10	1.12	1.22			3.26	3.24	3.32
	velocity	4.89		7.80	7.87	7.87	7.87	7.87	7.73	7.73	7.59	8.61	7.30		7.82	7.87	7.68

2014 Chinese National Grand Prix (Zhaoqing, CHN)

FINAL

date 20-Apr-14 wind 1.0 m/s

Deng (2016) - research on the 2014 winter training of chinese excellent 100m hurdler Deng Ru

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Deng Ru (CHN) (1989)	time	2.35	3.43	4.51	5.59	6.63	7.66	8.74	9.81	10.90	12.01		13.57	/ 4			
reaction time	interval		1.08	1.08	1.08	1.04	1.03	1.08	1.07	1.09	1.11	1.56			3.24	3.15	3.27
	velocity	5.53	7.87	7.87	7.87	8.17	8.25	7.87	7.94	7.80	7.66	6.73	7.37		7.87	8.10	7.80

2014 Italian National Indoor Championships (Ancona, ITA)

FINAL

date 22-Feb-14

FIDAL - Centro Studi & Ricerche (2014) - www.youtube.com/watch?v=7_FeLg_p08Y

	H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4

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

Pennella, Giulia (ITA) (1989)	time	2.66	3.66	4.67	5.67	6.65						8.04	5 / 1			
reaction time	interval		1.00	1.01	1.00	0.98					1.39			3.01		
	velocity	4.89	8.50	8.42	8.50	8.67					9.35	7.46		8.47		
Caravelli, Marzia (ITA) (1991)	time	2.69	3.74	4.76	5.75	6.78						8.07	6 / 2			
reaction time	interval	7 steps	1.05	1.02	0.99	1.03					1.29			3.06		
	velocity	4.83	8.10	8.33	8.59	8.25					10.08	7.43		8.33		

2013 IAAF World Championships (Moscow, RUS) (TV Analysis)

FINAL date 17-Aug-13 wind -0.6 m/s

Henson (2021) - Athlete First: major championships report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Rollins, Brianna (USA) (1991)	time	2.52	3.50	4.48	5.42	6.40	7.36	8.30	9.26	10.24	11.24		12.44	7 / 1			
reaction time 0.263	interval		0.98	0.98	0.94	0.98	0.96	0.94	0.96	0.98	1.00	1.20			2.90	2.88	2.94
	velocity	5.16	8.67	8.67	9.04	8.67	8.85	9.04	8.85	8.67	8.50	8.75	8.04		8.79	8.85	8.67
Pearson, Sally (AUS) (1986)	time	2.46	3.46	4.44	5.40	6.36	7.32	8.28	9.28	10.28	11.32		12.50	6 / 2			
reaction time 0.154	interval		1.00	0.98	0.96	0.96	0.96	0.96	1.00	1.00	1.04	1.18			2.94	2.88	3.04
	velocity	5.28	8.50	8.67	8.85	8.85	8.85	8.85	8.50	8.50	8.17	8.90	8.00		8.67	8.85	8.39
Porter, Tiffany (GBR) (1987)	time	2.46	3.48	4.46	5.42	6.38	7.34	8.30	9.30	10.30	11.32		12.55	4 / 3			
reaction time 0.149	interval		1.02	0.98	0.96	0.96	0.96	0.96	1.00	1.00	1.02	1.23			2.96	2.88	3.02
	velocity	5.28	8.33	8.67	8.85	8.85	8.85	8.85	8.50	8.50	8.33	8.54	7.97		8.61	8.85	8.44
Harper Nelson, Dawn (1984)	time	2.52	3.52	4.50	5.48	6.44	7.40	8.38	9.36	10.38	11.40		12.59	5 / 4			
reaction time 0.194	interval		1.00	0.98	0.98	0.96	0.96	0.98	0.98	1.02	1.02	1.19			2.96	2.90	3.02
	velocity	5.16	8.50	8.67	8.67	8.85	8.85	8.67	8.67	8.33	8.33	8.82	7.94		8.61	8.79	8.44
Harrison, Queen (USA) (1988)	time	2.52	3.54	4.54	5.52	6.50	7.50	8.50	9.50	10.50	11.52		12.73	2 / 5			
reaction time 0.174	interval		1.02	1.00	0.98	0.98	1.00	1.00	1.00	1.00	1.02	1.21			3.00	2.98	3.02
	velocity	5.16	8.33	8.50	8.67	8.67	8.50	8.50	8.50	8.50	8.33	8.68	7.86		8.50	8.56	8.44
Whyte, Angela (CAN) (1980)	time	2.52	3.56	4.56	5.54	6.52	7.50	8.48	9.48	10.50	11.52		12.78	9 / 6			
reaction time 0.152	interval		1.04	1.00	0.98	0.98	0.98	0.98	1.00	1.02	1.02	1.26			3.02	2.94	3.04
	velocity	5.16	8.17	8.50	8.67	8.67	8.67	8.67	8.50	8.33	8.33	8.33	7.82		8.44	8.67	8.39
Billard, Cindy (FRA) (1986)	time	2.56	3.60	4.60	5.58	6.56	7.54	8.54	9.54	10.56	11.60		12.84	3 / 7			
reaction time 0.165	interval		1.04	1.00	0.98	0.98	0.98	1.00	1.00	1.02	1.04	1.24			3.02	2.96	3.06
	velocity	5.08	8.17	8.50	8.67	8.67	8.67	8.50	8.50	8.33	8.17	8.47	7.79		8.44	8.61	8.33
Kondakova, Yuliya (RUS) (198	time	2.56	3.60	4.62	5.60	6.60	7.60	8.60	9.62	10.64	11.68		12.86	8 / 8			
reaction time 0.206	interval		1.04	1.02	0.98	1.00	1.00	1.00	1.02	1.02	1.04	1.18			3.04	3.00	3.08
	velocity	5.08	8.17	8.33	8.67	8.50	8.50	8.50	8.33	8.33	8.17	8.90	7.78		8.39	8.50	8.28

2013 Windsprint (Sundsvall, SWE)

FINAL date 28-Jul-13 wind 1.2 m/s

(2013) - www.ssg.se/windsprint/Splittider/

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Neziri, Nooralotta (FIN) (1992)	time	2.71	3.77	4.81	5.82	6.83	7.84	8.85	9.87	10.90	11.94		13.10	3 / 1			
reaction time	interval		1.06	1.04	1.01	1.01	1.01	1.01	1.02	1.03	1.04	1.16	NR		3.11	3.03	3.09
	velocity	4.80	8.02	8.17	8.42	8.42	8.42	8.42	8.33	8.25	8.17	9.05	7.63		8.20	8.42	8.25
Thomas, Vashti (USA) (1990)	time	2.59	3.62	4.67	5.70	6.72	7.74	8.78	9.81	10.85	11.91		13.11	4 / 2			
reaction time	interval		1.03	1.05	1.03	1.02	1.02	1.04	1.03	1.04	1.06	1.20			3.11	3.08	3.13
	velocity	5.02	8.25	8.10	8.25	8.33	8.33	8.17	8.25	8.17	8.02	8.75	7.63		8.20	8.28	8.15
Ørving, Tale (NOR) (1989)	time	2.70	3.82	4.93	6.01	7.11	8.19	9.26	10.34	11.42	12.51		13.74	5 / 3			
reaction time	interval		1.12	1.11	1.08	1.10	1.08	1.07	1.08	1.08	1.09	1.23			3.31	3.25	3.25
	velocity	4.81	7.59	7.66	7.87	7.73	7.87	7.94	7.87	7.87	7.80	8.54	7.28		7.70	7.85	7.85
Tuvesson, Emma (SWE) (1991	time	2.78	3.89	5.03	6.11	7.19	8.25	9.33	10.42	11.53	12.65		13.90	6 / 4			
reaction time	interval		1.11	1.14	1.08	1.08	1.06	1.08	1.09	1.11	1.12	1.25			3.33	3.22	3.32
	velocity	4.68	7.66	7.46	7.87	7.87	8.02	7.87	7.80	7.66	7.59	8.40	7.19		7.66	7.92	7.68
Secher Myrmel, Lene (NOR) (1	time	2.82	3.93	5.04	6.14	7.22	8.27	9.36	10.46	11.59	12.70		13.94	2 / 5			
reaction time	interval		1.11	1.11	1.10	1.08	1.05	1.09	1.10	1.13	1.11	1.24			3.32	3.22	3.34
	velocity	4.61	7.66	7.66	7.73	7.87	8.10	7.80	7.73	7.52	7.66	8.47	7.17		7.68	7.92	7.63
Inoussa, Farydah (SWE) (1994	time	2.83	4.00	5.13	6.28	7.42	8.56	9.70	10.89	12.12	13.35		14.71	7 / 6			
reaction time	interval		1.17	1.13	1.15	1.14	1.14	1.14	1.19	1.23	1.23	1.36			3.45	3.42	3.65
	velocity	4.59	7.26	7.52	7.39	7.46	7.46	7.46	7.14	6.91	6.91	7.72	6.80		7.39	7.46	6.99

2013 Athletissima Diamond League Meeting (Lausanne, SUI)

FINAL date 04-Jul-13 wind 1.2 m/s

Vazel (2013) - hurdle observations

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Pearson, Sally (AUS) (1986)	time	2.55	3.57	4.56	5.53	6.51	7.50	8.48	9.47	10.50	11.55		12.69	7 / 7			
reaction time 0.136	interval		1.02	0.99	0.97	0.98	0.99	0.98	0.99	1.03	1.05	1.14			2.98	2.95	3.07
	velocity	5.10	8.33	8.59	8.76	8.67	8.59	8.67	8.59	8.25	8.10	9.21	7.88		8.56	8.64	8.31

2013 USATF National Championships (Des Moines, IA)

FINAL

date 22-Jun-13 wind 1.2 m/s *(2015.9.20) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Rollins, Brianna (USA) (1991)	time	2.52	3.52	4.48	5.43	6.37	7.33	8.27	9.25	10.20	11.18		12.26	4 / 1			
reaction time	interval		1.00	0.96	0.95	0.94	0.96	0.94	0.98	0.95	0.98	1.08	AR		2.91	2.84	2.91
	velocity	5.16	8.50	8.85	8.95	9.04	8.85	9.04	8.67	8.95	8.67	9.72	8.16		8.76	8.98	8.76

2013 Czech Republic National Championships (Tábor, CZE)

FINAL

date 15-Jun-13 wind 0.3 m/s *Feher (2013) - Final report from the men's & women's Czech Republic national championships*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Škrobáková, Lucie (CZE) (198	time	2.60	3.62	4.62	5.59	6.58	7.56	8.56	9.57	10.58	11.61		12.79	4 / 1			
reaction time 0.151	interval		1.02	1.00	0.97	0.99	0.98	1.00	1.01	1.01	1.03	1.18			2.99	2.97	3.05
	velocity	5.00	8.33	8.50	8.76	8.59	8.67	8.50	8.42	8.42	8.25	8.90	7.82		8.53	8.59	8.36
Sotáková, Jana (CZE) (1993)	time	2.74	3.84	4.91	5.95	6.98	8.02	9.05	10.11	11.20	12.29		13.49	5 / 2			
reaction time 0.165	interval		1.10	1.07	1.04	1.03	1.04	1.03	1.06	1.09	1.09	1.20	PB		3.21	3.10	3.24
	velocity	4.74	7.73	7.94	8.17	8.25	8.17	8.25	8.02	7.80	7.80	8.75	7.41		7.94	8.23	7.87
Cachová, Katerína (CZE) (199	time	2.76	3.85	4.91	6.02	7.07	8.15	9.24	10.35	11.47	12.58		13.77	3 / 3			
reaction time 0.200	interval		1.09	1.06	1.11	1.05	1.08	1.09	1.11	1.12	1.11	1.19			3.26	3.22	3.34
	velocity	4.71	7.80	8.02	7.66	8.10	7.87	7.80	7.66	7.59	7.66	8.82	7.26		7.82	7.92	7.63
Koudelová, Lucie (CZE) (1994)	time	2.78	3.92	5.00	6.09	7.16	8.23	9.31	10.40	11.49	12.61		13.79	6 / 4			
reaction time 0.171	interval		1.14	1.08	1.09	1.07	1.07	1.08	1.09	1.09	1.12	1.18			3.31	3.22	3.30
	velocity	4.68	7.46	7.87	7.80	7.94	7.94	7.87	7.80	7.80	7.59	8.90	7.25		7.70	7.92	7.73
Klučinová, Eliška (CZE) (1988)	time	2.81	3.96	5.09	6.19	7.29	8.38	9.48	10.60	11.77	12.88		14.08	7 / 5			
reaction time 0.161	interval		1.15	1.13	1.10	1.10	1.09	1.10	1.12	1.17	1.11	1.20			3.38	3.29	3.40
	velocity	4.63	7.39	7.52	7.73	7.73	7.80	7.73	7.59	7.26	7.66	8.75	7.10		7.54	7.75	7.50
Komrsková, Aneta (CZE) (199	time	2.80	3.94	5.05	6.15	7.24	8.35	9.44	10.56	11.72	12.85		14.14	1 / 6			
reaction time 0.203	interval		1.14	1.11	1.10	1.09	1.11	1.09	1.12	1.16	1.13	1.29			3.35	3.29	3.41
	velocity	4.64	7.46	7.66	7.73	7.80	7.66	7.80	7.59	7.33	7.52	8.14	7.07		7.61	7.75	7.48
Galertová, Alena (CZE) (1992)	time	2.88	4.00	5.13	6.20	7.30	8.42	9.57	10.73	11.88	13.03		14.35	8 / 7			
reaction time 0.220	interval		1.12	1.13	1.07	1.10	1.12	1.15	1.16	1.15	1.15	1.32			3.32	3.37	3.46
	velocity	4.51	7.59	7.52	7.94	7.73	7.59	7.39	7.33	7.39	7.39	7.95	6.97		7.68	7.57	7.37
Nejedlová, Michaela (CZE) (19	time	2.78	3.89	5.02	6.13	7.23	8.39	9.57	10.82	12.01	13.25		14.56	2 / 8			
reaction time 0.162	interval		1.11	1.13	1.11	1.10	1.16	1.18	1.25	1.19	1.24	1.31			3.35	3.44	3.68
	velocity	4.68	7.66	7.52	7.66	7.73	7.33	7.20	6.80	7.14	6.85	8.02	6.87		7.61	7.41	6.93

Heat 3

date 15-Jun-13 wind -1.8 m/s *Feher (2013) - Final report from the men's & women's Czech Republic national championships*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Cachová, Katerína (CZE) (199	time	2.83	3.93	5.05	6.13	7.21	8.29	9.38	10.50	11.60	12.73		13.97	4 / 1			
reaction time 0.212	interval		1.10	1.12	1.08	1.08	1.08	1.09	1.12	1.10	1.13	1.24			3.30	3.25	3.35
	velocity	4.59	7.73	7.59	7.87	7.87	7.87	7.80	7.59	7.73	7.52	8.47	7.16		7.73	7.85	7.61
Galertová, Alena (CZE) (1992)	time	2.83	3.97	5.08	6.15	7.28	8.37	9.50	10.61	11.70	12.89		14.14	5 / 2			
reaction time 0.197	interval		1.14	1.11	1.07	1.13	1.09	1.13	1.11	1.09	1.19	1.25			3.32	3.35	3.39
	velocity	4.59	7.46	7.66	7.94	7.52	7.80	7.52	7.66	7.80	7.14	8.40	7.07		7.68	7.61	7.52
Zekuciová, Anna (CZE) (1995)	time	2.79	3.92	5.06	6.18	7.31	8.44	9.60	10.75	11.91	13.14		14.42	6 / 3			
reaction time 0.201	interval		1.13	1.14	1.12	1.13	1.13	1.16	1.15	1.16	1.23	1.28			3.39	3.42	3.54
	velocity	4.66	7.52	7.46	7.59	7.52	7.52	7.33	7.39	7.33	6.91	8.20	6.93		7.52	7.46	7.20
Matysková, Ludmila (CZE) (19	time	2.94	4.18	5.38	6.61	7.85	9.07	10.32	11.55	12.82	14.07		15.50	2 / 4			
reaction time 0.143	interval		1.24	1.20	1.23	1.24	1.22	1.25	1.23	1.27	1.25	1.43			3.67	3.71	3.75
	velocity	4.42	6.85	7.08	6.91	6.85	6.97	6.80	6.91	6.69	6.80	7.34	6.45		6.95	6.87	6.80
Nováčková, Olga (CZE) (1992)	time	3.00	4.22	5.47	6.71	7.93	9.19	10.47	11.78				15.72	7 / 5			
reaction time 0.176	interval		1.22	1.25	1.24	1.22	1.26	1.28	1.31						3.71	3.76	
	velocity	4.33	6.97	6.80	6.85	6.97	6.75	6.64	6.49				6.36		6.87	6.78	

Heat 2

date 15-Jun-13 wind -0.9 m/s *Feher (2013) - Final report from the men's & women's Czech Republic national championships*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Sotáková, Jana (CZE) (1993)	time	2.70	3.80	4.87	5.93	6.99	8.03	9.11	10.19	11.27	12.38		13.62	4 / 1			
reaction time 0.133	interval		1.10	1.07	1.06	1.06	1.04	1.08	1.08	1.08	1.11	1.24			3.23	3.18	3.27
	velocity	4.81	7.73	7.94	8.02	8.02	8.17	7.87	7.87	7.87	7.66	8.47	7.34		7.89	8.02	7.80
Klučinová, Eliška (CZE) (1988)	time	2.84	3.98	5.08	6.19	7.29	8.40	9.53	10.65	11.78	12.93		14.13	5 / 2			
reaction time 0.153	interval		1.14	1.10	1.11	1.10	1.11	1.13	1.12	1.13	1.15	1.20			3.35	3.34	3.40
	velocity	4.58	7.46	7.73	7.66	7.73	7.66	7.52	7.59	7.52	7.39	8.75	7.08		7.61	7.63	7.50
Nejedlová, Michaela (CZE) (19	time	2.81	3.92	5.02	6.11	7.22	8.33	9.45	10.59	11.74	12.89		14.16	6 / 3			
reaction time 0.171	interval		1.11	1.10	1.09	1.11	1.11	1.12	1.14	1.15	1.15	1.27			3.30	3.34	3.44
	velocity	4.63	7.66	7.73	7.80	7.66	7.66	7.59	7.46	7.39	7.39	8.27	7.06		7.73	7.63	7.41

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

Komrsková, Aneta (CZE) (199	time	2.18	3.94	5.08	6.20	7.32	8.42	9.55	10.69	11.81	12.98		14.31	3 / 4			
reaction time 0.188	interval		1.76	1.14	1.12	1.12	1.10	1.13	1.14	1.12	1.17	1.33			4.02	3.35	3.43
	velocity	5.96	4.83	7.46	7.59	7.59	7.73	7.52	7.46	7.59	7.26	7.89	6.99		6.34	7.61	7.43
Šutová, Eva (CZE) (1990)	time	2.87	4.05	5.26	6.46	7.66	8.91	10.17	11.45	12.74	14.12		15.47	2 / 5			
reaction time 0.168	interval		1.18	1.21	1.20	1.20	1.25	1.26	1.28	1.29	1.38	1.35			3.59	3.71	3.95
	velocity	4.53	7.20	7.02	7.08	7.08	6.80	6.75	6.64	6.59	6.16	7.78	6.46		7.10	6.87	6.46
Plíhalová, Katerína (CZE) (199	time	2.99	4.30	5.58	6.85	8.09	9.40				14.58		16.03	7 / 6			
reaction time 0.210	interval		1.31	1.28	1.27	1.24	1.31					1.45			3.86		
	velocity	4.35	6.49	6.64	6.69	6.85	6.49					7.24	6.24		6.61		

Heat 1

date 15-Jun-13 wind -1.0 m/s

Feher (2013) - Final report from the men's & women's Czech Republic national championships

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Škrobáková, Lucie (CZE) (198	time	2.61	3.67	4.68	5.70	6.69	7.71	8.72	9.74	10.77	11.83		13.04	4 / 1			
reaction time 0.158	interval		1.06	1.01	1.02	0.99	1.02	1.01	1.02	1.03	1.06	1.21			3.09	3.02	3.11
	velocity	4.98	8.02	8.42	8.33	8.59	8.33	8.42	8.33	8.25	8.02	8.68	7.67		8.25	8.44	8.20
Koudelová, Lucie (CZE) (1994)	time	2.78	3.89	5.00	6.08	7.16	8.24	9.33	10.44	11.54	12.68		13.94	5 / 2			
reaction time 0.143	interval		1.11	1.11	1.08	1.08	1.08	1.09	1.11	1.10	1.14	1.26			3.30	3.25	3.35
	velocity	4.68	7.66	7.66	7.87	7.87	7.87	7.80	7.66	7.73	7.46	8.33	7.17		7.73	7.85	7.61
Muchová, Zuzana (CZE) (1988	time	2.88	4.00	5.14	6.27	7.41	8.53	9.65	10.80	11.95	13.13		14.45	3 / 3			
reaction time 0.170	interval		1.12	1.14	1.13	1.14	1.12	1.12	1.15	1.15	1.18	1.32			3.39	3.38	3.48
	velocity	4.51	7.59	7.46	7.52	7.46	7.59	7.59	7.39	7.39	7.20	7.95	6.92		7.52	7.54	7.33
Škaloudová, Elíška (CZE) (199	time	2.79	3.95	5.11	6.27	7.43	8.60	9.65	10.96	12.16	13.56		14.96	6 / 4			
reaction time 0.159	interval		1.16	1.16	1.16	1.16	1.17	1.05	1.31	1.20	1.40	1.40			3.48	3.38	3.91
	velocity	4.66	7.33	7.33	7.33	7.33	7.26	8.10	6.49	7.08	6.07	7.50	6.68		7.33	7.54	6.52
Rajmová, Katerina (CZE) (198	time	2.81	3.99	5.13	6.28	7.45	8.61	9.75	10.95	12.24				2 / --			
reaction time 0.144	interval		1.18	1.14	1.15	1.17	1.16	1.14	1.20	1.29			DQ		3.47	3.47	
	velocity	4.63	7.20	7.46	7.39	7.26	7.33	7.46	7.08	6.59					7.35	7.35	

2013 European Indoor Championships (Göteborg, SWE)

FINAL

date 01-Mar-13

Blomkvist (2013) - www.elitlandslag.se/SprintHäck/KortHäck.aspx

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4
Yanit, Nevin (TUR) (1986)	time	2.52	3.58	4.58	5.58	6.56		7.89	3 / ~~1~~	
reaction time 0.158	interval		1.06	1.00	1.00	0.98	1.33	~~NR~~ DV		3.06
	velocity	5.16	8.02	8.50	8.50	8.67	9.77	7.60		8.33
Talay, Alina (BLR) (1989)	time	2.62	3.65	4.64	5.64	6.62		7.94	5 / ~~2~~ 1	
reaction time 0.154	interval		1.03	0.99	1.00	0.98	1.32	=PB		3.02
	velocity	4.96	8.25	8.59	8.50	8.67	9.85	7.56		8.44
Borsi, Veronica (ITA) (1987)	time	2.60	3.64	4.64	5.64	6.62		7.94	4 / ~~3~~ 2	
reaction time 0.176	interval		1.04	1.00	1.00	0.98	1.32	NR		3.04
	velocity	5.00	8.17	8.50	8.50	8.67	9.85	7.56		8.39
O'Rourke, Deval (IRL) (1981)	time	2.58	3.60	4.61	5.61	6.63		7.95	2 / ~~4~~ 3	
reaction time 0.141	interval		1.02	1.01	1.00	1.02	1.32			3.03
	velocity	5.04	8.33	8.42	8.50	8.33	9.85	7.55		8.42
Kondakova, Yuliya (RUS) (198	time	2.58	3.64	4.65	5.64	6.65		7.99	6 / ~~5~~ 4	
reaction time 0.159	interval		1.06	1.01	0.99	1.01	1.34			3.06
	velocity	5.04	8.02	8.42	8.59	8.42	9.70	7.51		8.33
Berings, Eline (BEL) (1986)	time	2.59	3.63	4.68	5.70	6.71		8.08	8 / ~~6~~ 5	
reaction time 0.127	interval		1.04	1.05	1.02	1.01	1.37			3.11
	velocity	5.02	8.17	8.10	8.33	8.42	9.49	7.43		8.20
Cattaneo, Micol (ITA) (1982)	time	2.64	3.71	4.73	5.74	6.78		8.11	7 / ~~7~~ 6	
reaction time 0.180	interval		1.07	1.02	1.01	1.04	1.33			3.10
	velocity	4.92	7.94	8.33	8.42	8.17	9.77	7.40		8.23
Neziri, Nooralotta (FIN) (1992)	time	2.65	3.74	4.78	5.79	6.80		8.19	1 / ~~8~~ 7	
reaction time 0.143	interval		1.09	1.04	1.01	1.01	1.39			3.14
	velocity	4.91	7.80	8.17	8.42	8.42	9.35	7.33		8.12

Pentathlon - Heat 2

date 01-Mar-13

Blomkvist (2013) - www.elitlandslag.se/SprintHäck/KortHäck.aspx

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4
Linde, Sofia (SWE) (1995)	time	2.73	3.80	4.86	5.90	6.94		8.36	5 / 5	
reaction time 0.165	interval		1.07	1.06	1.04	1.04	1.42			3.17
	velocity	4.76	7.94	8.02	8.17	8.17	9.15	7.18		8.04

Pentathlon - Heat 1

date 01-Mar-13

Blomkvist (2013) - www.elitlandslag.se/SprintHäck/KortHäck.aspx

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

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4
Hallin, Ellinor (SWE) (1987)	time	2.74	3.82	4.88	5.96	7.00		8.43	6 / 2	
reaction time 0.172	interval		1.08	1.06	1.08	1.04	1.43			3.22
	velocity	4.74	7.87	8.02	7.87	8.17	9.09	7.12		7.92

2013 Italian National Indoor Championships (Ancona, ITA)

FINAL date 16-Feb-13

FIDAL - Centro Studi & Ricerche (2013) - www.youtube.com/watch?v=V4AEm5H14hI

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4
Borsi, Vernoica (ITA) (1987)	time	2.69	3.69	4.70	5.68	6.67		8.00	4 / 1	
reaction time	interval		1.00	1.01	0.98	0.99	1.33	PB		2.99
	velocity	4.83	8.50	8.42	8.67	8.59	9.77	7.50		8.53

2012 Olympic Games (London, GBR) (TV Analysis)

FINAL date 07-Aug-12 wind -0.2 m/s

Henson (2021) - Athlete First: major championships report

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Pearson, Sally (AUS) (1986)	time	2.44	3.42	4.38	5.34	6.30	7.24	8.20	9.18	10.18	11.18		12.35	7 / 1			
reaction time 0.137	interval		0.98	0.96	0.96	0.96	0.94	0.96	0.98	1.00	1.00	1.17	OR		2.90	2.86	2.98
	velocity	5.33	8.67	8.85	8.85	8.85	9.04	8.85	8.67	8.50	8.50	8.97	8.10		8.79	8.92	8.56
Harper, Dawn (USA) (1984)	time	2.48	3.48	4.44	5.40	6.36	7.32	8.28	9.24	10.22	11.22		12.37	4 / 2			
reaction time 0.156	interval		1.00	0.96	0.96	0.96	0.96	0.96	0.96	0.98	1.00	1.15	PB		2.92	2.88	2.94
	velocity	5.24	8.50	8.85	8.85	8.85	8.85	8.85	8.85	8.67	8.50	9.13	8.08		8.73	8.85	8.67
Wells, Kellie (USA) (1982)	time	2.46	3.46	4.42	5.38	6.36	7.34	8.32	9.30	10.28	11.30		12.48	5 / 3			
reaction time 0.137	interval		1.00	0.96	0.96	0.98	0.98	0.98	0.98	0.98	1.02	1.18	PB		2.92	2.94	2.98
	velocity	5.28	8.50	8.85	8.85	8.67	8.67	8.67	8.67	8.67	8.33	8.90	8.01		8.73	8.67	8.56
Jones, Lolo (USA) (1982)	time	2.56	3.52	4.48	5.44	6.42	7.38	8.36	9.36	10.36	11.40		12.58	2 / 4			
reaction time 0.163	interval		0.96	0.96	0.96	0.98	0.96	0.98	1.00	1.00	1.04	1.18			2.88	2.92	3.04
	velocity	5.08	8.85	8.85	8.85	8.67	8.85	8.67	8.50	8.50	8.17	8.90	7.95		8.85	8.73	8.39
Yanit, Nevin (TUR) (1986)	time	2.50	3.50	4.50	5.46	6.42	7.42	8.40	9.40	10.42	11.42		12.58	6 / ~~5~~			
reaction time 0.161	interval		1.00	1.00	0.96	0.96	1.00	0.98	1.00	1.02	1.00	1.16	DV		2.96	2.94	3.02
	velocity	5.20	8.50	8.50	8.85	8.85	8.50	8.67	8.50	8.33	8.50	9.05	7.95		8.61	8.67	8.44
George, Phylicia (CAN) (1987)	time	2.52	3.54	4.52	5.48	6.44	7.42	8.40	9.40	10.42	11.46		12.65	3 / ~~6~~ 5			
reaction time 0.152	interval		1.02	0.98	0.96	0.96	0.98	0.98	1.00	1.02	1.04	1.19	=PB		2.96	2.92	3.06
	velocity	5.16	8.33	8.67	8.85	8.85	8.67	8.67	8.50	8.33	8.17	8.82	7.91		8.61	8.73	8.33
Zelinka, Jessica (CAN) (1981)	time	2.50	3.50	4.50	5.46	6.42	7.40	8.38	9.40	10.42	11.46		12.69	8 / ~~7~~ 6			
reaction time 0.145	interval		1.00	1.00	0.96	0.96	0.98	0.98	1.02	1.02	1.04	1.23			2.96	2.92	3.08
	velocity	5.20	8.50	8.50	8.85	8.85	8.67	8.67	8.33	8.33	8.17	8.54	7.88		8.61	8.73	8.28
Schrott, Beate (AUT) (1988)	time	2.58	3.60	4.62	5.62	6.62	7.62	8.62	9.66	10.70	11.78		13.07	9 / ~~8~~ 7			
reaction time 0.156	interval		1.02	1.02	1.00	1.00	1.00	1.00	1.04	1.04	1.08	1.29			3.04	3.00	3.16
	velocity	5.04	8.33	8.33	8.50	8.50	8.50	8.50	8.17	8.17	7.87	8.14	7.65		8.39	8.50	8.07

Heat 1

date 06-Aug-12 wind 0.6 m/s

(2016.10.31) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kimura, Ayako (JPN) (1988)	time	2.64	3.66	4.69	5.70	6.71							13.75	5 / 7			
reaction time 0.169	interval		1.02	1.03	1.01	1.01									3.06		
	velocity	4.92	8.33	8.25	8.42	8.42							7.27		8.33		

Heptathlon - Heat 5

date 03-Aug-12 wind 1.3 m/s

Hollman (2012) - uka 2012 olympic games report: combined events

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ennis, Jessica (GBR) (1986)	time	2.66	3.68	4.64	5.62	6.60	7.58	8.54	9.52	10.52	11.54		12.54	8 / 1			
reaction time 0.180	interval		1.02	0.96	0.98	0.98	0.98	0.96	0.98	1.00	1.02	1.00	NR		2.96	2.92	3.00
	velocity	4.89	8.33	8.85	8.67	8.67	8.67	8.85	8.67	8.50	8.33	10.50	7.97		8.61	8.73	8.50

2012 Areva Diamond League Meeting (Saint-Denis, FRA)

FINAL date 06-Jul-12 wind 0.0 m/s

Vazel (2012) - hurdle observations

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Pearson, Sally (AUS) (1986)	time	2.51	3.50	4.50	5.46	6.43	7.40	8.36	9.32	10.30	11.30		12.40	5 / 1			
reaction time 0.147	interval		0.99	1.00	0.96	0.97	0.97	0.96	0.96	0.98	1.00	1.10			2.95	2.90	2.94
	velocity	5.18	8.59	8.50	8.85	8.76	8.76	8.85	8.85	8.67	8.50	9.55	8.06		8.64	8.79	8.67

2012 British National Championships (Birmingham, GBR)

FINAL date 23-Jun-12 wind 0.3 m/s

Hollman (2012) - uka 2012 olympic games report: combined events

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ennis, Jessica (GBR) (1986)	time	2.66	3.68	4.82	5.84	6.83	7.82	8.81	9.80	10.80	11.80		12.92	/ 1			
reaction time 0.217	interval		1.02	1.14	1.02	0.99	0.99	0.99	0.99	1.00	1.00	1.12			3.18	2.97	2.99
	velocity	4.89	8.33	7.46	8.33	8.59	8.59	8.59	8.59	8.50	8.50	9.38	7.74		8.02	8.59	8.53

2012 Windsprint (Sundsvall, SWE)

FINAL date 17-Jun-12 wind 0.8 m/s

Blomkvist (2012) - www.sub13.se

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

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

Argunova, Nina (RUS) (1989)	time	2.77	3.83	4.85	5.89	6.91	7.91	8.97	10.02	11.07	12.14		13.38	/ 1			
reaction time	interval		1.06	1.02	1.04	1.02	1.00	1.06	1.05	1.05	1.07	1.24			3.12	3.08	3.17
	velocity	4.69	8.02	8.33	8.17	8.33	8.50	8.02	8.10	8.10	7.94	8.47	7.47		8.17	8.28	8.04
Gubina, Yekaterina (RUS) (198	time	2.81	3.87	4.92	5.96	6.99	8.04	9.09	10.14	11.22	12.30		13.47	/ 2			
reaction time	interval		1.06	1.05	1.04	1.03	1.05	1.05	1.05	1.08	1.08	1.17			3.15	3.13	3.21
	velocity	4.63	8.02	8.10	8.17	8.25	8.10	8.10	8.10	7.87	7.87	8.97	7.42		8.10	8.15	7.94
Lundahl, Caroline (SWE) (199	time	2.79	3.87	4.94	5.99	7.04	8.15	9.20	10.30	11.42	12.57		13.80	/ 3			
reaction time	interval		1.08	1.07	1.05	1.05	1.11	1.05	1.10	1.12	1.15	1.23			3.20	3.21	3.37
	velocity	4.66	7.87	7.94	8.10	8.10	7.66	8.10	7.73	7.59	7.39	8.54	7.25		7.97	7.94	7.57
Eriksson, Malin (SWE) (1991)	time	2.78	3.89	4.97	6.06	7.13	8.23	9.34	10.48	11.61	12.77		14.11	/ 4			
reaction time	interval		1.11	1.08	1.09	1.07	1.10	1.11	1.14	1.13	1.16	1.34			3.28	3.28	3.43
	velocity	4.68	7.66	7.87	7.80	7.94	7.73	7.66	7.46	7.52	7.33	7.84	7.09		7.77	7.77	7.43
Juhász, Fanni (HUN) (1981)	time	2.77	3.90	4.98	6.07	7.16	8.27	9.40	10.55	11.72	12.91		14.25	/ 5			
reaction time	interval		1.13	1.08	1.09	1.09	1.11	1.13	1.15	1.17	1.19	1.34			3.30	3.33	3.51
	velocity	4.69	7.52	7.87	7.80	7.80	7.66	7.52	7.39	7.26	7.14	7.84	7.02		7.73	7.66	7.26
Skogström, Charlotte (SWE) (	time	2.91	4.06	5.15	6.23	7.32	8.43	9.57	10.71	11.85	13.00		14.31	/ 6			
reaction time	interval		1.15	1.09	1.08	1.09	1.11	1.14	1.14	1.14	1.15	1.31			3.32	3.34	3.43
	velocity	4.47	7.39	7.80	7.87	7.80	7.66	7.46	7.46	7.46	7.39	8.02	6.99		7.68	7.63	7.43

2012 Melbourne Track Classic (Melbourne, AUS)

FINAL

date 03-Mar-12 wind 0.8 m/s

kitkat1 (2012) - www.charliefrancis.com/community/showthread.php?22163-Sally-Pearson-s-12-49

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Pearson, Sally (AUS) (1986)	time	2.55	3.55	4.53	5.51	6.47	7.44	8.41	9.39	10.38	11.41		12.49	/ 1			
reaction time	interval		1.00	0.98	0.98	0.96	0.97	0.97	0.98	0.99	1.03	1.08			2.96	2.90	3.00
	velocity	5.10	8.50	8.67	8.67	8.85	8.76	8.76	8.67	8.59	8.25	9.72	8.01		8.61	8.79	8.50

2012 Czech Republic National Indoor Championships (Praha, CZE)

FINAL

date 25-Feb-12

Feher (2012) - Czech Republic indoor national championships - women's 60m hurdles

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Korešová, Jana (CZE) (1981)	time	2.69	3.80	4.87	5.94	6.99		8.42	4 / 1			
reaction time 0.148	interval		1.11	1.07	1.07	1.05	1.43			3.25		
	velocity	4.83	7.66	7.94	7.94	8.10	9.09	7.13		7.85		
Tomková, Helena (CZE) (1992)	time	2.75	3.85	4.97	6.06	7.15		8.60	3 / 2			
reaction time 0.118	interval		1.10	1.12	1.09	1.09	1.45	PB		3.31		
	velocity	4.73	7.73	7.59	7.80	7.80	8.97	6.98		7.70		
Nejedlová, Michaela (CZE) (19	time	2.75	3.87	4.99	6.12	7.25		8.71	5 / 3			
reaction time 0.127	interval		1.12	1.12	1.13	1.13	1.46			3.37		
	velocity	4.73	7.59	7.59	7.52	7.52	8.90	6.89		7.57		
Štáhlová, Zuzana (CZE) (1992)	time	2.73	3.83	4.99	6.06	7.20		8.75	2 / 4			
reaction time 0.138	interval		1.10	1.16	1.07	1.14	1.55			3.33		
	velocity	4.76	7.73	7.33	7.94	7.46	8.39	6.86		7.66		
Sotáková, Jana (CZE) (1993)	time	2.78	3.93	5.07	6.22	7.35		8.86	7 / 5			
reaction time 0.136	interval		1.15	1.14	1.15	1.13	1.51			3.44		
	velocity	4.68	7.39	7.46	7.39	7.52	8.61	6.77		7.41		
Michalská, Klára (CZE) (1993)	time	2.78	4.02	5.16	6.31	7.45		8.98	6 / 6			
reaction time 0.195	interval		1.24	1.14	1.15	1.14	1.53			3.53		
	velocity	4.68	6.85	7.46	7.39	7.46	8.50	6.68		7.22		
Hamáčková, Barbora (CZE) (1	time	2.82	4.02	5.13	6.25	7.41		8.98	1 / 7			
reaction time 0.190	interval		1.20	1.11	1.12	1.16	1.57			3.43		
	velocity	4.61	7.08	7.66	7.59	7.33	8.28	6.68		7.43		
Komrsková, Aneta (CZE) (199	time	2.79	3.99	5.14	6.26	7.41		9.01	8 / 8			
reaction time 0.153	interval		1.20	1.15	1.12	1.15	1.60			3.47		
	velocity	4.66	7.08	7.39	7.59	7.39	8.13	6.66		7.35		

Heat 2

date 25-Feb-12

Feher (2012) - Czech Republic indoor national championships - women's 60m hurdles

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Korešová, Jana (CZE) (1981)	time	2.72	3.84	4.90	5.98	7.03		8.49	4 / 1			
reaction time 0.184	interval		1.12	1.06	1.08	1.05	1.46			3.26		
	velocity	4.78	7.59	8.02	7.87	8.10	8.90	7.07		7.82		
Tomková, Helena (CZE) (1992)	time	2.78	3.89	5.00	6.08	7.18		8.67	3 / 2			
reaction time 0.146	interval		1.11	1.11	1.08	1.10	1.49			3.30		
	velocity	4.68	7.66	7.66	7.87	7.73	8.72	6.92		7.73		
Sotáková, Jana (CZE) (1993)	time	2.79	3.93	5.06	6.16	7.28		8.83	5 / 3			

reaction time 0.162	interval		1.14	1.13	1.10	1.12					1.55			3.37			
	velocity	4.66	7.46	7.52	7.73	7.59					8.39	6.80		7.57			
Štáhlová, Zuzana (CZE) (1992)	time	2.76	3.90	5.03	6.18	7.32						8.88	6 / 4				
reaction time 0.135	interval		1.14	1.13	1.15	1.14					1.56			3.42			
	velocity	4.71	7.46	7.52	7.39	7.46					8.33	6.76		7.46			
Hamáčková, Barbora (CZE) (1	time	2.85	4.02	5.17	6.28	7.40						8.96	2 / 5				
reaction time 0.204	interval		1.17	1.15	1.11	1.12					1.56			3.43			
	velocity	4.56	7.26	7.39	7.66	7.59					8.33	6.70		7.43			
Galertová, Alena (CZE) (1992)	time	2.88	4.05	5.21	6.35	7.53						9.14	7 / 6				
reaction time 0.196	interval		1.17	1.16	1.14	1.18					1.61			3.47			
	velocity	4.51	7.26	7.33	7.46	7.20					8.07	6.56		7.35			
Nováčková, Olga (CZE) (1992)	time	2.92	4.15	5.41	6.65	7.90						9.55	8 / 7				
reaction time 0.156	interval		1.23	1.26	1.24	1.25					1.65			3.73			
	velocity	4.45	6.91	6.75	6.85	6.80					7.88	6.28		6.84			

Heat 1

date 25-Feb-12

Feher (2012) - Czech Republic indoor national championships - women's 60m hurdles

		H1	H2	H3	H4	H5					Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nejedlová, Michaela (CZE) (19	time	2.79	3.92	5.05	6.15	7.26						8.70	5 / 1			
reaction time 0.156	interval		1.13	1.13	1.10	1.11					1.44			3.36		
	velocity	4.66	7.52	7.52	7.73	7.66					9.03	6.90		7.59		
Michalská, Klára (CZE) (1993)	time	2.80	3.94	5.09	6.21	7.36						8.87	3 / 2			
reaction time 0.165	interval		1.14	1.15	1.12	1.15					1.51			3.41		
	velocity	4.64	7.46	7.39	7.59	7.39					8.61	6.76		7.48		
Komrsková, Aneta (CZE) (199	time	2.79	3.98	5.11	6.25	7.38						9.00	2 / 3			
reaction time 0.145	interval		1.19	1.13	1.14	1.13					1.62			3.46		
	velocity	4.66	7.14	7.52	7.46	7.52					8.02	6.67		7.37		
Chmelarová, Klára (CZE) (199	time	2.82	3.98	5.13	6.40	7.64						9.26	6 / 4			
reaction time 0.158	interval		1.16	1.15	1.27	1.24					1.62			3.58		
	velocity	4.61	7.33	7.39	6.69	6.85					8.02	6.48		7.12		
Suchelová, Nikola (CZE) (1991	time	2.98	4.18	5.40	6.64	7.87						9.47	7 / 5			
reaction time 0.258	interval		1.20	1.22	1.24	1.23					1.60			3.66		
	velocity	4.36	7.08	6.97	6.85	6.91					8.13	6.34		6.97		
Svojanovská, Michaela (CZE) (	time	2.97	4.19	5.42	6.63	7.88						9.52	8 / 6			
reaction time 0.159	interval		1.22	1.23	1.21	1.25					1.64			3.66		
	velocity	4.38	6.97	6.91	7.02	6.80					7.93	6.30		6.97		

2012 Italian National Indoor Championships (Ancona, ITA)

FINAL

date 25-Feb-12

FIDAL - Centro Studi & Ricerche (2012) - www.youtube.com/watch?v=_GzCppvayL8

		H1	H2	H3	H4	H5					Run-In	Official Time	Lane / Place	H1-H4
Caravelli, Marzia (ITA) (1981)	time	2.68	3.70	4.70	5.70	6.70						8.04	5 / ~~4~~	
reaction time	interval	7 steps	1.02	1.00	1.00	1.00					1.34	DQ		3.02
	velocity	4.85	8.33	8.50	8.50	8.50					9.70	7.46		8.44
Borsi, Vernoica (ITA) (1987)	time	2.70	3.73	4.77	5.77	6.79						8.18	3 / ~~2~~ 1	
reaction time	interval		1.03	1.04	1.00	1.02					1.39	PB		3.07
	velocity	4.81	8.25	8.17	8.50	8.33					9.35	7.33		8.31

2011 IAAF World Championships (Daegu, KOR)

FINAL

date 03-Sep-11 wind 1.1 m/s

KSSB (2011) - biomechanical analysis of women's 100m hurdle

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Pearson, Sally (AUS) (1986)	time	2.53	3.52	4.49	5.42	6.37	7.31	8.27	9.22	10.21	11.20		12.28	3 / 1			
reaction time 0.145	interval		0.99	0.97	0.93	0.95	0.94	0.96	0.95	0.99	0.99	1.08	CR / AR		2.89	2.85	2.93
	velocity	5.14	8.59	8.76	9.14	8.95	9.04	8.85	8.95	8.59	8.59	9.72	8.14		8.82	8.95	8.70
Carruthers, Danielle (USA) (19	time	2.57	3.59	4.57	5.55	6.51	7.46	8.42	9.39	10.35	11.36		12.47	6 / 2			
reaction time 0.168	interval		1.02	0.98	0.98	0.96	0.95	0.96	0.97	0.96	1.01	1.11	PB		2.98	2.87	2.94
	velocity	5.06	8.33	8.67	8.67	8.85	8.95	8.85	8.76	8.85	8.42	9.46	8.02		8.56	8.89	8.67
Harper, Dawn (USA) (1984)	time	2.60	3.60	4.57	5.52	6.47	7.43	8.41	9.39	10.37	11.37		12.47	8 / 3			
reaction time 0.164	interval		1.00	0.97	0.95	0.95	0.96	0.98	0.98	0.98	1.00	1.10	PB		2.92	2.89	2.96
	velocity	5.00	8.50	8.76	8.95	8.95	8.85	8.67	8.67	8.67	8.50	9.55	8.02		8.73	8.82	8.61
Porter, Tiffany (GBR) (1987)	time	2.57	3.57	4.57	5.50	6.46	7.43	8.40	9.38	10.36	11.40		12.63	5 / 4			
reaction time 0.158	interval		1.00	1.00	0.93	0.96	0.97	0.97	0.98	0.98	1.04	1.23			2.93	2.90	3.00
	velocity	5.06	8.50	8.50	9.14	8.85	8.76	8.76	8.67	8.67	8.17	8.54	7.92		8.70	8.79	8.50
Dektyareva, Tatyana (RUS) (19	time	2.63	3.66	4.68	5.66	6.64	7.63	8.63	9.64	10.66	11.70		12.82	1 / 5			
reaction time 0.161	interval		1.03	1.02	0.98	0.98	0.99	1.00	1.01	1.02	1.04	1.12			3.03	2.97	3.07

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

	velocity	4.94	8.25	8.33	8.67	8.67	8.59	8.50	8.42	8.33	8.17	9.37	7.80		8.42	8.59	8.31
Holder, Nikkita (CAN) (1987)	time	2.65	3.68	4.74	5.72	6.74	7.72	8.73	9.75	10.77	11.81		12.93	2 / 6			
reaction time 0.172	interval		1.03	1.06	0.98	1.02	0.98	1.01	1.02	1.02	1.04	1.12			3.07	3.01	3.08
	velocity	4.91	8.25	8.02	8.67	8.33	8.67	8.42	8.33	8.33	8.17	9.38	7.73		8.31	8.47	8.28
George, Phylicia (CAN) (1987) 0.126	no information available												17.97	4 / 7			
Wells, Kellie (USA) (1982) 0.171	no information available												dnf	5 / --			

Heat 4

date 02-Sep-11 wind 0.0 m/s *KSSB (2011) - biomechanical analysis of women's 100m hurdle*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Carruthers, Danielle (USA) (19	time	2.61	3.65	4.67	5.65	6.65	7.65	8.62	9.65	10.66	11.68		12.79	2 / 1			
reaction time 0.160	interval		1.04	1.02	0.98	1.00	1.00	0.97	1.03	1.01	1.02	1.11			3.04	2.97	3.06
	velocity	4.98	8.17	8.33	8.67	8.50	8.50	8.76	8.25	8.42	8.33	9.46	7.82		8.39	8.59	8.33

Heat 2

date 02-Sep-11 wind -0.6 m/s *KSSB (2011) - biomechanical analysis of women's 100m hurdle*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Pearson, Sally (AUS) (1986)	time	2.52	3.51	4.50	5.47	6.44	7.42	8.38	9.38	10.38	11.40		12.53	2 / 1			
reaction time 0.141	interval		0.99	0.99	0.97	0.97	0.98	0.96	1.00	1.00	1.02	1.13			2.95	2.91	3.02
	velocity	5.16	8.59	8.59	8.76	8.76	8.67	8.85	8.50	8.50	8.33	9.29	7.98		8.64	8.76	8.44
Jung Hye-lim (KOR) (1987)	time	2.65	3.70	4.76	5.81	6.85	7.91	8.97	10.03	11.12	12.21		13.39	5 / 7			
reaction time 0.139	interval		1.05	1.06	1.05	1.04	1.06	1.06	1.06	1.09	1.09	1.18			3.16	3.16	3.24
	velocity	4.91	8.10	8.02	8.10	8.17	8.02	8.02	8.02	7.80	7.80	8.90	7.47		8.07	8.07	7.87

Heat 1

date 02-Sep-11 wind 1.0 m/s *KSSB (2011) - biomechanical analysis of women's 100m hurdle*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wells, Kellie (USA) (1982)	time	2.60	3.64	4.62	5.59	6.59	7.57	8.55	9.54	10.56	11.58		12.73	2 / 1			
reaction time 0.182	interval		1.04	0.98	0.97	1.00	0.98	0.98	0.99	1.02	1.02	1.15			2.99	2.96	3.03
	velocity	5.00	8.17	8.67	8.76	8.50	8.67	8.67	8.59	8.33	8.33	9.13	7.86		8.53	8.61	8.42

2011 Windsprint (Sundsvall, SWE)

FINAL

date 31-Jul-11 wind 1.4 m/s *Blomkvist (2011) - www.sub13.se*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harrison, Queen (USA) (1988)	time	2.67	3.72	4.76	5.77	6.76	7.77	8.75	9.76	10.76	11.78		12.93	/ 1			
reaction time	interval		1.05	1.04	1.01	0.99	1.01	0.98	1.01	1.00	1.02	1.15			3.10	2.98	3.03
	velocity	4.87	8.10	8.17	8.42	8.59	8.42	8.67	8.42	8.50	8.33	9.13	7.73		8.23	8.56	8.42
Barber, Aleesha (TTO) (1987)	time	2.47	3.53	4.57	5.60	6.62	7.66	8.70	9.75	10.80	11.89		13.29	/ 2			
reaction time	interval		1.06	1.04	1.03	1.02	1.04	1.04	1.05	1.05	1.09	1.40			3.13	3.10	3.19
	velocity	5.26	8.02	8.17	8.25	8.33	8.17	8.17	8.10	8.10	7.80	7.50	7.52		8.15	8.23	7.99
Tuvesson, Emma (SWE) (1991	time	2.73	3.80	4.85	5.92	6.97	8.02	9.06	10.11	11.17	12.25		13.43	/ 3			
reaction time	interval		1.07	1.05	1.07	1.05	1.05	1.04	1.05	1.06	1.08	1.18			3.19	3.14	3.19
	velocity	4.76	7.94	8.10	7.94	8.10	8.10	8.17	8.10	8.02	7.87	8.90	7.45		7.99	8.12	7.99
Makakala, Fatima (SWE) (1989)	time	2.70	3.76	4.82	5.90	6.97	8.05	9.13	10.26	11.40	12.54		13.78	/ 4			
reaction time	interval		1.06	1.06	1.08	1.07	1.08	1.08	1.13	1.14	1.14	1.24			3.20	3.23	3.41
	velocity	4.81	8.02	8.02	7.87	7.94	7.87	7.87	7.52	7.46	7.46	8.47	7.26		7.97	7.89	7.48
Samuelsson, Jessica (SWE) (1	time	2.77	3.88	4.96	6.06	7.15	8.25	9.34	10.46	11.61	12.76		13.95	/ 5			
reaction time	interval		1.11	1.08	1.10	1.09	1.10	1.09	1.12	1.15	1.15	1.19			3.29	3.28	3.42
	velocity	4.69	7.66	7.87	7.73	7.80	7.73	7.80	7.59	7.39	7.39	8.82	7.17		7.75	7.77	7.46
Hallin, Ellinore (SWE) (1987)	time	2.81	3.95	5.03	6.14								14.06	/ 6			
reaction time	interval		1.14	1.08	1.11										3.33		
	velocity	4.63	7.46	7.87	7.66								7.11		7.66		
Rogemyr, Maja (SWE) (1991)	time	2.84	3.97	5.09	6.21	7.33	8.46	9.61	10.76	11.94	13.14		14.45	/ 7			
reaction time	interval		1.13	1.12	1.12	1.12	1.13	1.15	1.15	1.18	1.20	1.31			3.37	3.40	3.53
	velocity	4.58	7.52	7.59	7.59	7.59	7.52	7.39	7.39	7.20	7.08	8.02	6.92		7.57	7.50	7.22

2011 European Team Championships (Stockholm, SWE)

Race 1

date 19-Jun-11 wind -1.0 m/s *Blomkvist (2011) - www.sub13.se*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Dektyareva, Tatyana (RUS) (19	time	2.56	3.60	4.64	5.68	6.68	7.72	8.76	9.80	10.84	11.92		13.16	/ 1			
reaction time 0.201	interval		1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.08	1.24			3.12	3.08	3.16
	velocity	5.08	8.17	8.17	8.17	8.50	8.17	8.17	8.17	8.17	7.87	8.47	7.60		8.17	8.28	8.07
Caravelli, Marzia (ITA) (1981)	time	2.58	3.64	4.68	5.70	6.72	7.76	8.80	9.86	10.92	12.00		13.21	/ 2			
reaction time 0.166	interval		1.06	1.04	1.02	1.02	1.04	1.04	1.06	1.06	1.08	1.21			3.12	3.10	3.20
	velocity	5.04	8.02	8.17	8.33	8.33	8.17	8.17	8.02	8.02	7.87	8.68	7.57		8.17	8.23	7.97
Tymińska, Karolina (POL) (198	time	2.62	3.68	4.76	5.80	6.86	7.88	8.92	9.96	11.06	12.20		13.51	/ 3			
reaction time 0.180	interval		1.06	1.08	1.04	1.06	1.02	1.04	1.04	1.10	1.14	1.31			3.18	3.12	3.28
	velocity	4.96	8.02	7.87	8.17	8.02	8.33	8.17	8.17	7.73	7.46	8.02	7.40		8.02	8.17	7.77

Yanovska, Olena (UKR) (1990)	time	2.58	3.68	4.74	5.80	6.88	7.92	9.00	10.06	11.16	12.28		13.56	/ 4			
reaction time 0.165	interval		1.10	1.06	1.06	1.08	1.04	1.08	1.06	1.10	1.12	1.28			3.22	3.20	3.28
	velocity	5.04	7.73	8.02	8.02	7.87	8.17	7.87	8.02	7.73	7.59	8.20	7.37		7.92	7.97	7.77
Tuvesson, Emma (SWE) (1991	time	2.68	3.76	4.84	5.90	6.96	8.03	9.10	10.18	11.24	12.32		13.62	/ 5			
reaction time 0.195	interval		1.08	1.08	1.06	1.06	1.07	1.07	1.08	1.06	1.08	1.30			3.22	3.20	3.22
	velocity	4.85	7.87	7.87	8.02	8.02	7.94	7.94	7.87	8.02	7.87	8.08	7.34		7.92	7.97	7.92
Mamona, Patrícia (POR) (1988)	time	2.74	3.80	4.88	6.00	7.08	8.20	9.30	10.42	11.56	12.80		14.30	/ 6			
reaction time 0.196	interval		1.06	1.08	1.12	1.08	1.12	1.10	1.12	1.14	1.24	1.50			3.26	3.30	3.50
	velocity	4.74	8.02	7.87	7.59	7.87	7.59	7.73	7.59	7.46	6.85	7.00	6.99		7.82	7.73	7.29

2011 Landskamp FIN-SWE-NOR (Tammefors, FIN)

FINAL date 05-Feb-11

Blomkvist (2011) - www.sub13.se

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4
Vukicevic, Christina (NOR) (19	time	2.44	3.48	4.48	5.44	6.44		7.92	/ 1	
reaction time	interval		1.04	1.00	0.96	1.00	1.48	NR		3.00
	velocity	5.33	8.17	8.50	8.85	8.50	8.78	7.58		8.50
Kluft, Carolina (SWE) (1983)	time	2.48	3.62	4.64	5.68	6.72		8.26	/ 2	
reaction time	interval		1.14	1.02	1.04	1.04	1.54			3.20
	velocity	5.24	7.46	8.33	8.17	8.17	8.44	7.26		7.97
Neziri, Nooralotta (FIN) (1992)	time	2.54	3.64	4.68	5.74	6.80		8.32	/ 3	
reaction time	interval		1.10	1.04	1.06	1.06	1.52			3.20
	velocity	5.12	7.73	8.17	8.02	8.02	8.55	7.21		7.97
Pedersen, Isabelle (NOR) (199	time	2.56	3.64	4.68	5.74	6.80		8.38	/ 4	
reaction time	interval		1.08	1.04	1.06	1.06	1.58			3.18
	velocity	5.08	7.87	8.17	8.02	8.02	8.23	7.16		8.02
Tuvesson, Emma (SWE) (1991	time	2.58	3.68	4.76	5.82	6.88		8.40	/ 5	
reaction time	interval		1.10	1.08	1.06	1.06	1.52			3.24
	velocity	5.04	7.73	7.87	8.02	8.02	8.55	7.14		7.87
Aidanpää, Ida (FIN) (1988)	time	2.56	3.66	4.72	5.76	6.80		8.43	/ 6	
reaction time	interval		1.10	1.06	1.04	1.04	1.63			3.20
	velocity	5.08	7.73	8.02	8.17	8.17	7.98	7.12		7.97

2010 National Sports Festival (Chiba, JPN)

FINAL date 04-Oct-10 wind 0.5 m/s

(2017.03.26) - https://twitter.com/touchdown_time/media?lang=en&lang=en&lang=en&lang=en

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Terada, Asuka (JPN) (1990)	time	2.63	3.67	4.70	5.71	6.73	7.76	8.78	9.82	10.88	11.95		13.12	4 / 1			
reaction time	interval		1.04	1.03	1.01	1.02	1.03	1.02	1.04	1.06	1.07	1.17			3.08	3.07	3.17
	velocity	4.94	8.17	8.25	8.42	8.33	8.25	8.33	8.17	8.02	7.94	8.97	7.62		8.28	8.31	8.04

2010 Swedish National Championships (Falun, SWE)

FINAL date 22-Aug-10 wind -0.2 m/s

Blomkvist (2010) - www.sub13.se

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Westerlund, Elin (SWE) (1990)	time	2.75	3.82	4.87	5.90	6.98	8.03	9.10	10.19	11.30	12.40		13.60	/ 1			
reaction time	interval		1.07	1.05	1.03	1.08	1.05	1.07	1.09	1.11	1.10	1.20			3.15	3.20	3.30
	velocity	4.73	7.94	8.10	8.25	7.87	8.10	7.94	7.80	7.66	7.73	8.75	7.35		8.10	7.97	7.73
Tuvesson, Emma (SWE) (1991	time	2.77	3.89	4.97	6.04	7.11	8.15	9.23	10.32	11.41	12.50		13.71	/ 2			
reaction time	interval		1.12	1.08	1.07	1.07	1.04	1.08	1.09	1.09	1.09	1.21			3.27	3.19	3.27
	velocity	4.69	7.59	7.87	7.94	7.94	8.17	7.87	7.80	7.80	7.80	8.68	7.29		7.80	7.99	7.80
Lundahl, Caroline (SWE) (199	time	2.83	3.88	4.96	6.04	7.14	8.22	9.35	10.46	11.58	12.72		13.95	/ 3			
reaction time	interval		1.05	1.08	1.08	1.10	1.08	1.13	1.11	1.12	1.14	1.23			3.21	3.31	3.37
	velocity	4.59	8.10	7.87	7.87	7.73	7.87	7.52	7.66	7.59	7.46	8.54	7.17		7.94	7.70	7.57
Magnusson, Emma (SWE) (19	time	2.87	3.99	5.09	6.19	7.27	8.36	9.48	10.59	11.73	12.94		14.26	/ 4			
reaction time	interval		1.12	1.10	1.10	1.08	1.09	1.12	1.11	1.14	1.21	1.32			3.32	3.29	3.46
	velocity	4.53	7.59	7.73	7.73	7.87	7.80	7.59	7.66	7.46	7.02	7.95	7.01		7.68	7.75	7.37
Sääw, Ellen (SWE) (1990)	time	2.82	3.95	5.06	6.16	7.25	8.34	9.48	10.63	11.81	12.99		14.32	/ 5			
reaction time	interval		1.13	1.11	1.10	1.09	1.09	1.14	1.15	1.18	1.18	1.33	PB		3.34	3.32	3.51
	velocity	4.61	7.52	7.66	7.73	7.80	7.80	7.46	7.39	7.20	7.20	7.89	6.98		7.63	7.68	7.26
Samuelsson, Jessica (SWE) (1	time	2.78	3.89	5.04	6.14	7.25	8.40	9.56	10.72	11.90	13.11		14.35	/ 6			
reaction time	interval		1.11	1.15	1.10	1.11	1.15	1.16	1.16	1.18	1.21	1.24			3.36	3.42	3.55
	velocity	4.68	7.66	7.39	7.73	7.66	7.39	7.33	7.33	7.20	7.02	8.47	6.97		7.59	7.46	7.18
Rogemyr, Maja (SWE) (1991)	time	2.83	3.93	5.03	6.14	7.24	8.39	9.54	10.72	11.92	13.15		14.50	/ 7			
reaction time	interval		1.10	1.10	1.11	1.10	1.15	1.15	1.18	1.20	1.23	1.35			3.31	3.40	3.61
	velocity	4.59	7.73	7.73	7.66	7.73	7.39	7.39	7.20	7.08	6.91	7.78	6.90		7.70	7.50	7.06

Eurenius, Isabelle (SWE) (1989	time	2.86	3.99	5.11	6.23	7.38	8.53	9.70	10.87	12.11	13.49		14.97	/ 8				
reaction time	interval		1.13	1.12	1.12	1.15	1.15	1.17	1.17	1.24	1.38	1.48			3.37	3.47	3.79	
	velocity	4.55	7.52	7.59	7.59	7.39	7.39	7.26	7.26	6.85	6.16	7.09	6.68		7.57	7.35	6.73	

2010 Windsprint (Sundsvall, SWE)

FINAL date 08-Aug-10 wind 0.6 m/s

Blomkvist (2010) - 100/110m Hurdles: Development

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Barber, Aleesha (TTO) (1987)	time	2.68	3.72	4.75	5.81	6.83	7.85	8.88	9.94	10.99	12.09		13.31	/ 1			
reaction time	interval		1.04	1.03	1.06	1.02	1.02	1.03	1.06	1.05	1.10	1.22			3.13	3.07	3.21
	velocity	4.85	8.17	8.25	8.02	8.33	8.33	8.25	8.02	8.10	7.73	8.61	7.51		8.15	8.31	7.94
Davin, Elisabeth (BEL) (1981)	time	2.72	3.78	4.85	5.88	6.90	7.94	8.99	10.06	11.14	12.21		13.36	/ 2			
reaction time	interval		1.06	1.07	1.03	1.02	1.04	1.05	1.07	1.08	1.07	1.15			3.16	3.11	3.22
	velocity	4.78	8.02	7.94	8.25	8.33	8.17	8.10	7.94	7.87	7.94	9.13	7.49		8.07	8.20	7.92
Helsby, Ashley (GBR) (1990)	time	2.67	3.75	4.81	5.86	6.90	7.95	9.04	10.14	11.28	12.49		14.01	/ 3			
reaction time	interval		1.08	1.06	1.05	1.04	1.05	1.09	1.10	1.14	1.21	1.52			3.19	3.18	3.45
	velocity	4.87	7.87	8.02	8.10	8.17	8.10	7.80	7.73	7.46	7.02	6.91	7.14		7.99	8.02	7.39
Rogemyr, Maja (SWE) (1991)	time	2.84	3.99	5.10	6.20	7.33	8.46	9.61	10.78	11.95	13.14		14.50	/ 4			
reaction time	interval		1.15	1.11	1.10	1.13	1.13	1.15	1.17	1.17	1.19	1.36			3.36	3.41	3.53
	velocity	4.58	7.39	7.66	7.73	7.52	7.52	7.39	7.26	7.26	7.14	7.72	6.90		7.59	7.48	7.22
Sääw, Ellen (SWE) (1990)	time	2.83	3.96	5.08	6.18	7.28	8.40	9.52	10.68	11.91	13.21		14.60	/ 5			
reaction time	interval		1.13	1.12	1.10	1.10	1.12	1.12	1.16	1.23	1.30	1.39			3.35	3.34	3.69
	velocity	4.59	7.52	7.59	7.73	7.73	7.59	7.59	7.33	6.91	6.54	7.55	6.85		7.61	7.63	6.91
Lüppert Thomsson, Frida (SW	time	2.83	3.99	5.16	6.29	7.44	8.62	9.80	11.01	12.25	13.50		14.94	/ 6			
reaction time	interval		1.16	1.17	1.13	1.15	1.18	1.18	1.21	1.24	1.25	1.44			3.46	3.51	3.70
	velocity	4.59	7.33	7.26	7.52	7.39	7.20	7.20	7.02	6.85	6.80	7.29	6.69		7.37	7.26	6.89

2010 European Championships (Barcelona, ESP)

FINAL date 31-Jul-10 wind -0.5 m/s

Graubner (2010) - http://www.fgs.uni-halle.de

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Yanit, Nevin (TUR) (1986)		time	2.57	3.60	4.61	5.59	6.58	7.56	8.54	9.54	10.53	11.56		12.63	3 / 1			
reaction time	0.184	interval		1.03	1.01	0.98	0.99	0.98	0.98	1.00	0.99	1.03	1.07	NR		3.02	2.95	3.02
		velocity	5.06	8.25	8.42	8.67	8.59	8.67	8.67	8.50	8.59	8.25	9.81	7.92		8.44	8.64	8.44
O'Rourke, Deval (IRL) (1981)		time	2.59	3.61	4.60	5.57	6.55	7.53	8.53	9.53	10.54	11.57		12.65	7 / 2			
reaction time	0.172	interval		1.02	0.99	0.97	0.98	0.98	1.00	1.00	1.01	1.03	1.08	NR		2.98	2.96	3.04
		velocity	5.02	8.33	8.59	8.76	8.67	8.67	8.50	8.50	8.42	8.25	9.72	7.91		8.56	8.61	8.39
Nytra, Carolin (GER) (1985)		time	2.59	3.61	4.61	5.60	6.58	7.55	8.54	9.55	10.57	11.61		12.68	6 / 3			
reaction time	0.177	interval		1.02	1.00	0.99	0.98	0.97	0.99	1.01	1.02	1.04	1.07			3.01	2.94	3.07
		velocity	5.02	8.33	8.50	8.59	8.67	8.76	8.59	8.42	8.33	8.17	9.81	7.89		8.47	8.67	8.31
Vukicevic, Christina (NOR) (19	0.157	no information available												12.78	/ 4			
Snihur, Yevheniya (UKR) (198	0.151	no information available												12.92	/ 5			
Dektyareva, Tatyana (RUS) (19	0.819	no information available												12.98	/ 6			
Urech, Lisa (SUI) (1989)	0.170	no information available												13.02	/ 7			
Hildebrand, Nadine (GER) (19	0.191	no information available												13.08	/ 8			

2010 IAAF World Indoor Championships (Doha, QAT)

FINAL date 13-Mar-10

Kuitunen (2010) - biomencanical analysis of the 14th IAAF world indoor championships

			H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4
Jones, Lolo (USA) (1982)		time	2.59	3.56	4.53	5.46	6.42		7.72	2 / 1	
reaction time	0.157	interval		0.97	0.97	0.93	0.96	1.30	CR / AR		2.87
		velocity	5.02	8.76	8.76	9.14	8.85	10.00	7.77		8.89
Felicien, Perdita (CAN) (1980)		time	2.61	3.63	4.60	5.58	6.57		7.86	3 / 2	
reaction time	0.156	interval		1.02	0.97	0.98	0.99	1.29			2.97
		velocity	4.98	8.33	8.76	8.67	8.59	10.08	7.63		8.59
Lopes-Schliep, Priscilla (CAN)		time	2.55	3.58	4.57	5.56	6.54		7.87	5 / 3	
reaction time	0.132	interval		1.03	0.99	0.99	0.98	1.33			3.01
		velocity	5.10	8.25	8.59	8.59	8.67	9.77	7.62		8.47
Tejeda, Anay (CUB) (1983)		time	2.58	3.60	4.59	5.57	6.55		7.91	4 / 4	
reaction time	0.144	interval		1.02	0.99	0.98	0.98	1.36			2.99
		velocity	5.04	8.33	8.59	8.67	8.67	9.56	7.59		8.53
Powell, Virginia (Ginnie) (USA		time	2.63	3.65	4.64	5.62	6.61		7.97	1 / 5	
reaction time	0.150	interval		1.02	0.99	0.98	0.99	1.36			2.99
		velocity	4.94	8.33	8.59	8.67	8.59	9.56	7.53		8.53
Dixon, Vonette (JAM) (1975)		time	2.68	3.68	4.66	5.66	6.64		7.99	6 / 6	
reaction time	0.269	interval		1.00	0.98	1.00	0.98	1.35			2.98

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

		velocity	4.85	8.50	8.67	8.50	8.67					9.63	7.51		8.56	
Golding-Clarke, Lacena (JAM)		time	2.60	3.63	4.65	5.65	6.64						8.02	8 / 7		
reaction time	0.159	interval		1.03	1.02	1.00	0.99					1.38			3.05	
		velocity	5.00	8.25	8.33	8.50	8.59					9.42	7.48		8.36	
Dektyareva, Tatyana (RUS) (19		time	2.62	3.66	4.67	5.65	6.69						8.05	7 / 8		
reaction time	0.173	interval		1.04	1.01	0.98	1.04					1.36			3.03	
		velocity	4.96	8.17	8.42	8.67	8.17					9.56	7.45		8.42	

2010 Five Nations (Glasgow, GBR)

FINAL date 30-Jan-10

Blomkvist (2010) - www.sub13.se

			H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4
Sääw, Ellen (SWE) (1990)		time	2.54	3.63	4.74	5.81	6.87		8.50	/ 6	
reaction time	0.516	interval		1.09	1.11	1.07	1.06	1.63	PB		3.27
		velocity	5.12	7.80	7.66	7.94	8.02	7.98	7.06		7.80

2010 Scandic Indoor Games (Huddinge, SWE)

FINAL date 16-Jan-10

Blomkvist (2010) - www.sub13.se

			H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4
Sääw, Ellen (SWE) (1990)		time	2.60	3.69	4.80	5.87	6.94		8.60	/ 1	
reaction time	0.200	interval		1.09	1.11	1.07	1.07	1.66			3.27
		velocity	5.00	7.80	7.66	7.94	7.94	7.83	6.98		7.80

2009 Seiko Super Grand Prix (Kawasaki, JPN)

FINAL date 23-Sep-09 wind 0.3 m/s

Akirabun (2010) - analysis of speed and stride on straight track events in the 2009 season

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)		time	2.44	3.49	4.50	5.49	6.47	7.45	8.42	9.43	10.46	11.48		12.74	/ 1			
reaction time		interval		1.05	1.01	0.99	0.98	0.98	0.97	1.01	1.03	1.02	1.26			3.05	2.93	3.06
		velocity	5.33	8.10	8.42	8.59	8.67	8.67	8.76	8.42	8.25	8.33	8.33	7.85		8.36	8.70	8.33
Fountain, Hyleas (USA) (1981)		time	2.48	3.55	4.57	5.59	6.61	7.63	8.67	9.71	10.77	11.84		13.15	/ 2			
reaction time		interval		1.07	1.02	1.02	1.02	1.02	1.04	1.04	1.06	1.07	1.31			3.11	3.08	3.17
		velocity	5.24	7.94	8.33	8.33	8.33	8.33	8.17	8.17	8.02	7.94	8.02	7.60		8.20	8.28	8.04

2009 IAAF World Athletic Final (Thessaloniki, GRE)

FINAL date 12-Sep-09 wind -0.1 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Foster-Hylton, Brigitte (JAM)	0.178	no information available											12.58	1 . 5			
Harper, Dawn (USA) (1984)	0.187	no information available											12.61	6 / 2			
Ennis-London, Delloreen (JAI	0.186	no information available											12.61	2 / 3			
Lopes-Schliep, Priscilla (CAN)	0.141	no information available											12.61	4 / 4			

Felicien, Perdita (CAN) (1986)		time	2.23	3.26	4.22	5.19	6.15	7.09	8.11	9.10	10.08	11.05		12.61	7 / 5			
reaction time	0.173	interval		1.03	0.96	0.97	0.96	0.94	1.02	0.99	0.98	0.97	1.56			2.96	2.92	2.94
		velocity	5.83	8.25	8.85	8.76	8.85	9.04	8.33	8.59	8.67	8.76	6.73	7.93		8.61	8.73	8.67
Cherry, Damu (USA) (1977)	0.165	no information available												12.78	3 / 6			
Golding-Clarke, Lacena (JAM)	0.149	no information available												12.78	1 / 7			
Carruthers, Danielle (USA) (19	0.182	no information available												12.78	8 / 8			

2009 Weltklasse (Zurich, SUI)

FINAL date 28-Aug-09 wind -0.4 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)		time	2.46	3.50	4.47	5.44	6.37	7.38	8.36	9.32	10.27	11.29		12.61	/ 3			
reaction time	0.159	interval		1.04	0.97	0.97	0.93	1.01	0.98	0.96	0.95	1.02	1.32			2.98	2.92	2.93
		velocity	5.28	8.17	8.76	8.76	9.14	8.42	8.67	8.85	8.95	8.33	7.95	7.93		8.56	8.73	8.70

2009 IAAF World Championships (Berlin, GER)

FINAL date 19-Aug-09 wind 0.2 m/s

Graubner (2009) - biomechanical analyses at the 12th IAAF world championships

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Foster-Hylton, Brigette (JAM)		time	2.60	3.60	4.59	5.56	6.51	7.46	8.43	9.41	10.39	11.40		12.51	4 / 1			
reaction time	0.157	interval		1.00	0.99	0.97	0.95	0.95	0.97	0.98	0.98	1.01	1.11			2.96	2.87	2.97
		velocity	5.00	8.50	8.59	8.76	8.95	8.95	8.76	8.67	8.67	8.42	9.46	7.99		8.61	8.89	8.59
Lopes-Schliep, Priscilla (CAN)		time	2.56	3.58	4.58	5.57	6.54	7.50	8.47	9.46	10.44	11.46		12.54	6 / 2			
reaction time	0.128	interval		1.02	1.00	0.99	0.97	0.96	0.97	0.99	0.98	1.02	1.08			3.01	2.90	2.99
		velocity	5.08	8.33	8.50	8.59	8.76	8.85	8.76	8.59	8.67	8.33	9.72	7.97		8.47	8.79	8.53
Ennis-London, Delloreen (JAI		time	2.60	3.60	4.58	5.54	6.50	7.47	8.44	9.43	10.44	11.46		12.55	8 / 3			
reaction time	0.142	interval		1.00	0.98	0.96	0.96	0.97	0.97	0.99	1.01	1.02	1.09			2.94	2.90	3.02
		velocity	5.00	8.50	8.67	8.85	8.85	8.76	8.76	8.59	8.42	8.33	9.63	7.97		8.67	8.79	8.44
O'Rourke, Derval (IRL) (1981)		time	2.58	3.57	4.55	5.53	6.52	7.51	8.49	9.50	10.52	11.58		12.67	1 / 4			
reaction time	0.128	interval		0.99	0.98	0.98	0.99	0.99	0.98	1.01	1.02	1.06	1.09	NR		2.95	2.96	3.09
		velocity	5.04	8.59	8.67	8.67	8.59	8.59	8.67	8.42	8.33	8.02	9.63	7.89		8.64	8.61	8.25

McLellan, Sally (AUS) (1986)	time	2.55	3.56	4.55	5.52	6.51	7.48	8.46	9.46	10.48	11.51		12.70	7 / 5			
reaction time 0.139	interval		1.01	0.99	0.97	0.99	0.97	0.98	1.00	1.02	1.03	1.19			2.97	2.94	3.05
	velocity	5.10	8.42	8.59	8.76	8.59	8.76	8.67	8.50	8.33	8.25	8.82	7.87		8.59	8.67	8.36
Crawford, Virginia (Ginnie) (U	time	2.60	3.62	4.60	5.56	6.52	7.50	8.50	9.51	10.55	11.63		12.78	2 / 6			
reaction time 0.146	interval		1.02	0.98	0.96	0.96	0.98	1.00	1.01	1.04	1.08	1.15			2.96	2.94	3.13
	velocity	5.00	8.33	8.67	8.85	8.85	8.67	8.50	8.42	8.17	7.87	9.13	7.82		8.61	8.67	8.15
Harper, Dawn (USA) (1984)	time	2.58	3.58	4.60	5.61	6.60	7.59	8.58	9.60	10.63	11.68		12.81	5 / 7			
reaction time 0.164	interval		1.00	1.02	1.01	0.99	0.99	0.99	1.02	1.03	1.05	1.13			3.03	2.97	3.10
	velocity	5.04	8.50	8.33	8.42	8.59	8.59	8.59	8.33	8.25	8.10	9.29	7.81		8.42	8.59	8.23
Felicien, Perdita (CAN 0.151	no information available												15.53	3 / 8			

Semi-Final 3

date 19-Aug-09 wind 0.3 m/s

Graubner (2009) - biomechanical analyses at the 12th IAAF world championships

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harper, Dawn (USA) (1984)	time	2.54	3.55	4.52	5.48	6.43	7.38	8.36	9.33	10.34	11.37		12.48	4 / 1			
reaction time 0.161	interval		1.01	0.97	0.96	0.95	0.95	0.98	0.97	1.01	1.03	1.11	PB		2.94	2.88	3.01
	velocity	5.12	8.42	8.76	8.85	8.95	8.95	8.67	8.76	8.42	8.25	9.46	8.01		8.67	8.85	8.47
McLellan, Sally (AUS) (1986)	time	2.54	3.56	4.56	5.54	6.53	7.51	8.49	9.48	10.50	11.54		12.66	6 / 2			
reaction time 0.139	interval		1.02	1.00	0.98	0.99	0.98	0.98	0.99	1.02	1.04	1.12			3.00	2.95	3.05
	velocity	5.12	8.33	8.50	8.67	8.59	8.67	8.67	8.59	8.33	8.17	9.37	7.90		8.50	8.64	8.36
O'Rourke, Derval (IRL) (1981)	time	2.60	3.60	4.60	5.59	6.57	7.55	8.55	9.58	10.60	11.65		12.73	5 / 3			
reaction time 0.148	interval		1.00	1.00	0.99	0.98	0.98	1.00	1.03	1.02	1.05	1.08			2.99	2.96	3.10
	velocity	5.00	8.50	8.50	8.59	8.67	8.67	8.50	8.25	8.33	8.10	9.72	7.86		8.53	8.61	8.23
Golding-Clark, Lacena (JAM) (	time	2.54	3.54	4.54	5.52	6.50	7.48	8.48	9.51	10.56	11.60		12.76	3 / 4			
reaction time 0.144	interval		1.00	1.00	0.98	0.98	0.98	1.00	1.03	1.05	1.04	1.16			2.98	2.96	3.12
	velocity	5.12	8.50	8.50	8.67	8.67	8.67	8.50	8.25	8.10	8.17	9.05	7.84		8.56	8.61	8.17
Nytra, Carolin (GER) (1985)	time	2.62	3.65	4.66	5.66	6.66	7.69	8.71	9.74	10.78	11.82		12.94	8 / 5			
reaction time 0.149	interval		1.03	1.01	1.00	1.00	1.03	1.02	1.03	1.04	1.04	1.12			3.04	3.05	3.11
	velocity	4.96	8.25	8.42	8.50	8.50	8.25	8.33	8.25	8.17	8.17	9.38	7.73		8.39	8.36	8.20
Berings, Eline (BEL) (1986)	time	2.60	3.64	4.66	5.66	6.66	7.66	8.67	9.69	10.73	11.79		12.94	1 / 6			
reaction time 0.143	interval		1.04	1.02	1.00	1.00	1.00	1.01	1.02	1.04	1.06	1.15	NR		3.06	3.01	3.12
	velocity	5.00	8.17	8.33	8.50	8.50	8.50	8.42	8.33	8.17	8.02	9.13	7.73		8.33	8.47	8.17

Semi-Final 2

date 19-Aug-09 wind 0.1 m/s

Graubner (2009) - biomechanical analyses at the 12th IAAF world championships

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Foster-Hylton, Brigitte (JAM)	time	2.58	3.60	4.59	5.56	6.52	7.48	8.44	9.44	10.44	11.46		12.54	5 / 1			
reaction time 0.108	interval		1.02	0.99	0.97	0.96	0.96	0.96	1.00	1.00	1.02	1.08			2.98	2.88	3.02
	velocity	5.04	8.33	8.59	8.76	8.85	8.85	8.85	8.50	8.50	8.33	9.72	7.97		8.56	8.85	8.44
Felicien, Perdita (CAN) (1980)	time	2.62	3.64	4.62	5.60	6.57	7.54	8.51	9.47	10.47	11.50		12.58	4 / 2			
reaction time 0.151	interval		1.02	0.98	0.98	0.97	0.97	0.97	0.96	1.00	1.03	1.08			2.98	2.91	2.99
	velocity	4.96	8.33	8.67	8.67	8.76	8.76	8.76	8.85	8.50	8.25	9.72	7.95		8.56	8.76	8.53
Cherry, Danu (USA) (1977)	time	2.66	3.68	4.70	5.68	6.67	7.67	8.66	9.66	10.66	11.69		12.76	3 / 3			
reaction time 0.165	interval		1.02	1.02	0.98	0.99	1.00	0.99	1.00	1.00	1.03	1.07			3.02	2.98	3.03
	velocity	4.89	8.33	8.33	8.67	8.59	8.50	8.59	8.50	8.50	8.25	9.81	7.84		8.44	8.56	8.42
Tejeda, Anay (CUB) (1983)	time	2.64	3.69	4.70	5.68	6.66	7.66	8.66	9.68	10.68	11.71		12.82	6 / 4			
reaction time 0.163	interval		1.05	1.01	0.98	0.98	1.00	1.00	1.02	1.00	1.03	1.11			3.04	2.98	3.05
	velocity	4.92	8.10	8.42	8.67	8.67	8.50	8.50	8.33	8.50	8.25	9.46	7.80		8.39	8.56	8.36

Semi-Final 1

date 19-Aug-09 wind -0.1 m/s

Graubner (2009) - biomechanical analyses at the 12th IAAF world championships

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lopes-Schliep, Priscilla (CAN)	time	2.58	3.60	4.60	5.59	6.56	7.54	8.51	9.50	10.48	11.52		12.60	3 / 1			
reaction time 0.142	interval		1.02	1.00	0.99	0.97	0.98	0.97	0.99	0.98	1.04	1.08			3.01	2.92	3.01
	velocity	5.04	8.33	8.50	8.59	8.76	8.67	8.76	8.59	8.67	8.17	9.72	7.94		8.47	8.73	8.47
Ennis-London, Delloreen (JAI	time	2.60	3.60	4.61	5.58	6.56	7.53	8.51	9.50	10.50	11.52		12.64	4 / 2			
reaction time 0.141	interval		1.00	1.01	0.97	0.98	0.97	0.98	0.99	1.00	1.02	1.12			2.98	2.93	3.01
	velocity	5.00	8.50	8.42	8.76	8.67	8.76	8.67	8.59	8.50	8.33	9.37	7.91		8.56	8.70	8.47
Crawford, Virginia (Ginnie) (U	time	2.58	3.60	4.58	5.55	6.51	7.49	8.49	9.52	10.56	11.60		12.73	6 / 3			
reaction time 0.138	interval		1.02	0.98	0.97	0.96	0.98	1.00	1.03	1.04	1.04	1.13			2.97	2.94	3.11
	velocity	5.04	8.33	8.67	8.76	8.85	8.67	8.50	8.25	8.17	8.17	9.29	7.86		8.59	8.67	8.20
Škrobáková, Lucie (CZE) (198	time	2.65	3.69	4.68	5.68	6.66	7.65	8.66	9.67	10.70	11.74		12.92	7 / 4			
reaction time 0.158	interval		1.04	0.99	1.00	0.98	0.99	1.01	1.01	1.03	1.04	1.18			3.03	2.98	3.08
	velocity	4.91	8.17	8.59	8.50	8.67	8.59	8.42	8.42	8.25	8.17	8.90	7.74		8.42	8.56	8.28

Yanit, Nevin (TUR) (1986)		time	2.60	3.64	4.66	5.68	6.68	7.69	8.71	9.74	10.78	11.86		12.99	8 / 5			
reaction time 0.153		interval		1.04	1.02	1.02	1.00	1.01	1.02	1.03	1.04	1.08	1.13			3.08	3.03	3.15
		velocity	5.00	8.17	8.33	8.33	8.50	8.42	8.33	8.25	8.17	7.87	9.29	7.70		8.28	8.42	8.10

Heat 5

date 18-Aug-09 wind 0.1 m/s

Graubner (2009) - biomechanical analyses at the 12th IAAF world championships

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Foster-Hylton, Brigitte (JAM)		time	2.58	3.59	4.57	5.53	6.49	7.46	8.43	9.43	10.45	11.51		12.67	5 / 1			
reaction time 0.134		interval		1.01	0.98	0.96	0.96	0.97	0.97	1.00	1.02	1.06	1.16			2.95	2.90	3.08
		velocity	5.04	8.42	8.67	8.85	8.85	8.76	8.76	8.50	8.33	8.02	9.05	7.89		8.64	8.79	8.28
Felicien, Perdita (CAN) (1980)		time	2.67	3.69	4.67	5.67	6.65	7.64	8.62	9.61	10.63	11.66		12.77	3 / 2			
reaction time 0.147		interval		1.02	0.98	1.00	0.98	0.99	0.98	0.99	1.02	1.03	1.11			3.00	2.95	3.04
		velocity	4.87	8.33	8.67	8.50	8.67	8.59	8.67	8.59	8.33	8.25	9.46	7.83		8.50	8.64	8.39
Tejeda, Anay (CUB) (1983)		time	2.63	3.66	4.67	5.67	6.66	7.65	8.63	9.64	10.67	11.70		12.82	2 / 3			
reaction time 0.149		interval		1.03	1.01	1.00	0.99	0.99	0.98	1.01	1.03	1.03	1.12			3.04	2.96	3.07
		velocity	4.94	8.25	8.42	8.50	8.59	8.59	8.67	8.42	8.25	8.25	9.37	7.80		8.39	8.61	8.31
Claxton, Sarah (GBR) (1979)		time	2.61	3.62	4.63	5.60	6.59	7.59	8.60	9.62	10.66	11.71		12.86	6 / 4			
reaction time 0.145		interval		1.01	1.01	0.97	0.99	1.00	1.01	1.02	1.04	1.05	1.15			2.99	3.00	3.11
		velocity	4.98	8.42	8.42	8.76	8.59	8.50	8.42	8.33	8.17	8.10	9.13	7.78		8.53	8.50	8.20

Heat 4

date 18-Aug-09 wind -0.3 m/s

Graubner (2009) - biomechanical analyses at the 12th IAAF world championships

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lopes-Schliep, Priscilla (CAN)		time	2.58	3.60	4.60	5.58	6.56	7.53	8.50	9.48	10.45	11.50		12.56	3 / 1			
reaction time 0.142		interval		1.02	1.00	0.98	0.98	0.97	0.97	0.98	0.97	1.05	1.06			3.00	2.92	3.00
		velocity	5.04	8.33	8.50	8.67	8.67	8.76	8.76	8.67	8.76	8.10	9.91	7.96		8.50	8.73	8.50
Crawford, Virginia (Ginnie) (U		time	2.60	3.60	4.58	5.56	6.52	7.50	8.50	9.51	10.54	11.61		12.77	6 / 2			
reaction time 0.156		interval		1.00	0.98	0.98	0.96	0.98	1.00	1.01	1.03	1.07	1.16			2.96	2.94	3.11
		velocity	5.00	8.50	8.67	8.67	8.85	8.67	8.50	8.42	8.25	7.94	9.05	7.83		8.61	8.67	8.20
Yanit, Nevin (TUR) (1986)		time	2.61	3.66	4.66	5.65	6.64	7.65	8.67	9.70	10.74	11.80		12.92	7 / 3			
reaction time 0.165		interval		1.05	1.00	0.99	0.99	1.01	1.02	1.03	1.04	1.06	1.12			3.04	3.02	3.13
		velocity	4.98	8.10	8.50	8.59	8.59	8.42	8.33	8.25	8.17	8.02	9.38	7.74		8.39	8.44	8.15
Vukicevic, Christina (NOR) (19		time	2.62	3.64	4.64	5.63	6.61	7.62	8.62	9.65	10.70	11.78		12.95	1 / 4			
reaction time 0.144		interval		1.02	1.00	0.99	0.98	1.01	1.00	1.03	1.05	1.08	1.17			3.01	2.99	3.16
		velocity	4.96	8.33	8.50	8.59	8.67	8.42	8.50	8.25	8.10	7.87	8.97	7.72		8.47	8.53	8.07

Heat 3

date 18-Aug-09 wind 0.1 m/s

Graubner (2009) - biomechanical analyses at the 12th IAAF world championships

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
McLellan, Sally (AUS) (1986)		time	2.55	3.57	4.57	5.55	6.53	7.53	8.54	9.57	10.60	11.67		12.82	2 / 1			
reaction time 0.140		interval		1.02	1.00	0.98	0.98	1.00	1.01	1.03	1.03	1.07	1.15			3.00	2.99	3.13
		velocity	5.10	8.33	8.50	8.67	8.67	8.50	8.42	8.25	8.25	7.94	9.13	7.80		8.50	8.53	8.15
O'Rourke, Derval (IRL) (1981)		time	2.61	3.61	4.61	5.61	6.59	7.60	8.61	9.64	10.70	11.77		12.86	4 / 2			
reaction time 0.147		interval		1.00	1.00	1.00	0.98	1.01	1.01	1.03	1.06	1.07	1.09			3.00	3.00	3.16
		velocity	4.98	8.50	8.50	8.50	8.67	8.42	8.42	8.25	8.02	7.94	9.63	7.78		8.50	8.50	8.07
Kondakova, Yuliya (RUS) (198		time	2.65	3.71	4.72	5.71	6.71	7.70	8.71	9.71	10.72	11.76		12.88	3 / 3			
reaction time 0.145		interval		1.06	1.01	0.99	1.00	0.99	1.01	1.00	1.01	1.04	1.12			3.06	3.00	3.05
		velocity	4.91	8.02	8.42	8.59	8.50	8.59	8.42	8.50	8.42	8.17	9.37	7.76		8.33	8.50	8.36

Heat 2

date 18-Aug-09 wind -0.3 m/s

Graubner (2009) - biomechanical analyses at the 12th IAAF world championships

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Cherry, Damu (USA) (1977)		time	2.69	3.72	4.71	5.70	6.67	7.65	8.64	9.65	10.66	11.67		12.71	4 / 1			
reaction time 0.185		interval		1.03	0.99	0.99	0.97	0.98	0.99	1.01	1.01	1.01	1.04			3.01	2.94	3.03
		velocity	4.83	8.25	8.59	8.59	8.76	8.67	8.59	8.42	8.42	8.42	10.10	7.87		8.47	8.67	8.42
Golding-Clarke, Lacena (JAM)		time	2.53	3.55	4.56	5.55	6.57	7.57	8.59	9.61	10.66	11.73		12.90	6 / 2			
reaction time 0.135		interval		1.02	1.01	0.99	1.02	1.00	1.02	1.02	1.05	1.07	1.17			3.02	3.04	3.14
		velocity	5.14	8.33	8.42	8.59	8.33	8.50	8.33	8.33	8.10	7.94	8.97	7.75		8.44	8.39	8.12
Nytra, Carolin (GER) (1985)		time	2.63	3.65	4.65	5.67	6.67	7.69	8.72	9.77	10.82	11.89		13.03	5 / 3			
reaction time 0.148		interval		1.02	1.00	1.02	1.00	1.02	1.03	1.05	1.05	1.07	1.14			3.04	3.05	3.17
		velocity	4.94	8.33	8.50	8.33	8.50	8.33	8.25	8.10	8.10	7.94	9.21	7.67		8.39	8.36	8.04

Heat 1

date 18-Aug-09 wind 0.1 m/s

Graubner (2009) - biomechanical analyses at the 12th IAAF world championships

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harper, Dawn (USA) (1984)		time	2.58	3.59	4.58	5.58	6.56	7.54	8.54	9.55	10.55	11.58		12.70	1 / 1			
reaction time 0.143		interval		1.01	0.99	1.00	0.98	0.98	1.00	1.01	1.00	1.03	1.12			3.00	2.96	3.04
		velocity	5.04	8.42	8.59	8.50	8.67	8.67	8.50	8.42	8.50	8.25	9.38	7.87		8.50	8.61	8.39
Ennis-London, Delloreen (JAI		time	2.62	3.64	4.66	5.65	6.63	7.62	8.60	9.60	10.59	11.62		12.73	3 / 2			
reaction time 0.159		interval		1.02	1.02	0.99	0.98	0.99	0.98	1.00	0.99	1.03	1.11			3.03	2.95	3.02
		velocity	4.96	8.33	8.33	8.59	8.67	8.59	8.67	8.50	8.59	8.25	9.46	7.86		8.42	8.64	8.44

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Augustus, Olutoyin (NGR) (1		time	2.64	3.70	4.74	5.74	6.74	7.75	8.76	9.78	10.81	11.86		12.99	7 / ~~3~~			
reaction time 0.139		interval		1.06	1.04	1.00	1.00	1.01	1.01	1.02	1.03	1.05	1.13	DV		3.10	3.02	3.10
		velocity	4.92	8.02	8.17	8.50	8.50	8.42	8.42	8.33	8.25	8.10	9.29	7.70		8.23	8.44	8.23

Heptathlon - Heat 4

date 15-Aug-09 wind -0.2 m/s

Graubner (2009) - biomechanical analyses at the 12th IAAF world championships

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nana Djimou, Ida Antoinette (	0.168	no information available											PB	13.44	2 / 1			
Chernova, Tatyana (RUS) (198		time	2.73	3.81	4.87	5.90	6.95	8.02	9.09	10.17	11.26	12.38		13.58	7 / 2			
reaction time 0.180		interval		1.08	1.06	1.03	1.05	1.07	1.07	1.08	1.09	1.12	1.20			3.17	3.19	3.29
		velocity	4.76	7.87	8.02	8.25	8.10	7.94	7.94	7.87	7.80	7.59	8.75	7.36		8.04	7.99	7.75
Yosypenko, Lyudmyla (UKR) (		time	2.76	3.86	4.92	5.98	7.04	8.13	9.21	10.29	11.40	12.50		13.64	3 / 3			
reaction time 0.169		interval		1.10	1.06	1.06	1.06	1.09	1.08	1.08	1.11	1.10	1.14	PB		3.22	3.23	3.29
		velocity	4.71	7.73	8.02	8.02	8.02	7.80	7.87	7.87	7.66	7.73	9.21	7.33		7.92	7.89	7.75
Theisen, Brianne (CAN) (1988)		time	2.76	3.84	4.91	5.99	7.06	8.14	9.22	10.30	11.40	12.50		13.69	5 / 4			
reaction time 0.159		interval		1.08	1.07	1.08	1.07	1.08	1.08	1.08	1.10	1.10	1.19	PB		3.23	3.23	3.28
		velocity	4.71	7.87	7.94	7.87	7.94	7.87	7.87	7.87	7.73	7.73	8.82	7.30		7.89	7.89	7.77
De Aniceto, Marisa (FRA) (198		time	2.80	3.92	5.00	6.07	7.12	8.20	9.28	10.38	11.48	12.59		13.78	6 / 6			
reaction time 0.217		interval		1.12	1.08	1.07	1.05	1.08	1.08	1.10	1.10	1.11	1.19			3.27	3.21	3.31
		velocity	4.64	7.59	7.87	7.94	8.10	7.87	7.87	7.73	7.73	7.66	8.82	7.26		7.80	7.94	7.70
Tarasova, Yuliya (UZB) (1986)		time	2.85	3.98	5.08	6.20	7.30	8.41	9.54	10.69	11.84	13.02		14.23	8 / 7			
reaction time 0.233		interval		1.13	1.10	1.12	1.10	1.11	1.13	1.15	1.15	1.18	1.21			3.35	3.34	3.48
		velocity	4.56	7.52	7.73	7.59	7.73	7.66	7.52	7.39	7.39	7.20	8.68	7.03		7.61	7.63	7.33

Heptathlon - Heat 3

date 15-Aug-09 wind -0.1 m/s

Graubner (2009) - biomechanical analyses at the 12th IAAF world championships

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Hazel, Louise (GBR) (1985)		time	2.70	3.75	4.82	5.89	6.94	8.00	9.07	10.14	11.24	12.39		13.60	6 / 1			
reaction time 0.184		interval		1.05	1.07	1.07	1.05	1.06	1.07	1.07	1.10	1.15	1.21			3.19	3.18	3.32
		velocity	4.81	8.10	7.94	7.94	8.10	8.02	7.94	7.94	7.73	7.39	8.68	7.35		7.99	8.02	7.68
Tymińska, Karolina (POL) (197		time	2.75	3.88	4.99	6.04	7.12	8.19	9.23	10.30	11.40	12.50		13.67	2 / 2			
reaction time 0.162		interval		1.13	1.11	1.05	1.08	1.07	1.04	1.07	1.10	1.10	1.17			3.29	3.19	3.27
		velocity	4.73	7.52	7.66	8.10	7.87	7.94	8.17	7.94	7.73	7.73	8.97	7.32		7.75	7.99	7.80
Samuelsson, Jessica (SWE) (1		time	2.78	3.90	5.00	6.10	7.20	8.30	9.41	10.51	11.63	12.78		13.96	8 / 3			
reaction time 0.182		interval		1.12	1.10	1.10	1.10	1.10	1.11	1.10	1.12	1.15	1.18			3.32	3.31	3.37
		velocity	4.68	7.59	7.73	7.73	7.73	7.73	7.66	7.73	7.59	7.39	8.90	7.16		7.68	7.70	7.57
Mächtig, Julia (GER) (1986)		time	2.77	3.92	5.08	6.24	7.38	8.52	9.67	10.84	12.03	13.21		14.40	5 / 4			
reaction time 0.171		interval		1.15	1.16	1.16	1.14	1.14	1.15	1.17	1.19	1.18	1.19			3.47	3.43	3.54
		velocity	4.69	7.39	7.33	7.33	7.46	7.46	7.39	7.26	7.14	7.20	8.82	6.94		7.35	7.43	7.20

Heptathlon - Heat 2

date 15-Aug-09 wind -0.3 m/s

Graubner (2009) - biomechanical analyses at the 12th IAAF world championships

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wade, Bettie (USA) (	0.198	no information available											PB	13.79	5 / 1			
Schwarzkopf, Lilli (GER) (1983		time	2.79	3.87	4.95	6.01	7.09	8.15	9.22	10.33	11.45	12.57		13.80	4 / 2			
reaction time 0.143		interval		1.08	1.08	1.06	1.08	1.06	1.07	1.11	1.12	1.12	1.23			3.22	3.21	3.35
		velocity	4.66	7.87	7.87	8.02	7.87	8.02	7.94	7.66	7.59	7.59	8.54	7.25		7.92	7.94	7.61
Dobrynska, Nataliya (UKR) (1		time	2.78	3.85	4.91	5.99	7.07	8.15	9.24	10.36	11.49	12.64		13.85	3 / 3			
reaction time 0.186		interval		1.07	1.06	1.08	1.08	1.08	1.09	1.12	1.13	1.15	1.21			3.21	3.25	3.40
		velocity	4.68	7.94	8.02	7.87	7.87	7.87	7.80	7.59	7.52	7.39	8.68	7.22		7.94	7.85	7.50
Day, Sharon (USA) (1985)		time	2.80	3.90	5.01	6.09	7.17	8.27	9.35	10.47	11.58	12.69		13.90	7 / 4			
reaction time 0.205		interval		1.10	1.11	1.08	1.08	1.10	1.08	1.12	1.11	1.11	1.21			3.29	3.26	3.34
		velocity	4.64	7.73	7.66	7.87	7.87	7.73	7.87	7.59	7.66	7.66	8.68	7.19		7.75	7.82	7.63

Heptathlon - Heat 1

date 15-Aug-09 wind -0.4 m/s

Graubner (2009) - biomechanical analyses at the 12th IAAF world championships

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ennis, Jessica (GBR) (1986)		time	2.65	3.70	4.72	5.73	6.74	7.74	8.76	9.78	10.82	11.86		12.93	6 / 1			
reaction time 0.155		interval		1.05	1.02	1.01	1.01	1.00	1.02	1.02	1.04	1.04	1.07			3.08	3.03	3.10
		velocity	4.91	8.10	8.33	8.42	8.42	8.50	8.33	8.33	8.17	8.17	9.81	7.73		8.28	8.42	8.23
Aerts, Sara (BEL) (198	0.144	no information available												13.45	2 / 2			
Chudzik, Kamila (POL) (1986)		time	2.74	3.84	4.91	5.98	7.02	8.06	9.13	10.19	11.26	12.33		13.50	7 / 3			
reaction time 0.178		interval		1.10	1.07	1.07	1.04	1.04	1.07	1.06	1.07	1.07	1.17			3.24	3.15	3.20
		velocity	4.74	7.73	7.94	7.94	8.17	8.17	7.94	8.02	7.94	7.94	8.97	7.41		7.87	8.10	7.97
Pickler, Diana (USA) (1983)		time	2.72	3.78	4.84	5.90	6.94	8.00	9.04	10.11	11.20	12.30		13.50	4 / 4			
reaction time 0.169		interval		1.06	1.06	1.06	1.04	1.06	1.04	1.07	1.09	1.10	1.20			3.18	3.14	3.26

	velocity	4.78	8.02	8.02	8.02	8.17	8.02	8.17	7.94	7.80	7.73	8.75	7.41		8.02	8.12	7.82
Melnychenko, Hanna (UKR) (1	time	2.67	3.72	4.81	5.86	6.92	8.01	9.09	10.19	11.29	12.40		13.60	8 / 5			
reaction time 0.138	interval		1.05	1.09	1.05	1.06	1.09	1.08	1.10	1.10	1.11	1.20			3.19	3.23	3.31
	velocity	4.87	8.10	7.80	8.10	8.02	7.80	7.87	7.73	7.73	7.66	8.75	7.35		7.99	7.89	7.70
Oeser, Jennifer (GER) (1983)	time	2.71	3.78	4.84	5.89	6.96	8.09	9.20	10.28	11.38	12.49		13.62	3 / 6			
reaction time 0.137	interval		1.07	1.06	1.05	1.07	1.13	1.11	1.08	1.10	1.11	1.13			3.18	3.31	3.29
	velocity	4.80	7.94	8.02	8.10	7.94	7.52	7.66	7.87	7.73	7.66	9.29	7.34		8.02	7.70	7.75
Wisse, Yvonne (NED) (1982)	time	2.81	3.89	4.96	6.04	7.10	8.14	9.22	10.29	11.38	12.49		13.66	1 / 7			
reaction time 0.162	interval		1.08	1.07	1.08	1.06	1.04	1.08	1.07	1.09	1.11	1.17			3.23	3.18	3.27
	velocity	4.63	7.87	7.94	7.87	8.02	8.17	7.87	7.94	7.80	7.66	8.97	7.32		7.89	8.02	7.80
Grabuste, Aiga (LAT) (1988)	time	2.76	3.86	4.94	6.02	7.09	8.16	9.24	10.34	11.44	12.56		13.78	5 / 8			
reaction time 0.181	interval		1.10	1.08	1.08	1.07	1.07	1.08	1.10	1.10	1.12	1.22			3.26	3.22	3.32
	velocity	4.71	7.73	7.87	7.87	7.94	7.94	7.87	7.73	7.73	7.59	8.61	7.26		7.82	7.92	7.68

2009 Swiss National Championships (Zürich, SUI)

FINAL date 02-Aug-09 wind 1.2 m/s

Rees (2009) - wettkampfauswertung 100m hürden - frauen/w.jgd.A+B

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Urech, Lisa (SUI) (1989)	time	2.62	3.66	4.70	5.70	6.70	7.70	8.74	9.78	10.82	11.86		13.01	/ 1			
reaction time	interval		1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.15	NUR		3.08	3.04	3.12
	velocity	4.96	8.17	8.17	8.50	8.50	8.50	8.17	8.17	8.17	8.17	9.13	7.69		8.28	8.39	8.17

2009 DN Gala (Stockholm, SWE)

FINAL date 31-Jul-09 wind 0.9 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.46	3.50	4.50	5.44	6.38	7.37	8.34	9.32	10.35	11.34		12.65	/ 5			
reaction time	interval		1.04	1.00	0.94	0.94	0.99	0.97	0.98	1.03	0.99	1.31			2.98	2.90	3.00
	velocity	5.28	8.17	8.50	9.04	9.04	8.59	8.76	8.67	8.25	8.59	8.02	7.91		8.56	8.79	8.50

Heat 1 date 31-Jul-09 wind 1.8 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.45	3.43	4.39	5.34	6.36	7.34	8.26	9.18	10.18	11.22		12.54	/ 1			
reaction time	interval		0.98	0.96	0.95	1.02	0.98	0.92	0.92	1.00	1.04	1.32			2.89	2.92	2.96
	velocity	5.31	8.67	8.85	8.95	8.33	8.67	9.24	9.24	8.50	8.17	7.95	7.97		8.82	8.73	8.61

2009 Aviva (London, GBR)

FINAL date 25-Jul-09 wind -0.7 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.49	3.52	4.51	5.50	6.43	7.41	8.42	9.45	10.40	11.38		12.66	/ 2			
reaction time 0.128	interval		1.03	0.99	0.99	0.93	0.98	1.01	1.03	0.95	0.98	1.28			3.01	2.92	2.96
	velocity	5.22	8.25	8.59	8.59	9.14	8.67	8.42	8.25	8.95	8.67	8.20	7.90		8.47	8.73	8.61

2009 Golden Gala (Rome, ITA)

FINAL date 10-Jul-09 wind 0.4 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.34	3.41	4.41	5.38	6.35	7.28	8.28	9.26	10.30	11.29		12.70	/ 4			
reaction time 0.176	interval		1.07	1.00	0.97	0.97	0.93	1.00	0.98	1.04	0.99	1.41			3.04	2.90	3.01
	velocity	5.56	7.94	8.50	8.76	8.76	9.14	8.50	8.67	8.17	8.59	7.45	7.87		8.39	8.79	8.47

2009 Athletissima (Lausanne, SUI)

FINAL date 07-Jul-09 wind 0.3 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.25	3.26	4.28	5.26	6.20	7.20	8.19	9.18	10.22	11.22		12.71	/ 5			
reaction time 0.170	interval		1.01	1.02	0.98	0.94	1.00	0.99	0.99	1.04	1.00	1.49			3.01	2.93	3.03
	velocity	5.78	8.42	8.33	8.67	9.04	8.50	8.59	8.59	8.17	8.50	7.05	7.87		8.47	8.70	8.42

2009 Bislett Games (Oslo, NOR)

FINAL date 03-Jul-09 wind -0.8 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.29	3.29	4.34	5.33	6.29	7.31	8.33	9.28	10.23	11.32		12.85	/ 5			
reaction time 0.226	interval		1.00	1.05	0.99	0.96	1.02	1.02	0.95	0.95	1.09	1.53			3.04	3.00	2.99
	velocity	5.68	8.50	8.10	8.59	8.85	8.33	8.33	8.95	8.95	7.80	6.86	7.78		8.39	8.50	8.53

2009 Canadian National Championships (Toronto, CAN)

FINAL date 27-Jun-09 wind -1.4 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.68	3.70	4.68	5.66	6.63	7.61	8.61	9.63	10.66	11.68		12.80	/ 1			
reaction time	interval		1.02	0.98	0.98	0.97	0.98	1.00	1.02	1.03	1.02	1.12			2.98	2.95	3.07
	velocity	4.85	8.33	8.67	8.67	8.76	8.67	8.50	8.33	8.25	8.33	9.37	7.81		8.56	8.64	8.31

Heat 2 date 26-Jun-09 wind -2.2 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

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

Felicien, Perdita (CAN) (1980)	time	2.67	3.69	4.67	5.65	6.62	7.62	8.62	9.62	10.69	11.72		12.89	/ 1			
reaction time	interval		1.02	0.98	0.98	0.97	1.00	1.00	1.00	1.07	1.03	1.17			2.98	2.97	3.10
	velocity	4.87	8.33	8.67	8.67	8.76	8.50	8.50	8.50	7.94	8.25	8.97	7.76		8.56	8.59	8.23

2009 Japanese National Championships (Hiroshima, JPN)

FINAL

date 26-Jun-09 wind 1.9 m/s

Akirabun (2010) - analysis of speed and stride on straight track events in the 2009 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Terada, Asuka (JPN) (1990)	time	2.47	3.53	4.57	5.60	6.62	7.65	8.67	9.70	10.74	11.79		13.05	3 / 1			
reaction time	interval		1.06	1.04	1.03	1.02	1.03	1.02	1.03	1.04	1.05	1.26	NJR / PB		3.13	3.07	3.12
	velocity	5.26	8.02	8.17	8.25	8.33	8.25	8.33	8.25	8.17	8.10	8.33	7.66		8.15	8.31	8.17
Ishino, Mami (JPN) (1983)	time	2.48	3.55	4.57	5.58	6.60	7.62	8.65	9.69	10.75	11.83		13.15	5 / 2			
reaction time	interval		1.07	1.02	1.01	1.02	1.02	1.03	1.04	1.06	1.08	1.32	PB		3.10	3.07	3.18
	velocity	5.24	7.94	8.33	8.42	8.33	8.33	8.25	8.17	8.02	7.87	7.95	7.60		8.23	8.31	8.02
Joshita, Rena (JPN) (1986)	time	2.49	3.57	4.63	5.68	6.72	7.76	8.80	9.84	10.90	11.97		13.26	6 / 3			
reaction time	interval		1.08	1.06	1.05	1.04	1.04	1.04	1.04	1.06	1.07	1.29	PB		3.19	3.12	3.17
	velocity	5.22	7.87	8.02	8.10	8.17	8.17	8.17	8.17	8.02	7.94	8.14	7.54		7.99	8.17	8.04

Semi-Final 2

date 25-Jun-09 wind 1.0 m/s

Akirabun (2010) - analysis of speed and stride on straight track events in the 2009 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kumagai, Fumiko (JPN) (1984)	time	2.50	3.60	4.67	5.72	6.77	7.82	8.89	9.96	11.05	12.15		13.50	6 / 2			
reaction time	interval		1.10	1.07	1.05	1.05	1.05	1.07	1.07	1.09	1.10	1.35	PB		3.22	3.17	3.26
	velocity	5.20	7.73	7.94	8.10	8.10	8.10	7.94	7.94	7.80	7.73	7.78	7.41		7.92	8.04	7.82

Heat 5

date 25-Jun-09 wind 1.5 m/s

Akirabun (2010) - analysis of speed and stride on straight track events in the 2009 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shimura, Hitomi (JPN) (1990)	time	2.54	3.64	4.71	5.78	6.85	7.92	9.00	10.08	11.18	12.30		13.66	4 / 1			
reaction time	interval		1.10	1.07	1.07	1.07	1.07	1.08	1.08	1.10	1.12	1.36			3.24	3.22	3.30
	velocity	5.12	7.73	7.94	7.94	7.94	7.94	7.87	7.87	7.73	7.59	7.72	7.32		7.87	7.92	7.73
Kimura, Ayako (JPN) (1988)	time	2.56	3.67	4.75	5.82	6.89	7.97	9.06	10.15	11.26	12.39		13.76	5 / 2			
reaction time	interval		1.11	1.08	1.07	1.07	1.08	1.09	1.09	1.11	1.13	1.37	PB		3.26	3.24	3.33
	velocity	5.08	7.66	7.87	7.94	7.94	7.87	7.80	7.80	7.66	7.52	7.66	7.27		7.82	7.87	7.66

Heat 3

date 25-Jun-09 wind 0.0 m/s

Akirabun (2010) - analysis of speed and stride on straight track events in the 2009 season

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shiba, Risa (JPN) (1981)	time	2.46	3.57	4.66	5.74	6.82	7.91	9.01	10.12	11.24	12.37		13.81	4 / 2			
reaction time	interval		1.11	1.09	1.08	1.08	1.09	1.10	1.11	1.12	1.13	1.44			3.28	3.27	3.36
	velocity	5.28	7.66	7.80	7.87	7.87	7.80	7.73	7.66	7.59	7.52	7.29	7.24		7.77	7.80	7.59

2009 ISTAF (Berlin, GER)

FINAL

date 14-Jun-09 wind -0.1 m/s

Graubner (2009) - http://www.fgs.uni-halle.de

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Cherry, Damu (USA) (1977)	time	2.65	3.71	4.71	5.70	6.67	7.65	8.65	9.65	10.67	11.69		12.76	/ 1			
reaction time 0.201	interval		1.06	1.00	0.99	0.97	0.98	1.00	1.00	1.02	1.02	1.07			3.05	2.95	3.04
	velocity	4.91	8.02	8.50	8.59	8.76	8.67	8.50	8.50	8.33	8.33	9.81	7.84		8.36	8.64	8.39
Ennis-London, Delloreen (JAI	time	2.62	3.65	4.68	5.67	6.65	7.68	8.67	9.70	10.75	11.83		12.98	/ 2			
reaction time 0.145	interval		1.03	1.03	0.99	0.98	1.03	0.99	1.03	1.05	1.08	1.15			3.05	3.00	3.16
	velocity	4.96	8.25	8.25	8.59	8.67	8.25	8.59	8.25	8.10	7.87	9.13	7.70		8.36	8.50	8.07
Golding-Clarke, Lacena (JAM)	time	2.58	3.60	4.63	5.62	6.64	7.65	8.67	9.71	10.76	11.84		13.00	/ 3			
reaction time 0.174	interval		1.02	1.03	0.99	1.02	1.01	1.02	1.04	1.05	1.08	1.16			3.04	3.05	3.17
	velocity	5.04	8.33	8.25	8.59	8.33	8.42	8.33	8.17	8.10	7.87	9.05	7.69		8.39	8.36	8.04
Nytra, Carolin (GER) (1985)	time	2.67	3.69	4.72	5.73	6.76	7.79	8.81	9.85	10.89	11.95		13.01	/ 4			
reaction time 0.201	interval		1.02	1.03	1.01	1.03	1.03	1.02	1.04	1.04	1.06	1.06			3.06	3.08	3.14
	velocity	4.87	8.33	8.25	8.42	8.25	8.25	8.33	8.17	8.17	8.02	9.91	7.69		8.33	8.28	8.12
Vukicevic, Christina (NOR) (19	time	2.61	3.63	4.63	5.65	6.66	7.67	8.69	9.73	10.79	11.87		13.04	/ 5			
reaction time 0.175	interval		1.02	1.00	1.02	1.01	1.01	1.02	1.04	1.06	1.08	1.17			3.04	3.04	3.18
	velocity	4.98	8.33	8.50	8.33	8.42	8.42	8.33	8.17	8.02	7.87	8.97	7.67		8.39	8.39	8.02
Lewis, Yvette (USA) (1985)	time	2.62	3.65	4.68	5.71	6.73	7.75	8.77	9.82	10.86	11.93		13.07	/ 6			
reaction time 0.172	interval		1.03	1.03	1.03	1.02	1.02	1.02	1.05	1.04	1.07	1.14			3.09	3.06	3.16
	velocity	4.96	8.25	8.25	8.25	8.33	8.33	8.33	8.10	8.17	7.94	9.21	7.65		8.25	8.33	8.07
Carruthers, Danielle (USA) (19	time	2.59	3.63	4.64	5.64	6.65	7.67	8.69	9.73	10.81	11.90		13.11	/ 7			
reaction time 0.167	interval		1.04	1.01	1.00	1.01	1.02	1.02	1.04	1.08	1.09	1.21			3.05	3.05	3.21
	velocity	5.02	8.17	8.42	8.50	8.42	8.33	8.33	8.17	7.87	7.80	8.68	7.63		8.36	8.36	7.94
Berings, Eline (BEL) (1986)	time	2.67	3.73	4.79	5.81	6.83	7.87	8.90	9.93	10.97	12.04		13.20	/ 8			
reaction time 0.196	interval		1.06	1.06	1.02	1.02	1.04	1.03	1.03	1.04	1.07	1.16			3.14	3.09	3.14
	velocity	4.87	8.02	8.02	8.33	8.33	8.17	8.25	8.25	8.17	7.94	9.05	7.58		8.12	8.25	8.12
O'Rourke, Derval (IRL) (1981)	time	2.63	3.70	4.72	5.75	6.77	7.81	8.86	9.91	10.99	12.09		13.21	/ 9			

reaction time	0.187	interval		1.07	1.02	1.03	1.02	1.04	1.05	1.05	1.08	1.10	1.12			3.12	3.11	3.23
		velocity	4.94	7.94	8.33	8.25	8.33	8.17	8.10	8.10	7.87	7.73	9.37	7.57		8.17	8.20	7.89

2009 Festival of Excellence (Toronto, CAN)

FINAL date 11-Jun-09 wind -1.8 m/s *Winckler (2009) - UK Athletics- National Coaching Conference*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.56	3.55	4.56	5.55	6.51	7.51	8.50	9.50	10.53	11.61		12.88	/ 2			
reaction time	interval		0.99	1.01	0.99	0.96	1.00	0.99	1.00	1.03	1.08	1.27			2.99	2.95	3.11
	velocity	5.08	8.59	8.42	8.59	8.85	8.50	8.59	8.50	8.25	7.87	8.27	7.76		8.53	8.64	8.20

2009 Prefontaine Classic (Eugene, OR)

FINAL date 07-Jun-09 wind 1.0 m/s *Winckler (2009) - UK Athletics- National Coaching Conference*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.49	3.50	4.43	5.40	6.40	7.39	8.41	9.38	10.38	11.40		12.78	/ 4			
reaction time	interval		1.01	0.93	0.97	1.00	0.99	1.02	0.97	1.00	1.02	1.38			2.91	3.01	2.99
	velocity	5.22	8.42	9.14	8.76	8.50	8.59	8.33	8.76	8.50	8.33	7.61	7.82		8.76	8.47	8.53

2009 adidas Track Classic (Carson, CA)

FINAL date 16-May-09 wind -1.1 m/s *Winckler (2009) - UK Athletics- National Coaching Conference*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.30	3.31	4.33	5.34	6.29	7.23	8.24	9.21	10.23	11.26		12.83	/ 2			
reaction time	interval		1.01	1.02	1.01	0.95	0.94	1.01	0.97	1.02	1.03	1.57			3.04	2.90	3.02
	velocity	5.65	8.42	8.33	8.42	8.95	9.04	8.42	8.76	8.33	8.25	6.69	7.79		8.39	8.79	8.44

2009 University of Illinois Invitational (Champaign, IL)

FINAL date 02-May-09 wind 2.1 m/s *Winckler (2009) - UK Athletics- National Coaching Conference*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.71	3.71	4.71	5.70	6.68	7.68	8.70	9.73	10.76	11.83		12.99	/ 1			
reaction time	interval		1.00	1.00	0.99	0.98	1.00	1.02	1.03	1.03	1.07	1.16			2.99	3.00	3.13
	velocity	4.80	8.50	8.50	8.59	8.67	8.50	8.33	8.25	8.25	7.94	9.05	7.70		8.53	8.50	8.15

2009 Mikio Oda Memorial (Hiroshima, JPN)

Heat 3 date 29-Apr-09 wind 2.1 m/s *Akirabun (2010) - analysis of speed and stride on straight track events in the 2009 season*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Akai, Suzuka (JPN) (1990)	time	2.55	3.67	4.75	5.81	6.86	7.92	9.00	10.10	11.21	12.34		13.72	/ 2			
reaction time	interval		1.12	1.08	1.06	1.05	1.06	1.08	1.10	1.11	1.13	1.38			3.26	3.19	3.34
	velocity	5.10	7.59	7.87	8.02	8.10	8.02	7.87	7.73	7.66	7.52	7.61	7.29		7.82	7.99	7.63

2009 Drake Relays (Des Moines, IA)

FINAL date 25-Apr-09 wind 3.1 m/s *Winckler (2009) - UK Athletics- National Coaching Conference*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.70	3.70	4.70	5.67	6.64	7.64	8.64	9.67	10.71	11.77		12.88	/ 3			
reaction time	interval		1.00	1.00	0.97	0.97	1.00	1.00	1.03	1.04	1.06	1.11			2.97	2.97	3.13
	velocity	4.81	8.50	8.50	8.76	8.76	8.50	8.50	8.25	8.17	8.02	9.46	7.76		8.59	8.59	8.15

2009 Kansas Relays (Lawrence, KS)

FINAL date 18-Apr-09 wind -0.2 m/s *Winckler (2009) - UK Athletics- National Coaching Conference*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.71	3.76	4.78	5.80	6.81	7.85	8.88	9.95	11.01	12.13		13.38	/ 5			
reaction time	interval		1.05	1.02	1.02	1.01	1.04	1.03	1.07	1.06	1.12	1.25			3.09	3.08	3.25
	velocity	4.80	8.10	8.33	8.33	8.42	8.17	8.25	7.94	8.02	7.59	8.40	7.47		8.25	8.28	7.85

2008 Seiko Super Grand Prix (Kawasaki, JPN)

FINAL date 23-Sep-08 wind 0.1 m/s *Akirabun (2009) - race analysis of 2008 men's and women's 100m and 110m & 100m hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Cherry, Damu (USA) (1977)	time	2.48	3.55	4.59	5.61	6.62	7.63	8.64	9.68	10.71	11.78		13.07	/ 1			
reaction time	interval		1.07	1.04	1.02	1.01	1.01	1.01	1.04	1.03	1.07	1.29			3.13	3.03	3.14
	velocity	5.24	7.94	8.17	8.33	8.42	8.42	8.42	8.17	8.25	7.94	8.14	7.65		8.15	8.42	8.12
Davis, Candice (USA) (1985)	time	2.57	3.62	4.63	5.63	6.63	7.66	8.69	9.72	10.77	11.84		13.13	/ 2			
reaction time	interval		1.05	1.01	1.00	1.00	1.03	1.03	1.03	1.05	1.07	1.29			3.06	3.06	3.15
	velocity	5.06	8.10	8.42	8.50	8.50	8.25	8.25	8.25	8.10	7.94	8.14	7.62		8.33	8.33	8.10
Fountain, Hyleas (USA) (1981)	time	2.45	3.52	4.54	5.57	6.59	7.62	8.67	9.73	10.80	11.89		13.22	/ 3			
reaction time	interval		1.07	1.02	1.03	1.02	1.03	1.05	1.06	1.07	1.09	1.33			3.12	3.10	3.22
	velocity	5.31	7.94	8.33	8.25	8.33	8.25	8.10	8.02	7.94	7.80	7.89	7.56		8.17	8.23	7.92
Ishino, Mami (JPN) (1983)	time	2.51	3.59	4.62	5.65	6.68	7.71	8.75	9.80	10.87	11.96		13.28	/ 4			
reaction time	interval		1.08	1.03	1.03	1.03	1.03	1.04	1.05	1.07	1.09	1.32			3.14	3.10	3.21
	velocity	5.18	7.87	8.25	8.25	8.25	8.25	8.17	8.10	7.94	7.80	7.95	7.53		8.12	8.23	7.94

2008 IAAF World Athletic Final (Stuttgart, GER)

FINAL date 13-Sep-08 wind 0.3 m/s *Graubner (2009) - http://www.fgs.uni-halle.de*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Onyia, Josephine (ESP) (1986)	time	2.55	3.59	4.58	5.54	6.50	7.47	8.45	9.44	10.43	11.46		12.54	6 / ~~4~~			

reaction time 0.154	interval		1.04	0.99	0.96	0.96	0.97	0.98	0.99	0.99	1.03	1.08	DV		2.99	2.91	3.01
	velocity	5.10	8.17	8.59	8.85	8.85	8.76	8.67	8.59	8.59	8.25	9.72	7.97		8.53	8.76	8.47
Jones, Lolo (USA) (1982)	time	2.58	3.60	4.58	5.56	6.53	7.50	8.48	9.47	10.46	11.48		12.56	4 / ~~2~~ 1			
reaction time 0.128	interval		1.02	0.98	0.98	0.97	0.97	0.98	0.99	0.99	1.02	1.08			2.98	2.92	3.00
	velocity	5.04	8.33	8.67	8.67	8.76	8.76	8.67	8.59	8.59	8.33	9.72	7.96		8.56	8.73	8.50
Ennis-London, Delloreen (JAI	time	2.59	3.60	4.60	5.59	6.55	7.52	8.50	9.46	10.45	11.45		12.56	7 / ~~3~~ 2			
reaction time 0.148	interval		1.01	1.00	0.99	0.96	0.97	0.98	0.96	0.99	1.00	1.11			3.00	2.91	2.95
	velocity	5.02	8.42	8.50	8.59	8.85	8.76	8.67	8.85	8.59	8.50	9.46	7.96		8.50	8.76	8.64
Harper, Dawn (USA) (1984)	time	2.60	3.62	4.61	5.60	6.57	7.54	8.52	9.51	10.54	11.58		12.67	8 / ~~4~~ 3			
reaction time 0.182	interval		1.02	0.99	0.99	0.97	0.97	0.98	0.99	1.03	1.04	1.09			3.00	2.92	3.06
	velocity	5.00	8.33	8.59	8.59	8.76	8.76	8.67	8.59	8.25	8.17	9.63	7.89		8.50	8.73	8.33
Foster-Hylton, Brigette (JAM)	time	2.63	3.66	4.65	5.63	6.62	7.60	8.58	9.58	10.61	11.63		12.76	3 / ~~5~~ 4			
reaction time 0.137	interval		1.03	0.99	0.98	0.99	0.98	0.98	1.00	1.03	1.02	1.13			3.00	2.95	3.05
	velocity	4.94	8.25	8.59	8.67	8.59	8.67	8.67	8.50	8.25	8.33	9.29	7.84		8.50	8.64	8.36
Lopes-Schliep, Priscilla (CAN)	time	2.55	3.60	4.61	5.64	6.66	7.66	8.67	9.68	10.70	11.72		12.81	1 / ~~6~~ 5			
reaction time 0.139	interval		1.05	1.01	1.03	1.02	1.00	1.01	1.01	1.02	1.02	1.09			3.09	3.03	3.05
	velocity	5.10	8.10	8.42	8.25	8.33	8.50	8.42	8.42	8.33	8.33	9.63	7.81		8.25	8.42	8.36
McLellan, Sally (AUS) (1986)	time	2.54	3.58	4.60	5.62	6.62	7.62	8.62	9.63	10.65	11.68		12.82	5 / ~~7~~ 6			
reaction time 0.137	interval		1.04	1.02	1.02	1.00	1.00	1.00	1.01	1.02	1.03	1.14			3.08	3.00	3.06
	velocity	5.12	8.17	8.33	8.33	8.50	8.50	8.50	8.42	8.33	8.25	9.21	7.80		8.28	8.50	8.33
Hayes, Joanna (USA) (1976)	time	2.68	3.75	4.78	5.80	6.82	7.82	8.81	9.84	10.84	11.92		13.06	2 / ~~8~~ 7			
reaction time 0.156	interval		1.07	1.03	1.02	1.02	1.00	0.99	1.03	1.00	1.08	1.14			3.12	3.01	3.11
	velocity	4.85	7.94	8.25	8.33	8.33	8.50	8.59	8.25	8.50	7.87	9.21	7.66		8.17	8.47	8.20

2008 Olympic Games (Beijing, CHN)

FINAL

date 19-Aug-08 wind 0.1 m/s

Tsiokanos (2017) - race pattern of women's 100m hurdles: time analysis of olympic hurdle performance

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harper, Dawn (USA) (1984)	time	2.55	3.59	4.53	5.51	6.50	7.46	8.45	9.44	10.43	11.44		12.54	6 / 1			
reaction time 0.193	interval		1.04	0.94	0.98	0.99	0.96	0.99	0.99	0.99	1.01	1.10	PB		2.96	2.94	2.99
	velocity	5.10	8.17	9.04	8.67	8.59	8.85	8.59	8.59	8.59	8.42	9.55	7.97		8.61	8.67	8.53
McLellan, Sally (AUS) (1986)	time	2.50	3.51	4.51	5.50	6.50	7.47	8.45	9.45	10.46	11.50		12.64	3 / 2			
reaction time 0.138	interval		1.01	1.00	0.99	1.00	0.97	0.98	1.00	1.01	1.04	1.14			3.00	2.95	3.05
	velocity	5.20	8.42	8.50	8.59	8.50	8.76	8.67	8.50	8.42	8.17	9.21	7.91		8.50	8.64	8.36
Lopes-Schliep, Priscilla (CAN)	time	2.57	3.63	4.63	5.60	6.60	7.58	8.54	9.53	10.56	11.58		12.64	8 / 3			
reaction time 0.174	interval		1.06	1.00	0.97	1.00	0.98	0.96	0.99	1.03	1.02	1.06			3.03	2.94	3.04
	velocity	5.06	8.02	8.50	8.76	8.50	8.67	8.85	8.59	8.25	8.33	9.91	7.91		8.42	8.67	8.39
Cherry, Damu (USA) (1977)	time	2.63	3.66	4.67	5.64	6.61	7.59	8.56	9.55	10.55	11.58		12.65	7 / 4			
reaction time 0.239	interval		1.03	1.01	0.97	0.97	0.98	0.97	0.99	1.00	1.03	1.07			3.01	2.92	3.02
	velocity	4.94	8.25	8.42	8.76	8.76	8.67	8.76	8.59	8.50	8.25	9.81	7.91		8.47	8.73	8.44
Ennis-London, Delloreen (JAI	time	2.59	3.59	4.62	5.55	6.52	7.52	8.52	9.47	10.48	11.53		12.66	5 / 5			
reaction time 0.151	interval		1.00	1.03	0.93	0.97	1.00	1.00	0.95	1.01	1.05	1.13			2.96	2.97	3.01
	velocity	5.02	8.50	8.25	9.14	8.76	8.50	8.50	8.95	8.42	8.10	9.29	7.90		8.61	8.59	8.47
Foster-Hylton, Brigitte (JAM)	time	2.61	3.63	4.63	5.61	6.59	7.54	8.54	9.52	10.53	11.56		12.66	9 / 6			
reaction time 0.167	interval		1.02	1.00	0.98	0.98	0.95	1.00	0.98	1.01	1.03	1.10			3.00	2.93	3.02
	velocity	4.98	8.33	8.50	8.67	8.67	8.95	8.50	8.67	8.42	8.25	9.55	7.90		8.50	8.70	8.44
Jones, Lolo (USA) (1982)	time	2.57	3.53	4.50	5.44	6.44	7.38	8.34	9.32	10.37	11.46		12.72	4 / 7			
reaction time 0.185	interval		0.96	0.97	0.94	1.00	0.94	0.96	0.98	1.05	1.09	1.26			2.87	2.90	3.12
	velocity	5.06	8.85	8.76	9.04	8.50	9.04	8.85	8.67	8.10	7.80	8.33	7.86		8.89	8.79	8.17
Claxton, Sarah (GBR) (1979)	time	2.59	3.62	4.63	5.63	6.63	7.62	8.62	9.66	10.69	11.77		12.94	2 / 8			
reaction time 0.163	interval		1.03	1.01	1.00	1.00	0.99	1.00	1.04	1.03	1.08	1.17			3.04	2.99	3.15
	velocity	5.02	8.25	8.42	8.50	8.50	8.59	8.50	8.17	8.25	7.87	8.97	7.73		8.39	8.53	8.10

Semi-Final 2

date 18-Aug-08 wind 0.2 m/s

Tsiokanos (2017) - race pattern of women's 100m hurdles: time analysis of olympic hurdle performance

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Cherry, Damu (USA) (1977)	time	2.59	3.62	4.59	5.55	6.52	7.52	8.52	9.52	10.52	11.54		12.62	8 / 1			
reaction time 0.189	interval		1.03	0.97	0.96	0.97	1.00	1.00	1.00	1.00	1.02	1.08			2.96	2.97	3.02
	velocity	5.02	8.25	8.76	8.85	8.76	8.50	8.50	8.50	8.50	8.33	9.72	7.92		8.61	8.59	8.44
Harper, Dawn (USA) (1984)	time	2.58	3.58	4.55	5.54	6.52	7.48	8.45	9.45	10.49	11.52		12.66	7 / 2			
reaction time 0.191	interval		1.00	0.97	0.99	0.98	0.96	0.97	1.00	1.04	1.03	1.14			2.96	2.91	3.07
	velocity	5.04	8.50	8.76	8.59	8.67	8.85	8.76	8.50	8.17	8.25	9.21	7.90		8.61	8.76	8.31
Foster-Hylton, Brigitte (JAM)	time	2.61	3.65	4.66	5.66	6.61	7.59	8.59	9.60	10.62	11.66		12.76	4 / 3			

reaction time 0.162	interval		1.04	1.01	1.00	0.95	0.98	1.00	1.01	1.02	1.04	1.10			3.05	2.93	3.07
	velocity	4.98	8.17	8.42	8.50	8.95	8.67	8.50	8.42	8.33	8.17	9.55	7.84		8.36	8.70	8.31
Claxton, Sarah (GBR) (1979)	time	2.57	3.60	4.59	5.58	6.53	7.53	8.53	9.55	10.61	11.66		12.84	3 / 4			
reaction time 0.145	interval		1.03	0.99	0.99	0.95	1.00	1.00	1.02	1.06	1.05	1.18			3.01	2.95	3.13
	velocity	5.06	8.25	8.59	8.59	8.95	8.50	8.50	8.33	8.02	8.10	8.90	7.79		8.47	8.64	8.15
Dixon, Vonette (JAM) (1975)	time	2.61	3.64	4.64	5.65	6.74	7.77	8.76	9.76	10.75	11.78		12.86	5 / 5			
reaction time 0.237	interval		1.03	1.00	1.01	1.09	1.03	0.99	1.00	0.99	1.03	1.08			3.04	3.11	3.02
	velocity	4.98	8.25	8.50	8.42	7.80	8.25	8.59	8.50	8.59	8.25	9.72	7.78		8.39	8.20	8.44
Okori, Reïna-Flor (FRA) (1980)	time	2.63	3.70	4.65	5.71	6.73	7.74	8.77	9.80	10.84	11.89		13.05	1 / 6			
reaction time 0.153	interval		1.07	0.95	1.06	1.02	1.01	1.03	1.03	1.04	1.05	1.16			3.08	3.06	3.12
	velocity	4.94	7.94	8.95	8.02	8.33	8.42	8.25	8.25	8.17	8.10	9.05	7.66		8.28	8.33	8.17
Kallur, Susanna (SWE) (1981)	0.198	no information available											dnf	6 / --			
Tejeda, Anay (CUB) (1983)	0.156	no information available											dnf	9 / --			

Semi-Final 1

date 18-Aug-08 wind 0.2 m/s

Tsiokanos (2017) - race pattern of women's 100m hurdles: time analysis of olympic hurdle performance

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Jones, Lolo (USA) (1982)	time	2.53	3.52	4.50	5.45	6.40	7.37	8.33	9.33	10.31	11.31		12.43	7 / 1			
reaction time 0.172	interval		0.99	0.98	0.95	0.95	0.97	0.96	1.00	0.98	1.00	1.12	PB		2.92	2.88	2.98
	velocity	5.14	8.59	8.67	8.95	8.95	8.76	8.85	8.50	8.67	8.50	9.38	8.05		8.73	8.85	8.56
Ennis-London, Delloreen (JAI	time	2.56	3.58	4.56	5.55	6.54	7.49	8.46	9.47	10.49	11.51		12.67	5 / 2			
reaction time 0.145	interval		1.02	0.98	0.99	0.99	0.95	0.97	1.01	1.02	1.02	1.16			2.99	2.91	3.05
	velocity	5.08	8.33	8.67	8.59	8.59	8.95	8.76	8.42	8.33	8.33	9.05	7.89		8.53	8.76	8.36
Lopes-Schliep, Priscilla (CAN)	time	2.51	3.56	4.58	5.57	6.58	7.54	8.50	9.52	10.57	11.59		12.68	6 / 3			
reaction time 0.159	interval		1.05	1.02	0.99	1.01	0.96	0.96	1.02	1.05	1.02	1.09			3.06	2.93	3.09
	velocity	5.18	8.10	8.33	8.59	8.42	8.85	8.85	8.33	8.10	8.33	9.63	7.89		8.33	8.70	8.25
McLellan, Sally (AUS) (1986)	time	2.54	3.55	4.54	5.53	6.51	7.51	8.52	9.52	10.54	11.57		12.70	9 / 4			
reaction time 0.140	interval		1.01	0.99	0.99	0.98	1.00	1.01	1.00	1.02	1.03	1.13			2.99	2.99	3.05
	velocity	5.12	8.42	8.59	8.59	8.67	8.50	8.42	8.50	8.33	8.25	9.29	7.87		8.53	8.53	8.36
Onyia, Josephine (ESP) (1986)	time	2.60	3.69	4.71	5.72	6.73	7.73	8.72	9.74	10.76	11.79		12.86	4 / ~~5~~			
reaction time 0.203	interval		1.09	1.02	1.01	1.01	1.00	0.99	1.02	1.02	1.03	1.07	DV		3.12	3.00	3.07
	velocity	5.00	7.80	8.33	8.42	8.42	8.50	8.59	8.33	8.33	8.25	9.81	7.78		8.17	8.50	8.31
Trywiańska-Kollasch, Aurelia (	time	2.56	3.69	4.70	5.72	6.73	7.75	8.75	9.76	10.79	11.84		12.96	3 / ~~6~~ 5			
reaction time 0.118	interval		1.13	1.01	1.02	1.01	1.02	1.00	1.01	1.03	1.05	1.12			3.16	3.03	3.09
	velocity	5.08	7.52	8.42	8.33	8.42	8.33	8.50	8.42	8.25	8.10	9.37	7.72		8.07	8.42	8.25
Nytra, Carolin (GER) (1985)	time	2.60	3.63	4.66	5.67	6.68	7.70	8.73	9.75	10.79	11.87		12.99	2 / ~~7~~ 6			
reaction time 0.144	interval		1.03	1.03	1.01	1.01	1.02	1.03	1.02	1.04	1.08	1.12			3.07	3.06	3.14
	velocity	5.00	8.25	8.25	8.42	8.42	8.33	8.25	8.33	8.17	7.87	9.37	7.70		8.31	8.33	8.12
Yanit, Nevin (TUR) (1986)	time	2.62	3.68	4.70	5.72	6.73	7.76	8.81	9.87	11.10	12.19		13.28	8 / ~~8~~ 7			
reaction time 0.201	interval		1.06	1.02	1.02	1.01	1.03	1.05	1.06	1.23	1.09	1.09			3.10	3.09	3.38
	velocity	4.96	8.02	8.33	8.33	8.42	8.25	8.10	8.02	6.91	7.80	9.63	7.53		8.23	8.25	7.54

2008 USA Olympic Trials (Eugene, OR)

FINAL

date 06-Jul-08 wind 3.8 m/s

USATF Hurdle Development (2008)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Jones, Lolo (USA) (1982)	time	2.56	3.53	4.48	5.45	6.38	7.32	8.25	9.22	10.19	11.21		12.29	4 / 1			
reaction time	interval		0.97	0.95	0.97	0.93	0.94	0.93	0.97	0.97	1.02	1.08			2.89	2.80	2.96
	velocity	5.08	8.76	8.95	8.76	9.14	9.04	9.14	8.76	8.76	8.33	9.72	8.14		8.82	9.11	8.61
Cherry, Damu (USA) (1977)	time	2.56	3.58	4.55	5.52	6.48	7.45	8.44	9.44	10.44	11.51		12.58	6 / 2			
reaction time	interval		1.02	0.97	0.97	0.96	0.97	0.99	1.00	1.00	1.07	1.07			2.96	2.92	3.07
	velocity	5.08	8.33	8.76	8.76	8.85	8.76	8.59	8.50	8.50	7.94	9.81	7.95		8.61	8.73	8.31
Harper, Dawn (USA) (1984)	time	2.58	3.57	4.55	5.50	6.45	7.39	8.34	9.39	10.46	11.46		12.62	2 / 3			
reaction time	interval		0.99	0.98	0.95	0.95	0.94	0.95	1.05	1.07	1.00	1.16			2.92	2.84	3.12
	velocity	5.04	8.59	8.67	8.95	8.95	9.04	8.95	8.10	7.94	8.50	9.05	7.92		8.73	8.98	8.17
Denby, Nichole (USA) (1982)	time	2.60	3.58	4.57	5.53	6.50	7.50	8.47	9.47	10.47	11.49		12.62	5 / 4			
reaction time	interval		0.98	0.99	0.96	0.97	1.00	0.97	1.00	1.00	1.02	1.13			2.93	2.94	3.02
	velocity	5.00	8.67	8.59	8.85	8.76	8.50	8.76	8.50	8.50	8.33	9.29	7.92		8.70	8.67	8.44
Davis, Candice (USA) (1985)	time	2.58	3.58	4.58	5.57	6.52	7.49	8.49	9.47	10.49	11.52		12.66	1 / 5			
reaction time	interval		1.00	1.00	0.99	0.95	0.97	1.00	0.98	1.02	1.03	1.14			2.99	2.92	3.03
	velocity	5.04	8.50	8.50	8.59	8.95	8.76	8.50	8.67	8.33	8.25	9.21	7.90		8.53	8.73	8.42
Crawford, Virginia (Ginnie) (U	time	2.56	3.58	4.58	5.55	6.55	7.54	8.52	9.50	10.51	11.59		12.74	8 / 6			
reaction time	interval		1.02	1.00	0.97	1.00	0.99	0.98	0.98	1.01	1.08	1.15			2.99	2.97	3.07

	velocity	5.08	8.33	8.50	8.76	8.50	8.59	8.67	8.67	8.42	7.87	9.13	7.85		8.53	8.59	8.31
Hayes, Joanna (USA) (1976)	time	2.61	3.60	4.55	5.48	6.47	7.57	8.60	9.64	10.71	11.79		12.96	7 / 7			
reaction time	interval		0.99	0.95	0.93	0.99	1.10	1.03	1.04	1.07	1.08	1.17			2.87	3.12	3.19
	velocity	4.98	8.59	8.95	9.14	8.59	7.73	8.25	8.17	7.94	7.87	8.97	7.72		8.89	8.17	7.99

2008 Nambu Chuhei Memorial (Harodate, JPN)

FINAL date 06-Jul-08 wind 1.8 m/s *Akirabun (2009) - race analysis of 2008 men's and women's 100m and 110m & 100m hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ishino, Mami (JPN) (1983)	time	2.60	3.67	4.71	5.75	6.78	7.81	8.86	9.91	10.97	12.06		13.39	/ 2			
reaction time	interval		1.07	1.04	1.04	1.03	1.03	1.05	1.05	1.06	1.09	1.33			3.15	3.11	3.20
	velocity	5.00	7.94	8.17	8.17	8.25	8.25	8.10	8.10	8.02	7.80	7.89	7.47		8.10	8.20	7.97
Kumagai, Fumiko (JPN) (1984)	time	2.58	3.69	4.77	5.83	6.88	7.93	8.98	10.05	11.14	12.25		13.58	/ 3			
reaction time	interval		1.11	1.08	1.06	1.05	1.05	1.05	1.07	1.09	1.11	1.33			3.25	3.15	3.27
	velocity	5.04	7.66	7.87	8.02	8.10	8.10	8.10	7.94	7.80	7.66	7.89	7.36		7.85	8.10	7.80

2008 Japanese National Championships (Kawasaki, JPN)

FINAL date 28-Jun-08 wind -1.5 m/s *Akirabun (2009) - race analysis of 2008 men's and women's 100m and 110m & 100m hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Terada, Asuka (JPN) (1990)	time	2.48	3.57	4.64	5.69	6.75	7.79	8.85	9.92	11.00	12.13		13.51	/ 1			
reaction time	interval		1.09	1.07	1.05	1.06	1.04	1.06	1.07	1.08	1.13	1.38			3.21	3.16	3.28
	velocity	5.24	7.80	7.94	8.10	8.02	8.17	8.02	7.94	7.87	7.52	7.61	7.40		7.94	8.07	7.77
Joshita, Rena (JPN) (1986)	time	2.46	3.54	4.62	5.68	6.74	7.80	8.87	9.94	11.04	12.13		13.53	/ 2			
reaction time	interval		1.08	1.08	1.06	1.06	1.06	1.07	1.07	1.10	1.09	1.40			3.22	3.19	3.26
	velocity	5.28	7.87	7.87	8.02	8.02	8.02	7.94	7.94	7.73	7.80	7.50	7.39		7.92	7.99	7.82
Ishino, Mami (JPN) (1983)	time	2.53	3.63	4.70	5.77	6.82	7.87	8.94	10.01	11.11	12.22		13.59	/ 3			
reaction time	interval		1.10	1.07	1.07	1.05	1.05	1.07	1.07	1.10	1.11	1.37			3.24	3.17	3.28
	velocity	5.14	7.73	7.94	7.94	8.10	8.10	7.94	7.94	7.73	7.66	7.66	7.36		7.87	8.04	7.77
Kumagai, Fumiko (JPN) (1984)	time	2.50	3.61	4.70	5.78	6.86	7.93	9.02	10.12	11.24	12.36		13.72	/ 4			
reaction time	interval		1.11	1.09	1.08	1.08	1.07	1.09	1.10	1.12	1.12	1.36			3.28	3.24	3.34
	velocity	5.20	7.66	7.80	7.87	7.87	7.94	7.80	7.73	7.59	7.59	7.72	7.29		7.77	7.87	7.63

2008 ISTAF (Berlin, GER) (TV Analysis)

FINAL date 01-Jun-08 wind 0.8 m/s *Graubner (2008) - http://www.fgs.uni-halle.de*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Onyia, Josephine (ESP) (1986)	time	2.58	3.60	4.58	5.55	6.51	7.48	8.46	9.43	10.41	11.42		12.50	/ 1			
reaction time 0.178	interval		1.02	0.98	0.97	0.96	0.97	0.98	0.97	0.98	1.01	1.08	NR		2.97	2.91	2.96
	velocity	5.04	8.33	8.67	8.76	8.85	8.76	8.67	8.76	8.67	8.42	9.72	8.00		8.59	8.76	8.61
Kallur, Susanna (SWE) (1981)	time	2.58	3.57	4.55	5.52	6.49	7.46	8.42	9.40	10.41	11.44		12.54	/ 2			
reaction time 0.203	interval		0.99	0.98	0.97	0.97	0.97	0.96	0.98	1.01	1.03	1.10			2.94	2.90	3.02
	velocity	5.04	8.59	8.67	8.76	8.76	8.76	8.85	8.67	8.42	8.25	9.55	7.97		8.67	8.79	8.44

2008 Mikio Oda Memorial (Hiroshima, JPN)

FINAL date 29-Apr-08 wind -0.1 m/s *Akirabun (2009) - race analysis of 2008 men's and women's 100m and 110m & 100m hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Imura, Kumiko (JPN) (1983)	time	2.48	3.57	4.62	5.67	6.71	7.75	8.80	9.86	10.94	12.04		13.36	/ 1			
reaction time	interval		1.09	1.05	1.05	1.04	1.04	1.05	1.06	1.08	1.10	1.32			3.19	3.13	3.24
	velocity	5.24	7.80	8.10	8.10	8.17	8.17	8.10	8.02	7.87	7.73	7.95	7.49		7.99	8.15	7.87
Terada, Asuka (JPN) (1990)	time	2.50	3.60	4.68	5.73	6.78	7.84	8.90	9.96	11.05	12.14		13.46	/ 2			
reaction time	interval		1.10	1.08	1.05	1.05	1.06	1.06	1.06	1.09	1.09	1.32			3.23	3.17	3.24
	velocity	5.20	7.73	7.87	8.10	8.10	8.02	8.02	8.02	7.80	7.80	7.95	7.43		7.89	8.04	7.87

B FINAL date 29-Apr-08 wind -0.9 m/s *Akirabun (2009) - race analysis of 2008 men's and women's 100m and 110m & 100m hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kawafune, Manami (JPN) (198	time	2.57	3.72	4.84	5.94	7.05	8.17	9.30	10.44	11.59	12.75		14.15	/ 2			
reaction time	interval		1.15	1.12	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.40			3.37	3.36	3.45
	velocity	5.06	7.39	7.59	7.73	7.66	7.59	7.52	7.46	7.39	7.33	7.50	7.07		7.57	7.59	7.39

2008 BW-Bank (Karlsruhe, GER)

FINAL date 10-Feb-08 *Blomkvist (2010) - www.sub13.se*

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4
Kallur, Susanna (SWE) (1981)	time	2.42	3.40	4.36	5.32	6.26		7.68	/ 1	
reaction time	interval		0.98	0.96	0.96	0.94	1.42	WR		2.90
	velocity	5.37	8.67	8.85	8.85	9.04	9.15	7.81		8.79

2007 Seiko Super Grand Prix (Yokohama, JPN)

FINAL date 30-Sep-07 wind -0.8 m/s *Akirabun (2008) - 2007 speed analysis of the men's & women's 100m, 100m hurdles, & 110m hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
McLellan, Sally (AUS) (1986)	time	2.49	3.58	4.64	5.69	6.73	7.76	8.79	9.84	10.90	11.97		13.27	/ 1			
reaction time	interval		1.09	1.06	1.05	1.04	1.03	1.03	1.05	1.06	1.07	1.30			3.20	3.10	3.18

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

	velocity	5.22	7.80	8.02	8.10	8.17	8.25	8.25	8.10	8.02	7.94	8.08	7.54		7.97	8.23	8.02
Imura, Kumiko (JPN) (1981)	time	2.57	3.65	4.71	5.75	6.77	7.81	8.85	9.93	11.00	12.11		13.48	/ 2			
reaction time	interval		1.08	1.06	1.04	1.02	1.04	1.04	1.08	1.07	1.11	1.37			3.18	3.10	3.26
	velocity	5.06	7.87	8.02	8.17	8.33	8.17	8.17	7.87	7.94	7.66	7.66	7.42		8.02	8.23	7.82

2007 IAAF World Athletic Final (Stuttgart, GER)

FINAL

date 22-Sep-07 wind -0.3 m/s

Graubner (2007) - http://www.fgs.uni-halle.de

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Perry, Michelle (USA) (1979)	time	2.59	3.62	4.62	5.62	6.60	7.58	8.58	9.57	10.56	11.58		12.68	6 / 1			
reaction time 0.132	interval		1.03	1.00	1.00	0.98	0.98	1.00	0.99	0.99	1.02	1.10			3.03	2.96	3.00
	velocity	5.02	8.25	8.50	8.50	8.67	8.67	8.50	8.59	8.59	8.33	9.55	7.89		8.42	8.61	8.50
Onyia, Josephine (ESP) (1986)	time	2.57	3.62	4.62	5.60	6.60	7.58	8.56	9.57	10.59	11.62		12.70	2 / 2			
reaction time 0.159	interval		1.05	1.00	0.98	1.00	0.98	0.98	1.01	1.02	1.03	1.08			3.03	2.96	3.06
	velocity	5.06	8.10	8.50	8.67	8.50	8.67	8.67	8.42	8.33	8.25	9.72	7.87		8.42	8.61	8.33
Ennis-London, Delloreen (JAI	time	2.60	3.63	4.64	5.62	6.60	7.57	8.56	9.56	10.56	11.59		12.72	3 / 3			
reaction time 0.159	interval		1.03	1.01	0.98	0.98	0.97	0.99	1.00	1.00	1.03	1.13			3.02	2.94	3.03
	velocity	5.00	8.25	8.42	8.67	8.67	8.76	8.59	8.50	8.50	8.25	9.29	7.86		8.44	8.67	8.42
Felicien, Perdita (CAN) (1980)	time	2.64	3.67	4.68	5.65	6.63	7.61	8.64	9.66	10.68	11.72		12.83	5 / 4			
reaction time 0.182	interval		1.03	1.01	0.97	0.98	0.98	1.03	1.02	1.02	1.04	1.11			3.01	2.99	3.08
	velocity	4.92	8.25	8.42	8.76	8.67	8.67	8.25	8.33	8.33	8.17	9.46	7.79		8.47	8.53	8.28
Dixon, Vonette (JAM) (1975)	time	2.64	3.66	4.68	5.67	6.67	7.68	8.68	9.72	10.74	11.79		12.90	7 / 5			
reaction time 0.212	interval		1.02	1.02	0.99	1.00	1.01	1.00	1.04	1.02	1.05	1.11			3.03	3.01	3.11
	velocity	4.92	8.33	8.33	8.59	8.50	8.42	8.50	8.17	8.33	8.10	9.46	7.75		8.42	8.47	8.20
Kallur, Susanna (SWE) (1981)	no information available												DQ	4 /			
Jones, Lolo (USA) (1982)	no information available												DQ	8 /			
McLellan, Sally (AUS) (1986)	no information available												DQ	1 /			

2007 ISTAF (Berlin, GER) (TV Analysis)

FINAL

date 16-Sep-07 wind 0.9 m/s

Graubner (2008) - http://www.fgs.uni-halle.de

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kallur, Susanna (SWE) (1981)	time	2.51	3.51	4.49	5.46	6.42	7.37	8.33	9.32	10.33	11.35		12.49	3 / 1			
reaction time 0.153	interval		1.00	0.98	0.97	0.96	0.95	0.96	0.99	1.01	1.02	1.14	PB		2.95	2.87	3.02
	velocity	5.18	8.50	8.67	8.76	8.85	8.95	8.85	8.59	8.42	8.33	9.21	8.01		8.64	8.89	8.44

Shibayama (2008) - analysis of racing patterns in the men's 110m & women's 100m sprint hurdles

2007 IAAF World Championships (Osaka, JPN)

Graubner (2008) - http://www.fgs.uni-halle.de (TV Analysis)

FINAL

date 29-Aug-07 wind -0.1 m/s

Ae (2008) - IAAF biomechanics team - a booklet of biomechanics data

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Perry, Michelle (USA) (1979)	time	2.40	3.42	4.40	5.35	6.32	7.28	8.27	9.24	10.34	11.27		12.46	6 / 1			*Ae (2008)*
reaction time 0.105	interval		1.02	0.98	0.95	0.97	0.96	0.99	0.97	1.10	0.93	1.19			2.95	2.92	3.00
	velocity	5.42	8.33	8.67	8.95	8.76	8.85	8.59	8.76	7.73	9.14	8.82	8.03		8.64	8.73	8.50
Felicien, Perdita (CAN) (1980)	time	2.48	3.45	4.43	5.42	6.36	7.30	8.28	9.25	10.25	11.27		12.49	4 / 2			*Ae (2008)*
reaction time 0.132	interval		0.97	0.98	0.99	0.94	0.94	0.98	0.97	1.00	1.02	1.22			2.94	2.86	2.99
	velocity	5.24	8.76	8.67	8.59	9.04	9.04	8.67	8.76	8.50	8.33	8.61	8.01		8.67	8.92	8.53
Ennis-London, Delloreen (JAI	time	2.42	3.45	4.41	5.38	6.33	7.28	8.27	9.26	10.27	11.25		12.50	3 / 3			*Ae (2008)*
reaction time 0.116	interval		1.03	0.96	0.97	0.95	0.95	0.99	0.99	1.01	0.98	1.25	PB		2.96	2.89	2.98
	velocity	5.37	8.25	8.85	8.76	8.95	8.95	8.59	8.59	8.42	8.67	8.40	8.00		8.61	8.82	8.56
Kallur, Susanna (SWE) (1981)	time	2.54	3.53	4.50	5.48	6.43	7.40	8.36	9.34	10.34	11.38		12.51	5 / 4			*Graubner (2008)*
reaction time 0.142	interval		0.99	0.97	0.98	0.95	0.97	0.96	0.98	1.00	1.04	1.13	PB		2.94	2.88	3.02
	velocity	5.12	8.59	8.76	8.67	8.95	8.76	8.85	8.67	8.50	8.17	9.29	7.99		8.67	8.85	8.44
Crawford, Virginia (Ginnie) (U	time	2.55	3.57	4.55	5.52	6.47	7.44	8.41	9.39	10.37	11.39		12.55	9 / 5			*Shibayama (2008)*
reaction time 0.120	interval		1.02	0.98	0.97	0.95	0.97	0.97	0.98	0.98	1.02	1.16			2.97	2.89	2.98
	velocity	5.10	8.33	8.67	8.76	8.95	8.76	8.76	8.67	8.67	8.33	9.05	7.97		8.59	8.82	8.56
Jones, Lolo (USA) (1982)	0.140	no information available											12.62	2 / 6			
Dixon, Vonette (JAM) (1975)	0.161	no information available										PB	12.64	8 / 7			
Whyte, Angela (CAN) (1980)	0.138	no information available											12.66	7 / 8			

Semi-Final 2

date 28-Aug-07 wind -0.1 m/s

Shibayama (2008) - analysis of racing patterns in the men's 110m & women's 100m sprint hurdles

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Perry, Michelle (USA) (1979)	time	2.57	3.57	4.57	5.54	6.52	7.50	8.48	9.46	10.44	11.47		12.55	5 / 1			
reaction time 0.137	interval		1.00	1.00	0.97	0.98	0.98	0.98	0.98	0.98	1.03	1.08			2.97	2.94	2.99
	velocity	5.06	8.50	8.50	8.76	8.67	8.67	8.67	8.67	8.67	8.25	9.72	7.97		8.59	8.67	8.53
Felicien, Perdita (CAN) (1980)	time	2.64	3.66	4.63	5.61	6.56	7.54	8.52	9.52	10.50	11.52		12.61	6 / 2			
reaction time 0.133	interval		1.02	0.97	0.98	0.95	0.98	0.98	1.00	0.98	1.02	1.09			2.97	2.91	3.00
	velocity	4.92	8.33	8.76	8.67	8.95	8.67	8.67	8.50	8.67	8.33	9.63	7.93		8.59	8.76	8.50

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Crawford, Virginia (Ginnie) (U		time	2.62	3.64	4.62	5.60	6.58	7.55	8.53	9.53	10.53	11.55		12.67	7 / 4			
reaction time 0.133		interval		1.02	0.98	0.98	0.98	0.97	0.98	1.00	1.00	1.02	1.12			2.98	2.93	3.02
		velocity	4.96	8.33	8.67	8.67	8.67	8.76	8.67	8.50	8.50	8.33	9.38	7.89		8.56	8.70	8.44

Heat 4

date 27-Aug-07 wind 0.4 m/s *Kawakami (2010) - improving women's 100m hurdle of japanese hurdler- analysis of race patterns based on touchdown times*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Berings, Eline (BEL) (1986)		time	2.65	3.67	4.70	5.72	6.75	7.75	8.79	9.79	10.82	11.87		12.97	5 / 6			
reaction time 0.124		interval		1.02	1.03	1.02	1.03	1.00	1.04	1.00	1.03	1.05	1.10	NR		3.07	3.07	3.08
		velocity	4.91	8.33	8.25	8.33	8.25	8.50	8.17	8.50	8.25	8.10	9.55	7.71		8.31	8.31	8.28
Ishino, Mami (JPN) (1983)		time	2.71	3.74	4.76	5.79	6.82	7.84	8.89	9.94	11.01	12.09		13.29	3 / 8			
reaction time 0.172		interval		1.03	1.02	1.03	1.03	1.02	1.05	1.05	1.07	1.08	1.20			3.08	3.10	3.20
		velocity	4.80	8.25	8.33	8.25	8.25	8.33	8.10	8.10	7.94	7.87	8.75	7.52		8.28	8.23	7.97

Heat 3

date 27-Aug-07 wind -0.8 m/s *Shibayama (2008) - analysis of racing patterns in the men's 110m & women's 100m sprint hurdles*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)		time	2.65	3.67	4.67	5.64	6.61	7.58	8.60	9.62	10.62	11.67		12.73	8 / 1			
reaction time 0.143		interval		1.02	1.00	0.97	0.97	0.97	1.02	1.02	1.00	1.05	1.06			2.99	2.96	3.07
		velocity	4.91	8.33	8.50	8.76	8.76	8.76	8.33	8.33	8.50	8.10	9.91	7.86		8.53	8.61	8.31
Crawford, Virginia (Ginnie) (U		time	2.64	3.66	4.66	5.64	6.62	7.60	8.60	9.58	10.60	11.63		12.74	6 / 1			
reaction time 0.151		interval		1.02	1.00	0.98	0.98	0.98	1.00	0.98	1.02	1.03	1.11			3.00	2.96	3.03
		velocity	4.92	8.33	8.50	8.67	8.67	8.67	8.50	8.67	8.33	8.25	9.46	7.85		8.50	8.61	8.42

Heat 1

date 27-Aug-07 wind 0.2 m/s *Shibayama (2008) - analysis of racing patterns in the men's 110m & women's 100m sprint hurdles*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Perry, Michelle (USA) (1979)		time	2.57	3.59	4.59	5.59	6.57	7.55	8.55	9.55	10.55	11.62		12.72	5 / 1			
reaction time 0.129		interval		1.02	1.00	1.00	0.98	0.98	1.00	1.00	1.00	1.07	1.10			3.02	2.96	3.07
		velocity	5.06	8.33	8.50	8.50	8.67	8.67	8.50	8.50	8.50	7.94	9.55	7.86		8.44	8.61	8.31

2007 Pan American Games (Rio de Janerio, BRA)

FINAL

date 25-Jul-07 wind 0.0 m/s *Winckler (2009) - UK Athletics- National Coaching Conference*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ennis, Delloreen (JAM	0.152	no information available											CR	12.65	/ 1			
Felicien, Perdita (CAN) (1980)		time	2.62	3.63	4.63	5.62	6.58	7.55	8.52	9.51	10.52	11.54		12.65	/ 2			
reaction time 0.150		interval		1.01	1.00	0.99	0.96	0.97	0.97	0.99	1.01	1.02	1.11	CR		3.00	2.90	3.02
		velocity	4.96	8.42	8.50	8.59	8.85	8.76	8.76	8.59	8.42	8.33	9.46	7.91		8.50	8.79	8.44
Whyte, Angela (CAN) (1980)	0.167	no information available												12.72	/ 3			
Dixon, Vonette (JAM) (1975)	0.201	no information available												12.86	/ 4			
Tejada, Anay (CUB) (1983)	0.218	no information available												12.95	/ 5			
Adams, Jenny (USA) (1978)	0.225	no information available												13.15	/ 6			
Faustin-Park, Nadine (HAI) (19	0.227	no information available												13.26	/ 7			
Lewis, Yvette (USA) (1985)	0.257	no information available												13.69	/ 8			

Heat 3

date 24-Jul-07 wind 0.2 m/s *Winckler (2009) - UK Athletics- National Coaching Conference*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)		time	2.62	3.65	4.62	5.58	6.55	7.52	8.50	9.50	10.52	11.56		12.69	/ 1			
reaction time		interval		1.03	0.97	0.96	0.97	0.97	0.98	1.00	1.02	1.04	1.13			2.96	2.92	3.06
		velocity	4.96	8.25	8.76	8.85	8.76	8.76	8.67	8.50	8.33	8.17	9.29	7.88		8.61	8.73	8.33

2007 Canadian National Championships (Windsor, CAN)

FINAL

date 14-Jul-07 wind 4.3 m/s *Winckler (2009) - UK Athletics- National Coaching Conference*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)		time	2.65	3.65	4.62	5.57	6.52	7.45	8.40	9.40	10.39	11.39		12.50	/ 1			
reaction time		interval		1.00	0.97	0.95	0.95	0.93	0.95	1.00	0.99	1.00	1.11			2.92	2.83	2.99
		velocity	4.91	8.50	8.76	8.95	8.95	9.14	8.95	8.50	8.59	8.50	9.46	8.00		8.73	9.01	8.53

2007 European Cup (Munich, GER)

FINAL

date 24-Jun-07 wind 0.9 m/s *Graubner (2007) - http://www.fgs.uni-halle.de*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Snihur, Yevheniya (UKR) (198		time	2.60	3.64	4.66	5.66	6.66	7.67	8.68	9.69	10.72	11.77		12.92	/ 1			
reaction time 0.129		interval		1.04	1.02	1.00	1.00	1.01	1.01	1.01	1.03	1.05	1.15			3.06	3.02	3.09
		velocity	5.00	8.17	8.33	8.50	8.50	8.42	8.42	8.42	8.25	8.10	9.13	7.74		8.33	8.44	8.25
Lamalle, Adrianna (FRA) (198		time	2.72	3.80	4.83	5.84	6.83	7.82	8.80	9.79	10.80	11.82		12.94	/ 2			
reaction time 0.169		interval		1.08	1.03	1.01	0.99	0.99	0.98	0.99	1.01	1.02	1.12			3.12	2.96	3.02
		velocity	4.78	7.87	8.25	8.42	8.59	8.59	8.67	8.59	8.42	8.33	9.38	7.73		8.17	8.61	8.44
Antonova, Aleksandra (RUS) (		time	2.63	3.66	4.69	5.69	6.68	7.67	8.70	9.72	10.78	11.84		12.97	/ 3			
reaction time 0.118		interval		1.03	1.03	1.00	0.99	0.99	1.03	1.02	1.06	1.06	1.13			3.06	3.01	3.14
		velocity	4.94	8.25	8.25	8.50	8.59	8.59	8.25	8.33	8.02	8.02	9.29	7.71		8.33	8.47	8.12
Funck, Annette (GER) (1977)		time	2.60	3.63	4.66	5.68	6.69	7.73	8.77	9.83	10.89	11.96		13.14	/ 4			
reaction time 0.111		interval		1.03	1.03	1.02	1.01	1.04	1.04	1.06	1.06	1.07	1.18	PB		3.08	3.09	3.19

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

	velocity	5.00	8.25	8.25	8.33	8.42	8.17	8.17	8.02	8.02	7.94	8.90	7.61		8.28	8.25	7.99
Redoúmi, Flóra (GRE) (1976)	time	2.72	3.76	4.78	5.81	6.81	7.83	8.84	9.87	10.92	11.98		13.15	/ 5			
reaction time 0.222	interval		1.04	1.02	1.03	1.00	1.02	1.01	1.03	1.05	1.06	1.17			3.09	3.03	3.14
	velocity	4.78	8.17	8.33	8.25	8.50	8.33	8.42	8.25	8.10	8.02	8.97	7.60		8.25	8.42	8.12
Valadzko, Yauhenia (BLR) (19	time	2.76	3.80	4.83	5.84	6.85	7.88	8.89	9.93	10.99	12.09		13.25	/ 6			
reaction time 0.248	interval		1.04	1.03	1.01	1.01	1.03	1.01	1.04	1.06	1.10	1.16			3.08	3.05	3.20
	velocity	4.71	8.17	8.25	8.42	8.42	8.25	8.42	8.17	8.02	7.73	9.05	7.55		8.28	8.36	7.97
Kocielnik, Joanna (POL) (1983	time	2.78	3.84	4.90	5.96	7.00	8.02	9.06	10.10	11.16	12.24		13.35	/ 7			
reaction time 0.249	interval		1.06	1.06	1.06	1.04	1.02	1.04	1.04	1.06	1.08	1.11			3.18	3.10	3.18
	velocity	4.68	8.02	8.02	8.02	8.17	8.33	8.17	8.17	8.02	7.87	9.46	7.49		8.02	8.23	8.02
Troppa, Claudia (ESP) (1985)	time	2.78	3.85	4.97	6.04	7.12	8.18	9.26	10.33	11.42	12.54		13.77	/ 8			
reaction time 0.147	interval		1.07	1.12	1.07	1.08	1.06	1.08	1.07	1.09	1.12	1.23			3.26	3.22	3.28
	velocity	4.68	7.94	7.59	7.94	7.87	8.02	7.87	7.94	7.80	7.59	8.54	7.26		7.82	7.92	7.77

2007 USATF National Championship (Indianapolis, IN)

FINAL date 23-Jun-07 wind -1.3 m/s *USATF Men's Hurdle Development (2007)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Crawford, Virginia (Ginnie) (U	time	2.59	3.57	4.57	5.56	6.55	7.53	8.51	9.51	10.50	11.53		12.63	/ 1			
reaction time	interval		0.98	1.00	0.99	0.99	0.98	0.98	1.00	0.99	1.03	1.10			2.97	2.95	3.02
	velocity	5.02	8.67	8.50	8.59	8.59	8.67	8.67	8.50	8.59	8.25	9.55	7.92		8.59	8.64	8.44
Perry, Michelle (USA) (1979)	time	2.59	3.62	4.62	5.61	6.51	7.59	8.59	9.58	10.61	11.63		12.72	/ 2			
reaction time	interval		1.03	1.00	0.99	0.90	1.08	1.00	0.99	1.03	1.02	1.09			3.02	2.98	3.04
	velocity	5.02	8.25	8.50	8.59	9.44	7.87	8.50	8.59	8.25	8.33	9.63	7.86		8.44	8.56	8.39
Jones, Lolo (USA) (1982)	time	2.64	3.62	4.62	5.61	6.59	7.59	8.59	9.59	10.59	11.64		12.79	/ 3			
reaction time	interval		0.98	1.00	0.99	0.98	1.00	1.00	1.00	1.00	1.05	1.15			2.97	2.98	3.05
	velocity	4.92	8.67	8.50	8.59	8.67	8.50	8.50	8.50	8.50	8.10	9.13	7.82		8.59	8.56	8.36
Denby, Nichole (USA) (1982)	time	2.64	3.67	4.70	5.69	6.71	7.72	8.73	9.74	10.76	11.80		12.82	/ 4			
reaction time	interval		1.03	1.03	0.99	1.02	1.01	1.01	1.01	1.02	1.04	1.02			3.05	3.04	3.07
	velocity	4.92	8.25	8.25	8.59	8.33	8.42	8.42	8.42	8.33	8.17	10.29	7.80		8.36	8.39	8.31
Cherry, Damu (USA) (1977)	time	2.60	3.60	4.62	5.62	6.62	7.61	8.61	9.63	10.64	11.70		12.89	/ 5			
reaction time	interval		1.00	1.02	1.00	1.00	0.99	1.00	1.02	1.01	1.06	1.19			3.02	2.99	3.09
	velocity	5.00	8.50	8.33	8.50	8.50	8.59	8.50	8.33	8.42	8.02	8.82	7.76		8.44	8.53	8.25
Adams, Jenny (USA) (1978)	time	2.67	3.69	4.70	5.69	6.71	7.70	8.73	9.73	10.76	11.81		12.96	/ 6			
reaction time	interval		1.02	1.01	0.99	1.02	0.99	1.03	1.00	1.03	1.05	1.15			3.02	3.04	3.08
	velocity	4.87	8.33	8.42	8.59	8.33	8.59	8.25	8.50	8.25	8.10	9.13	7.72		8.44	8.39	8.28
Carruthers, Danielle (USA) (19	time	2.64	3.69	4.70	5.71	6.74	7.76	8.79	9.81	10.83	11.86		12.98	/ 7			
reaction time	interval		1.05	1.01	1.01	1.03	1.02	1.03	1.02	1.02	1.03	1.12			3.07	3.08	3.07
	velocity	4.92	8.10	8.42	8.42	8.25	8.33	8.25	8.33	8.33	8.25	9.37	7.70		8.31	8.28	8.31
Harper, Dawn (USA) (1984)	time	2.65	3.69	4.70	5.71	6.72	7.74	8.79	9.81	10.86	11.95		13.07	/ 8			
reaction time	interval		1.04	1.01	1.01	1.01	1.02	1.05	1.02	1.05	1.09	1.12			3.06	3.08	3.16
	velocity	4.91	8.17	8.42	8.42	8.42	8.33	8.10	8.33	8.10	7.80	9.37	7.65		8.33	8.28	8.07

2007 Osaka Grand Prix (Osaka, JPN)

FINAL date 05-May-07 wind 0.0 m/s *Akirabun (2008) - 2007 speed analysis of the men's & women's 100m, 100m hurdles, & 110m hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Carruthers, Danielle (USA) (19	time	2.48	3.55	4.58	5.58	6.58	7.58	8.58	9.59	10.62	11.65		12.90	/ 3			
reaction time	interval		1.07	1.03	1.00	1.00	1.00	1.00	1.01	1.03	1.03	1.25			3.10	3.00	3.07
	velocity	5.24	7.94	8.25	8.50	8.50	8.50	8.50	8.42	8.25	8.25	8.40	7.75		8.23	8.50	8.31
Trywianska, Aurelia (POL) (197	time	2.52	3.57	4.59	5.59	6.59	7.60	8.60	9.62	10.64	11.68		12.93	/ 4			
reaction time	interval		1.05	1.02	1.00	1.00	1.01	1.00	1.02	1.02	1.04	1.25			3.07	3.01	3.08
	velocity	5.16	8.10	8.33	8.50	8.50	8.42	8.50	8.33	8.33	8.17	8.40	7.73		8.31	8.47	8.28
Imura, Kumiko (JPN) (1981)	time	2.50	3.57	4.62	5.68	6.73	7.79	8.87	9.95	11.04	12.15		13.50	/ 6			
reaction time	interval		1.07	1.05	1.06	1.05	1.06	1.08	1.08	1.09	1.11	1.35			3.18	3.19	3.28
	velocity	5.20	7.94	8.10	8.02	8.10	8.02	7.87	7.87	7.80	7.66	7.78	7.41		8.02	7.99	7.77

2007 Mikio Oda Memorial (Hiroshima, JPN)

FINAL date 29-Apr-07 wind 1.4 m/s *Akirabun (2008) - 2007 speed analysis of the men's & women's 100m, 100m hurdles, & 110m hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Trywianska, Aurelia (POL) (197	time	2.47	3.51	4.52	5.51	6.49	7.48	8.48	9.49	10.53	11.57		12.83	/ 1			
reaction time	interval		1.04	1.01	0.99	0.98	0.99	1.00	1.01	1.04	1.04	1.26			3.04	2.97	3.09
	velocity	5.26	8.17	8.42	8.59	8.67	8.59	8.50	8.42	8.17	8.17	8.33	7.79		8.39	8.59	8.25
Imura, Kumiko (JPN) (1981)	time	2.53	3.59	4.62	5.62	6.62	7.62	8.62	9.64	10.68	11.74		13.02	/ 2			
reaction time	interval		1.06	1.03	1.00	1.00	1.00	1.00	1.02	1.04	1.06	1.28	PB		3.09	3.00	3.12

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
	velocity	5.14	8.02	8.25	8.50	8.50	8.50	8.50	8.33	8.17	8.02	8.20	7.68		8.25	8.50	8.17

2006 IAAF World Athletic Final (Stuttgart, GER) (TV Analysis)

FINAL date 10-Sep-06 wind 0.6 m/s *Graubner (2008) - http://www.fgs.uni-halle.de*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Perry, Michelle (USA) (1979)		time	2.58	3.58	4.57	5.54	6.50	7.48	8.45	9.42	10.42	11.44		12.52	6 / 1			
reaction time	0.135	interval		1.00	0.99	0.97	0.96	0.98	0.97	0.97	1.00	1.02	1.08			2.96	2.91	2.99
		velocity	5.04	8.50	8.59	8.76	8.85	8.67	8.76	8.76	8.50	8.33	9.72	7.99		8.61	8.76	8.53
Cherry, Damu (USA) (1977)	0.159	no information available												12.56	3 / 2			
Felicien, Perdita (CAN) (1980)	0.136	no information available												12.58	8 / 3			
Kallur, Susanna (SWE) (1981)	0.134	no information available												12.59	4 / 4			
Foster-Hylton, Brigitte (JAM)	0.118	no information available												12.66	5 / 5			
Jones, Lolo (USA) (1982)	0.140	no information available												12.76	1 / 6			
Carruthers, Danielle (USA) (19	0.133	no information available												12.89	2 / 7			
Bolm, Kirsten (GER) (1975)	0.145	no information available												13.37	7 / 8			

2006 European Championships (Göteborg, SWE) (TV Analysis)

FINAL date 11-Aug-06 wind 0.5 m/s *Graubner (2008) - http://www.fgs.uni-halle.de*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kallur, Susanna (SWE) (1981)		time	2.57	3.58	4.57	5.54	6.49	7.45	8.43	9.41	10.41	11.44		12.59	/ 1			
reaction time	0.171	interval		1.01	0.99	0.97	0.95	0.96	0.98	0.98	1.00	1.03	1.15			2.97	2.89	3.01
		velocity	5.06	8.42	8.59	8.76	8.95	8.85	8.67	8.67	8.50	8.25	9.13	7.94		8.59	8.82	8.47
O'Rourke, Derval (IRL) (1981)		no information available											NR	12.72	/ 2			
Bolm, Kirsten (GER) (1975)		no information available												12.72	/ 3			
Alozie, Glory (ESP) (1977)		no information available												12.86	/ 4			
Trywianska, Aurelia (POL) (1976)		no information available												12.90	/ 5			
Antonova, Aleksandra (RUS) (1980)		no information available												12.93	/ 6			
Kallur, Jenny (SWE) (1981)		no information available												12.94	/ 7			
Lamalle, Adrianna (FRA) (1982)		no information available												12.99	/ 8			

2006 Canadian National Championships (Ottawa, CAN)

FINAL date 05-Aug-06 wind 0.7 m/s *Winckler (2009) - UK Athletics- National Coaching Conference*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)		time	2.60	3.65	4.62	5.62	6.55	7.60	8.54	9.51	10.52	11.54		12.64	/ 1			
reaction time		interval		1.05	0.97	1.00	0.93	1.05	0.94	0.97	1.01	1.02	1.10			3.02	2.92	3.00
		velocity	5.00	8.10	8.76	8.50	9.14	8.10	9.04	8.76	8.42	8.33	9.55	7.91		8.44	8.73	8.50

2006 DLV Gala (Nurnberg, GER)

FINAL date 30-Jul-06 wind 0.5 m/s *Graubner (2008) - http://www.fgs.uni-halle.de*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Perry, Michelle (USA) (1979)		time	2.61	3.63	4.63	5.61	6.59	7.57	8.56	9.54	10.51	11.53		12.59	/ 1			
reaction time	0.133	interval		1.02	1.00	0.98	0.98	0.98	0.99	0.98	0.97	1.02	1.06			3.00	2.95	2.97
		velocity	4.98	8.33	8.50	8.67	8.67	8.67	8.59	8.67	8.76	8.33	9.91	7.94		8.50	8.64	8.59
Jones, Lolo (USA) (1982)		time	2.61	3.59	4.56	5.54	6.51	7.48	8.46	9.45	10.47	11.51		12.59	/ 2			
reaction time	0.157	interval		0.98	0.97	0.98	0.97	0.97	0.98	0.99	1.02	1.04	1.08			2.93	2.92	3.05
		velocity	4.98	8.67	8.76	8.67	8.76	8.76	8.67	8.59	8.33	8.17	9.72	7.94		8.70	8.73	8.36

2006 Japanese National Championships (Kobe, JPN)

FINAL date 01-Jul-06 wind 0.3 m/s *Akirabun (2007) - speed analysis of the 100m and hurdles with a laser system*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ishino, Mami (JPN) (1983)		time	2.52	3.59	4.63	5.67	6.70	7.72	8.77	9.84	10.91	11.99		13.30	/ 1			
reaction time		interval		1.07	1.04	1.04	1.03	1.02	1.05	1.07	1.07	1.08	1.31			3.15	3.10	3.22
		velocity	5.16	7.94	8.17	8.17	8.25	8.33	8.10	7.94	7.94	7.87	8.02	7.52		8.10	8.23	7.92

2006 USATF National Championship (Indianapolis, IN)

FINAL date 24-Jun-06 wind -0.4 m/s *USATF Women's Hurdle Development (2006)*

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Crawford, Virginia (Ginnie) (U		time	2.54	3.54	4.52	5.47	6.44	7.37	8.38	9.37	10.38	11.46		12.63	4 / 1			
reaction time		interval		1.00	0.98	0.95	0.97	0.93	1.01	0.99	1.01	1.08	1.17			2.93	2.91	3.08
		velocity	5.12	8.50	8.67	8.95	8.76	9.14	8.42	8.59	8.42	7.87	8.97	7.92		8.70	8.76	8.28
Cherry, Damu (USA) (1977)		time	2.60	3.64	4.62	5.61	6.57	7.52	8.56	9.54	10.58	11.56		12.64	3 / 2			
reaction time		interval		1.04	0.98	0.99	0.96	0.95	1.04	0.98	1.04	0.98	1.08			3.01	2.95	3.00
		velocity	5.00	8.17	8.67	8.59	8.85	8.95	8.17	8.67	8.17	8.67	9.72	7.91		8.47	8.64	8.50
Perry, Michelle (USA) (1979)		time	2.60	3.65	4.64	5.57	6.57	7.56	8.53	9.53	10.54	11.57		12.67	6 / 3			
reaction time		interval		1.05	0.99	0.93	1.00	0.99	0.97	1.00	1.01	1.03	1.10			2.97	2.96	3.04
		velocity	5.00	8.10	8.59	9.14	8.50	8.59	8.76	8.50	8.42	8.25	9.55	7.89		8.59	8.61	8.39
Adams, Jenny (USA) (1978)		time	2.60	3.64	4.62	5.61	6.57	7.56	8.54	9.54	10.56	11.61		12.75	5 / 4			
reaction time		interval		1.04	0.98	0.99	0.96	0.99	0.98	1.00	1.02	1.05	1.14			3.01	2.93	3.07
		velocity	5.00	8.17	8.67	8.59	8.85	8.59	8.67	8.50	8.33	8.10	9.21	7.84		8.47	8.70	8.31

Jones, Lolo (USA) (1982)	time	2.67	3.62	4.64	5.61	6.59	7.61	8.59	9.54	10.59	11.61		12.76	2 / 5			
reaction time	interval		0.95	1.02	0.97	0.98	1.02	0.98	0.95	1.05	1.02	1.15			2.94	2.98	3.02
	velocity	4.87	8.95	8.33	8.76	8.67	8.33	8.67	8.95	8.10	8.33	9.13	7.84		8.67	8.56	8.44
Kirkland, Anjanette (USA) (19	time	2.67	3.70	4.67	5.67	6.62	7.64	8.63	9.64	10.66	11.71		12.87	8 / 6			
reaction time	interval		1.03	0.97	1.00	0.95	1.02	0.99	1.01	1.02	1.05	1.16			3.00	2.96	3.08
	velocity	4.87	8.25	8.76	8.50	8.95	8.33	8.59	8.42	8.33	8.10	9.05	7.77		8.50	8.61	8.28
Harper, Dawn (USA) (1984)	time	2.67	3.69	4.72	5.72	6.72	7.71	8.74	9.75	10.78	11.88		13.02	7 / 7			
reaction time	interval		1.02	1.03	1.00	1.00	0.99	1.03	1.01	1.03	1.10	1.14			3.05	3.02	3.14
	velocity	4.87	8.33	8.25	8.50	8.50	8.59	8.25	8.42	8.25	7.73	9.21	7.68		8.36	8.44	8.12
Foster, Ebony (USA) (1983)	time	2.65	3.74	4.77	5.81	6.79	7.77	8.81	9.84	10.86	11.95		13.12	1 / 8			
reaction time	interval		1.09	1.03	1.04	0.98	0.98	1.04	1.03	1.02	1.09	1.17			3.16	3.00	3.14
	velocity	4.91	7.80	8.25	8.17	8.67	8.67	8.17	8.25	8.33	7.80	8.97	7.62		8.07	8.50	8.12

2006 Mikio Oda Memorial (Hiroshima, JPN)

FINAL

date 29-Apr-06 wind 1.9 m/s

Akirabun (2007) - speed analysis of the 100m and hurdles with a laser system

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Imura, Kumiko (JPN) (1981)	time	2.47	3.53	4.56	5.58	6.58	7.59	8.61	9.63	10.68	11.74		13.04	/ 2			
reaction time	interval		1.06	1.03	1.02	1.00	1.01	1.02	1.02	1.05	1.06	1.30	PB		3.11	3.03	3.13
	velocity	5.26	8.02	8.25	8.33	8.50	8.42	8.33	8.33	8.10	8.02	8.08	7.67		8.20	8.42	8.15

Heat 1

date 29-Apr-06 wind 0.2 m/s

Akirabun (2007) - speed analysis of the 100m and hurdles with a laser system

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Bliss, Andrea (JAM) (1980)	time	2.55	3.66	4.73	5.81	6.86	7.91	8.95	10.01	11.08	12.17		13.48	/ 1			
reaction time	interval		1.11	1.07	1.08	1.05	1.05	1.04	1.06	1.07	1.09	1.31			3.26	3.14	3.22
	velocity	5.10	7.66	7.94	7.87	8.10	8.10	8.17	8.02	7.94	7.80	8.02	7.42		7.82	8.12	7.92

2005 IAAF World Championships (Helsinki, FIN)

FINAL

date 11-Aug-05 wind -2.0 m/s

	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Perry, Michelle (USA) (1979)	0.149	no information available										12.66	3 / 1			
Ennis-London, Delloreen (JAI	0.138	no information available										12.76	6 / 2			
Foster-Hylton, Brigitte (JAM)	0.140	no information available										12.76	4 / 3			
Bolm, Kirsten (GER) (1975)	0.158	no information available										12.82	1 / 4			
Koroteyeva, Mariya (RUS) (19	0.148	no information available										12.93	2 / 5			
Kallur, Jenny (SWE) (1981)	0.174	no information available										12.95	8 / 6			
Shevchenko, Irina (RUS) (1975	0.148	no information available										12.97	7 / 7			
Hayes, Joanna (USA) (1976)	0.140	no information available										13.57	5 / 8			

2005 USATF National Junior Championship (Carson, CA)

FINAL

date 23-Jun-05 wind -0.7 m/s

USATF Women's Sprint Development (2005)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Robinson, Kira (USA) (1987)	time	2.70	3.77	4.84	5.92	6.97	8.03	9.11	10.21	11.34	12.48		13.72	4 / 1			
reaction time	interval		1.07	1.07	1.08	1.05	1.06	1.08	1.10	1.13	1.14	1.24			3.22	3.19	3.37
	velocity	4.81	7.94	7.94	7.87	8.10	8.02	7.87	7.73	7.52	7.46	8.47	7.29		7.92	7.99	7.57
Stewart, Talia (USA) (1986)	time	2.72	3.87	4.96	6.04	7.11	8.22	9.31	10.41	11.53	12.66		13.89	5 / 2			
reaction time	interval		1.15	1.09	1.08	1.07	1.11	1.09	1.10	1.12	1.13	1.23			3.32	3.27	3.35
	velocity	4.78	7.39	7.80	7.87	7.94	7.66	7.80	7.73	7.59	7.52	8.54	7.20		7.68	7.80	7.61
James, Tiki (USA) (1986)	time	2.70	3.80	4.91	6.00	7.10	8.22	9.33	10.46	11.60	12.70		14.03	8 / 3			
reaction time	interval		1.10	1.11	1.09	1.10	1.12	1.11	1.13	1.14	1.10	1.33			3.30	3.33	3.37
	velocity	4.81	7.73	7.66	7.80	7.73	7.59	7.66	7.52	7.46	7.73	7.89	7.13		7.73	7.66	7.57
McGrew, Ashleigh (USA) (198	time	2.69	3.91	4.99	6.14	7.23	8.33	9.44	10.58	11.67	12.76		14.14	6 / 4			
reaction time	interval		1.22	1.08	1.15	1.09	1.10	1.11	1.14	1.09	1.09	1.38			3.45	3.30	3.32
	velocity	4.83	6.97	7.87	7.39	7.80	7.73	7.66	7.46	7.80	7.80	7.61	7.07		7.39	7.73	7.68
Gilchrist, Danielle (USA) (1988	time	2.75	3.87	4.95	6.10	7.21	8.33	9.44	10.58	11.70	12.85		14.17	2 / 5			
reaction time	interval		1.12	1.08	1.15	1.11	1.12	1.11	1.14	1.12	1.15	1.32	PB		3.35	3.34	3.41
	velocity	4.73	7.59	7.87	7.39	7.66	7.59	7.66	7.46	7.59	7.39	7.95	7.06		7.61	7.63	7.48
Broom, Kimyon (USA) (1988)	time	2.70	3.92	4.96	6.12	7.22	8.33	9.44	10.58	11.70	12.84		14.20	7 / 6			
reaction time	interval		1.22	1.04	1.16	1.10	1.11	1.11	1.14	1.12	1.14	1.36			3.42	3.32	3.40
	velocity	4.81	6.97	8.17	7.33	7.73	7.66	7.66	7.46	7.59	7.46	7.72	7.04		7.46	7.68	7.50
Woods, Shana (USA) (1988)	time	2.80	3.92	5.07	6.19	7.31	8.44	9.58	10.73	11.88	13.03		14.27	3 / 7			
reaction time	interval		1.12	1.15	1.12	1.12	1.13	1.14	1.15	1.15	1.15	1.24			3.39	3.39	3.45
	velocity	4.64	7.59	7.39	7.59	7.59	7.52	7.46	7.39	7.39	7.39	8.47	7.01		7.52	7.52	7.39
Richardson, Ke'Nyia (USA) (1!	time	2.75	3.90	5.04	6.16	7.26	8.31	9.54	10.71	11.85	13.01		14.36	1 / 8			
reaction time	interval		1.15	1.14	1.12	1.10	1.05	1.23	1.17	1.14	1.16	1.35	PB		3.41	3.38	3.47
	velocity	4.73	7.39	7.46	7.59	7.73	8.10	6.91	7.26	7.46	7.33	7.78	6.96		7.48	7.54	7.35
Purvis, Julian (USA) (1990)	time	2.79	3.87	5.04	6.16	7.29	8.45	9.54	10.74	11.91	13.09		14.40	9 / 9			

reaction time	interval		1.08	1.17	1.12	1.13	1.16	1.09	1.20	1.17	1.18	1.31			3.37	3.38	3.55
	velocity	4.66	7.87	7.26	7.59	7.52	7.33	7.80	7.08	7.26	7.20	8.02	6.94		7.57	7.54	7.18

2004 Busan International Athletics Meeting (Busan, KOR)

FINAL date 24-Sep-04 wind 0.7 m/s

Lee (2007) - the kinematic analysis of horizontal velocity and records from start to finish on elite women 100m hurdler

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Lee Yeon-Kyoung (KOR) (198	time	2.74	3.83	4.90	5.94	7.01	8.05	9.10	10.17	11.24	12.32		13.47	/ 1			
reaction time	interval		1.09	1.07	1.04	1.07	1.04	1.05	1.07	1.07	1.08	1.15	NR		3.20	3.16	3.22
	velocity	4.74	7.80	7.94	8.17	7.94	8.17	8.10	7.94	7.94	7.87	9.13	7.42		7.97	8.07	7.92

2004 Olympic Games (Athens, GRE)

FINAL date 24-Aug-04 wind 0.3 m/s

Tsiokanos (2017) - race pattern of women's 100m hurdles: time analysis of olympic hurdle performance

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Hayes, Joanna (USA) (1976)	time	2.52	3.53	4.50	5.45	6.42	7.36	8.32	9.29	10.27	11.28		12.37	4 / 1			
reaction time 0.169	interval		1.01	0.97	0.95	0.97	0.94	0.96	0.97	0.98	1.01	1.09	OR / PB		2.93	2.87	2.96
	velocity	5.16	8.42	8.76	8.95	8.76	9.04	8.85	8.76	8.67	8.42	9.63	8.08		8.70	8.89	8.61
Krasovska, Olena (UKR (1976)	time	2.55	3.55	4.55	5.51	6.48	7.45	8.41	9.39	10.37	11.36		12.45	1 / 2			
reaction time 0.151	interval		1.00	1.00	0.96	0.97	0.97	0.96	0.98	0.98	0.99	1.09	PB		2.96	2.90	2.95
	velocity	5.10	8.50	8.50	8.85	8.76	8.76	8.85	8.67	8.67	8.59	9.63	8.03		8.61	8.79	8.64
Morrison-Howard, Melissa (US	time	2.56	3.54	4.50	5.48	6.47	7.48	8.47	9.47	10.47	11.47		12.56	3 / 3			
reaction time 0.145	interval		0.98	0.96	0.98	0.99	1.01	0.99	1.00	1.00	1.00	1.09			2.92	2.99	3.00
	velocity	5.08	8.67	8.85	8.67	8.59	8.42	8.59	8.50	8.50	8.50	9.63	7.96		8.73	8.53	8.50
Koroteyeva, Mariya (RUS) (19	time	2.61	3.64	4.63	5.64	6.61	7.57	8.56	9.57	10.58	11.61		12.72	8 / 4			
reaction time 0.195	interval		1.03	0.99	1.01	0.97	0.96	0.99	1.01	1.01	1.03	1.11			3.03	2.92	3.05
	velocity	4.98	8.25	8.59	8.42	8.76	8.85	8.59	8.42	8.42	8.25	9.46	7.86		8.42	8.73	8.36
Golding-Clark, Lacena (JAM) (	time	2.54	3.54	4.53	5.49	6.48	7.45	8.45	9.45	10.49	11.54		12.73	2 / 5			
reaction time 0.195	interval		1.00	0.99	0.96	0.99	0.97	1.00	1.00	1.04	1.05	1.19			2.95	2.96	3.09
	velocity	5.12	8.50	8.59	8.85	8.59	8.76	8.50	8.50	8.17	8.10	8.82	7.86		8.64	8.61	8.25
Whyte, Angela (CAN) (1980)	time	2.56	3.59	4.58	5.57	6.57	7.56	8.53	9.55	10.61	11.64		12.81	7 / 6			
reaction time 0.139	interval		1.03	0.99	0.99	1.00	0.99	0.97	1.02	1.06	1.03	1.17			3.01	2.96	3.11
	velocity	5.08	8.25	8.59	8.59	8.50	8.59	8.76	8.33	8.02	8.25	8.97	7.81		8.47	8.61	8.20
Shevchenko, Irina (RUS) (1975	0.155	no information available											dnf	6 / --			
Felicien, Perdita (CAN) (1980)	0.167	no information available											dnf	5 / --			

Semi-Final 2 date 23-Aug-04 wind 0.0 m/s

Liagonne (2007) - Historique: Le 110m haies en chiffres

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Okori, Reina-Flor (FRA) (1980)	time	2.60	3.66	4.68	5.67	6.64	7.62	8.61	9.62	10.64	11.66		12.81	6 / 6			
reaction time 0.187	interval		1.06	1.02	0.99	0.97	0.98	0.99	1.01	1.02	1.02	1.15	=PB		3.07	2.94	3.05
	velocity	5.00	8.02	8.33	8.59	8.76	8.67	8.59	8.42	8.33	8.33	9.13	7.81		8.31	8.67	8.36

Semi-Final 1 date 23-Aug-04 wind 0.5 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.57	3.55	4.54	5.51	6.45	7.42	8.39	9.37	10.37	11.39		12.49	4 / 1			
reaction time	interval		0.98	0.99	0.97	0.94	0.97	0.97	0.98	1.00	1.02	1.10			2.94	2.88	3.00
	velocity	5.06	8.67	8.59	8.76	9.04	8.76	8.76	8.67	8.50	8.33	9.55	8.01		8.67	8.85	8.50

2004 Weltklasse (Zurich, SUI)

FINAL date 06-Aug-04 wind 0.0 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.64	3.60	4.60	5.55	6.49	7.49	8.45	9.42	10.42	11.46		12.52	/ 1			
reaction time	interval		0.96	1.00	0.95	0.94	1.00	0.96	0.97	1.00	1.04	1.06			2.91	2.90	3.01
	velocity	4.92	8.85	8.50	8.95	9.04	8.50	8.85	8.76	8.50	8.17	9.91	7.99		8.76	8.79	8.47

2004 Canadian National Championships (Victoria, CAN)

FINAL date 10-Jul-04 wind 2.1 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.58	3.57	4.54	5.49	6.44	7.37	8.36	9.32	10.32	11.34		12.45	/ 1			
reaction time	interval		0.99	0.97	0.95	0.95	0.93	0.99	0.96	1.00	1.02	1.11			2.91	2.87	2.98
	velocity	5.04	8.59	8.76	8.95	8.95	9.14	8.59	8.85	8.50	8.33	9.46	8.03		8.76	8.89	8.56

Heat 1 date 09-Jul-04 wind 0.9 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.65	3.67	4.65	5.60	6.56	7.54	8.53	9.48	10.48	11.46		12.60	/ 1			
reaction time	interval		1.02	0.98	0.95	0.96	0.98	0.99	0.95	1.00	0.98	1.14			2.95	2.93	2.93
	velocity	4.91	8.33	8.67	8.95	8.85	8.67	8.59	8.95	8.50	8.67	9.21	7.94		8.64	8.70	8.70

2004 Prefontaine Classic (Eugene, OR)

FINAL date 19-Jun-04 wind 0.7 m/s

Graubner (2008) - http://www.fgs.uni-halle.de

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.59	3.58	4.55	5.51	6.47	7.42	8.39	9.37	10.34	11.37		12.46	/ 1			

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	interval		0.99	0.97	0.96	0.96	0.95	0.97	0.98	0.97	1.03	1.09	NR		2.92	2.88	2.98
	velocity	5.02	8.59	8.76	8.85	8.85	8.95	8.76	8.67	8.76	8.25	9.63	8.03		8.73	8.85	8.56

2004 Modesto Relays (Modesto, CA)

FINAL date 08-May-04 wind 1.2 m/s *Winckler (2009) - UK Athletics- National Coaching Conference*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.55	3.55	4.53	5.50	6.47	7.44	8.40	9.41	10.41	11.44		12.60	/ 1			
reaction time	interval		1.00	0.98	0.97	0.97	0.97	0.96	1.01	1.00	1.03	1.16			2.95	2.90	3.04
	velocity	5.10	8.50	8.67	8.76	8.76	8.76	8.85	8.42	8.50	8.25	9.05	7.94		8.64	8.79	8.39

2003 IAAF World Championships (Paris, FRA)

FINAL date 27-Aug-03 wind -0.2 m/s *Winckler (2009) - UK Athletics- National Coaching Conference*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Felicien, Perdita (CAN) (1980)	time	2.59	3.60	4.59	5.54	6.51	7.46	8.46	9.44	10.44	11.44		12.53	4 / 1			
reaction time 0.147	interval		1.01	0.99	0.95	0.97	0.95	1.00	0.98	1.00	1.00	1.09	NR		2.95	2.92	2.98
	velocity	5.02	8.42	8.59	8.95	8.76	8.95	8.50	8.67	8.50	8.50	9.63	7.98		8.64	8.73	8.56

Foster-Hylton, Brigitte (JAM)	0.158	no information available	12.57	5 / 2
McKelvy-Jones, Miesha (USA)	0.146	no information available	12.67	3 / 3
Alozie, Glory (ESP) (1977)	0.160	no information available	12.75	1 / 4
Trywlanska-Kollasch, Aurelia (	0.150	no information available	12.75	7 / 5
Adams, Jenny (USA) (1978)	0.161	no information available	12.77	6 / 6
Girard, Patricia (FRA) (1968)	0.152	no information available	12.83	8 / 7
Golding-Clarke, Lacena (JAM)	0.151	no information available	12.87	2 / 8
Dixon, Vonette (JAM) (1975)	0.172	no information available	12.87	9 / 9

2003 USATF National Junior Championships (Palo Alto, CA)

FINAL date 22-Jun-03 wind 2.3 m/s *USATF Women's Sprint Development (2003)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Harper, Dawn (USA) (1984)	time	2.60	3.69	4.72	5.76	6.79	7.81	8.86	9.91	10.98	12.03		13.28	5 / 1			
reaction time	interval		1.09	1.03	1.04	1.03	1.02	1.05	1.05	1.07	1.05	1.25			3.16	3.10	3.17
	velocity	5.00	7.80	8.25	8.17	8.25	8.33	8.10	8.10	7.94	8.10	8.40	7.53		8.07	8.23	8.04
Sherman, Alandra (USA) (198	time	2.56	3.65	4.70	5.76	6.81	7.84	8.89	9.96	11.01	12.10		13.36	7 / 2			
reaction time	interval		1.09	1.05	1.06	1.05	1.03	1.05	1.07	1.05	1.09	1.26			3.20	3.13	3.21
	velocity	5.08	7.80	8.10	8.02	8.10	8.25	8.10	7.94	8.10	7.80	8.33	7.49		7.97	8.15	7.94
Lodree, Ashley (USA) (1985)	time	2.58	3.67	4.74	5.80	6.87	7.93	9.03	10.09	11.18	12.28		13.59	6 / 3			
reaction time	interval		1.09	1.07	1.06	1.07	1.06	1.10	1.06	1.09	1.10	1.31			3.22	3.23	3.25
	velocity	5.04	7.80	7.94	8.02	7.94	8.02	7.73	8.02	7.80	7.73	8.02	7.36		7.92	7.89	7.85
James, Tiki (USA) (1986)	time	2.58	3.70	4.74	5.81	6.89	7.96	9.04	10.13	11.20	12.31		13.65	9 / 4			
reaction time	interval		1.12	1.04	1.07	1.08	1.07	1.08	1.09	1.07	1.11	1.34			3.23	3.23	3.27
	velocity	5.04	7.59	8.17	7.94	7.87	7.94	7.87	7.80	7.94	7.66	7.84	7.33		7.89	7.89	7.80
Stewart, Talia (USA) (1986)	time	2.61	3.75	4.86	5.94	7.02	8.14	9.24	10.36	11.46	12.58		13.92	3 / 5			
reaction time	interval		1.14	1.11	1.08	1.08	1.12	1.10	1.12	1.10	1.12	1.34			3.33	3.30	3.34
	velocity	4.98	7.46	7.66	7.87	7.87	7.59	7.73	7.59	7.73	7.59	7.84	7.18		7.66	7.73	7.63
DuPree, Ryanne (USA) (1984)	time	2.69	3.82	4.96	6.04	7.14	8.22	9.33	10.43	11.55	12.65		13.98	2 / 6			
reaction time	interval		1.13	1.14	1.08	1.10	1.08	1.11	1.10	1.12	1.10	1.33			3.35	3.29	3.32
	velocity	4.83	7.52	7.46	7.87	7.73	7.87	7.66	7.73	7.59	7.73	7.89	7.15		7.61	7.75	7.68
Davis, Candice (USA) (1985)	time	2.58	3.69	4.79	5.87	6.97	8.09	9.24	10.36	11.48	12.59		13.99	4 / 7			
reaction time	interval		1.11	1.10	1.08	1.10	1.12	1.15	1.12	1.12	1.11	1.40			3.29	3.37	3.35
	velocity	5.04	7.66	7.73	7.87	7.73	7.59	7.39	7.59	7.59	7.66	7.50	7.15		7.75	7.57	7.61
Jimoh, Fummilayo (USA) (198	time	2.65	3.79	4.94	6.06	7.12	8.22	9.37	10.49	11.65	12.85		14.23	1 / 8			
reaction time	interval		1.14	1.15	1.12	1.06	1.10	1.15	1.12	1.16	1.20	1.38			3.41	3.31	3.48
	velocity	4.91	7.46	7.39	7.59	8.02	7.73	7.39	7.59	7.33	7.08	7.61	7.03		7.48	7.70	7.33
Brown, Ashlee (USA) (1985)	time	2.58	3.70	4.76	5.86	6.96	8.04	9.14	10.26	11.48	12.99		15.41	8 / 9			
reaction time	interval		1.12	1.06	1.10	1.10	1.08	1.10	1.12	1.22	1.51	2.42			3.28	3.28	3.85
	velocity	5.04	7.59	8.02	7.73	7.73	7.87	7.73	7.59	6.97	5.63	4.34	6.49		7.77	7.77	6.62

2003 USATF National Championship (Palo Alto, CA)

FINAL date 22-Jun-03 wind -0.1 m/s *USATF Women's Sprint Development (2003)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Devers, Gail (USA) (1966)	time	2.50	3.50	4.50	5.47	6.45	7.42	8.42	9.40	10.41	11.41		12.61	5 / 1			
reaction time	interval		1.00	1.00	0.97	0.98	0.97	1.00	0.98	1.01	1.00	1.20			2.97	2.95	2.99
	velocity	5.20	8.50	8.50	8.76	8.67	8.76	8.50	8.67	8.42	8.50	8.75	7.93		8.59	8.64	8.53
McKelvy-Jones, Miesha (USA)	time	2.50	3.55	4.55	5.52	6.52	7.47	8.46	9.44	10.44	11.46		12.62	6 / 2			
reaction time	interval		1.05	1.00	0.97	1.00	0.95	0.99	0.98	1.00	1.02	1.16			3.02	2.94	3.00
	velocity	5.20	8.10	8.50	8.76	8.50	8.95	8.59	8.67	8.50	8.33	9.05	7.92		8.44	8.67	8.50
Adams, Jenny (USA) (1978)	time	2.55	3.57	4.54	5.52	6.50	7.45	8.44	9.43	10.44	11.49		12.68	7 / 3			

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	interval		1.02	0.97	0.98	0.98	0.95	0.99	0.99	1.01	1.05	1.19				2.97	2.92	3.05
	velocity	5.10	8.33	8.76	8.67	8.67	8.95	8.59	8.59	8.42	8.10	8.82	7.89			8.59	8.73	8.36
Morrison, Melissa (USA) (1971	time	2.52	3.55	4.54	5.50	6.49	7.44	8.49	9.46	10.46	11.49		12.70	3 / 4				
reaction time	interval		1.03	0.99	0.96	0.99	0.95	1.05	0.97	1.00	1.03	1.21				2.98	2.99	3.00
	velocity	5.16	8.25	8.59	8.85	8.59	8.95	8.10	8.76	8.50	8.25	8.68	7.87			8.56	8.53	8.50
Cherry, Damu (USA) (1977)	time	2.52	3.57	4.57	5.57	6.56	7.54	8.53	9.53	10.53	11.55		12.74	4 / ~~5~~				
reaction time	interval		1.05	1.00	1.00	0.99	0.98	0.99	1.00	1.00	1.02	1.19	DV			3.05	2.96	3.02
	velocity	5.16	8.10	8.50	8.50	8.59	8.67	8.59	8.50	8.50	8.33	8.82	7.85			8.36	8.61	8.44
Carruthers, Danielle (USA) (19	time	2.50	3.57	4.57	5.59	6.57	7.57	8.56	9.56	10.59	11.63		12.84	2 / ~~6~~ 5				
reaction time	interval		1.07	1.00	1.02	0.98	1.00	0.99	1.00	1.03	1.04	1.21				3.09	2.97	3.07
	velocity	5.20	7.94	8.50	8.33	8.67	8.50	8.59	8.50	8.25	8.17	8.68	7.79			8.25	8.59	8.31
McCray, Yolana (USA) (1976)	time	2.62	3.65	4.70	5.73	6.72	7.74	8.76	9.78	10.83	11.89		13.17	8 / ~~7~~ 6				
reaction time	interval		1.03	1.05	1.03	0.99	1.02	1.02	1.02	1.05	1.06	1.28				3.11	3.03	3.13
	velocity	4.96	8.25	8.10	8.25	8.59	8.33	8.33	8.33	8.10	8.02	8.20	7.59			8.20	8.42	8.15
Perry, Michelle (USA) (1979)	time	2.54	3.67	4.84	5.87	6.87	7.90	8.93	9.95	10.99	12.05		13.26	1 / ~~8~~ 7				
reaction time	interval		1.13	1.17	1.03	1.00	1.03	1.03	1.02	1.04	1.06	1.21				3.33	3.06	3.12
	velocity	5.12	7.52	7.26	8.25	8.50	8.25	8.25	8.33	8.17	8.02	8.68	7.54			7.66	8.33	8.17

2002 IAAF World Cup (Madrid, ESP)

FINAL date 21-Sep-02 wind 1.5 m/s

Sanchez (2002) - copa del mundo de Madrid '02: análisis de la carreras con villas

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Devers, Gail (USA) (1966)		time	2.49	3.49	4.46	5.42	6.38	7.38	8.39	9.38	10.40	11.45		12.65	4 / 1			
reaction time	0.177	interval		1.00	0.97	0.96	0.96	1.00	1.01	0.99	1.02	1.05	1.20			2.93	2.97	3.06
		velocity	5.22	8.50	8.76	8.85	8.85	8.50	8.42	8.59	8.33	8.10	8.75	7.91		8.70	8.59	8.33
Foster-Hylton, Brigitte (JAM)		time	2.49	3.49	4.50	5.49	6.49	7.49	8.49	9.50	10.54	11.60		12.82	9 / 2			
reaction time	0.144	interval		1.00	1.01	0.99	1.00	1.00	1.00	1.01	1.04	1.06	1.22			3.00	3.00	3.11
		velocity	5.22	8.50	8.42	8.59	8.50	8.50	8.50	8.42	8.17	8.02	8.61	7.80		8.50	8.50	8.20
Alozie, Glory (ESP) (1977)		time	2.51	3.52	4.54	5.55	6.56	7.57	8.58	9.60	10.63	11.67		12.95	7 / 3			
reaction time	0.188	interval		1.01	1.02	1.01	1.01	1.01	1.01	1.02	1.03	1.04	1.28			3.04	3.03	3.09
		velocity	5.18	8.42	8.33	8.42	8.42	8.42	8.42	8.33	8.25	8.17	8.20	7.72		8.39	8.42	8.25
Krasovska, Olena (UKR) (1976		time	2.51	3.52	4.52	5.54	6.55	7.57	8.58	9.61	10.63	11.68		13.07	3 / 4			
reaction time	0.146	interval		1.01	1.00	1.02	1.01	1.02	1.01	1.03	1.02	1.05	1.39			3.03	3.04	3.10
		velocity	5.18	8.42	8.50	8.33	8.42	8.33	8.42	8.25	8.33	8.10	7.55	7.65		8.42	8.39	8.23
Rakotozafy, Rosa (MAD) (197		time	2.53	3.56	4.57	5.59	6.58	7.60	8.60	9.62	10.66	11.72		13.07	1 / 5			
reaction time	0.157	interval		1.03	1.01	1.02	0.99	1.02	1.00	1.02	1.04	1.06	1.35			3.06	3.01	3.12
		velocity	5.14	8.25	8.42	8.33	8.59	8.33	8.50	8.33	8.17	8.02	7.78	7.65		8.33	8.47	8.17
Laukhova, Svetlana (RUS) (19		time	2.52	3.54	4.56	5.57	6.58	7.58	8.60	9.62	10.67	11.72		13.14	2 / 6			
reaction time	0.138	interval		1.02	1.02	1.01	1.01	1.00	1.02	1.02	1.05	1.05	1.42			3.05	3.03	3.12
		velocity	5.16	8.33	8.33	8.42	8.42	8.50	8.33	8.33	8.10	8.10	7.39	7.61		8.36	8.42	8.17
Bolm, Kirsten (GER) (1975)		time	2.53	3.55	4.57	5.57	6.59	7.59	8.61	9.66	10.74	11.80		13.15	4 / 7			
reaction time	0.149	interval		1.02	1.02	1.00	1.02	1.00	1.02	1.05	1.08	1.06	1.35			3.04	3.04	3.19
		velocity	5.14	8.33	8.33	8.50	8.33	8.50	8.33	8.10	7.87	8.02	7.78	7.60		8.39	8.39	7.99
Munro, Jacquie (AUS) (1981)		time	2.65	3.70	4.75	5.77	6.79	7.83	8.88	9.96	11.04	12.16		13.46	8 / 8			
reaction time	0.129	interval		1.05	1.05	1.02	1.02	1.04	1.05	1.08	1.08	1.12	1.30			3.12	3.11	3.28
		velocity	4.91	8.10	8.10	8.33	8.33	8.17	8.10	7.87	7.87	7.59	8.08	7.43		8.17	8.20	7.77
Kanazawa, Yvonne (JPN) (197		time	2.65	3.70	4.75	5.78	6.81	7.87	8.94	10.01	11.10	12.25		13.59	6 / 9			
reaction time	0.177	interval		1.05	1.05	1.03	1.03	1.06	1.07	1.07	1.09	1.15	1.34			3.13	3.16	3.31
		velocity	4.91	8.10	8.10	8.25	8.25	8.02	7.94	7.94	7.80	7.39	7.84	7.36		8.15	8.07	7.70

2002 European Championships (Munich, GER)

FINAL date 09-Aug-02 wind -0.7 m/s

Graubner (2009) - http://www.fgs.uni-halle.de

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Alozie, Glory (ESP) (1977)		time	2.62	3.68	4.68	5.67	6.66	7.64	8.64	9.65	10.66	11.65		12.73	/ 1			
reaction time	0.143	interval		1.06	1.00	0.99	0.99	0.98	1.00	1.01	1.01	0.99	1.08			3.05	2.97	3.01
		velocity	4.96	8.02	8.50	8.59	8.59	8.67	8.50	8.42	8.42	8.59	9.72	7.86		8.36	8.59	8.47
Krasovska, Olena (UKR) (1976		time	2.62	3.66	4.68	5.68	6.68	7.66	8.68	9.70	10.72	11.77		12.88	/ 2			
reaction time	0.145	interval		1.04	1.02	1.00	1.00	0.98	1.02	1.02	1.02	1.05	1.11			3.06	3.00	3.09
		velocity	4.96	8.17	8.33	8.50	8.50	8.67	8.33	8.33	8.33	8.10	9.46	7.76		8.33	8.50	8.25
Kasova, Yana (BUL) (1981)		time	2.69	3.72	4.74	5.74	6.72	7.72	8.72	9.74	10.76	11.80		12.91	/ 3			
reaction time	0.169	interval		1.03	1.02	1.00	0.98	1.00	1.00	1.02	1.02	1.04	1.11			3.05	2.98	3.08
		velocity	4.83	8.25	8.33	8.50	8.67	8.50	8.50	8.33	8.33	8.17	9.46	7.75		8.36	8.56	8.28

Girard, Patricia (FRA) (1968)	time	2.62	3.66	4.68	5.70	6.70	7.72	8.74	9.78	10.84	11.90		13.03	/ 4			
reaction time 0.143	interval		1.04	1.02	1.02	1.00	1.02	1.02	1.04	1.06	1.06	1.13			3.08	3.04	3.16
	velocity	4.96	8.17	8.33	8.33	8.50	8.33	8.33	8.17	8.02	8.02	9.29	7.67		8.28	8.39	8.07
Aron, Haydy (FRA) (1973)	time	2.72	3.74	4.76	5.76	6.76	7.76	8.76	9.80	10.84	11.92		13.05	/ 5			
reaction time 0.203	interval		1.02	1.02	1.00	1.00	1.00	1.00	1.04	1.04	1.08	1.13			3.04	3.00	3.16
	velocity	4.78	8.33	8.33	8.50	8.50	8.50	8.50	8.17	8.17	7.87	9.29	7.66		8.39	8.50	8.07
Allahgreen, Diane (GBR) (197	time	2.58	3.62	4.66	5.68	6.70	7.73	8.75	9.79	10.86	11.94		13.05	/ 5			
reaction time 0.131	interval		1.04	1.04	1.02	1.02	1.03	1.02	1.04	1.07	1.08	1.11			3.10	3.07	3.19
	velocity	5.04	8.17	8.17	8.33	8.33	8.25	8.33	8.17	7.94	7.87	9.46	7.66		8.23	8.31	7.99
Kallur, Susanna (SWE) (1981)	time	2.64	3.70	4.72	5.72	6.74	7.76	8.80	9.84	10.90	11.98		13.09	/ 7			
reaction time 0.153	interval		1.06	1.02	1.00	1.02	1.02	1.04	1.04	1.06	1.08	1.11			3.08	3.08	3.18
	velocity	4.92	8.02	8.33	8.50	8.33	8.33	8.17	8.17	8.02	7.87	9.46	7.64		8.28	8.28	8.02
Dimitrova, Svetla (BUL) (1970)	time	2.70	3.78	4.78	5.78	6.80	7.78	8.96					13.75	/ 8			
reaction time 0.220	interval		1.08	1.00	1.00	1.02	0.98	1.18							3.08	3.18	
	velocity	4.81	7.87	8.50	8.50	8.33	8.67	7.20					7.27		8.28	8.02	

Semi-Final 2

date 09-Aug-02 wind 0.6 m/s

Graubner (2009) - http://www.fgs.uni-halle.de

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Alozie, Glory (ESP) (1977)	time	2.65	3.69	4.71	5.69	6.69	7.67	8.68	9.67	10.69	11.69		12.79	/ 1			
reaction time 0.133	interval		1.04	1.02	0.98	1.00	0.98	1.01	0.99	1.02	1.00	1.10			3.04	2.99	3.01
	velocity	4.91	8.17	8.33	8.67	8.50	8.67	8.42	8.59	8.33	8.50	9.55	7.82		8.39	8.53	8.47
Aron, Haydy (FRA) (1973)	time	2.61	3.66	4.67	5.67	6.66	7.65	8.65	9.67	10.69	11.76		12.93	/ 2			
reaction time 0.153	interval		1.05	1.01	1.00	0.99	0.99	1.00	1.02	1.02	1.07	1.17	PB		3.06	2.98	3.11
	velocity	4.98	8.10	8.42	8.50	8.59	8.59	8.50	8.33	8.33	7.94	8.97	7.73		8.33	8.56	8.20

Semi-Final 1

date 09-Aug-02 wind 0.0 m/s

Graubner (2009) - http://www.fgs.uni-halle.de

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Girard, Patricia (FRA) (1968)	time	2.59	3.63	4.66	5.64	6.63	7.64	8.64	9.64	10.67	11.72		12.82	/ 1			
reaction time 0.139	interval		1.04	1.03	0.98	0.99	1.01	1.00	1.00	1.03	1.05	1.10			3.05	3.00	3.08
	velocity	5.02	8.17	8.25	8.67	8.59	8.42	8.50	8.50	8.25	8.10	9.55	7.80		8.36	8.50	8.28
Krasovska, Olena (UKR) (1976	time	2.64	3.70	4.72	5.72	6.72	7.70	8.70	9.72	10.76	11.80		12.88	/ 2			
reaction time 0.131	interval		1.06	1.02	1.00	1.00	0.98	1.00	1.02	1.04	1.04	1.08			3.08	2.98	3.10
	velocity	4.92	8.02	8.33	8.50	8.50	8.67	8.50	8.33	8.17	8.17	9.72	7.76		8.28	8.56	8.23

Heat 5

date 08-Aug-02 wind 1.1 m/s

Graubner (2009) - http://www.fgs.uni-halle.de

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Dimitrova, Svetla (BUL) (1970)	time	2.69	3.74	4.75	5.76	6.74	7.78	8.76	9.77	10.81	11.88		13.02	/ 1			
reaction time 0.205	interval		1.05	1.01	1.01	0.98	1.04	0.98	1.01	1.04	1.07	1.14			3.07	3.00	3.12
	velocity	4.83	8.10	8.42	8.42	8.67	8.17	8.67	8.42	8.17	7.94	9.21	7.68		8.31	8.50	8.17
Ferga, Linda (FRA) (1976)	time	2.66	3.70	4.74	5.74	6.76	7.75	8.78	9.80	10.82	11.88		13.03	/ 2			
reaction time 0.179	interval		1.04	1.04	1.00	1.02	0.99	1.03	1.02	1.02	1.06	1.15			3.08	3.04	3.10
	velocity	4.89	8.17	8.17	8.50	8.33	8.59	8.25	8.33	8.33	8.02	9.13	7.67		8.28	8.39	8.23

Heat 4

date 08-Aug-02 wind 0.3 m/s

Graubner (2009) - http://www.fgs.uni-halle.de

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Aron, Haydy (FRA) (1973)	time	2.67	3.70	4.72	5.72	6.70	7.69	8.70	9.73	10.78	11.86		13.00	/ 1			
reaction time 0.152	interval		1.03	1.02	1.00	0.98	0.99	1.01	1.03	1.05	1.08	1.14			3.05	2.98	3.16
	velocity	4.87	8.25	8.33	8.50	8.67	8.59	8.42	8.25	8.10	7.87	9.21	7.69		8.36	8.56	8.07
Krasovska, Olena (UKR) (1976	time	2.70	3.76	4.78	5.80	6.80	7.81	8.82	9.84	10.86	11.91		13.04	/ 2			
reaction time 0.157	interval		1.06	1.02	1.02	1.00	1.01	1.01	1.02	1.02	1.05	1.13			3.10	3.02	3.09
	velocity	4.81	8.02	8.33	8.33	8.50	8.42	8.42	8.33	8.33	8.10	9.29	7.67		8.23	8.44	8.25
Lenskiy, Irina (ISR) (1971)	time	2.70	3.73	4.76	5.76	6.77	7.78	8.80	9.83	10.85	11.91		13.04	/ 3			
reaction time 0.121	interval		1.03	1.03	1.00	1.01	1.01	1.02	1.03	1.02	1.06	1.13			3.06	3.04	3.11
	velocity	4.81	8.25	8.25	8.50	8.42	8.42	8.33	8.25	8.33	8.02	9.29	7.67		8.33	8.39	8.20

Heat 3

date 08-Aug-02 wind -0.3 m/s

Graubner (2009) - http://www.fgs.uni-halle.de

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Laukhova, Svetlana (RUS) (19	time	2.64	3.68	4.70	5.72	6.72	7.75	8.76	9.79	10.82	11.91		13.02	/ 1			
reaction time 0.121	interval		1.04	1.02	1.02	1.00	1.03	1.01	1.03	1.03	1.09	1.11			3.08	3.04	3.15
	velocity	4.92	8.17	8.33	8.33	8.50	8.25	8.42	8.25	8.25	7.80	9.46	7.68		8.28	8.39	8.10
Kasova, Yana (BUL) (1981)	time	2.73	3.74	4.78	5.79	6.80	7.82	8.83	9.85	10.89	11.94		13.07	/ 2			
reaction time 0.174	interval		1.01	1.04	1.01	1.01	1.02	1.01	1.02	1.04	1.05	1.13			3.06	3.04	3.11
	velocity	4.76	8.42	8.17	8.42	8.42	8.33	8.42	8.33	8.17	8.10	9.29	7.65		8.33	8.39	8.20

Heat 2

date 08-Aug-02 wind 0.0 m/s

Graubner (2009) - http://www.fgs.uni-halle.de

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kallur, Susanna (SWE) (1981)	time	2.68	3.72	4.74	5.77	6.77	7.79	8.81	9.83	10.85	11.91		13.01	/ 1			

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 0.160	interval		1.04	1.02	1.03	1.00	1.02	1.02	1.02	1.02	1.06	1.10			3.09	3.04	3.10
	velocity	4.85	8.17	8.33	8.25	8.50	8.33	8.33	8.33	8.33	8.02	9.55	7.69		8.25	8.39	8.23
Alozie, Glory (ESP) (1977)	time	2.69	3.75	4.77	5.77	6.79	7.81	8.81	9.83	10.87	11.92		13.03	/ 2			
reaction time 0.164	interval		1.06	1.02	1.00	1.02	1.02	1.00	1.02	1.04	1.05	1.11			3.08	3.04	3.11
	velocity	4.83	8.02	8.33	8.50	8.33	8.33	8.50	8.33	8.17	8.10	9.46	7.67		8.28	8.39	8.20

Heat 1

date 08-Aug-02 wind 0.5 m/s

Graubner (2009) - http://www.fgs.uni-halle.de

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Girard, Patricia (FRA) (1968)	time	2.64	3.67	4.69	5.71	6.73	7.74	8.77	9.79	10.83	11.87		13.00	/ 1			
reaction time 0.149	interval		1.03	1.02	1.02	1.02	1.01	1.03	1.02	1.04	1.04	1.13			3.07	3.06	3.10
	velocity	4.92	8.25	8.33	8.33	8.33	8.42	8.25	8.33	8.17	8.17	9.29	7.69		8.31	8.33	8.23

2002 German National Indoor Championships (Sindelfingen, GER)

FINAL

date 16-Feb-02

Hücklekemkes (2002) - explosive starten vielfältig erlernen

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4
Bolm, Kirsten (GER) (1975)	time	2.64	3.66	4.68	5.69	6.68		7.97	/ 1	
reaction time 0.129	interval		1.02	1.02	1.01	0.99	1.29	PB		3.05
	velocity	4.92	8.33	8.33	8.42	8.59	10.08	7.53		8.36
Hentschke, Nadine (GER) (198	time	2.62	3.68	4.70	5.73	6.75		8.09	/ 2	
reaction time 0.161	interval		1.06	1.02	1.03	1.02	1.34			3.11
	velocity	4.96	8.02	8.33	8.25	8.33	9.70	7.42		8.20
Rehwagen, Corinna (GER) (19	time	2.66	3.73	4.78	5.82	6.88		8.22	/ 3	
reaction time 0.149	interval		1.07	1.05	1.04	1.06	1.34			3.16
	velocity	4.89	7.94	8.10	8.17	8.02	9.70	7.30		8.07
Braun, Sabine (GER) (1965)	time	2.68	3.74	4.80	5.84	6.88		8.29	/ 4	
reaction time 0.167	interval		1.06	1.06	1.04	1.04	1.41			3.16
	velocity	4.85	8.02	8.02	8.17	8.17	9.22	7.24		8.07
Komoll, Jennifer (GER) (1980)	time	2.64	3.76	4.78	5.82	6.89		8.33	/ 5	
reaction time 0.119	interval		1.12	1.02	1.04	1.07	1.44			3.18
	velocity	4.92	7.59	8.33	8.17	7.94	9.03	7.20		8.02
Thimm, Annette (GER) (1977)	time	2.78	3.88	4.94	5.98	7.04		8.41	/ 6	
reaction time 0.199	interval		1.10	1.06	1.04	1.06	1.37			3.20
	velocity	4.68	7.73	8.02	8.17	8.02	9.49	7.13		7.97

2001 Chinese National Games (Beijing, CHN)

Huang (2003) - research on the technique of women's 100m hurdles in th 9th national games

Xu (2007) - comparative study on technical parameters of china & world female 100m hurdlers

FINAL

date 18-Nov-01 wind 2.2 m/s

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Su Yiping (CHN) (1979)	time	2.62	3.66	4.65	5.63	6.59	7.57	8.55	9.54	10.56	11.59		12.70	/ 1			*Xu (2007)*
reaction time	interval		1.04	0.99	0.98	0.96	0.98	0.98	0.99	1.02	1.03	1.11			3.01	2.92	3.04
	velocity	4.96	8.17	8.59	8.67	8.85	8.67	8.67	8.59	8.33	8.25	9.46	7.87		8.47	8.73	8.39
Zeng Xiaoling (CHN) (1980)	time	2.60	3.64	4.66	5.68	6.68	7.69	8.71	9.73	10.75	11.79		12.91	/ 3			*Huang (2003)*
reaction time	interval		1.04	1.02	1.02	1.00	1.01	1.02	1.02	1.02	1.04	1.12			3.08	3.03	3.08
	velocity	5.00	8.17	8.33	8.33	8.50	8.42	8.33	8.33	8.33	8.17	9.37	7.75		8.28	8.42	8.28

2001 IAAF World Championships (Edmonton, CAN)

FINAL

date 11-Aug-01 wind 2.0 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kirkland, Anjanette (USA) (19	time	2.60	3.60	4.60	5.56	6.52	7.48	8.41	9.37	10.33	11.33		12.42	1 / 1			
reaction time 0.123	interval		1.00	1.00	0.96	0.96	0.96	0.93	0.96	0.96	1.00	1.09	PB		2.96	2.85	2.92
	velocity	5.00	8.50	8.50	8.85	8.85	8.85	9.14	8.85	8.85	8.50	9.63	8.05		8.61	8.95	8.73
Devers, Gail (USA) (1966)	0.136	no information available											12.54	6 / 2			
Shishigina, Olga (KAZ) (1968)	0.137	no information available											12.58	8 / 3			
Dimitrova, Svetla (BUL) (1970)	0.153	no information available											12.58	3 / 4			
Adams, Jenny (USA) (1978)	time	2.63	3.63	4.59	5.55	6.51	7.47	8.43	9.39	10.45	11.48		12.63	4 / 5			
reaction time 0.148	interval		1.00	0.96	0.96	0.96	0.96	0.96	0.96	1.06	1.03	1.15	PB		2.92	2.88	3.05
	velocity	4.94	8.50	8.85	8.85	8.85	8.85	8.85	8.85	8.02	8.25	9.13	7.92		8.73	8.85	8.36
Rose-Henley, Dionne (JAM) (1	0.131	no information available											12.79	2 / 6			
Ferga, Linda (FRA) (1976)	0.196	no information available											12.80	5 / 7			
Dixon, Vonette (JAM) (1975)	0.140	no information available											13.02	7 / 8			

Semi-Final 2

date 10-Aug-01 wind -0.3 m/s

Winckler (2009) - UK Athletics- National Coaching Conference

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Devers, Gail (USA) (1966)	time	2.60	3.60	4.56	5.52	6.52	7.52	8.52	9.52	10.52	11.55		12.56	6 / 1			
reaction time 0.134	interval		1.00	0.96	0.96	1.00	1.00	1.00	1.00	1.00	1.03	1.01			2.92	3.00	3.03
	velocity	5.00	8.50	8.85	8.85	8.50	8.50	8.50	8.50	8.50	8.25	10.40	7.96		8.73	8.50	8.42

2001 European Cup (Bremen, GER)

FINAL date 24-Jun-01 wind 0.6 m/s *Graubner (2007) - http://www.fgs.uni-halle.de*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Korotya, Irina (RUS) (1975)	time	2.68	3.73	4.76	5.80	6.78	7.82	8.84	9.83	10.91	11.94		13.06	/ 1			
reaction time 0.150	interval		1.05	1.03	1.04	0.98	1.04	1.02	0.99	1.08	1.03	1.12			3.12	3.04	3.10
	velocity	4.85	8.10	8.25	8.17	8.67	8.17	8.33	8.59	7.87	8.25	9.37	7.66		8.17	8.39	8.23
Ferga, Linda (FRA) (1976)	time	2.69	3.75	4.75	5.80	6.76	7.78	8.80	9.83	10.91	11.94		13.10	/ 2			
reaction time 0.249	interval		1.06	1.00	1.05	0.96	1.02	1.02	1.03	1.08	1.03	1.16			3.11	3.00	3.14
	velocity	4.83	8.02	8.50	8.10	8.85	8.33	8.33	8.25	7.87	8.25	9.05	7.63		8.20	8.50	8.12
Bolm, Kirsten (GER) (1975)	time	2.71	3.77	4.81	5.83	6.85	7.86	8.88	9.92	10.95	12.03		13.15	/ 3			
reaction time 0.113	interval		1.06	1.04	1.02	1.02	1.01	1.02	1.04	1.03	1.08	1.12			3.12	3.05	3.15
	velocity	4.80	8.02	8.17	8.33	8.33	8.42	8.33	8.17	8.25	7.87	9.37	7.60		8.17	8.36	8.10
Allahgreen, Diane (GBR) (197	time	2.62	3.67	4.74	5.79	6.82	7.84	8.90	9.94	11.04	12.07		13.23	/ 4			
reaction time 0.130	interval		1.05	1.07	1.05	1.03	1.02	1.06	1.04	1.10	1.03	1.16			3.17	3.11	3.17
	velocity	4.96	8.10	7.94	8.10	8.25	8.33	8.02	8.17	7.73	8.25	9.05	7.56		8.04	8.20	8.04
Macchiut, Margaret (ITA) (197	time	2.69	3.76	4.84	5.87	6.91	7.92	8.96	9.98	11.03	12.10		13.23	/ 5			
reaction time 0.128	interval		1.07	1.08	1.03	1.04	1.01	1.04	1.02	1.05	1.07	1.13			3.18	3.09	3.14
	velocity	4.83	7.94	7.87	8.25	8.17	8.42	8.17	8.33	8.10	7.94	9.29	7.56		8.02	8.25	8.12
Miklós, Éva (ROU) (1978)	time	2.73	3.82	4.87	5.92	6.98	8.04	9.09	10.14	11.24	12.33		13.53	/ 6			
reaction time 0.161	interval		1.09	1.05	1.05	1.06	1.06	1.05	1.05	1.10	1.09	1.20			3.19	3.17	3.24
	velocity	4.76	7.80	8.10	8.10	8.02	8.02	8.10	8.10	7.73	7.80	8.75	7.39		7.99	8.04	7.87
Škrobáková, Lucie (CZE) (198	time	2.64	3.84	4.91	5.98	7.03	8.10	9.18	10.26	11.37	12.49		13.70	/ 7			
reaction time 0.222	interval		1.20	1.07	1.07	1.05	1.07	1.08	1.08	1.11	1.12	1.21			3.34	3.20	3.31
	velocity	4.92	7.08	7.94	7.94	8.10	7.94	7.87	7.87	7.66	7.59	8.68	7.30		7.63	7.97	7.70
Likhuta, Yauhenia (BLR) (198	time	2.72	3.79	4.90	5.98	7.03	8.16	9.28									
reaction time 0.151	interval		1.07	1.11	1.08	1.05	1.13	1.12					DQ		3.26	3.30	
	velocity	4.78	7.94	7.66	7.87	8.10	7.52	7.59							7.82	7.73	

2000 Olympic Games (Sydney, AUS)

FINAL date 27-Sep-00 wind 0.0 m/s

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shishigina, Olga (KAZ) (1968)	0.237	no information available											12.65	7 / 1			
Alozie, Glory (NGR) (1977)	0.217	no information available											12.68	3 / 2			
Morrison, Melissa (USA) (1971	0.180	no information available											12.76	6 / 3			
Ennis-London, Delloreen (JAI	0.156	no information available											12.80	8 / 4			
López, Aliuska (CUB) (1969)	0.179	no information available											12.83	1 / 5			
Ramalalanirina, Nicole (FRA) (	0.194	no information available											12.91	4 / 6			
Ferga, Linda (FRA) (1976)	0.294	no information available											13.11	2 / 7			
Foster, Brigitte (JAM) (1974)	0.217	no information available											13.49	3 / 8			

2000 ISTAF (Berlin, GER)

FINAL date 01-Sep-00 wind -0.2 m/s *Graubner (2009) - http://www.fgs.uni-halle.de*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Alozie, Glory (NGR) (1977)	time	2.58	3.62	4.62	5.61	6.61	7.60	8.60	9.60	10.58	11.56		12.66	/ 1			
reaction time 0.235	interval		1.04	1.00	0.99	1.00	0.99	1.00	1.00	0.98	0.98	1.10			3.03	2.99	2.96
	velocity	5.04	8.17	8.50	8.59	8.50	8.59	8.50	8.50	8.67	8.67	9.55	7.90		8.42	8.53	8.61
Morrison, Melissa (USA) (1971	time	2.58	3.61	4.61	5.60	6.58	7.55	8.54	9.56	10.56	11.57		12.67	/ 2			
reaction time 0.183	interval		1.03	1.00	0.99	0.98	0.97	0.99	1.02	1.00	1.01	1.10			3.02	2.94	3.03
	velocity	5.04	8.25	8.50	8.59	8.67	8.76	8.59	8.33	8.50	8.42	9.55	7.89		8.44	8.67	8.42
Shishigina, Olga (KZK) (1968)	time	2.62	3.64	4.64	5.63	6.62	7.62	8.61	9.62	10.62	11.65		12.74	/ 3			
reaction time 0.169	interval		1.02	1.00	0.99	0.99	1.00	0.99	1.01	1.00	1.03	1.09			3.01	2.98	3.04
	velocity	4.96	8.33	8.50	8.59	8.59	8.50	8.59	8.42	8.50	8.25	9.63	7.85		8.47	8.56	8.39
Ennis-London, Delloreen (JAI	time	2.60	3.64	4.66	5.66	6.65	7.66	8.66	9.66	10.70	11.74		12.88	/ 4			
reaction time 0.170	interval		1.04	1.02	1.00	0.99	1.01	1.00	1.00	1.04	1.04	1.14			3.06	3.00	3.08
	velocity	5.00	8.17	8.33	8.50	8.59	8.42	8.50	8.50	8.17	8.17	9.21	7.76		8.33	8.50	8.28
Kirkland, Anjanette (USA) (1974)	no information available												12.97	/ 5			
Ovcharova-Krasovska, Olena (UKR) (1976)	no information available												13.04	/ 6			
Manning, Valerie (USA) (1968)	no information available												13.23	/ 7			
Sprenger, Juliane (GER) (1977	time	2.66	3.72	4.76	5.80	6.83	7.88	8.93					13.39	/ 8			
reaction time 0.166	interval		1.06	1.04	1.04	1.03	1.05	1.05							3.14	3.13	
	velocity	4.89	8.02	8.17	8.17	8.25	8.10	8.10					7.47		8.12	8.15	

1999 IAAF World Championships (Sevilla, ESP)

FINAL date 28-Aug-99 wind 0.7 m/s *Sanchez (1999) - Sevilla '99: análisis de la carreras con villas*

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

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

Devers, Gail (USA) (1966)	time	2.50	3.49	4.46	5.44	6.42	7.38	8.34	9.32	10.30	11.29		12.37	3 / 1			
reaction time 0.113	interval		0.99	0.97	0.98	0.98	0.96	0.96	0.98	0.98	0.99	1.08	AR		2.94	2.90	2.95
	velocity	5.20	8.59	8.76	8.67	8.67	8.85	8.85	8.67	8.67	8.59	9.72	8.08		8.67	8.79	8.64
Alozie, Glory (NGR) (1977)	time	2.52	3.52	4.49	5.45	6.42	7.38	8.37	9.35	10.33	11.35		12.44	6 / 2			
reaction time 0.155	interval		1.00	0.97	0.96	0.97	0.96	0.99	0.98	0.98	1.02	1.09	AR / =PB		2.93	2.92	2.98
	velocity	5.16	8.50	8.76	8.85	8.76	8.85	8.59	8.67	8.67	8.33	9.63	8.04		8.70	8.73	8.56
Engquist, Ludmila (SWE) (196	time	2.58	3.59	4.57	5.55	6.51	7.45	8.42	9.40	10.38	11.39		12.47	5 / 3			
reaction time 0.132	interval		1.01	0.98	0.98	0.96	0.94	0.97	0.98	0.98	1.01	1.08	NR		2.97	2.87	2.97
	velocity	5.04	8.42	8.67	8.67	8.85	9.04	8.76	8.67	8.67	8.42	9.72	8.02		8.59	8.89	8.59
Shishigina, Olga (KZK) (1968)	time	2.60	3.60	4.59	5.56	6.52	7.49	8.47	9.44	10.44	11.45		12.51	4 / 4			
reaction time 0.150	interval		1.00	0.99	0.97	0.96	0.97	0.98	0.97	1.00	1.01	1.06			2.96	2.91	2.98
	velocity	5.00	8.50	8.59	8.76	8.85	8.76	8.67	8.76	8.50	8.42	9.91	7.99		8.61	8.76	8.56
Dimitrova, Svetla (BUL) (1970)	time	2.63	3.65	4.65	5.62	6.61	7.57	8.53	9.53	10.55	11.58		12.75	8 / 5			
reaction time 0.149	interval		1.02	1.00	0.97	0.99	0.96	0.96	1.00	1.02	1.03	1.17			2.99	2.91	3.05
	velocity	4.94	8.33	8.50	8.76	8.59	8.85	8.85	8.50	8.33	8.25	8.97	7.84		8.53	8.76	8.36
Rose, Dionne (JAM) (1969)	time	2.55	3.56	4.55	5.54	6.52	7.52	8.50	9.52	10.55	11.59		12.80	7 / 6			
reaction time 0.107	interval		1.01	0.99	0.99	0.98	1.00	0.98	1.02	1.03	1.04	1.21			2.99	2.96	3.09
	velocity	5.10	8.42	8.59	8.59	8.67	8.50	8.67	8.33	8.25	8.17	8.68	7.81		8.53	8.61	8.25
Ennis-London, Delloreen (JAI	time	2.54	3.55	4.54	5.53	6.53	7.52	8.54	9.56	10.60	11.68		12.87	2 / 7			
reaction time 0.148	interval		1.01	0.99	0.99	1.00	0.99	1.02	1.02	1.04	1.08	1.19			2.99	3.01	3.14
	velocity	5.12	8.42	8.59	8.59	8.50	8.59	8.33	8.33	8.17	7.87	8.82	7.77		8.53	8.47	8.12
Girard, Patricia (FRA) (1968)	time	2.59	3.60	4.61	5.60	6.58	7.59	8.61	9.63	10.68	11.75		12.97	1 / 8			
reaction time 0.154	interval		1.01	1.01	0.99	0.98	1.01	1.02	1.02	1.05	1.07	1.22			3.01	3.01	3.14
	velocity	5.02	8.42	8.42	8.59	8.67	8.42	8.33	8.33	8.10	7.94	8.61	7.71		8.47	8.47	8.12

Semi-Final 2

date 27-Aug-99 wind 1.0 m/s

Sanchez (1999) - Sevilla '99: análisis de la carreras con villas

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Devers, Gail (USA) (1966)	time	2.55	3.56	4.56	5.53	6.51	7.49	8.48	9.48	10.49	11.52		12.70	3 / 1			
reaction time 0.149	interval		1.01	1.00	0.97	0.98	0.98	0.99	1.00	1.01	1.03	1.18			2.98	2.95	3.04
	velocity	5.10	8.42	8.50	8.76	8.67	8.67	8.59	8.50	8.42	8.25	8.90	7.87		8.56	8.64	8.39
Shishigina, Olga (KZK) (1968)	time	2.61	3.64	4.66	5.65	6.63	7.61	8.60	9.59	10.58	11.60		12.75	6 / 2			
reaction time 0.152	interval		1.03	1.02	0.99	0.98	0.98	0.99	0.99	0.99	1.02	1.15			3.04	2.95	3.00
	velocity	4.98	8.25	8.33	8.59	8.67	8.67	8.59	8.59	8.59	8.33	9.13	7.84		8.39	8.64	8.50
Rose, Dionne (JAM) (1969)	time	2.55	3.57	4.58	5.58	6.57	7.55	8.56	9.57	10.60	11.63		12.79	4 / 3			
reaction time 0.133	interval		1.02	1.01	1.00	0.99	0.98	1.01	1.01	1.03	1.03	1.16			3.03	2.98	3.07
	velocity	5.10	8.33	8.42	8.50	8.59	8.67	8.42	8.42	8.25	8.25	9.05	7.82		8.42	8.56	8.31
Dimitrova, Svetla (BUL) (1970)	time	2.59	3.63	4.62	5.61	6.57	7.55	8.54	9.54	10.57	11.61		12.79	5 / 4			
reaction time 0.146	interval		1.04	0.99	0.99	0.96	0.98	0.99	1.00	1.03	1.04	1.18			3.02	2.93	3.07
	velocity	5.02	8.17	8.59	8.59	8.85	8.67	8.59	8.50	8.25	8.17	8.90	7.82		8.44	8.70	8.31
López, Aliuska (CUB) (1969)	time	2.53	3.55	4.56	5.55	6.54	7.51	8.52	9.54	10.57	11.62		12.83	1 / 5			
reaction time 0.130	interval		1.02	1.01	0.99	0.99	0.97	1.01	1.02	1.03	1.05	1.21			3.02	2.97	3.10
	velocity	5.14	8.33	8.42	8.59	8.59	8.76	8.42	8.33	8.25	8.10	8.68	7.79		8.44	8.59	8.23
Korotya, Irina (RUS) (1975)	time	2.62	3.65	4.64	5.62	6.60	7.60	8.59	9.61	10.62	11.65		12.86	8 / 6			
reaction time 0.148	interval		1.03	0.99	0.98	0.98	1.00	0.99	1.02	1.01	1.03	1.21			3.00	2.97	3.06
	velocity	4.96	8.25	8.59	8.67	8.67	8.50	8.59	8.33	8.42	8.25	8.68	7.78		8.50	8.59	8.33
Ramalalanirina, Nicole (FRA) (	time	2.59	3.63	4.67	5.67	6.68	7.67	8.67	9.69	10.72	11.76		12.96	2 / 7			
reaction time 0.151	interval		1.04	1.04	1.00	1.01	0.99	1.00	1.02	1.03	1.04	1.20			3.08	3.00	3.09
	velocity	5.02	8.17	8.17	8.50	8.42	8.59	8.50	8.33	8.25	8.17	8.75	7.72		8.28	8.50	8.25
Kulawansa-Fonseka, Sriyani (S	time	2.57	3.61	4.64	5.64	6.65	7.65	8.67	9.69	10.72	11.77		12.98	7 / 8			
reaction time 0.142	interval		1.04	1.03	1.00	1.01	1.00	1.02	1.02	1.03	1.05	1.21			3.07	3.03	3.10
	velocity	5.06	8.17	8.25	8.50	8.42	8.50	8.33	8.33	8.25	8.10	8.68	7.70		8.31	8.42	8.23

Semi-Final 1

date 27-Aug-99 wind 1.9 m/s

Sanchez (1999) - Sevilla '99: análisis de la carreras con villas

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Engquist, Ludmila (SWE) (196	time	2.53	3.53	4.51	5.48	6.45	7.39	8.34	9.32	10.29	11.30		12.50	4 / 1			
reaction time 0.135	interval		1.00	0.98	0.97	0.97	0.94	0.95	0.98	0.97	1.01	1.20			2.95	2.86	2.96
	velocity	5.14	8.50	8.67	8.76	8.76	9.04	8.95	8.67	8.76	8.42	8.75	8.00		8.64	8.92	8.61
Alozie, Glory (NGR) (1977)	time	2.52	3.53	4.53	5.52	6.48	7.47	8.43	9.42	10.39	11.39		12.61	6 / 2			
reaction time 0.154	interval		1.01	1.00	0.99	0.96	0.99	0.96	0.99	0.97	1.00	1.22			3.00	2.91	2.96
	velocity	5.16	8.42	8.50	8.59	8.85	8.59	8.85	8.59	8.76	8.50	8.61	7.93		8.50	8.76	8.61
Girard, Patricia (FRA) (1968)	time	2.51	3.51	4.50	5.47	6.42	7.40	8.40	9.43	10.46	11.50		12.76	3 / 3			
reaction time 0.120	interval		1.00	0.99	0.97	0.95	0.98	1.00	1.03	1.03	1.04	1.26			2.96	2.93	3.10

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

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
	velocity	5.18	8.50	8.59	8.76	8.95	8.67	8.50	8.25	8.25	8.17	8.33	7.84		8.61	8.70	8.23
Ennis-London, Delloreen (JAI	time	2.52	3.54	4.53	5.51	6.53	7.53	8.53	9.54	10.56	11.58		12.81	1 / 4			
reaction time 0.151	interval		1.02	0.99	0.98	1.02	1.00	1.00	1.01	1.02	1.02	1.23			2.99	3.02	3.05
	velocity	5.16	8.33	8.59	8.67	8.33	8.50	8.50	8.42	8.33	8.33	8.54	7.81		8.53	8.44	8.36
Roberts, Trecia (THA) (1971)	time	2.51	3.51	4.52	5.51	6.49	7.49	8.48	9.50	10.53	11.58		12.83	7 / 5			
reaction time 0.170	interval		1.00	0.170	0.99	0.98	1.00	0.99	1.02	1.03	1.05	1.25	NR		3.00	2.97	3.10
	velocity	5.18	8.50	50.00	8.59	8.67	8.50	8.59	8.33	8.25	8.10	8.40	7.79		8.50	8.59	8.23
Laukhova, Svetlana (RUS) (19	time	2.53	3.55	4.54	5.53	6.54	7.52	8.52	9.54	10.57	11.61		12.86	2 / 6			
reaction time 0.133	interval		1.02	0.99	0.99	1.01	0.98	1.00	1.02	1.03	1.04	1.25			3.00	2.99	3.09
	velocity	5.14	8.33	8.59	8.59	8.42	8.67	8.50	8.33	8.25	8.17	8.40	7.78		8.50	8.53	8.25
Graudyn, Yuliya (RUS) (1970)	time	2.58	3.61	4.62	5.63	6.61	7.59	8.57	9.60	10.62	11.67		12.95	8 / 7			
reaction time 0.135	interval		1.03	1.01	1.01	0.98	0.98	0.98	1.03	1.02	1.05	1.28			3.05	2.94	3.10
	velocity	5.04	8.25	8.42	8.42	8.67	8.67	8.67	8.25	8.33	8.10	8.20	7.72		8.36	8.67	8.23
Feng Yun (CHN) (1976)	time	2.52	3.53	4.52	5.53	6.52	7.51	8.53	9.57	10.62	11.68		12.98	5 / 8			
reaction time 0.150	interval		1.01	0.99	1.01	0.99	0.99	1.02	1.04	1.05	1.06	1.30			3.01	3.00	3.15
	velocity	5.16	8.42	8.59	8.42	8.59	8.59	8.33	8.17	8.10	8.02	8.08	7.70		8.47	8.50	8.10

Quarter-Final 4

date 26-Aug-99 wind 0.7 m/s

Sanchez (1999) - Sevilla '99: análisis de la carreras con villas

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Engquist, Ludmila (SWE) (196	time	2.57	3.57	4.57	5.54	6.50	7.47	8.44	9.43	10.44	11.45		12.65	3 / 1			
reaction time 0.136	interval		1.00	1.00	0.97	0.96	0.97	0.97	0.99	1.01	1.01	1.20			2.97	2.90	3.01
	velocity	5.06	8.50	8.50	8.76	8.85	8.76	8.76	8.59	8.42	8.42	8.75	7.91		8.59	8.79	8.47

Quarter-Final 3

date 26-Aug-99 wind -0.6 m/s

Sanchez (1999) - Sevilla '99: análisis de la carreras con villas

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Devers, Gail (USA) (1966)	time	2.51	3.51	4.50	5.47	6.46	7.42	8.40	9.39	10.38	11.40		12.53	4 / 1			
reaction time 0.145	interval		1.00	0.99	0.97	0.99	0.96	0.98	0.99	0.99	1.02	1.13			2.96	2.93	3.00
	velocity	5.18	8.50	8.59	8.76	8.59	8.85	8.67	8.59	8.59	8.33	9.29	7.98		8.61	8.70	8.50

Quarter-Final 2

date 26-Aug-99 wind 0.2 m/s

Sanchez (1999) - Sevilla '99: análisis de la carreras con villas

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Alozie, Glory (NGR) (1977)	time	2.52	3.53	4.52	5.49	6.45	7.45	8.43	9.39	10.38	11.39		12.60	4 / 1			
reaction time 0.158	interval		1.01	0.99	0.97	0.96	1.00	0.98	0.96	0.99	1.01	1.21			2.97	2.94	2.96
	velocity	5.16	8.42	8.59	8.76	8.85	8.50	8.67	8.85	8.59	8.42	8.68	7.94		8.59	8.67	8.61

Heat 6

date 26-Aug-99 wind 3.2 m/s

Sanchez (1999) - Sevilla '99: análisis de la carreras con villas

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Engquist, Ludmila (SWE) (196	time	2.59	3.60	4.60	5.57	6.56	7.54	8.51	9.50	10.50	11.53		12.62	4 / 1			
reaction time 0.137	interval		1.01	1.00	0.97	0.99	0.98	0.97	0.99	1.00	1.03	1.09			2.98	2.94	3.02
	velocity	5.02	8.42	8.50	8.76	8.59	8.67	8.76	8.59	8.50	8.25	9.63	7.92		8.56	8.67	8.44

Heat 4

date 26-Aug-99 wind 1.1 m/s

Sanchez (1999) - Sevilla '99: análisis de la carreras con villas

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Alozie, Glory (NGR) (1977)	time	2.54	3.55	4.57	5.55	6.53	7.51	8.50	9.49	10.49	11.50		12.67	3 / 1			
reaction time 0.162	interval		1.01	1.02	0.98	0.98	0.98	0.99	0.99	1.00	1.01	1.17			3.01	2.95	3.00
	velocity	5.12	8.42	8.33	8.67	8.67	8.67	8.59	8.59	8.50	8.42	8.97	7.89		8.47	8.64	8.50

Heat 2

date 26-Aug-99 wind -0.1 m/s

Sanchez (1999) - Sevilla '99: análisis de la carreras con villas

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Devers, Gail (USA) (1966)	time	2.60	3.62	4.62	5.61	6.61	7.59	8.58	9.62	10.64	11.71		12.80	4 / 1			
reaction time 0.178	interval		1.02	1.00	0.99	1.00	0.98	0.99	1.04	1.02	1.07	1.09			3.01	2.97	3.13
	velocity	5.00	8.33	8.50	8.59	8.50	8.67	8.59	8.17	8.33	7.94	9.63	7.81		8.47	8.59	8.15

1998 USATF National Championship (New Orleans, LA)

Heat 1

date 20-Jun-98 wind 2.3 m/s

Mann (1998) - usatf elite sprint & hurdle summit

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Morrison, Melissa (USA) (71)	time	2.30	3.31	4.31	5.29	6.27	7.24	8.23	9.23	10.25	11.35		12.69	/ 1			
reaction time	interval		1.01	1.00	0.98	0.98	0.97	0.99	1.00	1.02	1.10	1.34			2.99	2.94	3.12
	velocity	5.65	8.42	8.50	8.67	8.67	8.76	8.59	8.50	8.33	7.73	7.84	7.88		8.53	8.67	8.17

1998 European Championships (Budapest, HUN)

FINAL

date 23-Aug-98 wind 1.5 m/s

Sanchez (1998) - Budapest '98: análisis de la carreras con villas

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Dimitrova, Svetla (BUL) (1970)	time	2.59	3.61	4.61	5.59	6.53	7.46	8.44	9.45	10.43	11.42		12.56	4 / 1			
reaction time	interval		1.02	1.00	0.98	0.94	0.93	0.98	1.01	0.98	0.99	1.14			3.00	2.85	2.98
	velocity	5.02	8.33	8.50	8.67	9.04	9.14	8.67	8.42	8.67	8.59	9.21	7.96		8.50	8.95	8.56
Bukovec, Brigita (SLO) (1970)	time	2.59	3.60	4.59	5.54	6.50	7.47	8.43	9.42	10.45	11.50		12.65	6 / 2			
reaction time	interval		1.01	0.99	0.95	0.96	0.97	0.96	0.99	1.03	1.05	1.15			2.95	2.89	3.07
	velocity	5.02	8.42	8.59	8.95	8.85	8.76	8.85	8.59	8.25	8.10	9.13	7.91		8.64	8.82	8.31

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Korotya, Irina (RUS) (1975)	time	2.61	3.66	4.68	5.67	6.66	7.63	8.65	9.68	10.70	11.75		12.85	3 / 3			
reaction time	interval		1.05	1.02	0.99	0.99	0.97	1.02	1.03	1.02	1.05	1.10			3.06	2.98	3.10
	velocity	4.98	8.10	8.33	8.59	8.59	8.76	8.33	8.25	8.33	8.10	9.55	7.78		8.33	8.56	8.23
Ramalalalirina, Nicole (FRA) (1	time	2.59	3.63	4.67	5.66	6.60	7.61	8.61	9.63	10.66	11.73		12.87	5 / 4			
reaction time	interval		1.04	1.04	0.99	0.94	1.01	1.00	1.02	1.03	1.07	1.14			3.07	2.95	3.12
	velocity	5.02	8.17	8.17	8.59	9.04	8.42	8.50	8.33	8.25	7.94	9.21	7.77		8.31	8.64	8.17
Girard, Patricia (FRA) (1968)	time	2.58	3.59	4.58	5.59	6.60	7.58	8.56	9.57	10.60	11.64		12.89	1 / 5			
reaction time	interval		1.01	0.99	1.01	1.01	0.98	0.98	1.01	1.03	1.04	1.25			3.01	2.97	3.08
	velocity	5.04	8.42	8.59	8.42	8.42	8.67	8.67	8.42	8.25	8.17	8.40	7.76		8.47	8.59	8.28
Blaßneck, Heike (GER) (1971)	time	2.62	3.66	4.68	5.70	6.69	7.74	8.74	9.75	10.79	11.87		13.02	8 / 6			
reaction time	interval		1.04	1.02	1.02	0.99	1.05	1.00	1.01	1.04	1.08	1.15			3.08	3.04	3.13
	velocity	4.96	8.17	8.33	8.33	8.59	8.10	8.50	8.42	8.17	7.87	9.13	7.68		8.28	8.39	8.15
Baumann, Julie (SUI) (1964)	time	2.57	3.61	4.66	5.71	6.70	7.74	8.75	9.77	10.79	11.85		13.15	2 / 7			
reaction time	interval		1.04	1.05	1.05	0.99	1.04	1.01	1.02	1.02	1.06	1.30			3.14	3.04	3.10
	velocity	5.06	8.17	8.10	8.10	8.59	8.17	8.42	8.33	8.33	8.02	8.08	7.60		8.12	8.39	8.23
Ferga, Linda (FRA) (1976)	time	2.70	3.71	4.75	5.77	6.78	7.77	8.83	9.87	10.92	11.99		13.22	7 / 8			
reaction time	interval		1.01	1.04	1.02	1.01	0.99	1.06	1.04	1.05	1.07	1.23			3.07	3.06	3.16
	velocity	4.81	8.42	8.17	8.33	8.42	8.59	8.02	8.17	8.10	7.94	8.54	7.56		8.31	8.33	8.07

1998 Spanish National Championships (San Sebastián, ESP)

FINAL date 01-Aug-98 wind 0.0 m/s

Ruiz (1998) - campeonato des españa absoluto: análisis de la carreras con villas

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Mardomingo, Maria Jose (ESP	time	2.59	3.65	4.67	5.69	6.74	7.76	8.79	9.87	10.96	12.09		13.37	5 / 1			
reaction time	interval		1.06	1.02	1.02	1.05	1.02	1.03	1.08	1.09	1.13	1.28			3.10	3.10	3.30
	velocity	5.02	8.02	8.33	8.33	8.10	8.33	8.25	7.87	7.80	7.52	8.20	7.48		8.23	8.23	7.73
Azcárate, Nerea (ESP) (1974)	time	2.60	3.66	4.77	5.84	6.93	7.99	9.08	10.18	11.25	12.39		13.77	4 / 2			
reaction time	interval		1.06	1.11	1.07	1.09	1.06	1.09	1.10	1.07	1.14	1.38			3.24	3.24	3.31
	velocity	5.00	8.02	7.66	7.94	7.80	8.02	7.80	7.73	7.94	7.46	7.61	7.26		7.87	7.87	7.70
Ingelmo, Sandra (ESP) (1978)	time	2.64	3.72	4.82	5.89	6.98	8.08	9.25	10.38	11.54	12.70		14.04	3 / 3			
reaction time	interval		1.08	1.10	1.07	1.09	1.10	1.17	1.13	1.16	1.16	1.34			3.25	3.36	3.45
	velocity	4.92	7.87	7.73	7.94	7.80	7.73	7.26	7.52	7.33	7.33	7.84	7.12		7.85	7.59	7.39
Rodríguez, Jessica (ESP) (197	time	2.69	3.78	4.87	5.99	7.11	8.23	9.32	10.45	11.59	12.77		14.14	7 / 4			
reaction time	interval		1.09	1.09	1.12	1.12	1.12	1.09	1.13	1.14	1.18	1.37			3.30	3.33	3.45
	velocity	4.83	7.80	7.80	7.59	7.59	7.59	7.80	7.52	7.46	7.20	7.66	7.07		7.73	7.66	7.39
Fraguas, Raquel (ESP) (1976)	time	2.65	3.74	4.83	5.95	7.05	8.18	9.36	10.51	11.65	12.85		14.15	6 / 5			
reaction time	interval		1.09	1.09	1.12	1.10	1.13	1.18	1.15	1.14	1.20	1.30			3.30	3.41	3.49
	velocity	4.91	7.80	7.80	7.59	7.73	7.52	7.20	7.39	7.46	7.08	8.08	7.07		7.73	7.48	7.31
Clopes, Imma (ESP) (1968)	time	2.61	3.69	4.79	5.92	7.01	8.15	9.25	10.42	11.60	12.81		14.29	2 / 6			
reaction time	interval		1.08	1.10	1.13	1.09	1.14	1.10	1.17	1.18	1.21	1.48			3.31	3.33	3.56
	velocity	4.98	7.87	7.73	7.52	7.80	7.46	7.73	7.26	7.20	7.02	7.09	7.00		7.70	7.66	7.16
Siles, Isabel (ESP) (1973)	time	2.69	3.81	4.91	6.05	7.17	8.33	9.51	10.70	11.88	13.11		14.54	8 / 7			
reaction time	interval		1.12	1.10	1.14	1.12	1.16	1.18	1.19	1.18	1.23	1.43			3.36	3.46	3.60
	velocity	4.83	7.59	7.73	7.46	7.59	7.33	7.20	7.14	7.20	6.91	7.34	6.88		7.59	7.37	7.08

1997 IAAF World Championships (Athens, GRE)

FINAL date 10-Aug-97 wind -0.3 m/s

Hommel (1997) - biomechanical research project at the VI th world championships in athletics, Athens 1997

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Engquist, Ludmila (SWE) (196	time	2.56	3.56	4.56	5.54	6.48	7.46	8.41	9.38	10.36	11.36		12.50	5 / 1			
reaction time 0.126	interval		1.00	1.00	0.98	0.94	0.98	0.95	0.97	0.98	1.00	1.14			2.98	2.87	2.95
	velocity	5.08	8.50	8.50	8.67	9.04	8.67	8.95	8.76	8.67	8.50	9.21	8.00		8.56	8.89	8.64
Dimitrova, Svetla (BUL) (1970)	time	2.58	3.62	4.60	5.58	6.54	7.51	8.48	9.46	10.44	11.48		12.58	3 / 2			
reaction time 0.136	interval		1.04	0.98	0.98	0.96	0.97	0.97	0.98	0.98	1.04	1.10			3.00	2.90	3.00
	velocity	5.04	8.17	8.67	8.67	8.85	8.76	8.76	8.67	8.67	8.17	9.55	7.95		8.50	8.79	8.50
Freeman, Michelle (JAM) (196	time	2.52	3.53	4.52	5.48	6.46	7.43	8.42	9.42	10.44	11.48		12.61	4 / 3			
reaction time 0.145	interval		1.01	0.99	0.96	0.98	0.97	0.99	1.00	1.02	1.04	1.13			2.96	2.94	3.06
	velocity	5.16	8.42	8.59	8.85	8.67	8.76	8.59	8.50	8.33	8.17	9.29	7.93		8.61	8.67	8.33
Bukovec, Brigita (SLO) (1970)	time	2.60	3.58	4.58	5.56	6.52	7.49	8.50	9.50	10.50	11.54		12.69	2 / 4			
reaction time 0.146	interval		0.98	1.00	0.98	0.96	0.97	1.01	1.00	1.00	1.04	1.15			2.96	2.94	3.04
	velocity	5.00	8.67	8.50	8.67	8.85	8.76	8.42	8.50	8.50	8.17	9.13	7.88		8.61	8.67	8.39
Rose, Dionne (JAM) (1969)	time	2.60	3.58	4.58	5.56	6.56	7.56	8.58	9.60	10.64	11.66		12.87	1 / 5			
reaction time 0.118	interval		0.98	1.00	0.98	1.00	1.00	1.02	1.02	1.04	1.02	1.21			2.96	3.02	3.08
	velocity	5.00	8.67	8.50	8.67	8.50	8.50	8.33	8.33	8.17	8.33	8.68	7.77		8.61	8.44	8.28

Anderson, Katie (CAN) (1968)	time	2.54	3.58	4.58	5.58	6.56	7.56	8.56	9.60	10.64	11.72		12.88	8 / 6			
reaction time 0.127	interval		1.04	1.00	1.00	0.98	1.00	1.00	1.04	1.04	1.08	1.16			3.04	2.98	3.16
	velocity	5.12	8.17	8.50	8.50	8.67	8.50	8.50	8.17	8.17	7.87	9.05	7.76		8.39	8.56	8.07
Laukhova, Svetlana (RUS) (19	time	2.58	3.62	4.64	5.64	6.64	7.64	8.67	9.70	10.72	11.80		12.89	7 / 7			
reaction time 0.135	interval		1.04	1.02	1.00	1.00	1.00	1.03	1.03	1.02	1.08	1.09			3.06	3.03	3.13
	velocity	5.04	8.17	8.33	8.50	8.50	8.50	8.25	8.25	8.33	7.87	9.63	7.76		8.33	8.42	8.15
Girard, Patricia (FRA) (1968)	no information available												DQ	6 /			

1997 European Cup (Munich, GER)

FINAL date 22-Jun-97 wind 0.7 m/s

Jung (2003) - http://www.fgs.uni-halle.de

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Laukhova, Svetlana (RUS) (19	time	2.65	3.69	4.68	5.69	6.68	7.69	8.69	9.71	10.74	11.81		12.94	/ 1			
reaction time	interval		1.04	0.99	1.01	0.99	1.01	1.00	1.02	1.03	1.07	1.13	PB		3.04	3.00	3.12
	velocity	4.91	8.17	8.59	8.42	8.59	8.42	8.50	8.33	8.25	7.94	9.29	7.73		8.39	8.50	8.17
Girard, Patricia (FRA) (1968)	time	2.65	3.68	4.69	5.70	6.71	7.71	8.74	9.76	10.79	11.86		13.03	/ 2			
reaction time	interval		1.03	1.01	1.01	1.01	1.00	1.03	1.02	1.03	1.07	1.17			3.05	3.04	3.12
	velocity	4.91	8.25	8.42	8.42	8.42	8.50	8.25	8.33	8.25	7.94	8.97	7.67		8.36	8.39	8.17
Thorp, Angela (GBR) (1972)	time	2.69	3.76	4.76	5.79	6.81	7.87	8.89	9.92	10.95	12.03		13.16	/ 3			
reaction time	interval		1.07	1.00	1.03	1.02	1.06	1.02	1.03	1.03	1.08	1.13			3.10	3.10	3.14
	velocity	4.83	7.94	8.50	8.25	8.33	8.02	8.33	8.25	8.25	7.87	9.29	7.60		8.23	8.23	8.12
Tuzzi, Carla (ITA) (1967)	time	2.68	3.76	4.80	5.81	6.84	7.84	8.87	9.95	11.00	12.10		13.23	/ 4			
reaction time	interval		1.08	1.04	1.01	1.03	1.00	1.03	1.08	1.05	1.10	1.13			3.13	3.06	3.23
	velocity	4.85	7.87	8.17	8.42	8.25	8.50	8.25	7.87	8.10	7.73	9.29	7.56		8.15	8.33	7.89
Kuchma, Oksana (UKR) (1973)	time	2.69	3.78	4.84	5.87	6.91	7.96	9.01	10.06	11.15	12.25		13.43	/ 5			
reaction time	interval		1.09	1.06	1.03	1.04	1.05	1.05	1.05	1.09	1.10	1.18			3.18	3.14	3.24
	velocity	4.83	7.80	8.02	8.25	8.17	8.10	8.10	8.10	7.80	7.73	8.90	7.45		8.02	8.12	7.87
Nastase, Liliana (ROU) (1962)	time	2.67	3.75	4.83	5.87	6.90	7.95	9.03	10.11	11.23	12.39		13.66	/ 6			
reaction time	interval		1.08	1.08	1.04	1.03	1.05	1.08	1.08	1.12	1.16	1.27			3.20	3.16	3.36
	velocity	4.87	7.87	7.87	8.17	8.25	8.10	7.87	7.87	7.59	7.33	8.27	7.32		7.97	8.07	7.59
Voronkova, Nelli (BLR) (1972)	time	2.79	3.94	4.99	6.10	7.17	8.26	9.35	10.47	11.59	12.73		13.90	/ 7			
reaction time	interval		1.15	1.05	1.11	1.07	1.09	1.09	1.12	1.12	1.14	1.17			3.31	3.25	3.38
	velocity	4.66	7.39	8.10	7.66	7.94	7.80	7.80	7.59	7.59	7.46	8.97	7.19		7.70	7.85	7.54
Blaßneck, Heike (GER) (1971)	time	2.61	3.64	4.65	5.65	6.65	7.68	8.71	9.76	11.41	12.97		14.38	/ 8			
reaction time	interval		1.03	1.01	1.00	1.00	1.03	1.03	1.05	1.65	1.56	1.41			3.04	3.06	4.26
	velocity	4.98	8.25	8.42	8.50	8.50	8.25	8.25	8.10	5.15	5.45	7.45	6.95		8.39	8.33	5.99

1997 Southeastern Conference Championships (Auburn, AL)

FINAL date 18-May-97 wind 1.4 m/s

Shaver (2002) - Hurdle training design

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Walker, Astia (JAM) (1975)	time	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.4	10.4	11.4		12.82	/ 1			
reaction time	interval		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.4	PB		3.01	2.95	2.92
	velocity	5.20	8.42	8.50	8.50	8.50	8.67	8.76	8.85	8.76	8.59	7.29	7.80		8.47	8.64	8.73

1996 Olympic Games (Atlanta, GA)

FINAL date 31-Jul-96 wind 0.2 m/s

Butler (2016) - IAAF statistics handbook- special edition: Games of the XXXI Olympiad- Rio 2016

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Engquist, Ludmila (SWE) (196	time	2.48	3.54	4.50	5.48	6.44	7.41	8.40	9.39	10.37	11.39		12.58	6 / 1			
reaction time 0.132	interval		1.06	0.96	0.98	0.96	0.97	0.99	0.99	0.98	1.02	1.19			3.00	2.92	2.99
	velocity	5.24	8.02	8.85	8.67	8.85	8.76	8.59	8.59	8.67	8.33	8.82	7.95		8.50	8.73	8.53
Bukovec, Brigita (SLO) (1970)	time	2.46	3.49	4.52	5.43	6.41	7.38	8.36	9.34	10.34	11.37		12.59	3 / 2			
reaction time 0.164	interval		1.03	1.03	0.91	0.98	0.97	0.98	0.98	1.00	1.03	1.22	NR		2.97	2.93	3.01
	velocity	5.28	8.25	8.25	9.34	8.67	8.76	8.67	8.67	8.50	8.25	8.61	7.94		8.59	8.70	8.47
Girard-Leno, Patricia (FRA) (1	time	2.36	3.40	4.39	5.39	6.38	7.37	8.37	9.35	10.40	11.44		12.65	5 / 3			
reaction time 0.133	interval		1.04	0.99	1.00	0.99	0.99	1.00	0.98	1.05	1.04	1.21			3.03	2.98	3.07
	velocity	5.51	8.17	8.59	8.50	8.59	8.59	8.50	8.67	8.10	8.17	8.68	7.91		8.42	8.56	8.31
Devers, Gail (USA) (1966)	time	2.44	3.46	4.47	5.43	6.44	7.43	8.43	9.46	10.48	11.48		12.66	8 / 4			
reaction time 0.189	interval		1.02	1.01	0.96	1.01	0.99	1.00	1.03	1.02	1.00	1.18			2.99	3.00	3.05
	velocity	5.33	8.33	8.42	8.85	8.42	8.59	8.50	8.25	8.33	8.50	8.90	7.90		8.53	8.50	8.36
Rose, Dionne (JAM) (1969)	time	2.47	3.50	4.52	5.50	6.50	7.48	8.48	9.47	10.50	11.52		12.74	2 / 5			
reaction time 0.179	interval		1.03	1.02	0.98	1.00	0.98	1.00	0.99	1.03	1.02	1.22			3.03	2.98	3.04
	velocity	5.26	8.25	8.33	8.67	8.50	8.67	8.50	8.59	8.25	8.33	8.61	7.85		8.42	8.56	8.39
Freeman, Michelle (JAM) (196	time	2.44	3.46	4.44	5.44	6.40	7.39	8.38	9.42	10.45	11.49		12.76	4 / 6			

reaction time 0.181	interval		1.02	0.98	1.00	0.96	0.99	0.99	1.04	1.03	1.04	1.27			3.00	2.94	3.11
	velocity	5.33	8.33	8.67	8.50	8.85	8.59	8.59	8.17	8.25	8.17	8.27	7.84		8.50	8.67	8.20
Shekhodanova, Nataliya (RUS	time	2.45	3.50	4.48	5.45	6.43	7.44	8.46	9.47	10.51	11.51		12.80	1 / ~~7~~			
reaction time 0.160	interval		1.05	0.98	0.97	0.98	1.01	1.02	1.01	1.04	1.00	1.29	DV		3.00	3.01	3.05
	velocity	5.31	8.10	8.67	8.76	8.67	8.42	8.33	8.42	8.17	8.50	8.14	7.81		8.50	8.47	8.36
Tolbert-Goode, Lynda (USA) (	time	2.43	3.50	4.52	5.52	6.55	7.58	8.62	9.65	10.72	11.80		13.11	7 / ~~8~~ 7			
reaction time 0.175	interval		1.07	1.02	1.00	1.03	1.03	1.04	1.03	1.07	1.08	1.31			3.09	3.10	3.18
	velocity	5.35	7.94	8.33	8.50	8.25	8.25	8.17	8.25	7.94	7.87	8.02	7.63		8.25	8.23	8.02

1996 USATF National Junior Championships (Delaware, OH)

FINAL date 29-Jun-96 wind -2.5 m/s *USATF Women's Sprint Development (1996)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Calloway, Dominqué (USA) (1	time	2.50	3.63	4.69	5.72	6.73	7.75	8.79	9.82	10.87	11.93		13.28	5 / 1			
reaction time	interval		1.13	1.06	1.03	1.01	1.02	1.04	1.03	1.05	1.06	1.35			3.22	3.07	3.14
	velocity	5.20	7.52	8.02	8.25	8.42	8.33	8.17	8.25	8.10	8.02	7.78	7.53		7.92	8.31	8.12
Bates, Joyce (USA) (1977)	time	2.46	3.60	4.63	5.63	6.70	7.73	8.79	9.88	10.95	12.01		13.42	4 / 2			
reaction time	interval		1.14	1.03	1.00	1.07	1.03	1.06	1.09	1.07	1.06	1.41			3.17	3.16	3.22
	velocity	5.28	7.46	8.25	8.50	7.94	8.25	8.02	7.80	7.94	8.02	7.45	7.45		8.04	8.07	7.92
Merriman, Donica (USA) (1979	time	2.51	3.67	4.73	5.78	6.85	7.95	9.05	10.16	11.27	12.42		13.87	6 / 3			
reaction time	interval		1.16	1.06	1.05	1.07	1.10	1.10	1.11	1.11	1.15	1.45	PB		3.27	3.27	3.37
	velocity	5.18	7.33	8.02	8.10	7.94	7.73	7.73	7.66	7.66	7.39	7.24	7.21		7.80	7.80	7.57
Adams, Jenny (USA) (1978)	time	2.58	3.68	4.75	5.83	6.93	8.05	9.15	10.29	11.43	12.57		14.06	3 / 4			
reaction time	interval		1.10	1.07	1.08	1.10	1.12	1.10	1.14	1.14	1.14	1.49			3.25	3.32	3.42
	velocity	5.04	7.73	7.94	7.87	7.73	7.59	7.73	7.46	7.46	7.46	7.05	7.11		7.85	7.68	7.46
Williams, Camee (USA) (1980)	time	2.57	3.73	4.83	5.91	7.02	8.14	9.29	10.46	11.63	12.80		14.31	8 / 5			
reaction time	interval		1.16	1.10	1.08	1.11	1.12	1.15	1.17	1.17	1.17	1.51			3.34	3.38	3.51
	velocity	5.06	7.33	7.73	7.87	7.66	7.59	7.39	7.26	7.26	7.26	6.95	6.99		7.63	7.54	7.26
Bethel, Ashley (USA) (1980)	time	2.60	3.78	4.85	5.97	7.11	8.22	9.41	10.58	11.75	12.91		14.48	7 / 6			
reaction time	interval		1.18	1.07	1.12	1.14	1.11	1.19	1.17	1.17	1.16	1.57			3.37	3.44	3.50
	velocity	5.00	7.20	7.94	7.59	7.46	7.66	7.14	7.26	7.26	7.33	6.69	6.91		7.57	7.41	7.29
Williams, Michelle (USA) (1978	time	2.63	3.81	4.98	6.11	7.20	8.41	9.58	10.73	11.89	13.07		14.56	2 / 7			
reaction time	interval		1.18	1.17	1.13	1.09	1.21	1.17	1.15	1.16	1.18	1.49			3.48	3.47	3.49
	velocity	4.94	7.20	7.26	7.52	7.80	7.02	7.26	7.39	7.33	7.20	7.05	6.87		7.33	7.35	7.31
Kamani, Nzingah (USA) (1978	time	2.67	3.80	4.98									dnf	1 / --			
reaction time	interval		1.13	1.18													
	velocity	4.87	7.52	7.20													

1996 ??? (Lisboa, POR)

FINAL date 29-Jun-96 wind 3.0 m/s *Coh (1998) - a biomechanical model of the 100m hurdles of birgita bukovec*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Bukovec, Brigita (SLO) (1970)	time	2.59	3.63	4.65	5.65	6.64	7.62	8.60	9.60	10.62	11.66		12.76	/ 1			
reaction time	interval		1.04	1.02	1.00	0.99	0.98	0.98	1.00	1.02	1.04	1.10			3.06	2.95	3.06
	velocity	5.02	8.17	8.33	8.50	8.59	8.67	8.67	8.50	8.33	8.17	9.55	7.84		8.33	8.64	8.33

1996 USA Olympic Trials (Atlanta, GA)

FINAL date 23-Jun-96 wind 0.6 m/s *USATF Women's Sprint Development (1996)*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Devers, Gail (USA) (1966)	time	2.26	3.28	4.28	5.26	6.24	7.21	8.20	9.20	10.22	11.32		12.62	2 / 1			
reaction time 0.153	interval		1.02	1.00	0.98	0.98	0.97	0.99	1.00	1.02	1.10	1.30			3.00	2.94	3.12
	velocity	5.75	8.33	8.50	8.67	8.67	8.76	8.59	8.50	8.33	7.73	8.08	7.92		8.50	8.67	8.17
Tolbert-Goode, Lynda (USA) (	time	2.24	3.31	4.34	5.35	6.33	7.31	8.31	9.28	10.30	11.31		12.69	5 / 2			
reaction time 0.119	interval		1.07	1.03	1.01	0.98	0.98	1.00	0.97	1.02	1.01	1.38			3.11	2.96	3.00
	velocity	5.80	7.94	8.25	8.42	8.67	8.67	8.50	8.76	8.33	8.42	7.61	7.88		8.20	8.61	8.50
Dickey, Cheryl (USA) (1966)	time	2.36	3.43	4.40	5.40	6.36	7.33	8.32	9.32	10.33	11.36		12.76	6 / 3			
reaction time	interval		1.07	0.97	1.00	0.96	0.97	0.99	1.00	1.01	1.03	1.40			3.04	2.92	3.04
	velocity	5.51	7.94	8.76	8.50	8.85	8.76	8.59	8.50	8.42	8.25	7.50	7.84		8.39	8.73	8.39
Bowles, Dawn (USA) (1968)	time	2.34	3.41	4.44	5.44	6.44	7.43	8.46	9.46	10.46	11.48		12.93	3 / 4			
reaction time	interval		1.07	1.03	1.00	1.00	0.99	1.03	1.00	1.00	1.02	1.45			3.10	3.02	3.02
	velocity	5.56	7.94	8.25	8.50	8.50	8.59	8.25	8.50	8.50	8.33	7.24	7.73		8.23	8.44	8.44
Lawson, Tonya (USA) (1969)	time	2.30	3.31	4.31	5.33	6.34	7.38	8.41	9.43	10.45	11.49		12.94	1 / 5			
reaction time	interval		1.01	1.00	1.02	1.01	1.04	1.03	1.02	1.02	1.04	1.45	PB		3.03	3.08	3.08
	velocity	5.65	8.42	8.50	8.33	8.42	8.17	8.25	8.33	8.33	8.17	7.24	7.73		8.42	8.28	8.28
Stanley-Boutte, Tananjalyn (U	time	2.40	3.44	4.48	5.50	6.50	7.51	8.51	9.53	10.54	11.56		12.97	8 / 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	interval		1.04	1.04	1.02	1.00	1.01	1.00	1.02	1.01	1.02	1.41			3.10	3.01	3.05
	velocity	5.42	8.17	8.17	8.33	8.50	8.42	8.50	8.33	8.42	8.33	7.45	7.71		8.23	8.47	8.36
Carson, Kim (USA) (1974)	time	2.34	3.41	4.43	5.44	6.44	7.44	8.48	9.53	10.62	11.60		13.04	4 / 7			
reaction time	interval		1.07	1.02	1.01	1.00	1.00	1.04	1.05	1.09	0.98	1.44			3.10	3.04	3.12
	velocity	5.56	7.94	8.33	8.42	8.50	8.50	8.17	8.10	7.80	8.67	7.29	7.67		8.23	8.39	8.17
Morrison, Melissa (USA) (1971	time	2.33	3.36	4.36	5.36	6.33	7.31	8.32	9.36	10.57	11.76		13.45	7 / 8			
reaction time	interval		1.03	1.00	1.00	0.97	0.98	1.01	1.04	1.21	1.19	1.69			3.03	2.96	3.44
	velocity	5.58	8.25	8.50	8.50	8.76	8.67	8.42	8.17	7.02	7.14	6.21	7.43		8.42	8.61	7.41

1996 German National Championships (Köln, GER)

Semi-Final 1

date 23-Jun-96 wind ??? *Hommel (2007) - Sprinttechnik beobachten und analysieren! P.71* ????

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Jung, Caren (GER) (1968)	time	2.60	3.62	4.64	5.64	6.66	7.68	8.70	9.74	10.82	11.88		13.05	/ 1			
reaction time	interval		1.02	1.02	1.00	1.02	1.02	1.02	1.04	1.08	1.06	1.17	=PB ???		3.04	3.06	3.18
	velocity	5.00	8.33	8.33	8.50	8.33	8.33	8.33	8.17	7.87	8.02	8.97	7.66		8.39	8.33	8.02

1995 IAAF World Championships (Göteborg, SWE)

FINAL

date 06-Aug-95 wind 0.2 m/s

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Devers, Gail (USA) (1966)	0.162	no information available											12.68	5 / 1			
Shishigina, Olga (KAZ) (1968)	0.141	no information available											12.80	4 / 2			
Graudyn, Yuliya (RUS) (1970)	0.185	no information available											12.85	8 / 3			
Reshetnikova, Tatyana (RUS)	0.194	no information available											12.87	2 / 4			
Baumann, Julie (SUI) (1964)	0.137	no information available											12.95	7 / 5			
Russell, Gillian (JAM) (1973)	0.167	no information available											12.96	6 / 6			
Rose, Dionne (JAM) (1969)	0.152	no information available											12.98	1 / 7			
Bukovec, Brigita (SLO) (1970)	0.180	no information available											13.02	3 / 8			

1995 Postojna, SLO

FINAL

date 08-Jul-95 wind ??? *Coh (1996) - three-dimensional kinematic analysis of the hurdles technique used by brigita bukovec*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Bukovec, Brigita (SLO) (1970)	time	2.60	3.64	4.66	5.66	6.65	7.63	8.61	9.60	10.62	11.65		12.75	/ 1			
reaction time	interval		1.04	1.02	1.00	0.99	0.98	0.98	0.99	1.02	1.03	1.10	PB		3.06	2.95	3.04
	velocity	5.00	8.17	8.33	8.50	8.59	8.67	8.67	8.59	8.33	8.25	9.55	7.84		8.33	8.64	8.39

1993 Chinese National Games (Beijing, CHN)

FINAL

date 09-Sep-93 wind 0.1 m/s *Bo (1996) - a study on female 100m hurdles running rhythm in the 7th national games*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Zhang Yu (CHN) (1971)	time	2.54	3.58	4.56	5.55	6.53	7.51	8.51	9.52	10.53	11.55		12.64	/ 1			
reaction time	interval		1.04	0.98	0.99	0.98	0.98	1.00	1.01	1.01	1.02	1.09	AR		3.01	2.96	3.04
	velocity	5.12	8.17	8.67	8.59	8.67	8.67	8.50	8.42	8.42	8.33	9.63	7.91		8.47	8.61	8.39
Xie Liuying (CHN) (1967)	time	2.55	3.57	4.57	5.55	6.53	7.53	8.55	9.57	10.60	11.65		12.75	/ 2			
reaction time	interval		1.02	1.00	0.98	0.98	1.00	1.02	1.02	1.03	1.05	1.10			3.00	3.00	3.10
	velocity	5.10	8.33	8.50	8.67	8.67	8.50	8.33	8.33	8.25	8.10	9.55	7.84		8.50	8.50	8.23
Zhou Hongyan (CHN) (1970)	time	2.57	3.61	4.63	5.62	6.63	7.65	8.67	9.69	10.73	11.78		12.90	/ 3			
reaction time	interval		1.04	1.02	0.99	1.01	1.02	1.02	1.02	1.04	1.05	1.12			3.05	3.05	3.11
	velocity	5.06	8.17	8.33	8.59	8.42	8.33	8.33	8.33	8.17	8.10	9.37	7.75		8.36	8.36	8.20
Pang Jiewen (CHN) (1967)	time	2.53	3.57	4.60	5.62	6.64	7.68	8.72	9.76	10.82	11.98		13.12	/ 4			
reaction time	interval		1.04	1.03	1.02	1.02	1.04	1.04	1.04	1.06	1.16	1.14			3.09	3.10	3.26
	velocity	5.14	8.17	8.25	8.33	8.33	8.17	8.17	8.17	8.02	7.33	9.21	7.62		8.25	8.23	7.82
Luo Bin (CHN) (1970)	time	2.51	3.53	4.53	5.49	6.47	7.45	8.47	9.51	10.57	11.77		13.13	/ 5			
reaction time	interval		1.02	1.00	0.96	0.98	0.98	1.02	1.04	1.06	1.20	1.36			2.98	2.98	3.30
	velocity	5.18	8.33	8.50	8.85	8.67	8.67	8.33	8.17	8.02	7.08	7.72	7.62		8.56	8.56	7.73
Zhou Jing (CHN) (1973)	time	2.56	3.62	4.67	5.68	6.71	7.75	8.79	9.83	10.89	12.05		13.19	/ 6			
reaction time	interval		1.06	1.05	1.01	1.03	1.04	1.04	1.04	1.06	1.16	1.14			3.12	3.11	3.26
	velocity	5.08	8.02	8.10	8.42	8.25	8.17	8.17	8.17	8.02	7.33	9.21	7.58		8.17	8.20	7.82
Sun Xue (CHN)	time	2.69	3.75	4.79	5.83	6.87	7.91	8.95	9.99	11.05	12.13		13.28	/ 7			
reaction time	interval		1.06	1.04	1.04	1.04	1.04	1.04	1.04	1.06	1.08	1.15			3.14	3.12	3.18
	velocity	4.83	8.02	8.17	8.17	8.17	8.17	8.17	8.17	8.02	7.87	9.13	7.53		8.12	8.17	8.02

1993 IAAF World Championships (Stuttgart, GER)

FINAL

date 20-Aug-93 wind 0.2 m/s *Graubner (2008) - http://www.fgs.uni-halle.de*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Devers, Gail (USA) (1966)	time	2.62	3.62	4.57	5.52	6.47	7.45	8.44	9.45	10.46	11.48		12.46	3 / 1			
reaction time 0.167	interval		1.00	0.95	0.95	0.95	0.98	0.99	1.01	1.01	1.02	0.98	AR		2.90	2.92	3.04
	velocity	4.96	8.50	8.95	8.95	8.95	8.67	8.59	8.42	8.42	8.33	10.71	8.03		8.79	8.73	8.39
Azyabina, Marina (RUS) (1963)	0.157	no information available											12.60	4 / 2			

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

Tolber-Goode, Lynda (USA) (	0.118	no information available	PB	12.67	5 / 3	
Lopez, Aliuska (CUB) (1969)	0.187	no information available	NR	12.73	1 / 4	
Sokolova, Eva (RUS) (1962)	0.163	no information available		12.78	6 / 5	
Bowles, Dawn (USA) (1968)	0.217	no information available		12.90	8 / 6	
Freeman, Michelle (JAM) (196	0.188	no information available		12.90	7 / 7	
Cinelu, Cecile (FRA) (1970)	0.190	no information available		12.95	2 / 8	

1993 European Junior Championships (San Sebastian, ESP)

FINAL

date 01-Aug-93 wind 1.3 m/s *Hücklekemkes (1997) - geschwindigkeitstabellen vereinfachen die auswertung von hürdensprints*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Fust, Katja (GER) (1974)	time	2.78	3.84	4.92	5.96	7.04	8.08	9.16	10.20	11.28	12.34		13.55	/ 2			
reaction time	interval		1.06	1.08	1.04	1.08	1.04	1.08	1.04	1.08	1.06	1.21			3.18	3.20	3.18
	velocity	4.68	8.02	7.87	8.17	7.87	8.17	7.87	8.17	7.87	8.02	8.68	7.38		8.02	7.97	8.02

Heat 2

date 31-Jul-93 wind 0.4 m/s *Hücklekemkes (1997) - geschwindigkeitstabellen vereinfachen die auswertung von hürdensprints*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Fust, Katja (GER) (1974)	time	2.74	3.84	4.90	5.96	7.00	8.10	9.18	10.20	11.28	12.38		13.70	/ 2			
reaction time	interval		1.10	1.06	1.06	1.04	1.10	1.08	1.02	1.08	1.10	1.32			3.22	3.22	3.20
	velocity	4.74	7.73	8.02	8.02	8.17	7.73	7.87	8.33	7.87	7.73	7.95	7.30		7.92	7.92	7.97

1992 Olympic Games (Barcelona, ESP)

FINAL

date 06-Aug-92 wind 0.4 m/s

	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Patoulídou, Voula (GRE) (1965)	no information available										NR	12.64	5 / 1			
Martin, LaVonna (USA) (1966)	no information available											12.69	4 / 2			
Donkova, Yordanka (BUL) (1961)	no information available											12.70	6 / 3			
Tolbert-Goode, Lynda (USA) (1967)	no information available											12.75	3 / 4			
Devers-Roberts, Gail (USA) (1966)	no information available											12.75	2 / 5			
Lopez, Aliuska (CUB) (1969)	no information available											12.87	7 / 6			
Kolovanova, Natalya (EUN) (1964)	no information available											13.01	8 / 7			
Adams, Odalys (CUB) (1966)	no information available											13.57	1 / 8			

Quarter-Final 3

date 05-Aug-92 wind -0.7 m/s *Lyle - miscellaneous coaching notes*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Devers-Roberts, Gail (USA) (1	time	2.49	3.51	4.50	5.48	6.45	7.41	8.38	9.38	10.38	11.42		12.76	2 / 1			
reaction time	interval		1.02	0.99	0.98	0.97	0.96	0.97	1.00	1.00	1.04	1.34			2.99	2.90	3.04
	velocity	5.22	8.33	8.59	8.67	8.76	8.85	8.76	8.50	8.50	8.17	7.84	7.84		8.53	8.79	8.39

Quarter-Final 2

date 05-Aug-92 wind 1.4 m/s *Lyle - miscellaneous coaching notes*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tolbert-Goode, Lynda (USA) (	time	2.56	3.59	4.57	5.56	6.55	7.55	8.55	9.55	10.58	11.63		12.96	5 / 2			
reaction time	interval		1.03	0.98	0.99	0.99	1.00	1.00	1.00	1.03	1.05	1.33			3.00	2.99	3.08
	velocity	5.08	8.25	8.67	8.59	8.59	8.50	8.50	8.50	8.25	8.10	7.89	7.72		8.50	8.53	8.28

Quarter-Final 1

date 05-Aug-92 wind -1.5 m/s *Lyle - miscellaneous coaching notes*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Martin, LaVonna (USA) (1966)	time	2.55	3.58	4.54	5.49	6.45	7.42	8.43	9.46	10.51	11.61		12.82	5 / 1			
reaction time	interval		1.03	0.96	0.95	0.96	0.97	1.01	1.03	1.05	1.10	1.21			2.94	2.94	3.18
	velocity	5.10	8.25	8.85	8.95	8.85	8.76	8.42	8.25	8.10	7.73	8.68	7.80		8.67	8.67	8.02

Heat 5

date 05-Aug-92 wind -0.7 m/s *Lyle - miscellaneous coaching notes*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tolbert-Goode, Lynda (USA) (	time	2.58	3.62	4.64	5.63	6.62	7.62	8.63	9.66	10.71	11.80		12.96	5 / 1			
reaction time	interval		1.04	1.02	0.99	0.99	1.00	1.01	1.03	1.05	1.09	1.16			3.05	3.00	3.17
	velocity	5.04	8.17	8.33	8.59	8.59	8.50	8.42	8.25	8.10	7.80	9.05	7.72		8.36	8.50	8.04

Heat 4

date 05-Aug-92 wind 0.0 m/s *Lyle - miscellaneous coaching notes*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Martin, LaVonna (USA) (1966)	time	2.66	3.66	4.65	5.63	6.62	7.62	8.61	9.60	10.63	11.70		12.82	7 / 1			
reaction time	interval		1.00	0.99	0.98	0.99	1.00	0.99	0.99	1.03	1.07	1.12			2.97	2.98	3.09
	velocity	4.89	8.50	8.59	8.67	8.59	8.50	8.59	8.59	8.25	7.94	9.37	7.80		8.59	8.56	8.25

Heat 3

date 05-Aug-92 wind -0.4 m/s *Lyle - miscellaneous coaching notes*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Donkova, Yordanka (BUL) (19	time	2.61	3.65	4.67	5.66	6.64	7.61	8.59	9.61	10.67	11.74		12.96	3 / 1			
reaction time	interval		1.04	1.02	0.99	0.98	0.97	0.98	1.02	1.06	1.07	1.22			3.05	2.93	3.15
	velocity	4.98	8.17	8.33	8.59	8.67	8.76	8.67	8.33	8.02	7.94	8.61	7.72		8.36	8.70	8.10

Heat 2

date 05-Aug-92 wind 0.0 m/s *Lyle - miscellaneous coaching notes*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Devers-Roberts, Gail (USA) (1	time	2.63	3.66	4.62	5.56	6.51	7.51	8.53	9.58	10.67	11.78		13.19	3 / 3			
reaction time	interval		1.03	0.96	0.94	0.95	1.00	1.02	1.05	1.09	1.11	1.41			2.93	2.97	3.25
	velocity	4.94	8.25	8.85	9.04	8.95	8.50	8.33	8.10	7.80	7.66	7.45	7.58		8.70	8.59	7.85

Heat 1

date 05-Aug-92 wind -1.5 m/s *Lyle - miscellaneous coaching notes*

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

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

Engquist-Narozhilenko, Ludm	time		2.56	3.60	4.61	5.60	6.58	7.58	8.60	9.64	10.71	11.84		13.04	1 / 1				
reaction time	interval			1.04	1.01	0.99	0.98	1.00	1.02	1.04	1.07	1.13	1.20			3.04	3.00	3.24	
	velocity		5.08	8.17	8.42	8.59	8.67	8.50	8.33	8.17	7.94	7.52	8.75	7.67		8.39	8.50	7.87	

1991 IAAF World Championships (Tokyo, JPN)

FINAL

date 30-Aug-91 wind -1.7 m/s

Numazawa (1991) - analysis of time in the 3rd world athletics championships, women's 100m hurdles

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Engquist-Narozhilenko, Ludm	time		2.62	3.62	4.61	5.59	6.56	7.55	8.51	9.50	10.50	11.50		12.59	4 / 1			
reaction time 0.147	interval			1.00	0.99	0.98	0.97	0.99	0.96	0.99	1.00	1.00	1.09			2.97	2.92	2.99	
	velocity		4.96	8.50	8.59	8.67	8.76	8.59	8.85	8.59	8.50	8.50	9.63	7.94		8.59	8.73	8.53	
Devers, Gail (USA) (1966)	time		2.57	3.61	4.61	5.59	6.58	7.56	8.54	9.55	10.55	11.56		12.63	5 / 2			
reaction time 0.148	interval			1.04	1.00	0.98	0.99	0.98	0.98	1.01	1.00	1.01	1.07			3.02	2.95	3.02	
	velocity		5.06	8.17	8.50	8.67	8.59	8.67	8.67	8.42	8.50	8.42	9.81	7.92		8.44	8.64	8.44	
Grigoryeva, Natalya (URS) (19	time		2.55	3.57	4.56	5.54	6.51	7.49	8.48	9.48	10.51	11.56		12.69	6 / 3			
reaction time 0.162	interval			1.02	0.99	0.98	0.97	0.98	0.99	1.00	1.03	1.05	1.13			2.99	2.94	3.08	
	velocity		5.10	8.33	8.59	8.67	8.76	8.67	8.59	8.50	8.25	8.10	9.29	7.88		8.53	8.67	8.28	
Éwanjé-Épée, Monique (FRA)	0.150	no information available												12.84	3 / 4				
Baumann, Julie (SUI) (1964)	0.152	no information available												12.88	2 / 5				
Colle, Florence (FRA) (1965)	0.165	no information available												13.01	1 / 6				
López, Aliuska (CUB) (1969)	0.168	no information available												13.06	8 / 7				
Patzwahl, Kristin (GER) (1965)	0.155	no information available												13.07	7 / 8				

Heat 5

date 29-Aug-91 wind 0.5 m/s

Numazawa (1991) - analysis of time in the 3rd world athletics championships, women's 100m hurdles

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Sasaki, Ayumi (JPN) (1967)	time	2.69	3.81	4.93	5.98	7.05	8.15	9.25	10.35	11.47	12.62		13.85	2 / 7			
reaction time	interval		1.12	1.12	1.05	1.07	1.10	1.10	1.10	1.12	1.15	1.23			3.29	3.27	3.37
	velocity	4.83	7.59	7.59	8.10	7.94	7.73	7.73	7.73	7.59	7.39	8.54	7.22		7.75	7.80	7.57

1991 USSR National Championships (Kiev, URS)

FINAL

date 11-Jul-91 wind 1.8 m/s

Stepanov (2004) - speed and (or?) technique: gail devers and others (in Jarver (ed) - the hurdles, 2004)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Narozhilenko, Ludmila (URS)	time	2.58	3.57	4.54	5.50	6.44	7.38	8.33	9.30	10.28	11.28		12.28	/ 1			
reaction time	interval		0.99	0.97	0.96	0.94	0.94	0.95	0.97	0.98	1.00	1.00	PB		2.92	2.83	2.95
	velocity	5.04	8.59	8.76	8.85	9.04	9.04	8.95	8.76	8.67	8.50	10.50	8.14		8.73	9.01	8.64

1991 European Cup (Frankfurt, GER)

FINAL

date 30-Jun-91 wind -2.1 m/s

Federle (2003) - http://www.fgs.uni-halle.de

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Narozhilenko, Lyudmila (URS)	time	2.63	3.64	4.63	5.61	6.59	7.55	8.53	9.51	10.49	11.48		12.55	/ 1			
reaction time	interval		1.01	0.99	0.98	0.98	0.96	0.98	0.98	0.98	0.99	1.07			2.98	2.92	2.95
	velocity	4.94	8.42	8.59	8.67	8.67	8.85	8.67	8.67	8.67	8.59	9.81	7.97		8.56	8.73	8.64
Ewanjé-Epée, Monique (FRA)	time	2.59	3.64	4.64	5.64	6.64	7.63	8.63	9.62	10.62	11.64		12.79	/ 2			
reaction time	interval		1.05	1.00	1.00	1.00	0.99	1.00	0.99	1.00	1.02	1.15			3.05	2.99	3.01
	velocity	5.02	8.10	8.50	8.50	8.50	8.59	8.50	8.59	8.50	8.33	9.13	7.82		8.36	8.53	8.47
Patzwahl, Kristin (GER) (1965)	time	2.62	3.65	4.67	5.69	6.70	7.72	8.74	9.78	10.83	11.90		13.10	/ 3			
reaction time	interval		1.03	1.02	1.02	1.01	1.02	1.02	1.04	1.05	1.07	1.20			3.07	3.05	3.16
	velocity	4.96	8.25	8.33	8.33	8.42	8.33	8.33	8.17	8.10	7.94	8.75	7.63		8.31	8.36	8.07
Pogacian, Mihaela (ROU) (195	time	2.66	3.74	4.77	5.79	6.81	7.83	8.85	9.87	10.90	11.94		13.18	/ 4			
reaction time	interval		1.08	1.03	1.02	1.02	1.02	1.02	1.02	1.03	1.04	1.24			3.13	3.06	3.09
	velocity	4.89	7.87	8.25	8.33	8.33	8.33	8.33	8.33	8.25	8.17	8.47	7.59		8.15	8.33	8.25
Skeete, Lesley-Ann (GBR) (19	time	2.61	3.68	4.74	5.78	6.81	7.86	8.90	9.94	11.02	12.08		13.26	/ 5			
reaction time	interval		1.07	1.06	1.04	1.03	1.05	1.04	1.04	1.08	1.06	1.18			3.17	3.12	3.18
	velocity	4.98	7.94	8.02	8.17	8.25	8.10	8.17	8.17	7.87	8.02	8.90	7.54		8.04	8.17	8.02
Włodarczyk, Urszula (POL) (1965)	no information available												13.66	/ 6				
Bálint, Zita (HUN) (1971)	no information available												14.12	/ 7				
Stoyanova, Yordanka (BUL) (1956)	no information available												17.79	/ 8				

1989 IAAF World Cup (Barcelona, ESP)

FINAL

date 09-Sep-89 wind -0.3 m/s

Gill (1990) - atletismo (I) carreras y marcha

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Oschkenat, Cornelia (GDR) (1	time	2.55	3.59	4.58	5.56	6.52	7.50	8.51	9.50	10.51	11.53		12.60	/ 1			
reaction time	interval		1.04	0.99	0.98	0.96	0.98	1.01	0.99	1.01	1.02	1.07			3.01	2.95	3.02
	velocity	5.10	8.17	8.59	8.67	8.85	8.67	8.42	8.59	8.42	8.33	9.81	7.94		8.47	8.64	8.44
Narozhilenko, Ludmila (URS)	time	2.64	3.66	4.66	5.66	6.66	7.66	8.69	9.70	10.72	11.76		12.80	/ 2			
reaction time	interval		1.02	1.00	1.00	1.00	1.00	1.03	1.01	1.02	1.04	1.04			3.02	3.03	3.07
	velocity	4.92	8.33	8.50	8.50	8.50	8.50	8.25	8.42	8.33	8.17	10.10	7.81		8.44	8.42	8.31

Tolbert, Lynda (USA) (1967)	time	2.57	3.61	4.62	5.64	6.64	7.65	8.68	9.69	10.72	11.77		12.86	/ 3			
reaction time	interval		1.04	1.01	1.02	1.00	1.01	1.03	1.01	1.03	1.05	1.09			3.07	3.04	3.09
	velocity	5.06	8.17	8.42	8.33	8.50	8.42	8.25	8.42	8.25	8.10	9.63	7.78		8.31	8.39	8.25
Adams, Odalys (CUB) (1966)	no information available												12.86	/ 4			
Zaczkiewicz, Claudia (FRG) (1962)	no information available												12.96	/ 5			
Liu Huajin (CHN) (1960)	no information available												13.43	/ 6			
Mardomingo, María José (ESP	time	2.71	3.78	4.85	5.93	7.01	8.14	9.26	10.38	11.48	12.58		13.76	/ 7			
reaction time	interval		1.07	1.07	1.08	1.08	1.13	1.12	1.12	1.10	1.10	1.18			3.22	3.33	3.32
	velocity	4.80	7.94	7.94	7.87	7.87	7.52	7.59	7.59	7.73	7.73	8.90	7.27		7.92	7.66	7.68
Azzizi, Yasmina (ALG) (1966)	no information available												13.99	/ 8			
Pirovano, Helen (NZL)	no information available												14.91	/ 9			

1988 Olympic Games (Seoul, KOR)

FINAL

date 30-Sep-88 wind 0.2 m/s

Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Donkova, Yordanka (BUL) (19	time	2.54	3.55	4.52	5.50	6.46	7.42	8.38	9.34	10.31	11.32		12.38	5 / 1			
reaction time 0.150	interval		1.01	0.97	0.98	0.96	0.96	0.96	0.96	0.97	1.01	1.06	OR		2.96	2.88	2.94
	velocity	5.12	8.42	8.76	8.67	8.85	8.85	8.85	8.85	8.76	8.42	9.91	8.08		8.61	8.85	8.67
Siebert, Gloria (GDR) (1964)	time	2.60	3.61	4.62	5.58	6.54	7.50	8.46	9.46	10.46	11.46		12.61	4 / 2			
reaction time 0.196	interval		1.01	1.01	0.96	0.96	0.96	0.96	1.00	1.00	1.00	1.15			2.98	2.88	3.00
	velocity	5.00	8.42	8.42	8.85	8.85	8.85	8.85	8.50	8.50	8.50	9.13	7.93		8.56	8.85	8.50
Zaczkiewicz, Claudia (FRG) (1	time	2.59	3.61	4.62	5.59	6.58	7.58	8.59	9.58	10.59	11.62		12.75	3 / 3			
reaction time 0.166	interval		1.02	1.01	0.97	0.99	1.00	1.01	0.99	1.01	1.03	1.13			3.00	3.00	3.03
	velocity	5.02	8.33	8.42	8.76	8.59	8.50	8.42	8.59	8.42	8.25	9.29	7.84		8.50	8.50	8.42
Grigoryeva, Natalya (URS) (19	time	2.59	3.61	4.61	5.59	6.57	7.57	8.56	9.57	10.58	11.62		12.79	8 / 4			
reaction time 0.179	interval		1.02	1.00	0.98	0.98	1.00	0.99	1.01	1.01	1.04	1.17			3.00	2.97	3.06
	velocity	5.02	8.33	8.50	8.67	8.67	8.50	8.59	8.42	8.42	8.17	8.97	7.82		8.50	8.59	8.33
Colle, Florence (FRA) (1965)	time	2.65	3.69	4.74	5.74	6.74	7.75	8.77	9.78	10.82	11.85		12.98	1 / 5			
reaction time 0.173	interval		1.04	1.05	1.00	1.00	1.01	1.02	1.01	1.04	1.03	1.13			3.09	3.03	3.08
	velocity	4.91	8.17	8.10	8.50	8.50	8.42	8.33	8.42	8.17	8.25	9.29	7.70		8.25	8.42	8.28
Rocheleau-Baumann, Julie (C	time	2.56	3.61	4.62	5.62	6.67	7.68	8.70	9.74	10.78	11.82		12.99	2 / 6			
reaction time 0.149	interval		1.05	1.01	1.00	1.05	1.01	1.02	1.04	1.04	1.04	1.17			3.06	3.08	3.12
	velocity	5.08	8.10	8.42	8.50	8.10	8.42	8.33	8.17	8.17	8.17	8.97	7.70		8.33	8.28	8.17
Ewanjé-Epée, Monique (FRA)	time	2.61	3.69	4.82	5.84	6.86	7.88	8.90	9.90	10.94	11.98		13.14	7 / 7			
reaction time 0.161	interval		1.08	1.13	1.02	1.02	1.02	1.02	1.00	1.04	1.04	1.16			3.23	3.06	3.08
	velocity	4.98	7.87	7.52	8.33	8.33	8.33	8.33	8.50	8.17	8.17	9.05	7.61		7.89	8.33	8.28
Oschkenat, Cornelia (GDR) (1	time	2.53	3.56	4.54	5.58	6.58	7.65	8.70	9.77	10.90	12.10		13.73	6 / 8			
reaction time 0.138	interval		1.03	0.98	1.04	1.00	1.07	1.05	1.07	1.13	1.20	1.63			3.05	3.12	3.40
	velocity	5.14	8.25	8.67	8.17	8.50	7.94	8.10	7.94	7.52	7.08	6.44	7.28		8.36	8.17	7.50

Semi-Final 2

date 29-Sep-88 wind 0.4 m/s

Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Oschkenat, Cornelia (GDR) (1	time	2.56	3.59	4.59	5.56	6.54	7.51	8.51	9.51	10.51	11.52		12.63	4 / 1			
reaction time 0.138	interval		1.03	1.00	0.97	0.98	0.97	1.00	1.00	1.00	1.01	1.11			3.00	2.95	3.01
	velocity	5.08	8.25	8.50	8.76	8.67	8.76	8.50	8.50	8.50	8.42	9.46	7.92		8.50	8.64	8.47
Zaczkiewicz, Claudia (FRG) (1	time	2.58	3.63	4.63	5.62	6.61	7.59	8.59	9.59	10.61	11.67		12.75	6 / 2			
reaction time 0.147	interval		1.05	1.00	0.99	0.99	0.98	1.00	1.00	1.02	1.06	1.08			3.04	2.97	3.08
	velocity	5.04	8.10	8.50	8.59	8.59	8.67	8.50	8.50	8.33	8.02	9.72	7.84		8.39	8.59	8.28
Grigoryeva, Natalya (URS) (19	time	2.65	3.67	4.67	5.67	6.65	7.63	8.63	9.63	10.63	11.71		12.81	3 / 3			
reaction time 0.176	interval		1.02	1.00	1.00	0.98	0.98	1.00	1.00	1.00	1.08	1.10			3.02	2.96	3.08
	velocity	4.91	8.33	8.50	8.50	8.67	8.67	8.50	8.50	8.50	7.87	9.55	7.81		8.44	8.61	8.28
Ewanjé-Epée, Monique (FRA)	time	2.67	3.71	4.75	5.75	6.75	7.75	8.75	9.78	10.79	11.84		12.95	7 / 4			
reaction time 0.176	interval		1.04	1.04	1.00	1.00	1.00	1.00	1.03	1.01	1.05	1.11			3.08	3.00	3.09
	velocity	4.87	8.17	8.17	8.50	8.50	8.50	8.50	8.25	8.42	8.10	9.46	7.72		8.28	8.50	8.25
Olyslager, Marjan (NED) (1962)	time	2.59	3.65	4.69	5.70	6.70	7.73	8.75	9.79	10.86	11.93		13.08	8 / 5			
reaction time 0.131	interval		1.06	1.04	1.01	1.00	1.03	1.02	1.04	1.07	1.07	1.15			3.11	3.05	3.18
	velocity	5.02	8.02	8.17	8.42	8.50	8.25	8.33	8.17	7.94	7.94	9.13	7.65		8.20	8.36	8.02
Gunnell, Sally (GBR) (1966)	time	2.72	3.81	4.87	5.91	6.95	7.95	8.97	9.99	11.01	12.04		13.13	2 / 6			
reaction time 0.182	interval		1.09	1.06	1.04	1.04	1.00	1.02	1.02	1.02	1.03	1.09			3.19	3.06	3.07
	velocity	4.78	7.80	8.02	8.17	8.17	8.50	8.33	8.33	8.33	8.25	9.63	7.62		7.99	8.33	8.31
Humphrey, Jacqueline (USA) (	time	2.67	3.79	4.89	5.96	7.03	8.10	9.16	10.23	11.29	12.39		13.59	1 / 7			

reaction time	0.181	interval		1.12	1.10	1.07	1.07	1.07	1.06	1.07	1.06	1.10	1.20			3.29	3.20	3.23
		velocity	4.87	7.59	7.73	7.94	7.94	7.94	8.02	7.94	8.02	7.73	8.75	7.36		7.75	7.97	7.89
Narozhilenko, Lyudmila (EUN)		time	2.67	3.71	4.71	5.70	6.67	7.65	8.63	9.63	10.63			dnf	5 / --			
reaction time	0.163	interval		1.04	1.00	0.99	0.97	0.98	0.98	1.00	1.00					3.03	2.93	
		velocity	4.87	8.17	8.50	8.59	8.76	8.67	8.67	8.50	8.50					8.42	8.70	

Semi-Final 1

date 29-Sep-88 wind 0.5 m/s

Brüggemann (1990) - scientific research project at the games of the XXXIV Olympiad, Seoul 1988

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Donkova, Yordanka (BUL) (19		time	2.56	3.60	4.58	5.57	6.53	7.49	8.45	9.44	10.45	11.45		12.58	6 / 1			
reaction time	0.171	interval		1.04	0.98	0.99	0.96	0.96	0.96	0.99	1.01	1.00	1.13			3.01	2.88	3.00
		velocity	5.08	8.17	8.67	8.59	8.85	8.85	8.85	8.59	8.42	8.50	9.29	7.95		8.47	8.85	8.50
Siebert, Gloria (GDR) (1964)		time	2.60	3.62	4.61	5.61	6.57	7.53	8.49	9.49	10.49	11.49		12.60	3 / 2			
reaction time	0.182	interval		1.02	0.99	1.00	0.96	0.96	0.96	1.00	1.00	1.00	1.11			3.01	2.88	3.00
		velocity	5.00	8.33	8.59	8.50	8.85	8.85	8.85	8.50	8.50	8.50	9.46	7.94		8.47	8.85	8.50
Rocheleau-Baumann, Julie (C		time	2.55	3.60	4.64	5.65	6.65	7.67	8.68	9.69	10.73	11.77		12.91	5 / 3			
reaction time	0.137	interval		1.05	1.04	1.01	1.00	1.02	1.01	1.01	1.04	1.04	1.14			3.10	3.03	3.09
		velocity	5.10	8.10	8.17	8.42	8.50	8.33	8.42	8.42	8.17	8.17	9.21	7.75		8.23	8.42	8.25
Colle, Florence (FRA) (1965)		time	2.65	3.69	4.75	5.77	6.77	7.77	8.77	9.78	10.81	11.84		12.92	2 / 4			
reaction time	0.166	interval		1.04	1.06	1.02	1.00	1.00	1.00	1.01	1.03	1.03	1.08			3.12	3.00	3.07
		velocity	4.91	8.17	8.02	8.33	8.50	8.50	8.50	8.42	8.25	8.25	9.72	7.74		8.17	8.50	8.31
Knabe, Kerstin (GDR) (1959)		time	2.64	3.73	4.73	5.75	6.75	7.76	8.77	9.78	10.80	11.81		12.93	4 / 5			
reaction time	0.133	interval		1.09	1.00	1.02	1.00	1.01	1.01	1.01	1.02	1.01	1.12			3.11	3.02	3.04
		velocity	4.92	7.80	8.50	8.33	8.50	8.42	8.42	8.42	8.33	8.42	9.38	7.73		8.20	8.44	8.39
Skeete, Lesley-Ann (GBR) (19		time	2.64	3.69	4.75	5.77	6.81	7.82	8.85	9.89	10.97	12.05		13.23	1 / 6			
reaction time	0.178	interval		1.05	1.06	1.02	1.04	1.01	1.03	1.04	1.08	1.08	1.18			3.13	3.08	3.20
		velocity	4.92	8.10	8.02	8.33	8.17	8.42	8.25	8.17	7.87	7.87	8.90	7.56		8.15	8.28	7.97
Martin, LaVonna (USA) (1966)		time	2.63	3.69	4.72	5.77	6.80	7.84	8.89	9.93	11.01	12.09		13.29	8 / 7			
reaction time	0.158	interval		1.06	1.03	1.05	1.03	1.04	1.05	1.04	1.08	1.08	1.20			3.14	3.12	3.20
		velocity	4.94	8.02	8.25	8.10	8.25	8.17	8.10	8.17	7.87	7.87	8.75	7.52		8.12	8.17	7.97
Devers-Roberts, Gail (USA) (1		time	2.64	3.77	4.89	5.96	7.01	8.05	9.13	10.21	11.29	12.37		13.51	7 / 8			
reaction time	0.166	interval		1.13	1.12	1.07	1.05	1.04	1.08	1.08	1.08	1.08	1.14			3.32	3.17	3.24
		velocity	4.92	7.52	7.59	7.94	8.10	8.17	7.87	7.87	7.87	7.87	9.21	7.40		7.68	8.04	7.87

1988 (Stara Zagova, BUL)

FINAL

date 20-Aug-88 wind 0.7 m/s

Vazel (2016) - Analysis of Keni Harrison's World Record 100m Hurdles Race

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Donkova, Yordanka (BUL) (19		time	2.50	3.49	4.42	5.34	6.24	7.19	8.16	9.14	10.11	11.14		12.21	/ 1			
reaction time		interval		0.99	0.93	0.92	0.90	0.95	0.97	0.98	0.97	1.03	1.07	WR		2.84	2.82	2.98
		velocity	5.20	8.59	9.14	9.24	9.44	8.95	8.76	8.67	8.76	8.25	9.81	8.19		8.98	9.04	8.56

1987 Chinese National Games (Guangzhou, CHN)

FINAL

date 25-Nov-87 wind ??

Xia (1990) - analysis of Liu Huajin's technical features in breaking the Asian 100m hurdles record

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Liu Huajin (CHN) (1960)		time	2.55	3.62	4.58	5.58	6.62	7.66	8.68	9.71	10.73	11.77		12.89	/ 1			
reaction time		interval		1.07	0.96	1.00	1.04	1.04	1.02	1.03	1.02	1.04	1.12	AR		3.03	3.10	3.09
		velocity	5.10	7.94	8.85	8.50	8.17	8.17	8.33	8.25	8.33	8.17	9.37	7.76		8.42	8.23	8.25

Semi-Final 2

date 25-Nov-87 wind -0.3 m/s

Xia (1990) - analysis of Liu Huajin's technical features in breaking the Asian 100m hurdles record

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Du Juan (CHN) (1968)		time	2.57	3.57	4.62	5.66	6.70	7.72	8.76	9.80	10.85	11.97		13.17	/ 2			
reaction time		interval		1.00	1.05	1.04	1.04	1.02	1.04	1.04	1.05	1.12	1.20	PB		3.09	3.10	3.21
		velocity	5.06	8.50	8.10	8.17	8.17	8.33	8.17	8.17	8.10	7.59	8.75	7.59		8.25	8.23	7.94

1987 IAAF World Championships (Rome, ITA)

FINAL

date 04-Sep-87 wind -0.5 m/s

Susanka (1988) - time analysis of the sprint hurdle events at the II World Championships in Athletics

			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Zagorcheva, Ginka (BUL) (195		time	2.51	3.52	4.49	5.46	6.44	7.41	8.38	9.34	10.31	11.28		12.34	5 / 1			
reaction time		interval		1.01	0.97	0.97	0.98	0.97	0.97	0.96	0.97	0.97	1.06	CR		2.95	2.92	2.90
		velocity	5.18	8.42	8.76	8.76	8.67	8.76	8.76	8.85	8.76	8.76		8.10		8.64	8.73	8.79
Uibel-Siebert, Gloria (GDR) (1!		time	2.57	3.58	4.56	5.50	6.48	7.44	8.42	9.36	10.33	11.34		12.44	4 / 2			
reaction time	0.193	interval		1.01	0.98	0.94	0.98	0.96	0.98	0.94	0.97	1.01	1.10	PB		2.93	2.92	2.92
		velocity	5.06	8.42	8.67	9.04	8.67	8.85	8.67	9.04	8.76	8.42	9.55	8.04		8.70	8.73	8.73
Riefstahl-Oschkenat, Cornelia		time	2.50	3.50	4.48	5.46	6.43	7.40	8.38	9.36	10.35	11.36		12.46	6 / 3			
reaction time		interval		1.00	0.98	0.98	0.97	0.97	0.98	0.98	0.99	1.01	1.10			2.96	2.92	2.98
		velocity	5.20	8.50	8.67	8.67	8.76	8.76	8.67	8.67	8.59	8.42	9.55	8.03		8.61	8.73	8.56
Donkova, Yordanka (RUL) (1961)		no information available												12.49	3 / 4			

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

Piquereau, Anne (FRA) (1964)	no information available	12.82	1 / 5
Elloy-Machabey, Laurence (FRA) (1959)	no information available	12.83	8 / 6
Zaczkiewicz, Claudia (FRG) (1962)	no information available	12.98	2 / 7
Martin, LaVonna (USA) (1966)	no information available	13.06	7 / 8

Semi-Final 2

date 04-Sep-87 wind -0.9 m/s

Susanka (1988) - time analysis of the sprint hurdle events at the II World Championships in Athletics

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Uibel-Siebert, Gloria (GDR) (1!	time	2.65	3.66	4.65	5.63	6.60	7.57	8.54	9.53	10.54	11.55		12.68	4 / 1			
reaction time	interval		1.01	0.99	0.98	0.97	0.97	0.97	0.99	1.01	1.01	1.13			2.98	2.91	3.01
	velocity	4.91	8.42	8.59	8.67	8.76	8.76	8.76	8.59	8.42	8.42	9.29	7.89		8.56	8.76	8.47
Zagorcheva, Ginka (BUL) (195	time	2.60	3.63	4.65	5.86	6.66	7.64	8.62	9.62	10.62	11.69		12.75	6 / 2			
reaction time	interval		1.03	1.02	1.21	0.80	0.98	0.98	1.00	1.00	1.07	1.06			3.26	2.76	3.07
	velocity	5.00	8.25	8.33	7.02	10.63	8.67	8.67	8.50	8.50	7.94	9.91	7.84		7.82	9.24	8.31

Semi-Final 1

date 04-Sep-87 wind -0.2 m/s

Susanka (1988) - time analysis of the sprint hurdle events at the II World Championships in Athletics

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Riefstahl-Oschkenat, Cornelia	time	2.47	3.54	4.56	5.56	6.52	7.51	8.50	9.49	10.49	11.53		12.65	4 / 1			
reaction time	interval		1.07	1.02	1.00	0.96	0.99	0.99	0.99	1.00	1.04	1.12			3.09	2.94	3.03
	velocity	5.26	7.94	8.33	8.50	8.85	8.59	8.59	8.59	8.50	8.17	9.37	7.91		8.25	8.67	8.42

Heat 4

date 03-Sep-87 wind -1.6 m/s

Susanka (1988) - time analysis of the sprint hurdle events at the II World Championships in Athletics

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Uibel-Siebert, Gloria (GDR) (1!	time	2.61	3.62	4.60	5.59	6.58	7.58	8.57	9.59	10.60	11.67		12.81	/ 1			
reaction time	interval		1.01	0.98	0.99	0.99	1.00	0.99	1.02	1.01	1.07	1.14			2.98	2.98	3.10
	velocity	4.98	8.42	8.67	8.59	8.59	8.50	8.59	8.33	8.42	7.94	9.21	7.81		8.56	8.56	8.23

Heat 3

date 03-Sep-87 wind -0.8 m/s

Susanka (1988) - time analysis of the sprint hurdle events at the II World Championships in Athletics

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Riefstahl-Oschkenat, Cornelia	time	2.62	3.66	4.66	5.63	6.62	7.62	8.61	9.62	10.62	11.66		12.83	/ 1			
reaction time	interval		1.04	1.00	0.97	0.99	1.00	0.99	1.01	1.00	1.04	1.17			3.01	2.98	3.05
	velocity	4.96	8.17	8.50	8.76	8.59	8.50	8.59	8.42	8.50	8.17	8.97	7.79		8.47	8.56	8.36

Heat 1

date 03-Sep-87 wind -1.0 m/s

Susanka (1988) - time analysis of the sprint hurdle events at the II World Championships in Athletics

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Zagorcheva, Ginka (BUL) (195	time	2.56	3.57	4.57	5.57	6.54	7.53	8.49	9.46	10.45	11.45		12.51	2 / 1			
reaction time	interval		1.01	1.00	1.00	0.97	0.99	0.96	0.97	0.99	1.00	1.06			3.01	2.92	2.96
	velocity	5.08	8.42	8.50	8.50	8.76	8.59	8.85	8.76	8.59	8.50	9.91	7.99		8.47	8.73	8.61

1987 Greece vs. Bulgaria vs.USSR (Drama, GRE)

FINAL

date 08-Aug-87 wind 1.4 m/s

Bondarchuk (2007) - transfer of training in sports

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Zagorcheva, Ginka (BUL) (195	time	2.49	3.47	4.42	5.39	6.33	7.26	8.17	9.15	10.15	11.17		12.25	/ 1			
reaction time	interval		0.98	0.95	0.97	0.94	0.93	0.91	0.98	1.00	1.02	1.08	WR		2.90	2.78	3.00
	velocity	5.22	8.67	8.95	8.76	9.04	9.14	9.34	8.67	8.50	8.33	9.72	8.16		8.79	9.17	8.50

1987 West German National Championships (Gelsenkirchen, FRG)

FINAL

date 11-Jul-87 wind -0.2 m/s

Hucklekemkes (1997) - velocity in the women's 100m sprint hurdles (in Jarver (ed) - the hurdles, 1997)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Zaczkiewicz, Claudia (FRG) (1!	time	2.61	3.63	4.63	5.61	6.62	7.60	8.59	9.61	10.63	11.69		12.80	/ 1			
reaction time	interval		1.02	1.00	0.98	1.01	0.98	0.99	1.02	1.02	1.06	1.11			3.00	2.98	3.10
	velocity	4.98	8.33	8.50	8.67	8.42	8.67	8.59	8.33	8.33	8.02	9.46	7.81		8.50	8.56	8.23

1987 European Cup (Prague, TCH)

FINAL

date 28-Jun-87 wind -0.9m/s

Sušanka (1987) - hints on computer processing of biomechanical data

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Riefstahl-Oschkenat, Cornelia	time	2.57	3.59	4.56	5.52	6.48	7.44	8.40	9.40	10.40	11.40		12.47	1 / 1			
reaction time	interval		1.02	0.97	0.96	0.96	0.96	0.96	1.00	1.00	1.00	1.07	CR		2.95	2.88	3.00
	velocity	5.06	8.33	8.76	8.85	8.85	8.85	8.85	8.50	8.50	8.50	9.81	8.02		8.64	8.85	8.50
Donkova, Yordanka (RUL) (19	time	2.57	3.59	4.57	5.56	6.52	7.48	8.44	9.44	10.47	11.47		12.53	7 / 2			
reaction time	interval		1.02	0.98	0.99	0.96	0.96	0.96	1.00	1.03	1.00	1.06			2.99	2.88	3.03
	velocity	5.06	8.33	8.67	8.59	8.85	8.85	8.85	8.50	8.25	8.50	9.91	7.98		8.53	8.85	8.42
Zaczkiewicz, Claudia (FRG) (1!	time	2.64	3.68	4.72	5.70	6.72	7.72	8.72	9.76	10.76	11.84		12.97	5 / 3			
reaction time	interval		1.04	1.04	0.98	1.02	1.00	1.00	1.04	1.00	1.08	1.13			3.06	3.02	3.12
	velocity	4.92	8.17	8.17	8.67	8.33	8.50	8.50	8.17	8.50	7.87	9.29	7.71		8.33	8.44	8.17
Grigoryeva, Natalya (URS) (19!	time	2.68	3.73	4.72	5.72	6.75	7.76	8.76	9.80	10.88	11.92		13.11	6 / 4			
reaction time	interval		1.05	0.99	1.00	1.03	1.01	1.00	1.04	1.08	1.04	1.19			3.04	3.04	3.16
	velocity	4.85	8.10	8.59	8.50	8.25	8.42	8.50	8.17	7.87	8.17	8.82	7.63		8.39	8.39	8.07
Piquereau, Anne (FRA) (1964)	time	2.68	3.72	4.76	5.79	6.80	7.84	8.87	9.88	10.96	12.04		13.15	3 / 5			
reaction time	interval		1.04	1.04	1.03	1.01	1.04	1.03	1.01	1.08	1.08	1.11			3.11	3.08	3.17
	velocity	4.85	8.17	8.17	8.25	8.42	8.17	8.25	8.42	7.87	7.87	9.46	7.60		8.20	8.28	8.04

Tebichova, Milena (TCH) (196	time	2.64	3.75	4.80	5.88	6.92	8.00	9.08	10.16	11.28	12.40		13.58	8 / 6				
reaction time	interval		1.11	1.05	1.08	1.04	1.08	1.08	1.08	1.12	1.12	1.18			3.24	3.20	3.32	
	velocity	4.92	7.66	8.10	7.87	8.17	7.87	7.87	7.87	7.59	7.59	8.90	7.36		7.87	7.97	7.68	
Skeete, Lesley-Ann (GBR) (19	time	2.68	3.80	4.88	5.96	7.02	8.08	9.20	10.27	11.39	12.52		13.66	2 / 7				
reaction time	interval		1.12	1.08	1.08	1.06	1.06	1.12	1.07	1.12	1.13	1.14			3.28	3.24	3.32	
	velocity	4.85	7.59	7.87	7.87	8.02	8.02	7.59	7.94	7.59	7.52	9.21	7.32		7.77	7.87	7.68	
Latos, Barbara (POL) (1965)	time	2.71	3.78	4.88	5.92	7.04	8.12	9.24	10.32	11.44	12.57		13.72	4 / 8				
reaction time	interval		1.07	1.10	1.04	1.12	1.08	1.12	1.08	1.12	1.13	1.15			3.21	3.32	3.33	
	velocity	4.80	7.94	7.73	8.17	7.59	7.87	7.59	7.87	7.59	7.52	9.13	7.29		7.94	7.68	7.66	

1987 GDR vs. USSR (Karl-Marx-Stadt, GDR)

FINAL date 21-Jun-87 wind 1.6 m/s

Breiser (1990) - the road to success- skill analysis of leading women hurdlers

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Riefstahl-Oschkenat, Cornelia	time	2.50	3.50	4.48	5.46	6.43	7.40	8.38	9.36	10.35	11.36		12.46	/ 1			
reaction time 0.135	interval		1.00	0.98	0.98	0.97	0.97	0.98	0.98	0.99	1.01	1.10			2.96	2.92	2.98
	velocity	5.20	8.50	8.67	8.67	8.76	8.76	8.67	8.67	8.59	8.42	9.55	8.03		8.61	8.73	8.56

1986 Balkan Games (Ljubljana, YUG)

FINAL date 07-Sep-86 wind 1.5 m/s

Čoh (1987) Analiza svetovnega rekorda teka na 100m z ovirami Jordanke Donkove

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Donkova, Yordanka (BUL) (19	time	2.43	3.43	4.39	5.36	6.31	7.26	8.22	9.19	10.16	11.17		12.26	/ 1			
reaction time	interval		1.00	0.96	0.97	0.95	0.95	0.96	0.97	0.97	1.01	1.09	WR		2.93	2.86	2.95
	velocity	5.35	8.50	8.85	8.76	8.95	8.95	8.85	8.76	8.76	8.42	9.63	8.16		8.70	8.92	8.64

1986 West German National Junior Championships (Krefeld, FRG)

FINAL date 26-Jul-86 wind 1.3 m/s

Hucklekemkes (1997) - velocity in the women's 100m sprint hurdles (in Jarver (ed) - the hurdles, 1997)

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wolf, Birgit (FRG) (1969)	time	2.70	3.82	4.90	5.98	7.06	8.12	9.20	10.28	11.38	12.50		13.70	/ 1			
reaction time	interval		1.12	1.08	1.08	1.08	1.06	1.08	1.08	1.10	1.12	1.20			3.28	3.22	3.30
	velocity	4.81	7.59	7.87	7.87	7.87	8.02	7.87	7.87	7.73	7.59	8.75	7.30		7.77	7.92	7.73

1986 IAAF World Junor Championships (Athens, GRE)

FINAL date 19-Jul-86 wind -0.7 m/s

Miskos (1986) - IAAF biomechanical research - Athens 1986 - hurdle races

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Tillack, Heike (GDR) (1968)	time	2.68	3.74	4.76	5.77	6.79	7.78	8.80	9.79	10.86	11.93		13.10	/ 1			
reaction time	interval		1.06	1.02	1.01	1.02	0.99	1.02	0.99	1.07	1.07	1.17	CR		3.09	3.03	3.13
	velocity	4.85	8.02	8.33	8.42	8.33	8.59	8.33	8.59	7.94	7.94	8.97	7.63		8.25	8.42	8.15
López, Aliuska (CUB) (1969)	time	2.65	3.70	4.72	5.74	6.78	7.81	8.85	9.87	10.90	11.95		13.14	/ 2			
reaction time	interval		1.05	1.02	1.02	1.04	1.03	1.04	1.02	1.03	1.05	1.19			3.09	3.11	3.10
	velocity	4.91	8.10	8.33	8.33	8.17	8.25	8.17	8.33	8.25	8.10	8.82	7.61		8.25	8.20	8.23
Davis, Tanya (USA) (1968)	time	2.58	3.67	4.68	5.73	6.78	7.83	8.86	10.00	11.13	12.26		13.46	/ 3			
reaction time	interval		1.09	1.01	1.05	1.05	1.05	1.03	1.14	1.13	1.13	1.20			3.15	3.13	3.40
	velocity	5.04	7.80	8.42	8.10	8.10	8.10	8.25	7.46	7.52	7.52	8.75	7.43		8.10	8.15	7.50
Wolf, Birgit (FRG) (1969)	no information available												13.52	/ 4			
Bellutti, Antonella (ITA) (1968)	no information available												13.62	/ 5			
Birzu, Lenuta (ROM)	no information available												13.96	/ 6			
Wang Shu-Hwa (TPE) (1969)	no information available												14.03	/ 7			
Zep, Malgorzata (POL)	no information available												14.35	/ 8			

1986 East German National Championships (Jena, GDR)

FINAL date 27-Jun-86 wind 1.4 m/s

Aubert (1987) - mesures et observations biomecaniques a propos des courses de haies hautes

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Riefstahl-Oschkenat, Cornelia	time	2.53	3.56	4.56	5.55	6.49	7.48	8.47	9.46	10.45	11.45		12.56	/ 1			
reaction time	interval		1.03	1.00	0.99	0.94	0.99	0.99	0.99	0.99	1.00	1.11			3.02	2.92	2.98
	velocity	5.14	8.25	8.50	8.59	9.04	8.59	8.59	8.59	8.59	8.50	9.46	7.96		8.44	8.73	8.56
Theele, Heike (GDR) (1964)	time	2.58	3.60	4.60	5.58	6.57	7.54	8.53	9.51	10.52	11.53		12.63	/ 2			
reaction time	interval		1.02	1.00	0.98	0.99	0.97	0.99	0.98	1.01	1.01	1.10	PB		3.00	2.95	3.00
	velocity	5.04	8.33	8.50	8.67	8.59	8.76	8.59	8.67	8.42	8.42	9.55	7.92		8.50	8.64	8.50
Knabe, Kerstin (GDR) (1959)	time	2.58	3.62	4.60	5.60	6.58	7.54	8.52	9.51	10.52	11.54		12.64	/ 3			
reaction time	interval		1.04	0.98	1.00	0.98	0.96	0.98	0.99	1.01	1.02	1.10			3.02	2.92	3.02
	velocity	5.04	8.17	8.67	8.50	8.67	8.85	8.67	8.59	8.42	8.33	9.55	7.91		8.44	8.73	8.44
Paetz, Sabine (GDR) (1957)	time	2.54	3.58	4.59	5.61	6.58	7.56	8.58	9.62	10.64	11.71		12.89	/ 4			
reaction time	interval		1.04	1.01	1.02	0.97	0.98	1.02	1.04	1.02	1.07	1.18			3.07	2.97	3.13
	velocity	5.12	8.17	8.42	8.33	8.76	8.67	8.33	8.17	8.33	7.94	8.90	7.76		8.31	8.59	8.15

1986 French National Indoor Championship (Lievin, FRA)

FINAL date 26-Jan-86

Aubert (1986) - indoor - video - haies, etude des performances

	H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4

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

Piquereau, Anne (FRA) (1964)	time	2.61	3.66	4.67	5.68	6.67			8.00	/ 1	
reaction time	interval		1.05	1.01	1.01	0.99	1.33				3.07
	velocity	4.98	8.10	8.42	8.42	8.59	9.77	7.50			8.31
Elloy, Laurence (FRA) (1959)	time	2.65	3.73	4.76	5.77	6.77			8.12	/ 2	
reaction time	interval		1.08	1.03	1.01	1.00	1.35				3.12
	velocity	4.91	7.87	8.25	8.42	8.50	9.63	7.39			8.17
Ewanjé-Epée, Monique (FRA)	time	2.65	3.76	4.80	5.83	6.84			8.20	/ 3	
reaction time	interval		1.11	1.04	1.03	1.01	1.36				3.18
	velocity	4.91	7.66	8.17	8.25	8.42	9.56	7.32			8.02
Kaftandjan, Isabelle (FRA) (19	time	2.66	3.72	4.78	5.81	6.84			8.24	/ 4	
reaction time	interval		1.06	1.06	1.03	1.03	1.40				3.15
	velocity	4.89	8.02	8.02	8.25	8.25	9.29	7.28			8.10
Chardonnet, Michèle (FRA) (1	time	2.67	3.75	4.80	5.84	6.86			8.26	/ 5	
reaction time	interval		1.08	1.05	1.04	1.02	1.40				3.17
	velocity	4.87	7.87	8.10	8.17	8.33	9.29	7.26			8.04
Sallaz, Christine (FRA) (1961)	time	2.70	3.82	4.90	5.93	6.99			8.34	/ 6	
reaction time	interval		1.12	1.08	1.03	1.06	1.35				3.23
	velocity	4.81	7.59	7.87	8.25	8.02	9.63	7.19			7.89

Semi-Final

date 25-Jan-86

Aubert (1986) - indoor - video - haies, etude des performances

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4
Piquereau, Anne (FRA) (1964)	time	2.67	3.74	4.76	5.76	6.78		8.13	/ 1	
reaction time	interval		1.07	1.02	1.00	1.02	1.35			3.09
	velocity	4.87	7.94	8.33	8.50	8.33	9.63	7.38		8.25
Elloy, Laurence (FRA) (1959)	time	2.68	3.76	4.78	5.78	6.79		8.15	/ 2	
reaction time	interval		1.08	1.02	1.00	1.01	1.36			3.10
	velocity	4.85	7.87	8.33	8.50	8.42	9.56	7.36		8.23
Ewanjé-Epée, Monique (FRA)	time	2.62	3.69	4.73	5.74	6.78		8.19	/ 3	
reaction time	interval		1.07	1.04	1.01	1.04	1.41			3.12
	velocity	4.96	7.94	8.17	8.42	8.17	9.22	7.33		8.17
Kaftandjan, Isabelle (FRA) (19	time	2.69	3.76	4.83	5.85	6.90		8.30	/ 1	
reaction time	interval		1.07	1.07	1.02	1.05	1.40			3.16
	velocity	4.83	7.94	7.94	8.33	8.10	9.29	7.23		8.07
Chardonnet, Michèle (FRA) (1	time	2.71	3.78	4.84	5.90	6.92		8.42	/ 2	
reaction time	interval		1.07	1.06	1.06	1.02	1.50			3.19
	velocity	4.80	7.94	8.02	8.02	8.33	8.67	7.13		7.99
Sallaz, Christine (FRA) (1961)	time	2.71	3.80	4.84	5.87	6.90		8.28	/ 3	
reaction time	interval		1.09	1.04	1.03	1.03	1.38			3.16
	velocity	4.80	7.80	8.17	8.25	8.25	9.42	7.25		8.07
Grimont, Corinne (FRA) (1963	time	2.82	3.87	4.93	5.97	6.99		8.51	/ 4	
reaction time	interval		1.05	1.06	1.04	1.02	1.52			3.15
	velocity	4.61	8.10	8.02	8.17	8.33	8.55	7.05		8.10
Sena, Françoise (FRA)	time	2.74	3.83	4.91	5.94	6.98		8.40	/ 5	
reaction time	interval		1.09	1.08	1.03	1.04	1.42			3.20
	velocity	4.74	7.80	7.87	8.25	8.17	9.15	7.14		7.97
Truwant, Véronique (FRA) (19	time	2.67	3.78	4.88	5.93	7.01		8.46	/ 6	
reaction time	interval		1.11	1.10	1.05	1.08	1.45			3.26
	velocity	4.87	7.66	7.73	8.10	7.87	8.97	7.09		7.82

Heat

date 25-Jan-86

Aubert (1986) - indoor - video - haies, etude des performances

		H1	H2	H3	H4	H5	Run-In	Official Time	Lane / Place	H1-H4
Piquereau, Anne (FRA) (1964)	time	2.60	3.68	4.73	5.75	6.79		8.23	/ 1	
reaction time	interval		1.08	1.05	1.02	1.04	1.44			3.15
	velocity	5.00	7.87	8.10	8.33	8.17	9.03	7.29		8.10
Elloy, Laurence (FRA) (1959)	time	2.63	3.70	4.75	5.76	6.80		8.27	/ 2	
reaction time	interval		1.07	1.05	1.01	1.04	1.47			3.13
	velocity	4.94	7.94	8.10	8.42	8.17	8.84	7.26		8.15
Ewanjé-Epée, Monique (FRA)	time	2.63	3.70	4.74	5.77	6.78		8.19	/ 3	
reaction time	interval		1.07	1.04	1.03	1.01	1.41			3.14
	velocity	4.94	7.94	8.17	8.25	8.42	9.22	7.33		8.12
Kaftandjan, Isabelle (FRA) (19	time	2.68	3.77	4.78	5.83	6.87		8.30	/ 1	
reaction time	interval		1.09	1.01	1.05	1.04	1.43			3.15

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

	velocity	4.85	7.80	8.42	8.10	8.17					9.09	7.23		8.10		
Chardonnet, Michèle (FRA) (1	time	2.69	3.78	4.86	5.92	6.96						8.42	/ 2			
reaction time	interval		1.09	1.08	1.06	1.04					1.46			3.23		
	velocity	4.83	7.80	7.87	8.02	8.17					8.90	7.13		7.89		
Sallaz, Christine (FRA) (1961)	time	2.66	3.75	4.84	5.91	6.95						8.36	/ 3			
reaction time	interval		1.09	1.09	1.07	1.04					1.41			3.25		
	velocity	4.89	7.80	7.80	7.94	8.17					9.22	7.18		7.85		
Grimont, Corinne (FRA) (1963	time	2.73	3.80	4.88	5.92	6.98						8.38	/ 4			
reaction time	interval		1.07	1.08	1.04	1.06					1.40			3.19		
	velocity	4.76	7.94	7.87	8.17	8.02					9.29	7.16		7.99		
Sena, Françoise (FRA)	time	2.71	3.81	4.88	5.92	6.98						8.42	/ 5			
reaction time	interval		1.10	1.07	1.04	1.06					1.44			3.21		
	velocity	4.80	7.73	7.94	8.17	8.02					9.03	7.13		7.94		
Truwant, Véronique (FRA) (19	time	2.74	3.85	4.93	5.98	7.07						8.51	/ 6			
reaction time	interval		1.11	1.08	1.05	1.09					1.44			3.24		
	velocity	4.74	7.66	7.87	8.10	7.80					9.03	7.05		7.87		

1985 European Junior Championships (Cottbus, GDR)

FINAL

date 23-Aug-85 wind 2.0 m/s — *Warburton (1985) - 1985 european junior championships - hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Skeete, Lesley-Anne (GBR) (1!	time	2.39	3.59	4.57	5.64	6.64	7.70	8.80	9.91	11.01	12.13		13.51	/ 5			
reaction time	interval		1.20	0.98	1.07	1.00	1.06	1.10	1.11	1.10	1.12	1.38			3.25	3.16	3.33
	velocity	5.44	7.08	8.67	7.94	8.50	8.02	7.73	7.66	7.73	7.59	7.61	7.40		7.85	8.07	7.66

Semi-Final 2

date 23-Aug-85 wind 1.3 m/s — *Warburton (1985) - 1985 european junior championships - hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Maynard, Sonia (GBR) (1967)	time	2.58	3.70	4.85	5.89	7.00	8.20	9.30	10.55	11.64	12.77		14.40	/ 8			
reaction time	interval		1.12	1.15	1.04	1.11	1.20	1.10	1.25	1.09	1.13	1.63			3.31	3.41	3.47
	velocity	5.04	7.59	7.39	8.17	7.66	7.08	7.73	6.80	7.80	7.52	6.44	6.94		7.70	7.48	7.35

Semi-Final 1

date 23-Aug-85 wind 1.5 m/s — *Warburton (1985) - 1985 european junior championships - hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Skeete, Lesley-Anne (GBR) (1!	time	2.52	3.60	4.67	5.76	6.81	7.90	8.92	9.99	11.07	12.17		13.60	/ 4			
reaction time	interval		1.08	1.07	1.09	1.05	1.09	1.02	1.07	1.08	1.10	1.43			3.24	3.16	3.25
	velocity	5.16	7.87	7.94	7.80	8.10	7.80	8.33	7.94	7.87	7.73	7.34	7.35		7.87	8.07	7.85

Heat 2

date 23-Aug-85 wind 0.6 m/s — *Warburton (1985) - 1985 european junior championships - hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Maynard, Sonia (GBR) (1967)	time	2.58	3.70	4.74	5.81	6.88	7.93	9.09	10.15	11.28	12.37		13.86	/ 4			
reaction time	interval		1.12	1.04	1.07	1.07	1.05	1.16	1.06	1.13	1.09	1.49			3.23	3.28	3.28
	velocity	5.04	7.59	8.17	7.94	7.94	8.10	7.33	8.02	7.52	7.80	7.05	7.22		7.89	7.77	7.77

Heat 1

date 23-Aug-85 wind 0.6 m/s — *Warburton (1985) - 1985 european junior championships - hurdles*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Skeete, Lesley-Anne (GBR) (1!	time	2.38	3.54	4.59	5.61	6.68	7.88	8.97	9.96	11.04	12.19		13.68	/ 3			
reaction time	interval		1.16	1.05	1.02	1.07	1.20	1.09	0.99	1.08	1.15	1.49			3.23	3.36	3.22
	velocity	5.46	7.33	8.10	8.33	7.94	7.08	7.80	8.59	7.87	7.39	7.05	7.31		7.89	7.59	7.92

1985 BNP Meeting d'Athlétisme (Paris, FRA)

FINAL

date 13-Jul-85 wind 2.0 m/s — *Aubert (1987) - mesures et observations biomecaniques a propos des courses de haies hautes*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Elloy, Laurence (FRA) (1959)	time	2.53	3.54	4.52	5.54	6.52	7.48	8.53	9.52	10.51	11.56		12.90	/ 1			
reaction time	interval		1.01	0.98	1.02	0.98	0.96	1.05	0.99	0.99	1.05	1.34			3.01	2.99	3.03
	velocity	5.14	8.42	8.67	8.33	8.67	8.85	8.10	8.59	8.59	8.10	7.84	7.75		8.47	8.53	8.42

1985 Marseille, FRA

FINAL

date 19-Jun-85 wind 0.9 m/s — *Aubert (1987) - mesures et observations biomecaniques a propos des courses de haies hautes*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Elloy, Laurence (FRA) (1959)	time	2.51	3.56	4.56	5.55	6.46	7.45	8.40	9.42	10.45	11.53		12.89	/ 1			
reaction time	interval		1.05	1.00	0.99	0.91	0.99	0.95	1.02	1.03	1.08	1.36			3.04	2.85	3.13
	velocity	5.18	8.10	8.50	8.59	9.34	8.59	8.95	8.33	8.25	7.87	7.72	7.76		8.39	8.95	8.15

1985 Internationales Sportfest (Fürth, FRG)

FINAL

date 17-Jun-85 wind 2.8 m/s — *Aubert (1987) - mesures et observations biomecaniques a propos des courses de haies hautes*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Elloy, Laurence (FRA) (1959)	time	2.43	3.51	4.43	5.41	6.38	7.33	8.29	9.20	10.27	11.30		12.72	/ 2			
reaction time	interval		1.08	0.92	0.98	0.97	0.95	0.96	0.91	1.07	1.03	1.42			2.98	2.88	3.01
	velocity	5.35	7.87	9.24	8.67	8.76	8.95	8.85	9.34	7.94	8.25	7.39	7.86		8.56	8.85	8.47

Heat 2

date 17-Jun-85 wind 2.0 m/s — *Aubert (1987) - mesures et observations biomecaniques a propos des courses de haies hautes*

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

Elloy, Laurence (FRA) (1959)	time	2.55	3.56	4.54	5.52	6.52	7.51	8.46	9.46	10.46	11.40		12.87	/ 2				
reaction time	interval		1.01	0.98	0.98	1.00	0.99	0.95	1.00	1.00	0.94	1.47			2.97	2.94	2.94	
	velocity	5.10	8.42	8.67	8.67	8.50	8.59	8.95	8.50	8.50	9.04	7.14	7.77		8.59	8.67	8.67	

1985 Joinville, FRA

FINAL date 12-Jun-85 wind 1.4 m/s

Aubert (1987) - mesures et observations biomecaniques a propos des courses de haies hautes

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Elloy, Laurence (FRA) (1959)	time	2.44	3.45	4.43	5.41	6.39	7.36	8.36	9.39	10.40	11.42		12.79	/ 1			
reaction time	interval		1.01	0.98	0.98	0.98	0.97	1.00	1.03	1.01	1.02	1.37			2.97	2.95	3.06	
	velocity	5.33	8.42	8.67	8.67	8.67	8.76	8.50	8.25	8.42	8.33	7.66	7.82		8.59	8.64	8.33	
Piquereau, Anne (FRA) (1964)	time	2.42	3.44	4.40	5.41	6.42	7.36	8.35	9.37	10.38	11.46		12.89	/ 2			
reaction time	interval		1.02	0.96	1.01	1.01	0.94	0.99	1.02	1.01	1.08	1.43			2.99	2.94	3.11	
	velocity	5.37	8.33	8.85	8.42	8.42	9.04	8.59	8.33	8.42	7.87	7.34	7.76		8.53	8.67	8.20	

1984 Olympic Games (Los Angeles, CA)

FINAL date 10-Aug-84 wind 0.7 m/s

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Fitzgerald-Brown, Benita (US	0.153	no information available											12.84	4 / 1			
Strong, Shirley (GBR) (1958)	0.171	no information available											12.88	7 / 2			
Turner, Kim (USA) (1961)	0.163	no information available											13.06	6 / 3			
Chardonnet, Michèle (FRA) (1	0.183	no information available											13.06	5 / 3			
Nunn, Glynis (AUS) (1960)	0.164	no information available											13.20	1 / 5			
Savigny, Marie-Noëlle (FRA) (	0.159	no information available											13.28	8 / 6			
Denk, Ulrike (FRG) (1964)	0.158	no information available											13.32	3 / 7			
Page, Pamela (USA) (1958)	0.139	no information available											13.40	2 / 8			

1984 USSR National Chamipionships (Kiev, URS)

FINAL date 22-Jun-84 wind -0.4 m/s

Breiser (1985) - over the hurdles with vera akimova and nadezdha korshunova

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Akimova, Vera (URS) (1959)	time	2.56	3.56	4.56	5.52	6.50	7.48	8.44	9.44	10.44	11.48		12.51	/ 1			
reaction time 0.170	interval		1.00	1.00	0.96	0.98	0.98	0.96	1.00	1.00	1.04	1.03			2.96	2.92	3.04	
	velocity	5.08	8.50	8.50	8.85	8.67	8.67	8.85	8.50	8.50	8.17	10.19	7.99		8.61	8.73	8.39	
Korshunova, Nadezhda (URS)	time	2.54	3.60	4.60	5.60	6.60	7.60	8.60	9.60	10.64	11.70		12.72	/ 2			
reaction time 0.170	interval		1.06	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.06	1.02			3.06	3.00	3.10	
	velocity	5.12	8.02	8.50	8.50	8.50	8.50	8.50	8.50	8.17	8.02	10.29	7.86		8.33	8.50	8.23	

1983 IAAF World Championships (Helsinki, FIN)

FINAL date 13-Aug-83 wind 2.4 m/s

Knobe (1984) - the hurdles

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Jahn, Bettine (GDR) (1958)	time	2.52	3.51	4.55	5.43	6.40	7.30	8.24	9.20	10.25	11.19		12.35	1 / 1			
reaction time 0.154	interval		0.99	1.04	0.88	0.97	0.90	0.94	0.96	1.05	0.94	1.16			2.91	2.81	2.95	
	velocity	5.16	8.59	8.17	9.66	8.76	9.44	9.04	8.85	8.10	9.04	9.05	8.10		8.76	9.07	8.64	
Knabe, Kerstin (GDR) (1959)	time	2.66	3.63	4.65	5.66	6.54	7.46	8.42	9.42	10.29	11.37		12.42	4 / 2			
reaction time 0.115	interval		0.97	1.02	1.01	0.88	0.92	0.96	1.00	0.87	1.08	1.05			3.00	2.76	2.95	
	velocity	4.89	8.76	8.33	8.42	9.66	9.24	8.85	8.50	9.77	7.87	10.00	8.05		8.50	9.24	8.64	
Zagorcheva, Ginka (BUL) (195	time	2.52	3.58	4.59	5.57	6.51	7.45	8.39	9.47	10.41	11.44		12.62	6 / 3			
reaction time 0.117	interval		1.06	1.01	0.98	0.94	0.94	0.94	1.08	0.94	1.03	1.18			3.05	2.82	3.05	
	velocity	5.16	8.02	8.42	8.67	9.04	9.04	9.04	7.87	9.04	8.25	8.90	7.92		8.36	9.04	8.36	
Petrova, Natalya (URS) (1957)	no information available												12.67	8 / 4			
Strong, Shirley (GBR) (1958)	no information available												12.78	2 / 5			
Biserova, Yelena (URS) (1962)	no information available												12.80	5 / 6			
Riefstahl-Oschkenat, Cornelia (GDR) (196	no information available												12.94	7 / 7			
Fitzgerald-Brown, Benita (USA) (1961)	no information available												12.99	3 / 8			

Semi-Final 2

date 13-Aug-83 wind 1.6 m/s

Knobe (1984) - the hurdles

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nunn-Cearns, Glynis (AUS) (1	time	2.61	3.75	4.75	5.79	6.88	7.89	8.92	9.95	11.00	12.10		13.39	6 / 8			
reaction time	interval		1.14	1.00	1.04	1.09	1.01	1.03	1.03	1.05	1.10	1.29			3.18	3.13	3.18	
	velocity	4.98	7.46	8.50	8.17	7.80	8.42	8.25	8.25	8.10	7.73	8.14	7.47		8.02	8.15	8.02	

Quarter-Final 1

date 12-Aug-83 wind 1.4 m/s

Knobe (1984) - the hurdles

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Nunn-Cearns, Glynis (AUS) (1	time	2.81	3.83	4.93	5.96	6.93	7.97	8.95	9.47	10.98	12.08		13.23	/ 3			
reaction time	interval		1.02	1.10	1.03	0.97	1.04	0.98	0.52	1.51	1.10	1.15			3.15	2.99	3.13	
	velocity	4.63	8.33	7.73	8.25	8.76	8.17	8.67	16.35	5.63	7.73	9.13	7.56		8.10	8.53	8.15	

1983 Olympischer Tag (Berlin, GER)

FINAL date 08-Jun-83 wind 1.8 m/s

Graubner (2008) - http://www.fgs.uni-halle.de

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Jahn, Bettine (GDR) (1958)	time	2.55	3.55	4.53	5.48	6.44	7.40	8.35	9.32	10.31	11.32		12.42	/ 1			
reaction time	interval		1.00	0.98	0.95	0.96	0.96	0.95	0.97	0.99	1.01	1.10	NR		2.93	2.87	2.97	

	velocity	5.10	8.50	8.67	8.95	8.85	8.85	8.95	8.76	8.59	8.42	9.55	8.05			8.70	8.89	8.59

1982 European Championships (Athens,GRE)

FINAL date 09-Sep-82 wind 1.5 m/s

Heß (1985) - entwicklungsaspekte die leichtathletischen sprint-/hürdendisziplinen im olympiazyklus 1981/84

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kałek, Lucyna (POL) (1956)	time	2.55		4.56		6.50		8.42			11.37		12.45	/ 1			
reaction time	interval			2.01		1.94		1.92			2.95	1.08	CR				2.95
	velocity	5.10		8.46		8.76		8.85			8.64	9.72	8.03				8.64

1982 ASV Weltklasse (Köln, FRG)

FINAL date 22-Aug-82 wind 0.2 m/s

Ballreich (1986) - biomechanik der sprtarten- Band 1- biomechanik der leichtathletik

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kałek, Lucyna (POL) (1956)	time	2.60	3.62	4.59	5.55	6.52	7.49	8.45	9.44	10.42	11.44		12.55	/ 1			
reaction time	interval		1.02	0.97	0.96	0.97	0.97	0.96	0.99	0.98	1.02	1.11			2.95	2.90	2.99
	velocity	5.00	8.33	8.76	8.85	8.76	8.76	8.85	8.59	8.67	8.33	9.46	7.97		8.64	8.79	8.53

1981 USSR vs. USA (Leningrad, URS)

FINAL date 11-Jul-81 wind 0.3 m/s

Chanon (1987) - analyse comparee des caracteristiques des courses de 100m haies et 110m haies

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Anisimova, Tatyana (URS) (19	time	2.60	3.61	4.62	5.62	6.62	7.62	8.62	9.62	10.62	11.64		12.79	/ 1			
reaction time	interval		1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.15			3.02	3.00	3.02
	velocity	5.00	8.42	8.42	8.50	8.50	8.50	8.50	8.50	8.50	8.33	9.13	7.82		8.44	8.50	8.44
Hightower, Stephanie (USA) (	time	2.65	3.68	4.70	5.72	6.78	7.85	8.87	9.89	10.94	11.97		13.09	/ 2			
reaction time	interval		1.03	1.02	1.02	1.06	1.07	1.02	1.02	1.05	1.03	1.12			3.07	3.15	3.10
	velocity	4.91	8.25	8.33	8.33	8.02	7.94	8.33	8.33	8.10	8.25	9.38	7.64		8.31	8.10	8.23
Fitzgerald, Benita (USA) (1961	time	2.66	3.70	4.71	5.74	6.83	7.90	8.93	9.94	11.02	12.09		13.24	/ 3			
reaction time	interval		1.04	1.01	1.03	1.09	1.07	1.03	1.01	1.08	1.07	1.15			3.08	3.19	3.16
	velocity	4.89	8.17	8.42	8.25	7.80	7.94	8.25	8.42	7.87	7.94	9.13	7.55		8.28	7.99	8.07
Petrova, Natalya (URS) (1957)	time	2.65	3.69	4.70	5.74	6.82	7.91	8.95	9.96	11.07	12.16		13.32	/ 4			
reaction time	interval		1.04	1.01	1.04	1.08	1.09	1.04	1.01	1.11	1.09	1.16			3.09	3.21	3.21
	velocity	4.91	8.17	8.42	8.17	7.87	7.80	8.17	8.42	7.66	7.80	9.05	7.51		8.25	7.94	7.94

1981 USSR vs. GDR (Tbilisi, URS)

FINAL date 26-Jun-81 wind 0.0 m/s

Chanon (1987) - analyse comparee des caracteristiques des courses de 100m haies et 110m haies

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Anisimova, Tatyana (URS) (19	time	2.49	3.50	4.48	5.46	6.45	7.45	8.44	9.45	10.46	11.50		12.68	/ 1			
reaction time	interval		1.01	0.98	0.98	0.99	1.00	0.99	1.01	1.01	1.04	1.18			2.97	2.98	3.06
	velocity	5.22	8.42	8.67	8.67	8.59	8.50	8.59	8.42	8.42	8.17	8.90	7.89		8.59	8.56	8.33
Knabe, Kerstin (GDR) (1959)	time	2.56	3.59	4.61	5.63	6.65	7.66	8.67	9.67	10.69	11.72		12.85	/ 2			
reaction time	interval		1.03	1.02	1.02	1.02	1.01	1.01	1.00	1.02	1.03	1.13			3.07	3.04	3.05
	velocity	5.08	8.25	8.33	8.33	8.33	8.42	8.42	8.50	8.33	8.25	9.29	7.78		8.31	8.39	8.36
Kemenchezhi, Mariya (URS) (1	time	2.52	3.56	4.57	5.58	6.64	7.69	8.74	9.75	10.78	11.82		12.96	/ 3			
reaction time	interval		1.04	1.01	1.01	1.06	1.05	1.05	1.01	1.03	1.04	1.14			3.06	3.16	3.08
	velocity	5.16	8.17	8.42	8.42	8.02	8.10	8.10	8.42	8.25	8.17	9.21	7.72		8.33	8.07	8.28
Gärtz, Bettine (GDR) (1958)	time	2.48	3.52	4.52	5.65	6.66	7.72	8.76	9.78	10.85	11.92		13.17	/ 4			
reaction time	interval		1.04	1.00	1.13	1.01	1.06	1.04	1.02	1.07	1.07	1.25			3.17	3.11	3.16
	velocity	5.24	8.17	8.50	7.52	8.42	8.02	8.17	8.33	7.94	7.94	8.40	7.59		8.04	8.20	8.07

1980 Olympic Games (Moscow, URS)

FINAL date 28-Jul-80 wind 1.0 m/s

McFarlane (1988) - the science of hurdling

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Komisova, Vera (URS) (1953)	time	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5		12.56	5 / 1			
reaction time 0.135	interval		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.06	OR / PB		3.00	3.00	3.00
	velocity	5.20	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	9.91	7.96		8.50	8.50	8.50

Schaller-Klier, Johanna (GDR)	0.137	no information available	12.63	3 / 2
Langer, Lucyna (POL) (1956)	0.169	no information available	12.65	2 / 3
Claus-Knabe, Kerstin (GDR) (	0.131	no information available	12.66	4 / 4
Rabsztyn, Grazyna (POL) (195	0.138	no information available	12.74	1 / 5
Litovchenko, Irina (URS) (195(	0.205	no information available	12.84	7 / 6
Gärtz, Bettina (GDR) (1958)	0.173	no information available	12.93	8 / 7
Bielczyk, Zofia (POL) (1958)	0.133	no information available	13.08	6 / 8

1979 VII USSR Spartakiade (Moscow, URS)

A FINAL date 25-Jul-79 wind ??? *Balachničiv (1981) - Periodisierung und Zyklisierung des Trainings 1978/79- Hürdenlauferinnen der Spitzenklasse der UdSSR*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Anisimova, Tatyana (URS) (19	time	2.58	3.66	4.66	5.64	6.64	7.62	8.60	9.64	10.65	11.70		12.90	/ 1			
reaction time	interval		1.08	1.00	0.98	1.00	0.98	0.98	1.04	1.01	1.05	1.20			3.06	2.96	3.10
	velocity	5.04	7.87	8.50	8.67	8.50	8.67	8.67	8.17	8.42	8.10	8.75	7.75		8.33	8.61	8.23

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Komisova, Vera (URS) (1953)	time	2.50	3.56	4.60	5.63	6.64	7.63	8.61	9.65	10.68	11.74		12.94	/ 2			
reaction time	interval		1.06	1.04	1.03	1.01	0.99	0.98	1.04	1.03	1.06	1.20			3.13	2.98	3.13
	velocity	5.20	8.02	8.17	8.25	8.42	8.59	8.67	8.17	8.25	8.02	8.75	7.73		8.15	8.56	8.15
Morgulina, Nina (URS) (1956)	time	2.56	3.64	4.67	5.68	6.70	7.70	8.72	9.76	10.81	11.90		13.10	/ 3			
reaction time	interval		1.08	1.03	1.01	1.02	1.00	1.02	1.04	1.05	1.09	1.20			3.12	3.04	3.18
	velocity	5.08	7.87	8.25	8.42	8.33	8.50	8.33	8.17	8.10	7.80	8.75	7.63		8.17	8.39	8.02
Lebedeva, Natalya (URS) (194	time	2.58	3.66	4.74	5.81	6.80	7.77	8.78	9.85	10.90	11.96		13.15	/ 4			
reaction time	interval		1.08	1.08	1.07	0.99	0.97	1.01	1.07	1.05	1.06	1.19			3.23	2.97	3.18
	velocity	5.04	7.87	7.87	7.94	8.59	8.76	8.42	7.94	8.10	8.02	8.82	7.60		7.89	8.59	8.02
Litovchenko, Irina (URS) (195	time	2.54	3.68	4.70	5.76	6.76	7.76	8.78	9.86	10.92	11.99		13.18	/ 5			
reaction time	interval		1.14	1.02	1.06	1.00	1.00	1.02	1.08	1.06	1.07	1.19			3.22	3.02	3.21
	velocity	5.12	7.46	8.33	8.02	8.50	8.50	8.33	7.87	8.02	7.94	8.82	7.59		7.92	8.44	7.94

1979 Pan American Games (San Juan, PUR)

FINAL

date 13-Jul-79 wind 3.9 m/s *Lyle (1979) - coaching observations*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
LaPlante, Deby (USA) (1953)	time	2.37	3.39	4.39	5.42	6.38	7.33	8.28	9.27	10.28	11.36		12.90	/ 1			
reaction time	interval		1.02	1.00	1.03	0.96	0.95	0.95	0.99	1.01	1.08	1.54			3.05	2.86	3.08
	velocity	5.49	8.33	8.50	8.25	8.85	8.95	8.95	8.59	8.42	7.87	6.82	7.75		8.36	8.92	8.28
Lane, Sharon (CAN)	no information available												13.56	/ 2			
Machado, Grisel (CUB) (1959)	no information available												13.60	/ 3			
Young, Candy (USA) (1962)	time	2.57	3.60	4.57	5.66	6.74	7.78	8.85	9.95	11.04	12.22		13.67	/ 4			
reaction time	interval		1.03	0.97	1.09	1.08	1.04	1.07	1.10	1.09	1.18	1.45			3.09	3.19	3.37
	velocity	5.06	8.25	8.76	7.80	7.87	8.17	7.94	7.73	7.80	7.20	7.24	7.32		8.25	7.99	7.57

Semi-Final 2

date 12-Jul-79 wind 2.8 m/s *Lyle (1979) - coaching observations*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Young, Candy (USA) (1962)	time	2.39	3.48	4.54	5.57	6.68	7.69	8.79	9.88	11.02	12.24		13.74	/ 2			
reaction time	interval		1.09	1.06	1.03	1.11	1.01	1.10	1.09	1.14	1.22	1.50			3.18	3.22	3.45
	velocity	5.44	7.80	8.02	8.25	7.66	8.42	7.73	7.80	7.46	6.97	7.00	7.28		8.02	7.92	7.39

Semi-Final 1

date 12-Jul-79 wind 3.4 m/s *Lyle (1979) - coaching observations*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
LaPlante, Deby (USA) (1953)	time	2.26	3.28	4.33	5.36	6.29	7.29	8.28	9.25	10.27	11.44		12.97	/ 1			
reaction time	interval		1.02	1.05	1.03	0.93	1.00	0.99	0.97	1.02	1.17	1.53			3.10	2.92	3.16
	velocity	5.75	8.33	8.10	8.25	9.14	8.50	8.59	8.76	8.33	7.26	6.86	7.71		8.23	8.73	8.07

1978 European Championships (Prague, TCH)

FINAL

date 02-Sep-78 wind 0.6 m/s *Lamare (1978) - championnats d'Europa 1978*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Schaller-Klier, Johanna (GDR)	time	2.69				6.52							12.62	4 / 1			
reaction time	interval					3.83											
	velocity	4.83				8.88							7.92				
Anisimova, Tatiana (URS) (1949)	no information available											PB	12.67	5 / 2			
Berend, Gudrun (GDR) (1955)	no information available											PB	12.73	1 / 3			
Morgulina, Nina (URS) (1956)	time	2.67				6.56							12.86	3 / 4			
reaction time	interval					3.89											
	velocity	4.87				8.74							7.78				
Langer, Lucyna (POL) (1956)	no information available												12.98	8 / 5			
Fiedler, Annerose (GDR) (1951)	no information available												13.09	6 / 6			
Rabsztyn, Elzbieta (POL) (1956)	no information available												13.17	7 / 7			

1976 Olympic Games (Montreal, CAN)

FINAL

date 29-Jul-76 wind 0.0 m/s *Ilyin (1979) - successes of women hurdlers*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Schaller-Klier, Johanna (GDR)	time	2.56	3.58	4.58	5.56	6.54	7.54	8.54	9.54	10.56	11.60		12.77	5 / 1			
reaction time	interval		1.02	1.00	0.98	0.98	1.00	1.00	1.00	1.02	1.04	1.17			3.00	2.98	3.06
	velocity	5.08	8.33	8.50	8.67	8.67	8.50	8.50	8.50	8.33	8.17	8.97	7.83		8.50	8.56	8.33
Anisimova, Tatyana (URS) (19	time	2.62	3.66	4.68	5.68	6.66	7.64	8.62	9.60	10.60	11.60		12.78	3 / 2			
reaction time	interval		1.04	1.02	1.00	0.98	0.98	0.98	0.98	1.00	1.00	1.18	PB		3.06	2.94	2.98
	velocity	4.96	8.17	8.33	8.50	8.67	8.67	8.67	8.67	8.50	8.50	8.90	7.82		8.33	8.67	8.56
Lebedeva, Natalya (URS) (194	time	2.60	3.66	4.68	5.66	6.64	7.62	8.60	9.60	10.60	11.62		12.80	8 / 3			
reaction time	interval		1.06	1.02	0.98	0.98	0.98	0.98	1.00	1.00	1.02	1.18	PB		3.06	2.94	3.02
	velocity	5.00	8.02	8.33	8.67	8.67	8.67	8.67	8.50	8.50	8.33	8.90	7.81		8.33	8.67	8.44
Berend, Gudrun (GDR) (1955)	time	2.58	3.62	4.64	5.64	6.62	7.62	8.62	9.62	10.64	11.66		12.82	1 / 4			
reaction time	interval		1.04	1.02	1.00	0.98	1.00	1.00	1.00	1.02	1.02	1.16			3.06	2.98	3.04

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

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
	velocity	5.04	8.17	8.33	8.50	8.67	8.50	8.50	8.50	8.33	8.33	9.05	7.80		8.33	8.56	8.39
Rabsztyn,Grazyna (POL) (1952)	no information available												12.96	2 / 5			
Shakhamorov-Rot, Esther (ISR) (1952)	no information available												13.04	6 / 6			
Bufano-Stefanescu, Valeria (ROU) (1946)	no information available												13.35	4 / 7			
Ongar, Ileana (ITA) (1950)	no information available												13.51	7 / 8			

1975 International "Pravda" Sportfest (Sotschi, URS)

FINAL

date 29-May-75 wind ?? *Artyschenko (1977) - zwischen den hürden geht es um die sekunde, teil 2*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kononova, Lyubov (URS) (19	time	2.3	3.5	4.6	5.7	6.7	7.7	8.7	9.8	10.8	11.9		13.1	/ 1			
reaction time	interval		1.20	1.11	1.04	1.02	1.02	1.02	1.03	1.04	1.08	1.22			3.35	3.06	3.15
	velocity	5.60	7.08	7.66	8.17	8.33	8.33	8.33	8.25	8.17	7.87	8.61	7.63		7.61	8.33	8.10
Lebedeva, Natalya (URS) (194	time	2.4	3.6	4.7	5.8	6.9	7.9	9.0	10.0	11.1	12.1		13.4	/ 2			
reaction time	interval		1.27	1.11	1.09	1.04	1.06	1.03	1.05	1.05	1.01	1.31			3.47	3.13	3.11
	velocity	5.51	6.69	7.66	7.80	8.17	8.02	8.25	8.10	8.10	8.42	8.02	7.47		7.35	8.15	8.20
Morgulina, Nina (URS) (1956)	time	2.4	3.6	4.7	5.9	6.9	8.1	9.2	10.3	11.3	12.5		13.8	/ 4			
reaction time	interval		1.19	1.17	1.15	1.05	1.15	1.09	1.09	1.03	1.21	1.35			3.51	3.29	3.33
	velocity	5.51	7.14	7.26	7.39	8.10	7.39	7.80	7.80	8.25	7.02	7.78	7.23		7.26	7.75	7.66

1974 West German National Championships (Hannover, FRG)

FINAL

date 28-Jul-74 wind 2.8 m/s *Letzelter (1977) - Hurdensprint: geschwindigkeitsverlauf und spezielle eigenschaften*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Wengler, Gudrun (FRG)	time	2.55				6.93							14.01	/ 4			
reaction time	interval					4.38						7.08					
	velocity	5.10				7.76						7.49	7.14				
Bretz, Heide-Lore (FRG) (1955	time	2.58				7.06							14.15	/ 7			
reaction time	interval					4.48						7.09					
	velocity	5.04				7.59						7.48	7.07				

1973 East German National Championships (Dresden, GDR)

FINAL

date 22-Jul-73 wind 1.5 m/s *Tepper (1978) - Analyse der traininsgestaltung und leistungsentwicklung in den sprintdisziplinen der M und F der DVfL*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ehrhardt, Anneliese (GDR) (19	time	2.61	3.66	4.66	5.65	6.64	7.62	8.60	9.58	10.56	11.55		12.67	/ 1			
reaction time	interval		1.05	1.00	0.99	0.99	0.98	0.98	0.98	0.98	0.99	1.12		*(12.3)*	3.04	2.95	2.95
	velocity	4.98	8.10	8.50	8.59	8.59	8.67	8.67	8.67	8.67	8.59	9.38	7.89	WR	8.39	8.64	8.64

1972 Olympic Games (Munich, FRG)

FINAL

date 08-Sep-72 wind -0.6 m/s *Kay (1972) - BAAB Munich Technical Report*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Ehrhardt, Anneliese (GDR) (19	time	2.5	3.6	4.6	5.6	6.5	7.5	8.5	9.5	10.4	11.5		12.59	6 / 1			
reaction time	interval		1.1	1.0	1.0	0.9	1.0	1.0	1.0	0.9	1.1	1.09	WR		3.10	2.90	3.00
	velocity	5.20	7.73	8.50	8.50	9.44	8.50	8.50	8.50	9.44	7.73	9.63	7.94		8.23	8.79	8.50
Bufanu, Valeria (ROU) (1946)	time	2.6	3.6	4.7	5.7	6.7	7.6	8.6	9.6	10.6	11.7		12.84	7 / 2			
reaction time	interval		1.0	1.1	1.0	1.0	0.9	1.0	1.0	1.0	1.1	1.14	PB		3.10	2.90	3.10
	velocity	5.00	8.50	7.73	8.50	8.50	9.44	8.50	8.50	8.50	7.73	9.21	7.79		8.23	8.79	8.23
Balzer-Richert, Karin (GDR) (1	time	2.5	3.6	4.6	5.7	6.7	7.7	8.7	9.7	10.7	11.8		12.90	5 / 3			
reaction time	interval		1.1	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.1	1.10	PB		3.20	3.00	3.10
	velocity	5.20	7.73	8.50	7.73	8.50	8.50	8.50	8.50	8.50	7.73	9.55	7.75		7.97	8.50	8.23
Kilborn-Ryan, Pam (AUS) (19	time	2.6	3.6	4.6	5.6	6.6	7.7	8.7	9.7	10.7	11.9		12.98	3 / 4			
reaction time	interval		1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.0	1.2	1.08			3.00	3.10	3.20
	velocity	5.00	8.50	8.50	8.50	8.50	7.73	8.50	8.50	8.50	7.08	9.72	7.70		8.50	8.23	7.97
Nowak, Teresa (POL) (1942)	no information available												13.17	1 / 5			
Strazynska, Danuta (POL) (1942)	no information available												13.18	8 / 6			
Krumpholz, Annerose (GDR) (1951)	no information available												13.27	2 / 7			
Rabsztyn,Grazyna (POL) (1952)	no information available												13.44	4 / 8			

Heat 3

date 04-Sep-72 wind 0.6 m/s *Letzelter (1977) - Hurdensprint: geschwindigkeitsverlauf und spezielle eigenschaften*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Rallins, Mamie (USA) (1941)	time	2.5				6.7							13.51	4 / 3			
reaction time	interval					4.3											
	velocity	5.24				7.98							7.40				

Heat 2

date 04-Sep-72 wind -0.6 m/s *Letzelter (1977) - Hurdensprint: geschwindigkeitsverlauf und spezielle eigenschaften*

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Mathews, Brenda (NZL) (1949)	time	2.5				6.9							13.81	4 / 5			
reaction time	interval					4.4											
	velocity	5.12				7.80							7.24				

Heat 1

date 04-Sep-72 wind 0.0 m/s

Letzelter (1977) - Hurdensprint: geschwindigkeitsverlauf und spezielle eigenschaften

		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Shakhamarov, Esther (ISR) (19	time	2.5				6.7							13.17	2 / 4			
reaction time	interval					4.2											
	velocity	5.26				8.10							7.59				

1968 Olympic Games (Mexico City, MEX) (80m Hurdles)

FINAL

date 18-Oct-68 wind 0.0 m/s

	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Caird, Maureen (AUS) (1951)	no information available										OR	10.3	1 / 1	(10.39)		
Kilborn, Pan (AUS) (1939)	no information available											10.4	8 / 2	(10.46)		
Chi Cheng (TPE) (1944)	no information available											10.4	2 / 3	(10.51)		
van Wolvelaere, Patty (USA) (1950)	no information available											10.5	7 / 4	(10.60)		
Balzer, Karin (GDR) (1938)	no information available											10.6	5 / 5	(10.61)		
Straszyńska, Danuta (POL) (1942)	no information available											10.6	4 / 6	(10.66)		
Zebrowska, Elżbieta (POL) (1945)	no information available											10.6	6 / 7	(10.66)		
Talysheva, Tatyana (URS) (1937)	no information available											10.7	3 / 8	(10.72)		

1964 Olympic Games (Tokyo, JPN) (80m Hurdles)

FINAL

date 19-Oct-64 wind 2.3 m/s

Breitschaft (1965) - die leichtathletik wettkampfe der 1964 olympischen sommerspielen - 80m hürdenlauf

		H1	H2	H3	H4	H5	H6	H7	H8	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Richert, Karin (EUA/GDR) (1938)	no information available										10.5	3 / 1	(10.54)		
Ciepły, Teresa (POL) (1937)	no information available										10.5	2 / 2	(10.55)		
Kilborn, Pan (AUS) (1939)	no information available										10.5	7 / 3	(10.56)		
Press, Irina (URS) (1939)	time			4.1			7.1				10.6	4 / 4			
reaction time	interval	7 steps					3.0			3.50	(10.62)				
	velocity			6.83			8.00			6.86	9.43				
Yoda, Ikuko (JPN) (1938)	time			3.8			7.2				10.7	6 / 5			
reaction time	interval						3.4			3.50	(10.72)				
	velocity			7.37			7.06			6.86	9.35				
Piatkowska, Maria (POL) (1931	time			4.1			7.2				10.7	8 / 6			
reaction time	interval	7 steps					3.1			3.50	(10.76)				
	velocity			6.83			7.74			6.86	9.35				
Stamejčič, Draga (YUG) (1937)	time			4.3			7.3				10.8	5 / 7			
reaction time	interval						3.0			3.50	(10.86)				
	velocity			6.51			8.00			6.86	9.26				
Bonds, Rosie (USA) (1946)	time			4.1			7.5				10.8	1 / 8			
reaction time	interval						3.4			3.30	(10.88)				
	velocity			6.83			7.06			7.27	9.26				

Semi-Final 2

date 19-Oct-64 wind ???

Breitschaft (1965) - die leichtathletik wettkampfe der 1964 olympischen sommerspielen - 80m hürdenlauf

		H1	H2	H3	H4	H5	H6	H7	H8	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Yoda, Ikuko (JPN) (1938)	time			4.4			7.3				10.7	/ 2			
reaction time	interval						2.9			3.40	(10.72)				
	velocity			6.36			8.28			7.06	9.35				
Piatkowska, Maria (POL) (1931	time			4.3			7.3				10.7	/ 4			
reaction time	interval	7 steps					3.0			3.40	(10.73)				
	velocity			6.51			8.00			7.06	9.35				
Bystrova, Galina (URS) (1934)	time			4.2			7.3				10.8	/ 6			
reaction time	interval						3.1			3.50	(10.89)				
	velocity			6.67			7.74			6.86	9.26				

Semi-Final 1

date 19-Oct-64 wind ???

Breitschaft (1965) - die leichtathletik wettkampfe der 1964 olympischen sommerspielen - 80m hürdenlauf

		H1	H2	H3	H4	H5	H6	H7	H8	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Kilborn, Pam (AUS) (1939)	time			4.2			7.1				10.6	/ 1			
reaction time	interval						2.9			3.50	=OR	(10.69)			
	velocity			6.67			8.28			6.86	9.43				
Press, Irina (URS) (1939)	time			4.3			7.2				10.8	/ 3			
reaction time	interval	7 steps					2.9			3.60	(10.85)				
	velocity			6.51			8.28			6.67	9.26				
Bonds, Rosie (USA) (1946)	time			4.2			7.2				10.8	/ 4			
reaction time	interval						3.0			3.60	(10.87)				
	velocity			6.67			8.00			6.67	9.26				

1960 Olympic Games (Rome, ITA) (80m Hurdles)

FINAL

date 01-Sep-60 wind 0.0 m/s

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

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

Press, Irina (URS) (1939)	no information available	10.8	3 / 1	(10.93)
Quinton, Carole (GBR) (1936)	no information available	10.9	6 / 2	(10.99)
Birkemeyer, Gisela (EUA/GDR) (1931)	no information available	11.0	4 / 3	(11.13)
Bignal, Mary (GBR) (1940)	no information available	11.1	5 / 4	(11.22)
Bystrova, Galina (URS) (1934)	no information available	11.2	2 / 5	(11.26)
Kosheleva, Rimma (URS) (1936)	no information available	11.2	1 / 6	(11.28)

1956 Olympic Games (Melbourne, AUS) (80m Hurdles)

FINAL date 28-Nov-56 wind -1.3 m/s

	H1	H2	H3	H4	H5	H6	H7	H8	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Strickland, Shirley (AUS) (1925)	no information available								OR	10.7	8 / 1	(10.96)		
Köhler, Gisela (EUA/GDR) (1931)	no information available									10.9	4 / 2	(11.12)		
Thrower, Norma (AUS) (1936)	no information available									11.0	7 / 3	(11.25)		
Bystrova, Galina (URS) (1934)	no information available				7 steps					11.0	6 / 4	(11.25)		
Golubnichaya, Mariya (URS) (1924)	no information available									11.3	5 / 5	(11.50)		
Cooke, Gloria (AUS) (1934)	no information available									11.4	3 / 6	(11.60)		

1952 Olympic Games (Helsinki, FIN) (80m Hurdles)

FINAL date 24-Jul-52 wind

	H1	H2	H3	H4	H5	H6	H7	H8	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Strickland, Shirley (AUS) (1925)	no information available								WR	10.9	4 / 1	(11.01)		
Golubnichaya, Mariya (URS) (1924)	no information available									11.1	6 / 2	(11.24)		
Sander, Maria (FRG) (1924)	no information available									11.1	5 / 3	(11.38)		
Seonbuchner, Anneliese (FRG) (1929)	no information available									11.2	7 / 4	(11.46)		
Desforges, Jean (GBR) (1929)	no information available									11.6	2 / 5	(11.75)		
Blankers-Koen, Fanny (NED) (1918)	no information available									dnf	3 / --			

1948 Olympic Games (London, GBR) (80m Hurdles)

FINAL date 04-Aug-48 wind 1.9 m/s

	H1	H2	H3	H4	H5	H6	H7	H8	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Blankers-Koen, Fanny (NED) (1918)	no information available								OR	11.2	2 / 1			
Gardner, Maureen (GBR) (1928)	no information available								OR	11.2	3 / 2			
Strickland, Shirley (AUS) (1925)	no information available									11.4	6 / 3			
Monginou, Yvette (FRA) (1927)	no information available									11.8e	5 / 4			
Oberbreyer, Maria (AUT) (1921)	no information available									11.9e	4 / 5			
Lomská, Libuše (TCH) (1923)	no information available									11.9e	7 / 6			

1936 Olympic Games (Berlin, GER) (80m Hurdles)

FINAL date 06-Aug-36 wind 1.4 m/s

	H1	H2	H3	H4	H5	H6	H7	H8	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Valla, Trebisonda (ITA) (1916)	no information available								=OR	11.7	5 / 1	(11.75)		
Steuer, Anni (GER) (1913)	no information available								=OR	11.7	2 / 2	(11.81)		
Taylor, Elizabeth (CAN) (1916)	no information available								=OR	11.7	4 / 3	(11.82)		
Testoni, Claudia (ITA) (1915)	no information available								=OR	11.7	3 / 4	(11.82)		
ter Braake, Kitty (NED) (1913)	no information available									11.8	6 / 5	(11.84)		
Eckert, Doris (GER) (1915)	no information available									12.0	7 / 6	(12.19)		

1932 Olympic Games (Los Angeles, CA) (80m Hurdles)

FINAL date 04-Aug-32 wind

	H1	H2	H3	H4	H5	H6	H7	H8	Run-In	Official Time	Lane / Place	H1-H4	H4-H7	H7-H10
Didriksen, Mildred "Babe" (USA) (1911)	no information available				9 steps				WR	11.7	3 / 1			
Hall, Evelyne (USA) (1909)	no information available								WR	11.7	2 / 2			
Clark, Marjorie (RSA) (1909)	no information available				7 steps					11.8	4 / 3			
Schaller, Simone (USA) (1912)	no information available									11.8	7 / 4			
Webb, Violet (GBR) (1915)	no information available				7 steps					11.9	6 / 5			
Wilson, Alda (CAN) (1910)	no information available				9 steps					12.0	5 / 6			