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Services

Partners

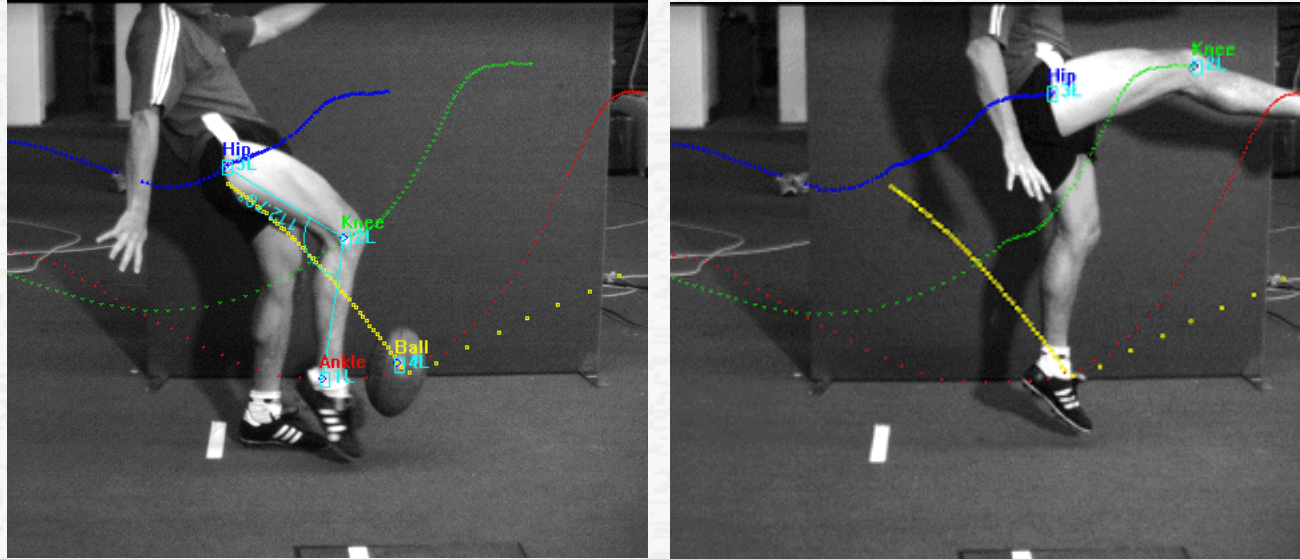
Features

VideoGallery

Contact

## Biomechanics

This example illustrates tracking video of a rugby player kicking the ball. Note the tracking marks on the player's leg at the hip, knee and ankle. These will be used to track the motion of the leg during the kick through the entire range of motion. Data acquired from video are exported to Excel for analysis.



Rugby Kick Data											
A	B	C	D	E	F	G	H	I	J		
1	<b>Motion Analysis Data Sheet</b>										
2											
3	<b>Test Data</b>										
4											
5	Event:	Rugby Kick	Based on Butterworth Low Pass Filter :					50	hz		
6	Model:	Unknown	Max Speed:					58.50	ft/sec	39.89	mph
7	Date:	7/4/2005	Min Speed:					5.52	ft/sec	3.77	mph
8	Time:	12:10:38 PM	Avg Speed:					25.89	ft/sec	17.65	mph
9	Test Date:	Unknown	Acceleration:					447.98	ft/sec <sup>2</sup>	before contact	
10	Video Rate:	250	frames per second	Acceleration:					96.30	ft/sec <sup>2</sup>	after contact
11	Shutter Speed:	Unkown	μseconds								
12											
13											
14	File Name:	E:\Pro Analyst\Rugby Kick\RugbyKick\Kick01.avi									
15											
16	<b>Calibration</b>										
17											
18	Calibration:	6.09	Pixels / Inch								
19	Tilt:	29.42	Degrees								
20	Export Units:	Feet									
21											
22	<b>Ankle Tracking Data</b>										
23											
24	Frame	Time	Position		Δt	Δx	Δy	Calculated	Speed	Filtered	
25			x	y				[ft/sec]	[ft/sec]	[mph]	
26	42	0.1680	-2.8532	3.0476					20.87	19.30	
27	43	0.1720	-2.7644	2.9739	0.00400	0.08882	-0.07365	28.85	28.30	20.48	
28	44	0.1760	-2.6902	2.9022	0.00400	0.07422	-0.07169	25.80	30.04	19.33	
29	45	0.1800	-2.6221	2.8057	0.00400	0.06808	-0.09650	29.53	28.34	18.53	
30	46	0.1840	-2.5416	2.7258	0.00400	0.08055	-0.07997	28.38	27.18	19.22	
31	47	0.1880	-2.5032	2.6240	0.00400	0.03842	-0.10176	27.19	28.18	20.61	
32	48	0.1920	-2.4481	2.5239	0.00400	0.05504	-0.10014	28.57	30.22	21.79	
33	49	0.1960	-2.3604	2.4073	0.00400	0.07873	-0.11663	26.49	24.06	22.00	

Video images provided courtesy of



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