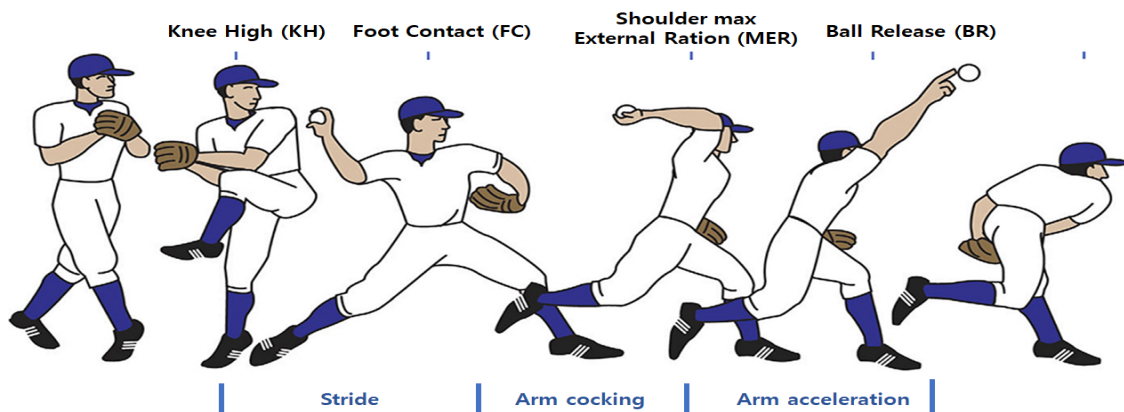


# 2024 Next-Level Training Camp

Name : n54    Date : 20240213    Hand : Right    Ball Velocity : 125 km/h    Weight : 82kg    Height : 184 cm



## PITCHING EFFICIENCY

### 1. KINEMATIC SEQUENCE

#### STRIDE

1. HEIGHT OF KNEE AND PELVIS
2. HIP/SHOULDER SEPARATION
3. ELBOW FLEXION

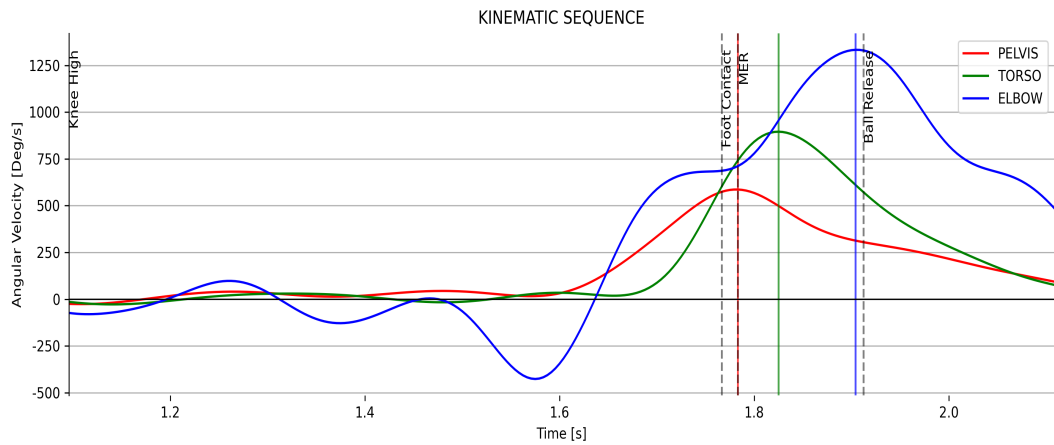
#### ARM COCKING

1. SHANK LATERAL TILT
2. PELVIS HEIGHT
3. SHOULDER EXTERNAL ROTATION
4. SHOULDER HORIZONTAL ABDUCTION
5. LEAD LEG KNEE FLEXION
6. LEAD LEG KNEE EXTENSION ANGULAR VELOCITY

#### ARM ACCELERATION

1. HEAD HAND DISTANCE
2. SHOULDER ABDUCTION
3. TRUNK LATERAL TILT
4. LEAD LEG KNEE FLEXION
5. LEAD LEG KNEE EXTENSION ANGULAR VELOCITY

KINEMATIC SEQUENCE

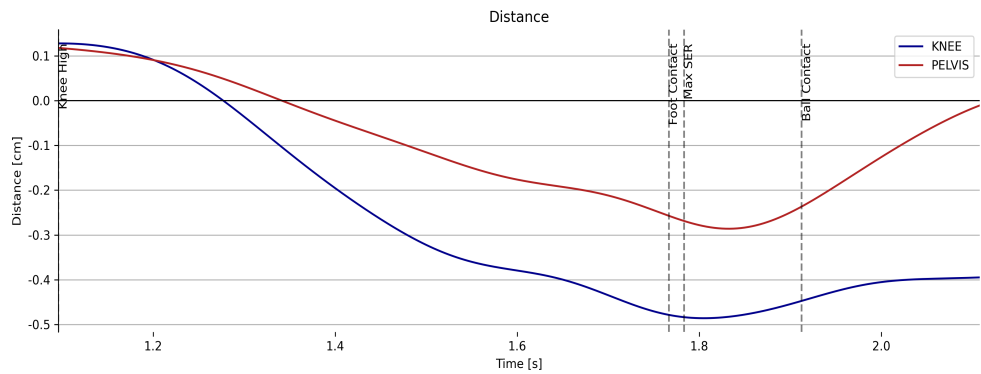
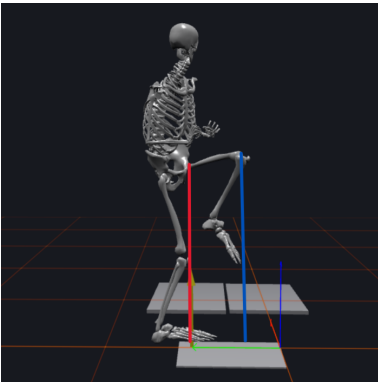


Kinematic Sequence

Segment	Major League	Peak Velocity	Timing [BC - FC (100%)]	Speed Gain
Pelvic	475 ~ 550	586	11 %	
Torso	600 ~ 800	895	40 %	1.53
Elbow	2500 ~ 4500	1333	94 %	1.49

STRIDE

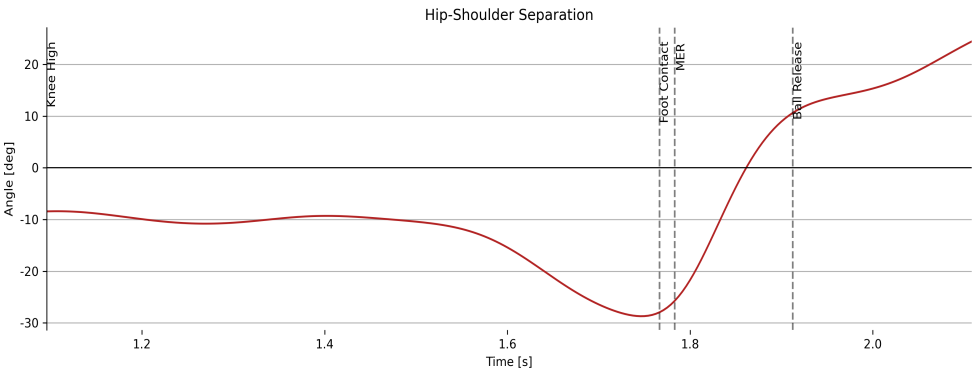
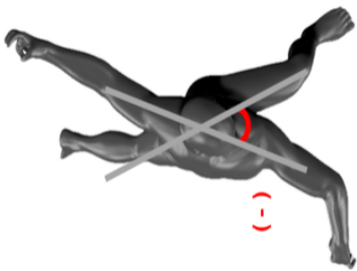
HEIGHT OF KNEE AND PELVIS



Height of knee and pelvis

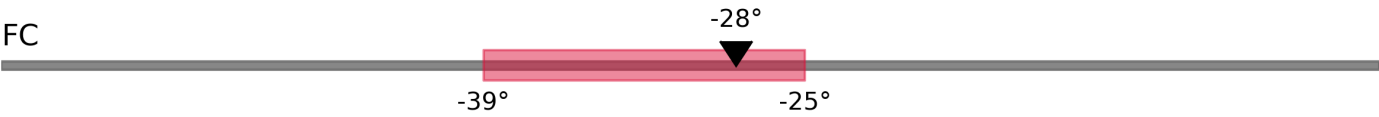
Segment	at Knee High	Max
Knee	0.13	0.13
Pelvis	0.12	0.12

HIP/SHOULDER SEPARATION

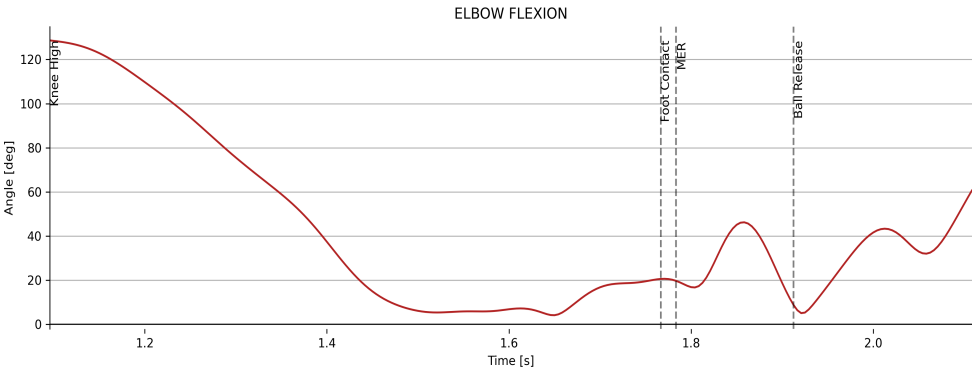
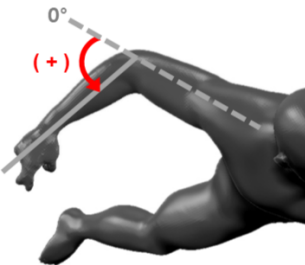


Hip-Shoulder Separation

at Foot Contact	Min	Min Timing [BC - FC (100%)]
-28	-28	0 %

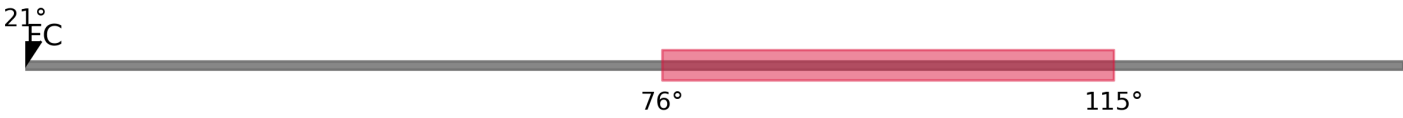


ELBOW FLEXION



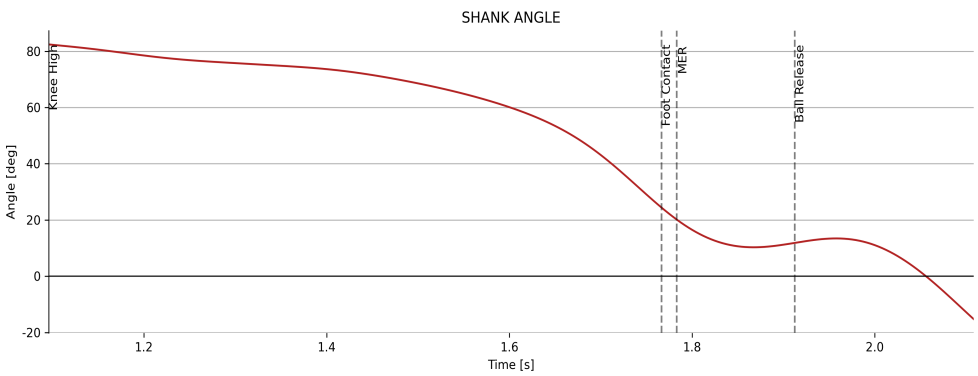
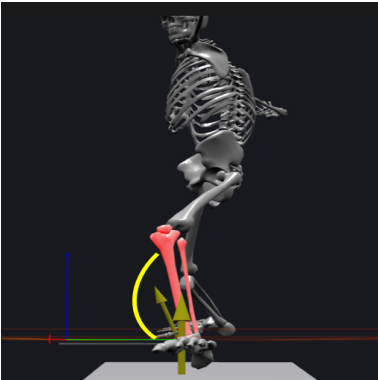
Elbow Flexion

at Foot Contact	Max	Max Timing [BC - FC (100%)]
21	46	63 %



Arm cocking

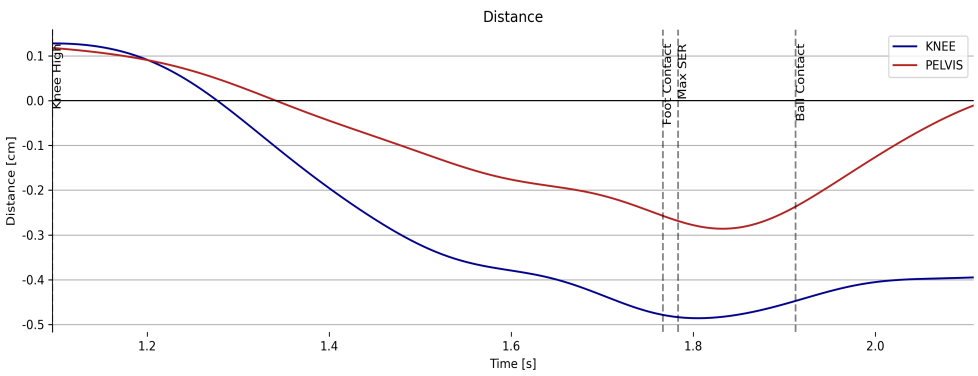
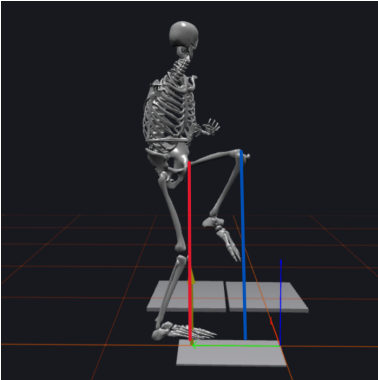
SHANK LATERAL TILT



shank angle

	at Knee High	at Foot Contact
	82.42	24.38

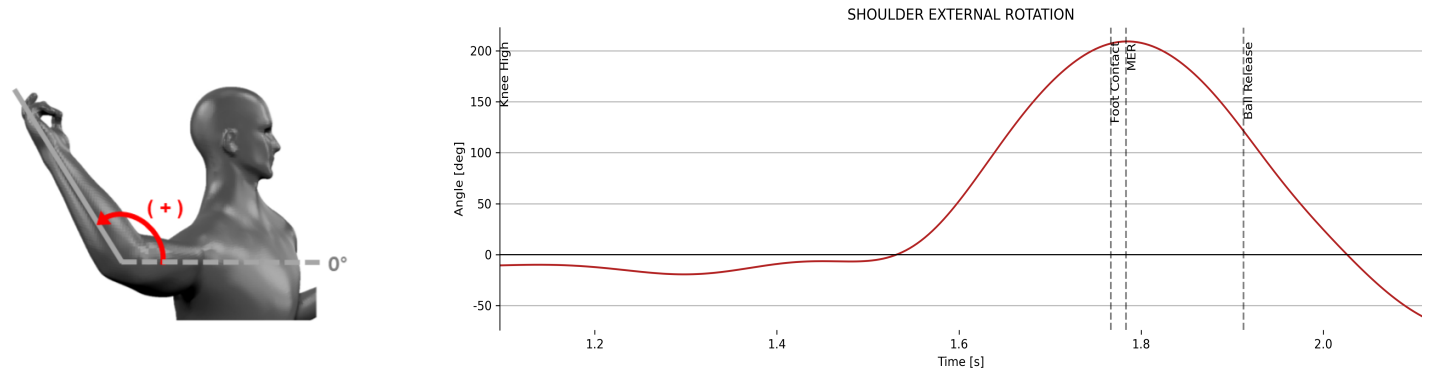
PELVIS HEIGHT



pelvis Height

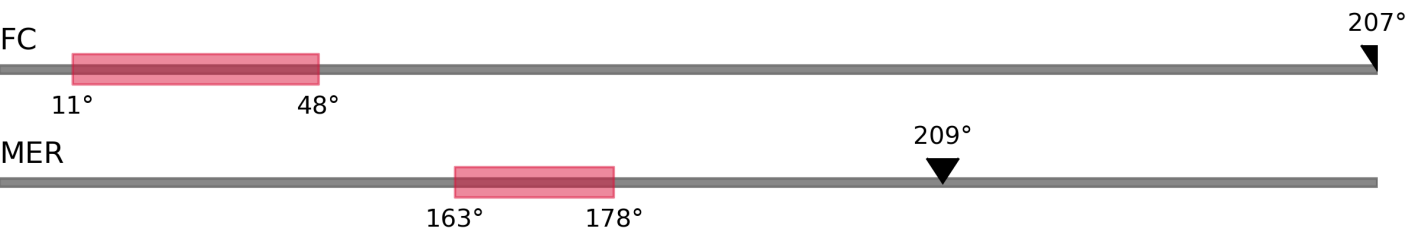
Segment	at Foot Contact	at Max SER	Max
Pelvis	-0.26	-0.27	0.12

SHOULDER EXTERNAL ROTATION

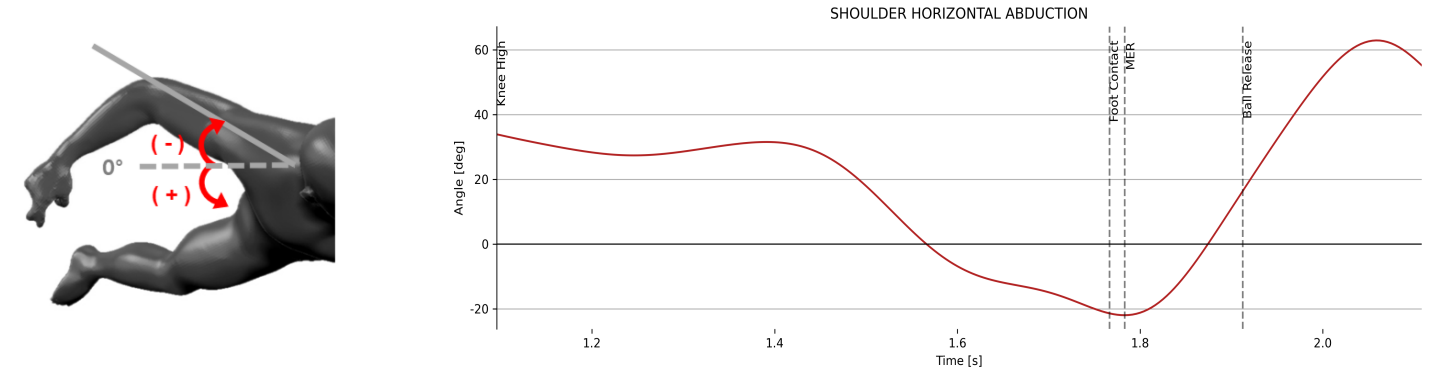


Shoulder External Rotation

at Foot Contact	at Max ER	Max	Max Timing [BC - FC (100%)]
207	209	209	11 %

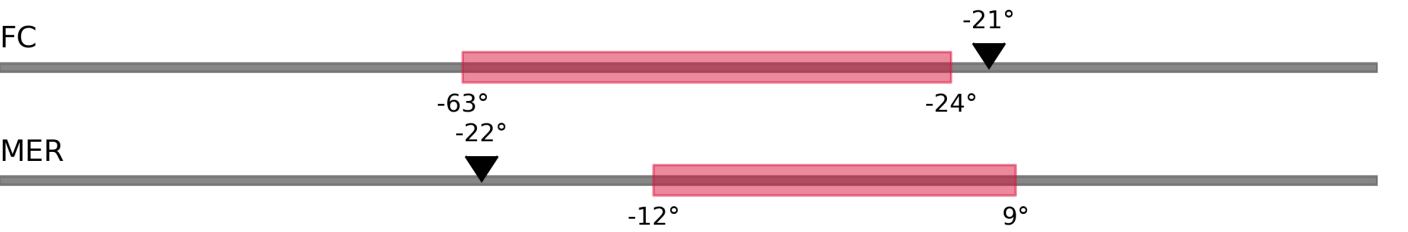


SHOULDER HORIZONTAL ABDUCTION

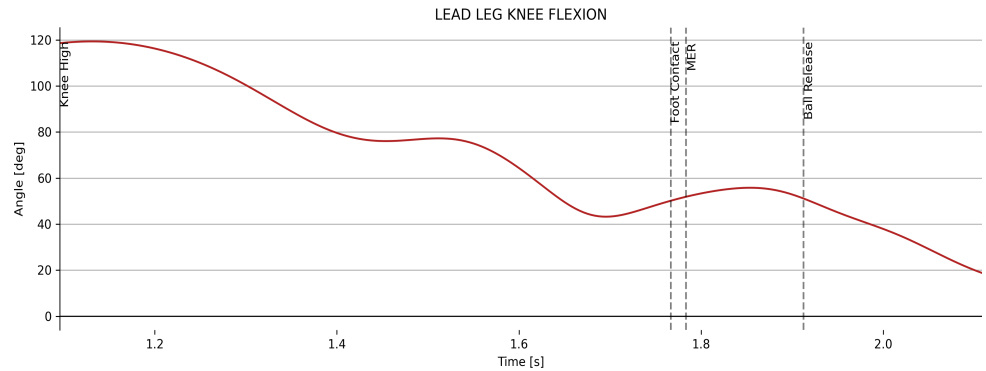
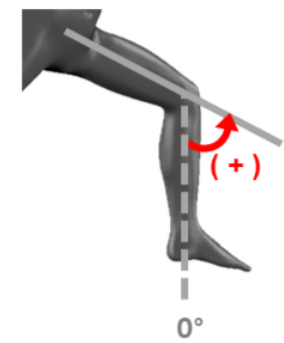


Shoulder Horizontal Abduction

at Foot Contact	at Max ER	Max	Max Timing [BC - FC (100%)]
-21	-22	16	100 %

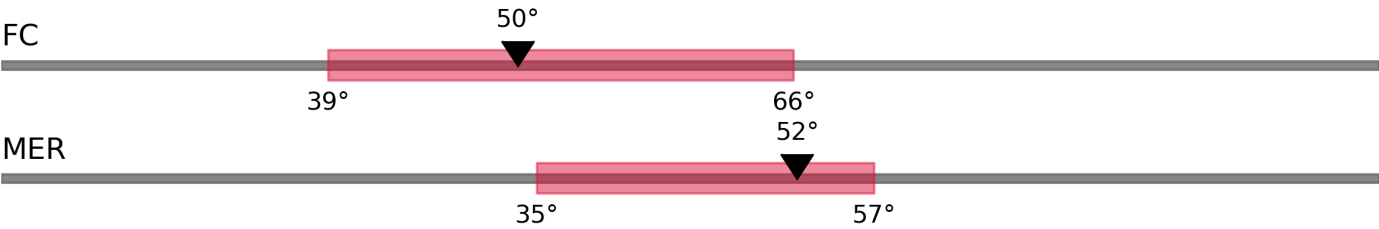


LEAD LEG KNEE FLEXION

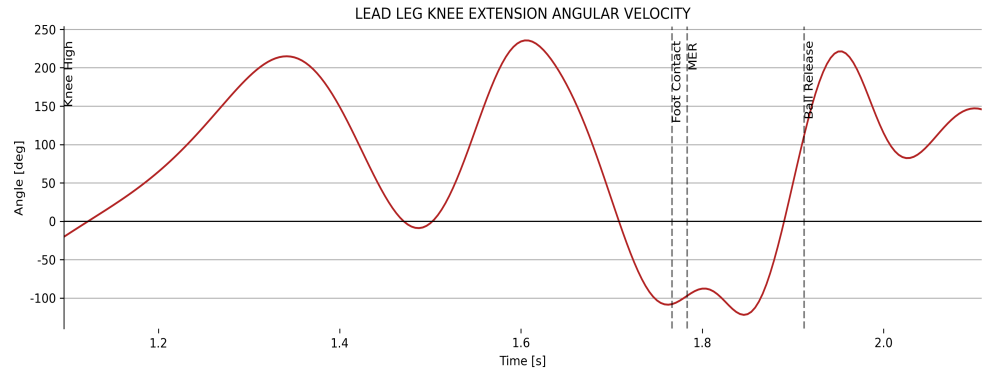


Lead Leg Knee Flexion

at Foot Contact	at Max ER	Max	Max Timing [BC - FC (100%)]
50	52	56	60 %



LEAD LEG KNEE EXTENSION ANGULAR VELOCITY



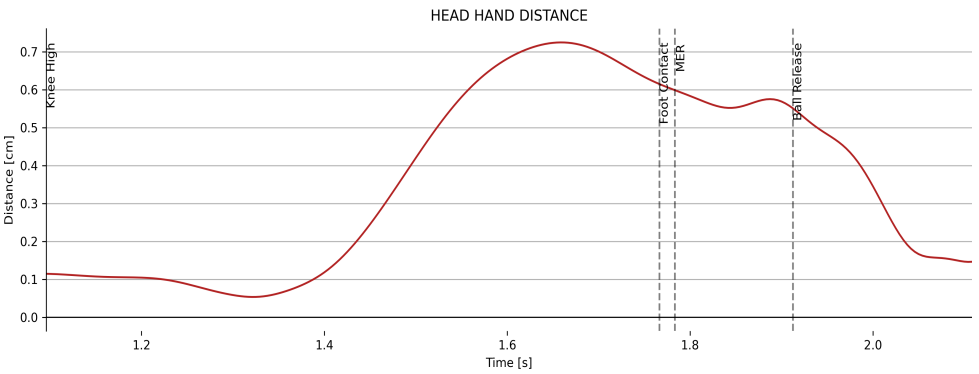
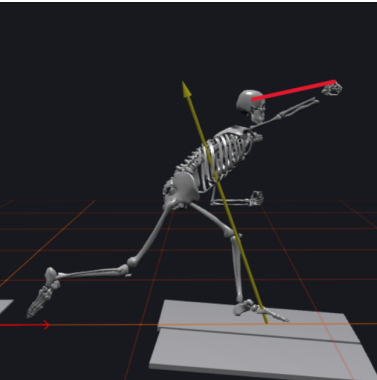
Lead Leg Knee Extension Angular Velocity

at Max ER	Max	Max Timing [BC - FC (100%)]
-97	112	100 %



Arm acceleration

HEAD HAND DISTANCE

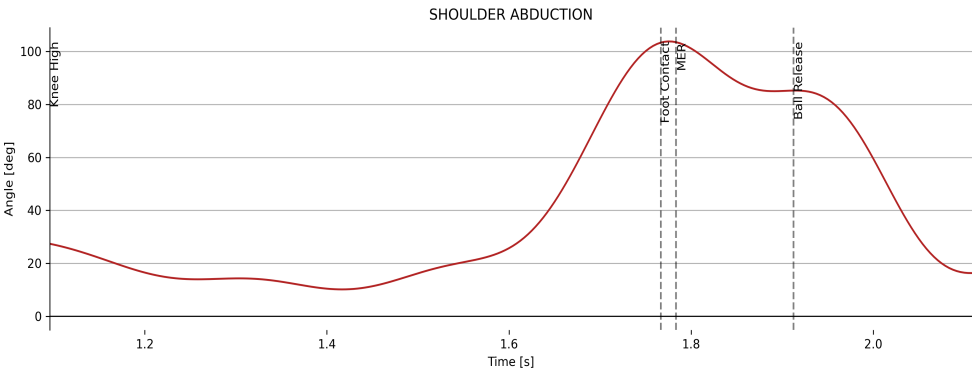
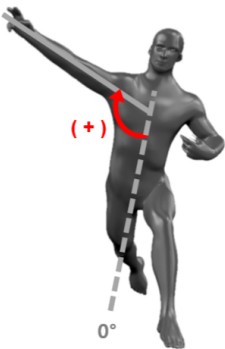


head\_hand\_distance

at Ball Release

0.55

SHOULDER ABDUCTION



Shoulder Abduction

at Ball Release

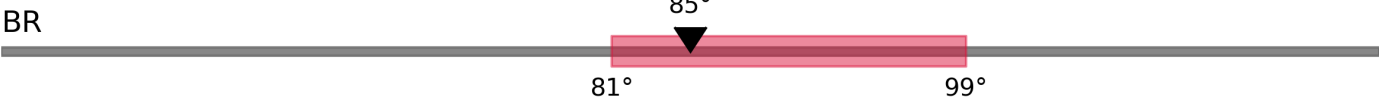
Max

Max Timing [BC - FC (100%)]

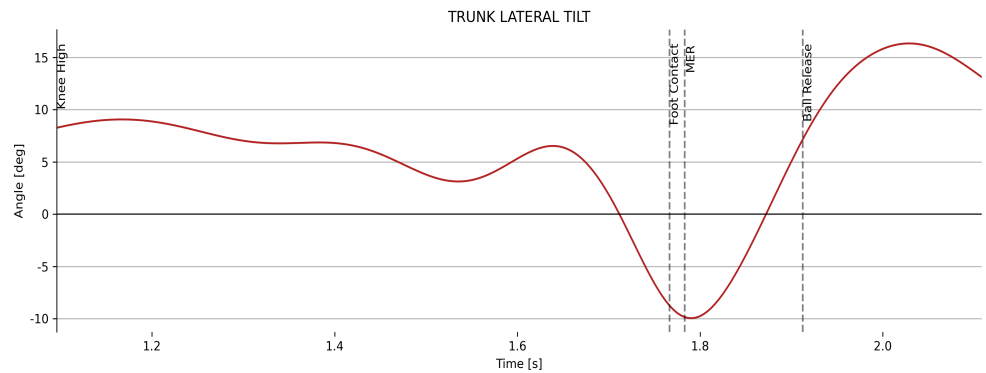
85

104

6 %



TRUNK LATERAL TILT

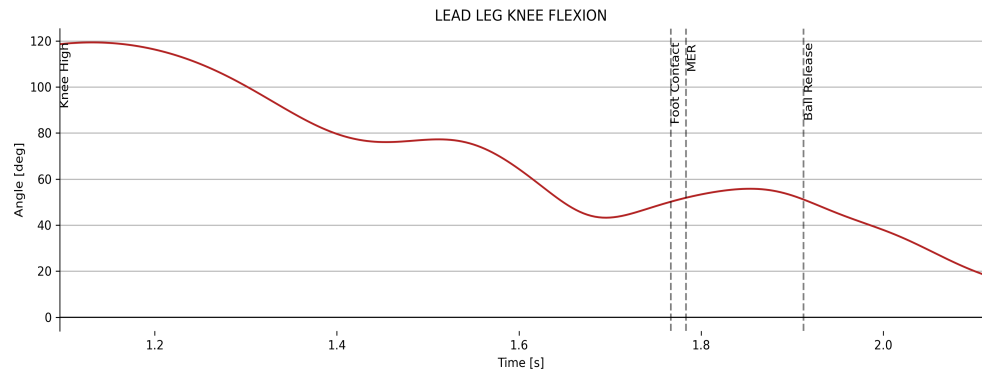
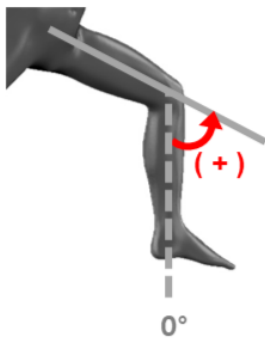


Trunk Lateral Tilt

at Ball Release	Max	Max Timing [BC - FC (100%)]
7	7	100 %



LEAD LEG KNEE FLEXION



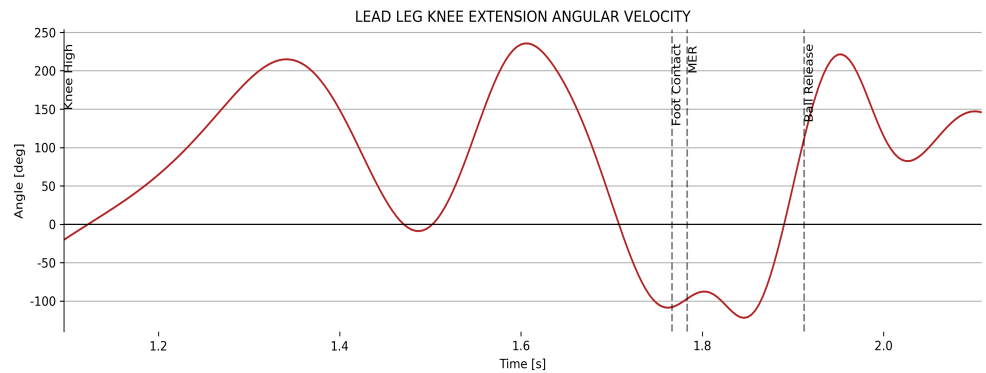
Lead Leg Knee Flexion

at Ball Release	Max	Max Timing [BC - FC (100%)]
51	56	60 %





LEAD LEG KNEE EXTENSION ANGULAR VELOCITY



Lead Leg Knee Extension Angular Velocity

at Ball Release	Max	Max Timing [BC - FC (100%)]
112	112	100 %