

# Scientific Research Project

## Biomechanical Analyses

at the



## Final Report

## Triple Jump

**Biomechanical analyses of selected events at the  
12<sup>th</sup> IAAF World Championships in Athletics,  
Berlin 15–23 August 2009**

**A Project by the German Athletics Federation**

(© Deutscher Leichtathletik-Verband, Alsfelder Strasse 27, 64289 Darmstadt, Germany)

**in co-operation with**

IAT Leipzig

OSP Berlin

OSP Hessen

OSP Rheinland

Martin Luther-Universität Wittenberg-Halle



**DLV Scientific Research Project**

Deutscher  
Leichtathletik-  
Verband



IAT  
Institut für Angewandte  
Trainingswissenschaft



Olympiastützpunkte  
Berlin  
Hessen  
Rheinland



MLU Halle-Wittenberg

**Report-layout:**

Helmar HOMMEL (DLV)

**Biomechanics-Team:**

Helmar HOMMEL (DLV, Project Co-ordinator • [helmar.hommel@leichtathletik.de](mailto:helmar.hommel@leichtathletik.de))

Marko BADURA (IAT Leipzig)

Dr. Luis MENDOZA (OSP Hessen)

Jörg BÖTTCHER (OSP Berlin)

Ralf MÜLLER (OSP Rheinland)

Dr. Ralf BUCKWITZ (OSP Berlin)

Eberhard NIXDORF (OSP Hessen)

Dr. Olaf ERNST (IAT Leipzig)

Dr. Bettina PERLT (IAT Leipzig)

Dr. Dieter GOHLITZ (IAT Leipzig)

Wilko SCHAA (IAT Leipzig)

Rolf GRAUBNER (Uni Halle)

Falk SCHADE (OSP Rheinland)

Regine ISELE (OSP Hessen)

Axel SCHLEICHARDT (IAT Leipzig)

Mirko LANDMANN (Uni Halle)

Anja STARKE (Uni Halle)

Dr. Frank LEHMANN (IAT Leipzig)

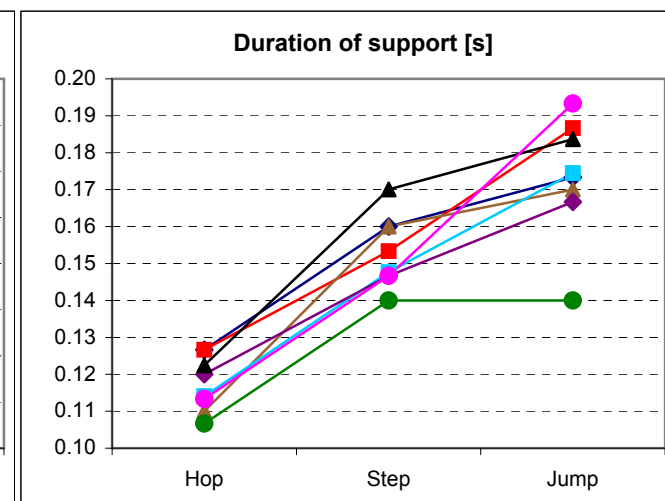
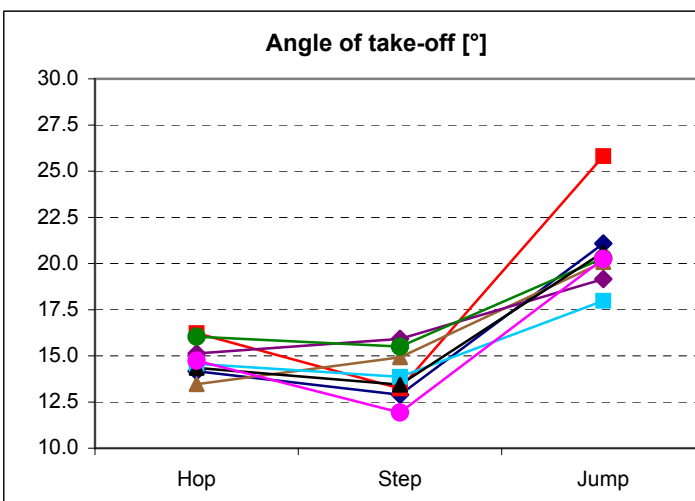
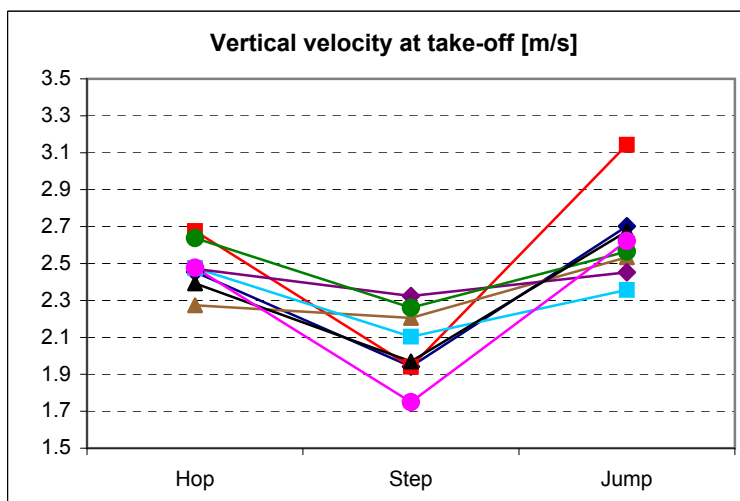
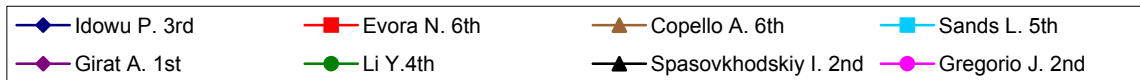
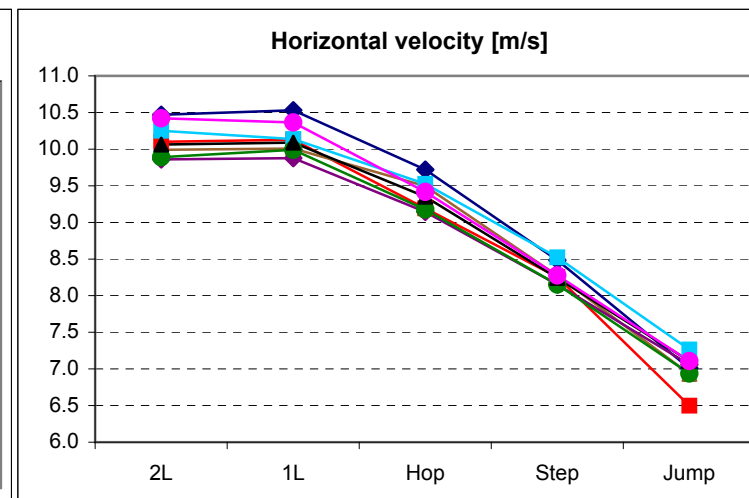
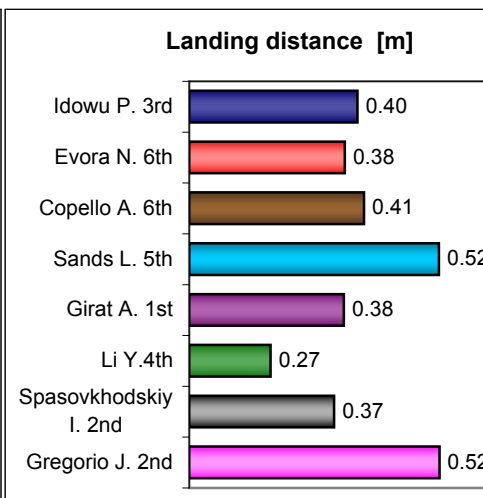
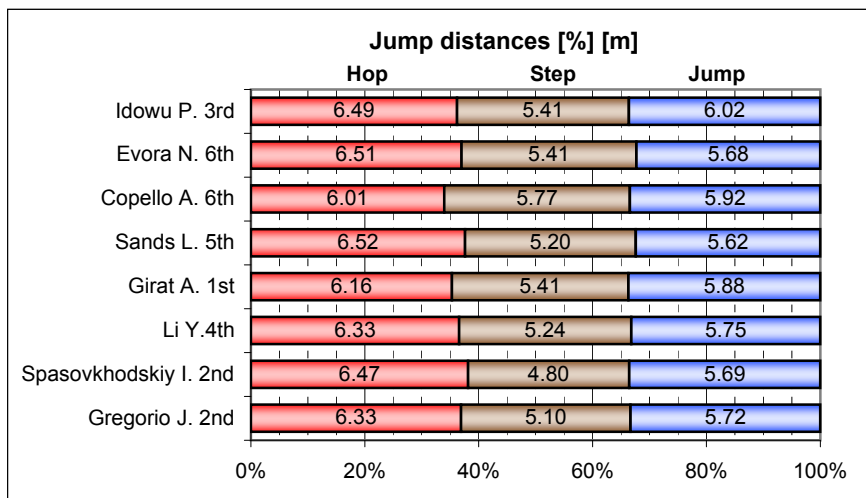
## Biomechanical Analysis of the Triple Jump Men Final

### 12th IAAF World Championships in Athletics - Berlin 18. August 2009

Name / Att.	Jump distance [m]			Stride length [m]					relativ dist. [%]			Horizontal velocity [m/s]					Loss of horizontal velocity [m/s]			Vertical velocity [m/s]			Angle of take-off [°]		
	off.	real	loss	2L	1L	Hop	Step	Jump	Hop	Step	Jump	2L	1L	Hop	Step	Jump	Hop	Step	Jump	Hop	Step	Jump	Hop	Step	Jump
Idowu P. 3rd	17.73	17.92	0.19	2.58	2.49	6.49	5.41	6.02	36	30	34	10.47	10.53	9.72	8.48	7.01	0.81	1.24	1.48	2.45	1.94	2.70	14	13	21
Evora N. 6th	17.55	17.60	0.05	2.68	2.26	6.51	5.41	5.68	37	31	32	10.10	10.13	9.19	8.25	6.50	0.94	0.94	1.76	2.68	1.94	3.14	16	13	26
Copello A. 6th	17.36	17.54	0.18	2.41	2.29	6.01	5.77	5.92	34	33	33	9.99	10.01	9.49	8.27	6.93	0.51	1.22	1.34	2.27	2.21	2.53	13	15	20
Sands L. 5th	17.32	17.34	0.02	2.92	2.30	6.52	5.20	5.62	38	30	32	10.25	10.14	9.53	8.52	7.26	0.61	1.00	1.26	2.48	2.10	2.36	15	14	18
Girat A. 1st	17.26	17.39	0.00	2.49	2.33	6.16	5.41	5.88	35	31	34	9.86	9.88	9.14	8.15	7.06	0.73	0.99	1.09	2.47	2.32	2.45	15	16	19
Li Y.4th	17.23	17.32	0.09	2.30	2.46	6.33	5.24	5.75	37	30	33	9.89	9.99	9.18	8.15	6.94	0.81	1.02	1.22	2.64	2.26	2.57	16	16	20
Spasovkhodskiy I. 2nd	16.91	16.96	0.05	2.55	2.49	6.47	4.80	5.69	38	28	34	10.06	10.09	9.35	8.24	7.11	0.74	1.11	1.13	2.39	1.97	2.67	14	13	21
Gregorio J. 2nd	16.89	17.15	0.26	2.71	2.62	6.33	5.10	5.72	37	30	33	10.42	10.36	9.42	8.28	7.11	0.95	1.14	1.17	2.48	1.75	2.62	15	12	20

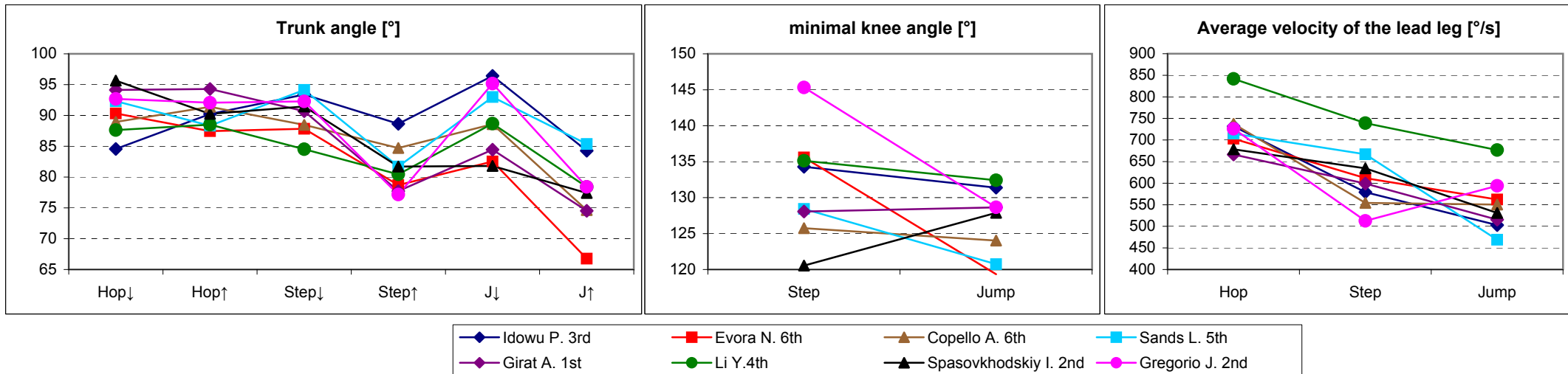
Name / Att.	Duration of the support phase [s]			minimal Knee angle [°]		Inclination angle at touch-down [°]			Trunk angle [°]						Lead leg angle at take-off [°]			Average velocity of the lead leg [°/s]			Landing				
	Hop	Step	Jump	Step	Jump	Hop	Step	Jump	Hop↓	Hop↑	Step↓	Step↑	J↓	J↑	Hop	Step	Jump	Hop	Step	Jump	dist. [m]	fall-back [m]	knee angle [°]	hip angle [°]	trunk angle [°]
Idowu P. 3rd	0.13	0.16	0.17	134	131	24	23	21	85	90	93	89	96	84	-14	-19	-6	732	579	503	0.40	0.00	144	59	39
Evora N. 6th	0.13	0.15	0.19	136	119	23	18	25	90	87	88	79	83	67	-14	-20	-16	703	612	562	0.38	0.00	147	113	81
Copello A. 6th	0.11	0.16	0.17	126	124	18	23	20	89	91	88	85	89	75	-21	-15	-22	738	554	550	0.41	0.15	109	44	66
Sands L. 5th	0.11	0.15	0.17	128	121	18	20	22	92	88	94	82	93	85	-15	-11	-18	715	667	469	0.52	0.00	146	113	88
Girat A. 1st	0.12	0.15	0.17	128	129	22	18	20	94	94	91	78	84	75	-12	-18	-26	666	599	515	0.38	0.07	108	51	77
Li Y.4th	0.11	0.14	0.14	135	132	17	19	18	88	89	85	80	89	78	-10	-17	-23	842	739	677	0.27	0.00	75	36	76
Spasovkhodskiy I. 2nd	0.12	0.17	0.18	121	128	20	24	22	96	90	91	82	82	77	-12	-22	-14	678	634	531	0.37	0.00	116	82	77
Gregorio J. 2nd	0.11	0.15	0.19	145	129	18	18	22	93	92	92	77	95	78	-16	-34	-10	726	513	594	0.52	0.00	130	99	86

## Biomechanical Analysis of the Triple Jump Men Final 12th IAAF World Championships in Athletics - Berlin 18. August 2009





## Biomechanical Analysis of the Triple Jump Men Final 12th IAAF World Championships in Athletics - Berlin 18. August 2009



**Idowu P. 3rd**      **17,73m**



**Evora N. 6th**      **17,55m**



## Biomechanical Analysis of the Triple Jump Men Final 12th IAAF World Championships in Athletics - Berlin 18. August 2009

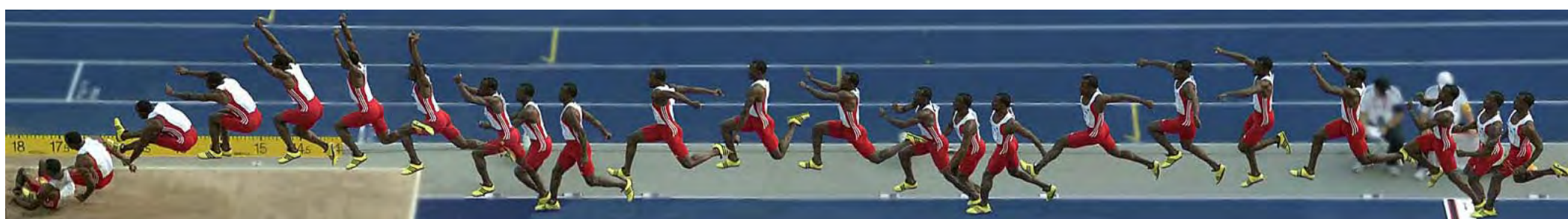
**Copello A. 6th 17,36m**



**Sands L. 5th 17,32m**



**Girat A. 1st 17,26m**





## Biomechanical Analysis of the Triple Jump Men Final 12th IAAF World Championships in Athletics - Berlin 18. August 2009

Li Y.4th 17,23m



Spasovkhodskiy I. 2nd 16,91m



Gregorio J. 2nd 16,89m



### Triple Jump Men Final, 12th IAAF World Championships in Athletics - Berlin

No.	Name	Att.	Distance [m]	Wind [m/s]	Run-Up-Velocity		from the Take-Off Board
					11-6m [m/s]	6-1m [m/s]	
510	Idowu	1	17.51	+0.0	10.49	10.55	18. Aug 09 s18:16:06
510	Idowu	2	17.44	+0.1	10.36	10.53	18. Aug 09 s18:35:39
510	Idowu	3	17.73	+0.0	10.41	10.49	18. Aug 09 s18:56:53
510	Idowu	4	x		10.36	10.05	18. Aug 09 s19:25:20
510	Idowu	5	x		10.27	10.32	18. Aug 09 s19:41:29
928	Evora	1	17.54	-0.3	9.86	9.91	18. Aug 09 s18:07:48
928	Evora	2	x		10.05	10.20	18. Aug 09 s18:26:00
928	Evora	3	17.38	+0.1	9.88	10.02	18. Aug 09 s18:44:40
928	Evora	4	x		10.14	10.22	18. Aug 09 s19:23:17
928	Evora	5	17.33	+0.2	9.92	10.06	18. Aug 09 s19:39:39
928	Evora	6	17.55	+0.1	9.98	10.14	18. Aug 09 s19:57:09
296	Copello	1	17.06	-0.2	9.64	9.79	18. Aug 09 s18:18:18
296	Copello	2	17.19	+0.2	0.00	0.00	18. Aug 09 s18:37:01
296	Copello	3	14.87	+0.4	9.79	9.94	18. Aug 09 s18:58:22
296	Copello	4	x		9.87	10.00	18. Aug 09 s19:14:57
296	Copello	5	17.04	-0.4	9.69	9.87	18. Aug 09 s19:33:19
296	Copello	6	17.36	-0.1	0.00	9.98	18. Aug 09 s19:50:16
165	Sands	1	17.2	+0.8	10.32	10.26	18. Aug 09 s18:13:33
165	Sands	2	17.08	-0.4	10.31	10.29	18. Aug 09 s18:32:32
165	Sands	3	16.96	-0.1	10.40	10.23	18. Aug 09 s18:53:12
165	Sands	4	17.05	-0.1	10.32	10.12	18. Aug 09 s19:17:41
165	Sands	5	17.32	-0.5	10.24	10.13	18. Aug 09 s19:35:03
165	Sands	6	16.99	-0.2	10.27	10.15	18. Aug 09 s19:55:24
302	Girat	1	17.26	+0.0	9.70	9.84	18. Aug 09 s18:24:53
302	Girat	2	17.18	+0.2	9.67	9.84	18. Aug 09 s18:43:13
302	Girat	3	13.51		9.73	9.49	18. Aug 09 s19:04:21
302	Girat	4	17.19	+0.1	9.86	9.93	18. Aug 09 s19:19:03
302	Girat	5	17.01	-0.6	9.60	9.88	18. Aug 09 s19:38:09
302	Girat	6	17.06	+0.1	9.67	9.93	18. Aug 09 s19:53:36
270	Li	1	16.95	+0.6	0.00	9.90	18. Aug 09 s18:23:24
270	Li	2	16.92	+0.0	9.61	9.80	18. Aug 09 s18:41:53
270	Li	3	14.23	+0.0	9.55	9.68	18. Aug 09 s19:02:32
270	Li	4	17.23	+1.1	9.74	10.02	18. Aug 09 s19:13:39
270	Li	5	x		9.71	9.90	18. Aug 09 s19:31:30
270	Li	6	16.75	+0.2	9.61	9.92	18. Aug 09 s19:51:50
1019	Spasovkhodskiy	1	16.73	+0.2	10.06	9.95	18. Aug 09 s18:10:35
1019	Spasovkhodskiy	2	16.91	-0.3	10.08	10.09	18. Aug 09 s18:29:47
1019	Spasovkhodskiy	3	14.66	+0.1	10.16	9.95	18. Aug 09 s18:50:18
1019	Spasovkhodskiy	4	14.75	+0.4	9.97	0.00	18. Aug 09 s19:11:51
1019	Spasovkhodskiy	5	16.37	+0.1	9.91	9.85	18. Aug 09 s19:29:48
1019	Spasovkhodskiy	6	x		9.91	10.06	18. Aug 09 s19:48:09
226	Gregorio	1	x		10.24	10.43	18. Aug 09 s18:14:38
226	Gregorio	2	16.89	-0.1	10.30	10.41	18. Aug 09 s18:34:25
226	Gregorio	3	16.84	+0.0	10.37	10.45	18. Aug 09 s18:55:13
226	Gregorio	4	16.7	+0.0	10.43	10.52	18. Aug 09 s19:10:03
226	Gregorio	6	x		9.87	10.02	18. Aug 09 s19:46:35



### Triple Jump Men Final, 12th IAAF World Championships in Athletics - Berlin

No.	Name	Att.	Distance [m]	Wind [m/s]	Run-Up-Velocity		
					11-6m [m/s]	6-1m [m/s]	
243	Karailiev	1	16.82	+0.3	9.69	9.84	18. Aug 09 s18:21:52
243	Karailiev	2	16.78	+0.3	9.65	9.83	18. Aug 09 s18:40:18
243	Karailiev	3	16.81	+0.0	9.75	9.89	18. Aug 09 s19:01:00
495	Douglas	1	16.78	-0.1	9.69	9.35	18. Aug 09 s18:20:07
495	Douglas	2	15.44	+0.0	9.66	9.11	18. Aug 09 s18:39:06
495	Douglas	3	16.79	-0.1	0.00	9.92	18. Aug 09 s18:59:38
480	Tamgho	1	x		9.60	0.00	18. Aug 09 s18:11:31
480	Tamgho	2	16.79	-0.6	9.72	9.88	18. Aug 09 s18:31:09
480	Tamgho	3	x		9.73	9.71	18. Aug 09 s18:51:13
1071	Valukevic	1	x		9.56	9.75	18. Aug 09 s18:09:00
1071	Valukevic	2	x		9.39	9.65	18. Aug 09 s18:28:03
1071	Valukevic	3	16.54	+0.3	9.59	9.82	18. Aug 09 s18:46:25

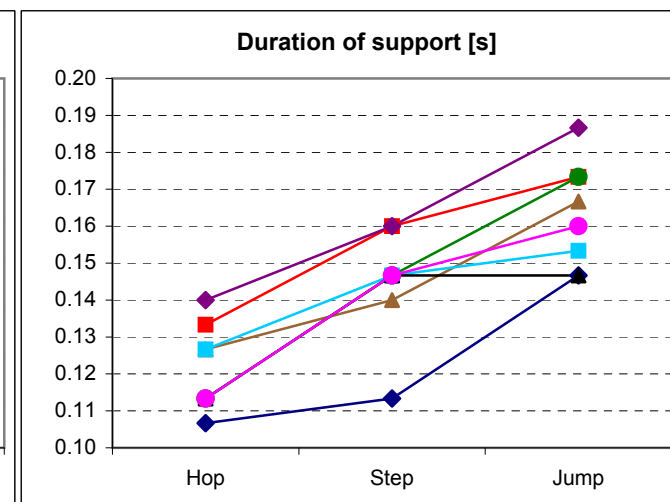
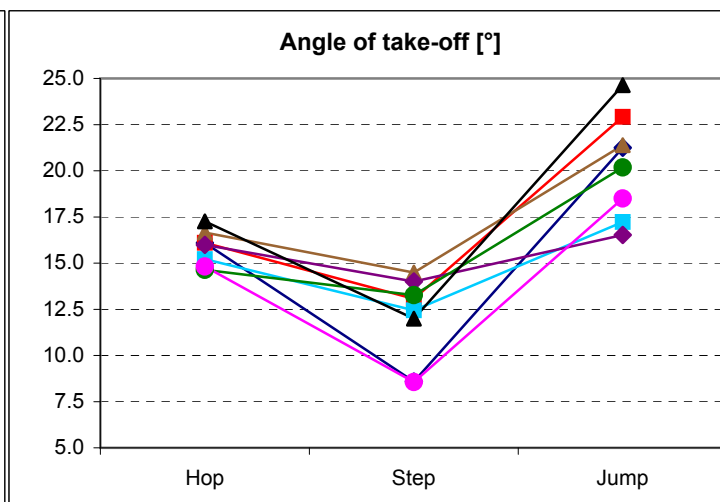
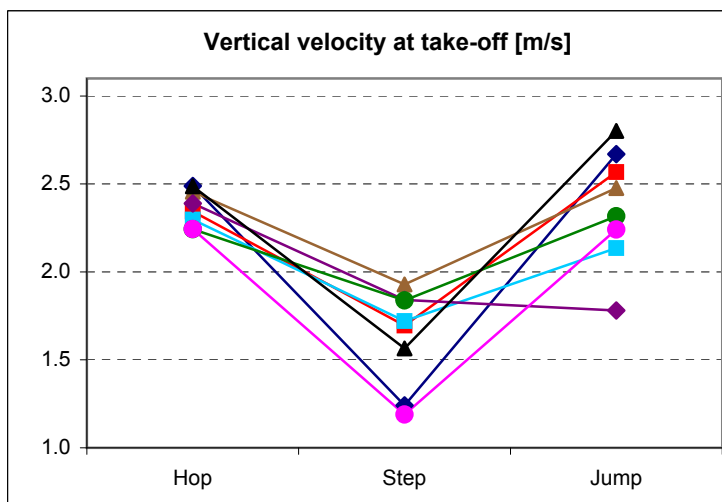
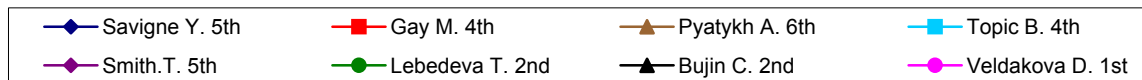
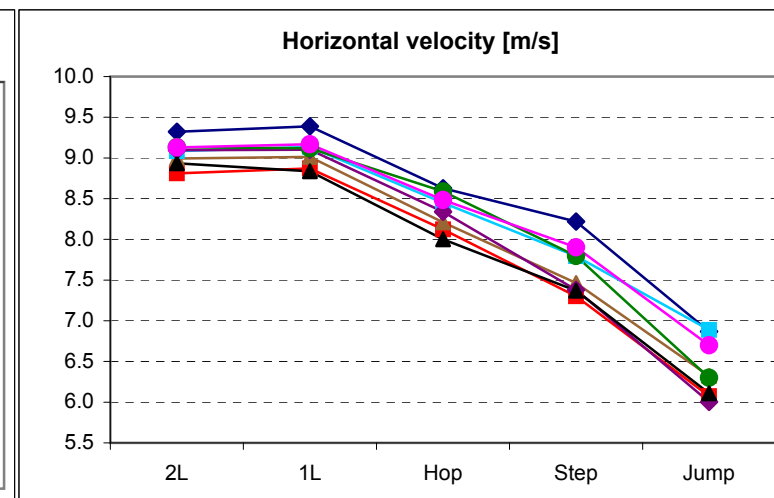
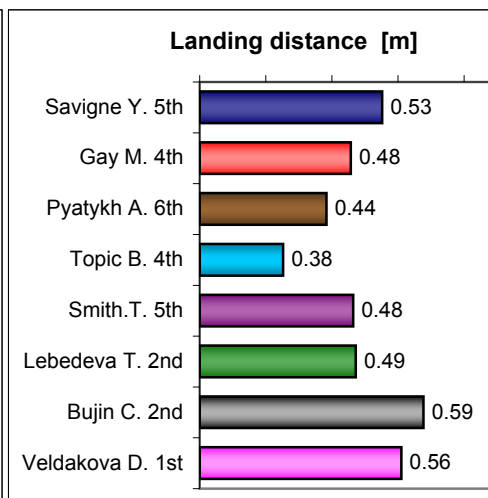
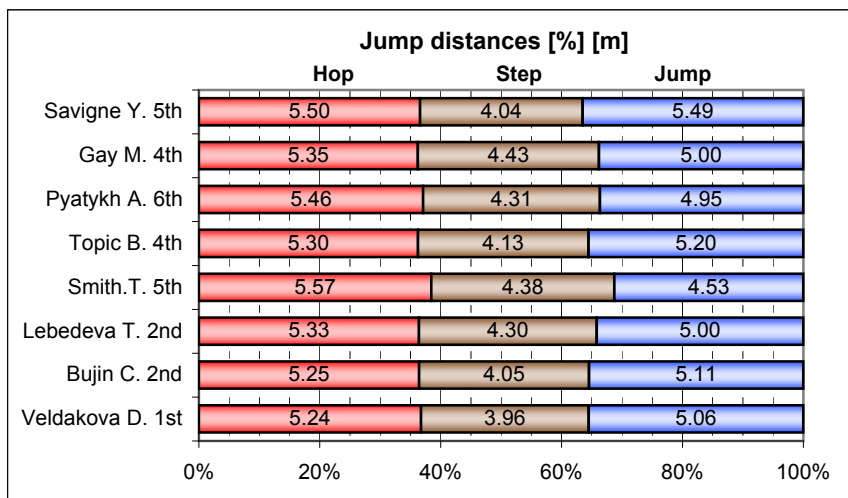
## Biomechanical Analysis of the Triple Jump Women Final

### 12th IAAF World Championships in Athletics - Berlin 17. August 2009

Name / Att.	Jump distance [m]			Stride length [m]					relativ dist. [%]			Horizontal velocity [m/s]					Loss of horizontal velocity [m/s]			Vertical velocity [m/s]			Angle of take-off [°]		
	off.	real	loss	2L	1L	Hop	Step	Jump	Hop	Step	Jump	2L	1L	Hop	Step	Jump	Hop	Step	Jump	Hop	Step	Jump	Hop	Step	Jump
Savigne Y. 5th	14.95	15.04	0.09	2.06	2.18	5.50	4.04	5.49	37	27	37	9.32	9.39	8.63	8.22	6.87	0.76	0.41	1.35	2.49	1.24	2.67	16	9	21
Gay M. 4th	14.61	14.78	0.17	2.42	2.15	5.35	4.43	5.00	36	30	34	8.81	8.87	8.12	7.30	6.07	0.75	0.82	1.23	2.34	1.70	2.57	16	13	23
Pyatykh A. 6th	14.53	14.72	0.19	2.30	2.18	5.46	4.31	4.95	37	29	34	8.99	9.01	8.21	7.46	6.32	0.80	0.74	1.14	2.46	1.93	2.48	17	14	21
Topic B. 4th	14.52	14.63	0.11	2.37	2.41	5.30	4.13	5.20	36	28	36	9.08	9.13	8.45	7.80	6.89	0.69	0.65	0.91	2.30	1.72	2.14	15	12	17
Smith.T. 5th	14.48	14.48	0.00	2.42	2.36	5.57	4.38	4.53	38	30	31	9.10	9.10	8.34	7.38	6.00	0.76	0.96	1.38	2.39	1.84	1.78	16	14	17
Lebedeva T. 2nd	14.48	14.57	0.09	2.06	2.09	5.33	4.30	5.00	36	29	34	9.13	9.12	8.59	7.80	6.30	0.53	0.79	1.50	2.24	1.84	2.32	15	13	20
Bujin C. 2nd	14.26	14.37	0.11	2.31	2.20	5.25	4.05	5.11	36	28	35	8.93	8.84	8.00	7.37	6.11	0.83	0.63	1.26	2.49	1.57	2.80	17	12	25
Veldakova D. 1st	14.25	14.26	0.01	2.46	2.21	5.24	3.96	5.06	37	28	35	9.13	9.17	8.48	7.90	6.70	0.68	0.58	1.20	2.24	1.19	2.24	15	9	19

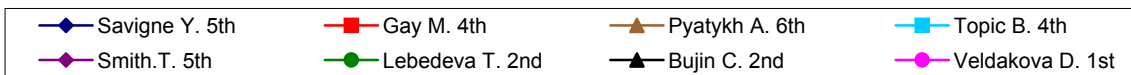
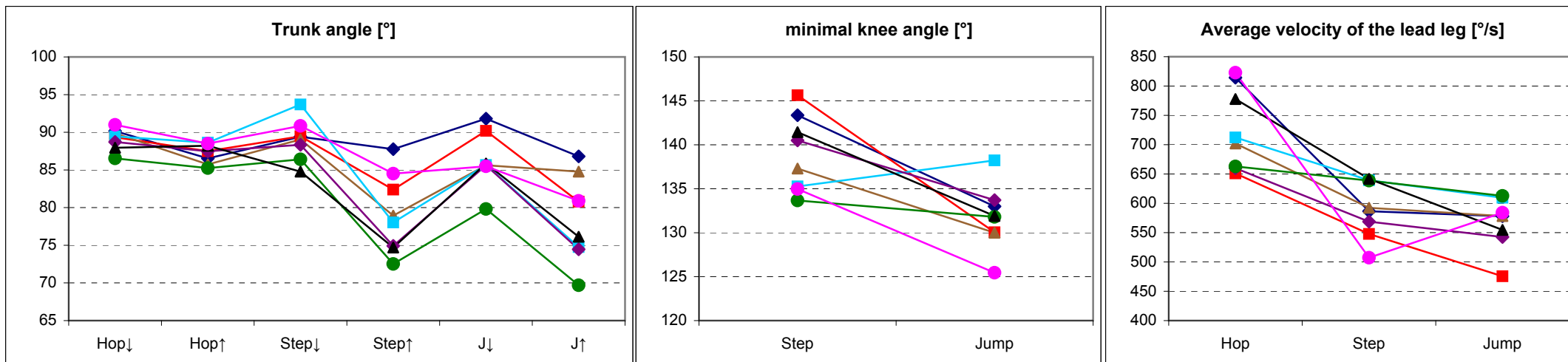
Name / Att.	Duration of the support phase [s]			minimal Knee angle [°]		Inclination angle at touch-down [°]			Trunk angle [°]						Lead leg angle at take-off [°]			Average velocity of the lead leg [°/s]			Landing				
	Hop	Step	Jump	Step	Jump	Hop	Step	Jump	Hop↓	Hop↑	Step↓	Step↑	J↓	J↑	Hop	Step	Jump	Hop	Step	Jump	dist. [m]	fall-back [m]	knee angle [°]	hip angle [°]	trunk angle [°]
Savigne Y. 5th	0.11	0.11	0.15	143	133	16	11	21	90	87	89	88	92	87	-17	-33	-18	814	586	578	0.53	0.00	143	109	91
Gay M. 4th	0.13	0.16	0.17	146	130	18	17	19	89	87	89	82	90	81	-14	-25	-21	651	548	476	0.48	0.00	141	80	62
Pyatykh A. 6th	0.13	0.14	0.17	137	130	22	15	21	90	86	89	79	86	85	-16	-28	-18	702	592	578	0.44	0.00	126	77	70
Topic B. 4th	0.13	0.15	0.15	135	138	21	18	18	89	89	94	78	86	75	-11	-20	-16	712	639	609	0.38	0.00	131	55	45
Smith.T. 5th	0.14	0.16	0.19	141	134	23	17	22	89	87	88	75	86	74	-11	-11	-13	660	569	542	0.48	0.00	122	56	57
Lebedeva T. 2nd	0.11	0.15	0.17	134	132	18	19	26	87	85	86	73	80	70	-18	-29	-22	663	639	613	0.49	0.06	125	74	75
Bujin C. 2nd	0.11	0.15	0.15	141	132	19	14	18	88	88	85	75	86	76	-13	-19	-22	778	642	555	0.59	0.00	144	96	84
Veldakova D. 1st	0.11	0.15	0.16	135	125	17	16	21	91	89	91	85	85	81	-6	-25	-16	823	507	584	0.56	0.00	128	86	82

## Biomechanical Analysis of the Triple Jump Women Final 12th IAAF World Championships in Athletics - Berlin 17. August 2009





## Biomechanical Analysis of the Triple Jump Women Final 12th IAAF World Championships in Athletics - Berlin 17. August 2009



**Savigne Y. 5th**      **14,95m**



## Biomechanical Analysis of the Triple Jump Women Final 12th IAAF World Championships in Athletics - Berlin 17. August 2009

Gay M. 4th 14,61m



Pyatykh A. 6th 14,53m





## Biomechanical Analysis of the Triple Jump Women Final 12th IAAF World Championships in Athletics - Berlin 17. August 2009

Topic B. 4th 14,52m



Smith.T. 5th 14,48m





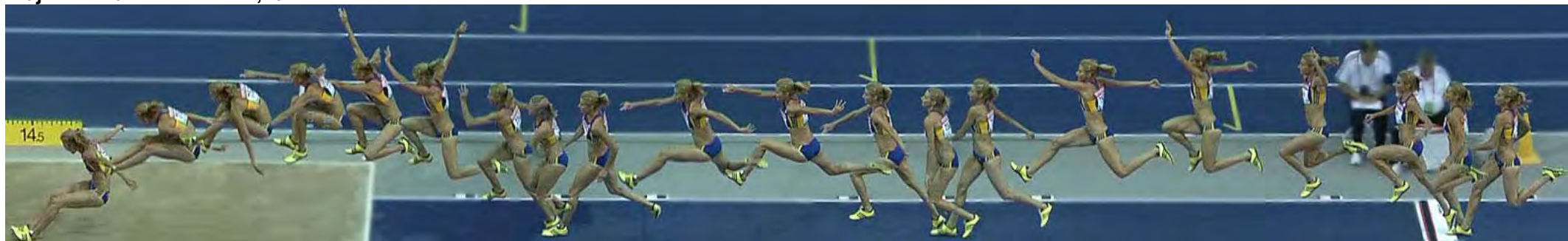
## Biomechanical Analysis of the Triple Jump Women Final

12th IAAF World Championships in Athletics - Berlin 17. August 2009

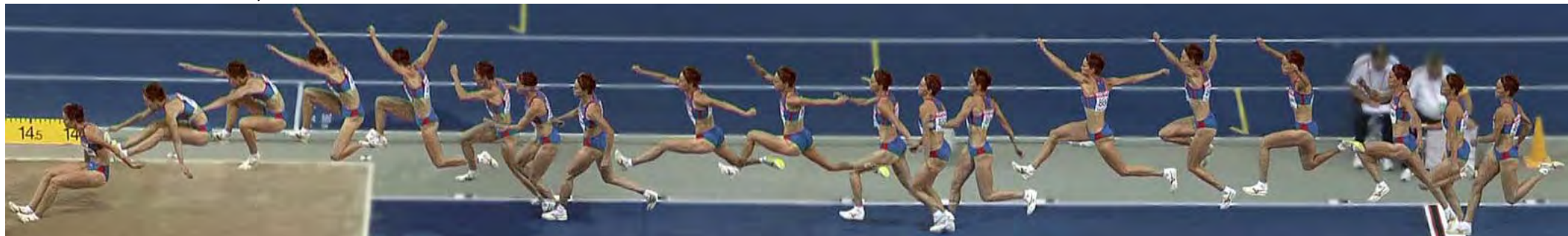
**Lebedeva T. 2nd**      **14,48m**



**Bujin C. 2nd**      **14,26m**



**Veldakova D. 1st**      **14,25m**



### Triple Jump Women Final, 12th IAAF World Championships in Athletics - Berlin

No.	Name	Att.	Distance [m]	Wind [m/s]	Run-Up-Velocity		
					11-6m [m/s]	6-1m from the Take-Off Board [m/s]	
273	Savigne	1	14.45	+0.5	9.24	9.37	17. Aug 09 s20:09:16
273	Savigne	2	14.14	-0.2	9.36	9.38	17. Aug 09 s20:28:43
273	Savigne	3	14.89	-0.1	9.29	9.42	17. Aug 09 s20:47:28
273	Savigne	4	14.85	+0.0	9.18	9.34	17. Aug 09 s21:17:11
273	Savigne	5	14.95	+1.3	0.00	0.00	17. Aug 09 s21:28:38
273	Savigne	6	14.39	+0.0	9.19	9.32	17. Aug 09 s21:46:12
267	Gay	1	13.87	-0.3	8.57	8.83	17. Aug 09 s20:17:06
267	Gay	2	14.50	-0.1	8.57	8.80	17. Aug 09 s20:37:21
267	Gay	4	14.61	-0.2	8.71	8.83	17. Aug 09 s21:15:51
267	Gay	5	14.48	+0.5	8.61	8.75	17. Aug 09 s21:27:21
267	Gay	6	14.04	+0.1	8.61	8.85	17. Aug 09 s21:44:53
817	Pyatykh	1	13.72	-0.3	8.90	8.82	17. Aug 09 s20:13:28
817	Pyatykh	2	14.23	-0.1	8.92	8.91	17. Aug 09 s20:33:34
817	Pyatykh	3	13.66	+0.0	8.78	8.87	17. Aug 09 s20:53:47
817	Pyatykh	4	14.58	-0.4	8.82	8.98	17. Aug 09 s21:08:39
817	Pyatykh	5	14.46	-0.2	8.81	8.90	17. Aug 09 s21:19:00
817	Pyatykh	6	14.53	+0.0	8.97	8.96	17. Aug 09 s21:43:28
865	Topic	1	14.21	+0.1	9.05	0.00	17. Aug 09 s20:07:59
865	Topic	2	14.38	+0.0	9.11	9.14	17. Aug 09 s20:27:16
865	Topic	3	14.27	-0.5	8.83	8.96	17. Aug 09 s20:44:30
865	Topic	4	14.52	-0.1	8.93	9.04	17. Aug 09 s21:14:11
865	Topic	5	14.43	+0.8	9.04	9.08	17. Aug 09 s21:25:54
865	Topic	6	14.10	-0.1	8.94	9.10	17. Aug 09 s21:42:22
542	Smith	1	14.31	+0.4	9.11	9.33	17. Aug 09 s20:10:37
542	Smith	2	x	+0.1	9.08	9.29	17. Aug 09 s20:30:15
542	Smith	3	x	+0.0	9.09	9.22	17. Aug 09 s20:50:54
542	Smith	4	14.41	+0.1	9.10	9.16	17. Aug 09 s21:11:54
542	Smith	5	14.48	-0.2	0.00	9.08	17. Aug 09 s21:22:42
542	Smith	6	x	-0.2	8.98	9.14	17. Aug 09 s21:40:41
808	Lebedeva	1	x	+0.6	0.00	0.00	17. Aug 09 s20:12:01
808	Lebedeva	2	14.37	+0.0	8.92	9.11	17. Aug 09 s20:32:07
808	Lebedeva	3	14.23	+0.0	0.00	0.00	17. Aug 09 s20:51:54
808	Lebedeva	4	14.22	-0.2	9.14	9.33	17. Aug 09 s21:13:17
808	Lebedeva	5	14.26	+0.1	9.01	0.00	17. Aug 09 s21:25:09
808	Lebedeva	6	14.28	+0.0	9.10	9.24	17. Aug 09 s21:36:02
752	Bujin	1	14.26	-0.2	8.81	8.92	17. Aug 09 s20:06:47
752	Bujin	2	14.00	-0.2	8.81	8.87	17. Aug 09 s20:25:53
752	Bujin	3	14.03	+0.3	9.00	9.08	17. Aug 09 s20:46:04
752	Bujin	4	14.20	-0.2	8.68	8.86	17. Aug 09 s21:10:34
752	Bujin	5	14.16	-0.2	8.69	8.90	17. Aug 09 s21:21:21
752	Bujin	6	14.15	+0.1	8.76	8.99	17. Aug 09 s21:34:39
882	Veldakova	1	14.25	-0.2	9.00	9.16	17. Aug 09 s20:20:52
882	Veldakova	2	x	+0.0	8.90	9.14	17. Aug 09 s20:40:20
882	Veldakova	3	12.86	+0.1	9.02	9.27	17. Aug 09 s21:00:30
882	Veldakova	4	14.14	-0.2	8.96	9.13	17. Aug 09 s21:09:28
882	Veldakova	5	14.19	+0.0	8.91	9.15	17. Aug 09 s21:19:53
882	Veldakova	6	14.13	+0.2	8.83	9.09	17. Aug 09 s21:33:33

### Triple Jump Women Final, 12th IAAF World Championships in Athletics - Berlin

No.	Name	Att.	Distance [m]	Wind [m/s]	Run-Up-Velocity		
					11-6m [m/s]	6-1m from the Take-Off Board [m/s]	
227	Xie	1	14.16	-0.1	8.83	8.86	17. Aug 09 s20:18:40
227	Xie	2	11.46	+0.0	8.80	8.89	17. Aug 09 s20:38:31
227	Xie	3	14.06	+0.3	8.77	8.90	17. Aug 09 s20:59:09
581	Rypakova	1	x	+0.1	8.61	8.81	17. Aug 09 s20:14:56
581	Rypakova	2	13.91	-0.2	8.57	8.60	17. Aug 09 s20:35:08
581	Rypakova	3	13.71	+0.0	8.33	8.58	17. Aug 09 s20:55:56
371	Nzola Meso	1	13.77	-0.2	8.85	8.86	17. Aug 09 s20:22:35
371	Nzola Meso	2	13.79	+0.0	0.00	0.00	17. Aug 09 s20:42:07
371	Nzola Meso	3	x	-0.1	8.62	8.74	17. Aug 09 s21:02:28
176	DeOliveira	1	x	+0.1	8.83	8.83	17. Aug 09 s20:05:35
176	DeOliveira	2	13.19	-0.2	8.41	8.74	17. Aug 09 s20:24:24