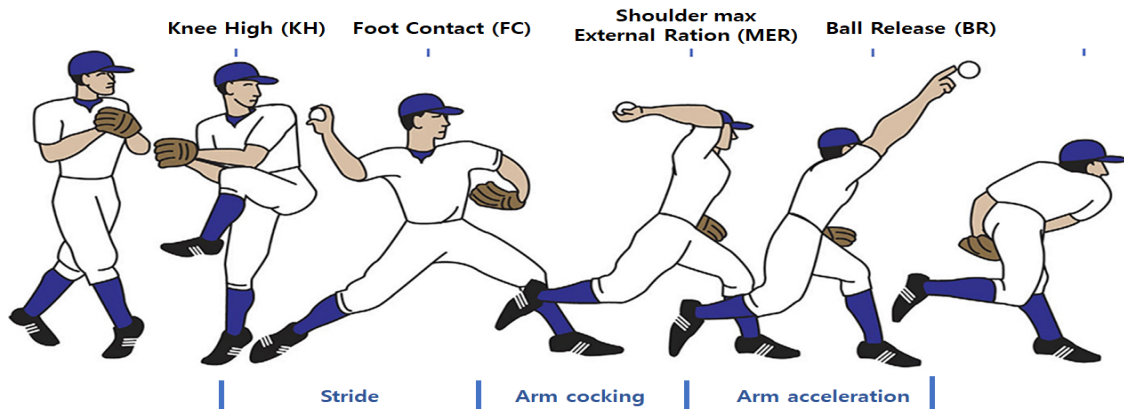


2024 Next-Level Training Camp

Name : n63 Date : 20240213 Hand : Right Ball Velocity : 91 km/h Weight : 55kg Height : 165 cm



PITCHING EFFICIENCY

1. KINEMATIC SEQUENCE

STRIDE

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

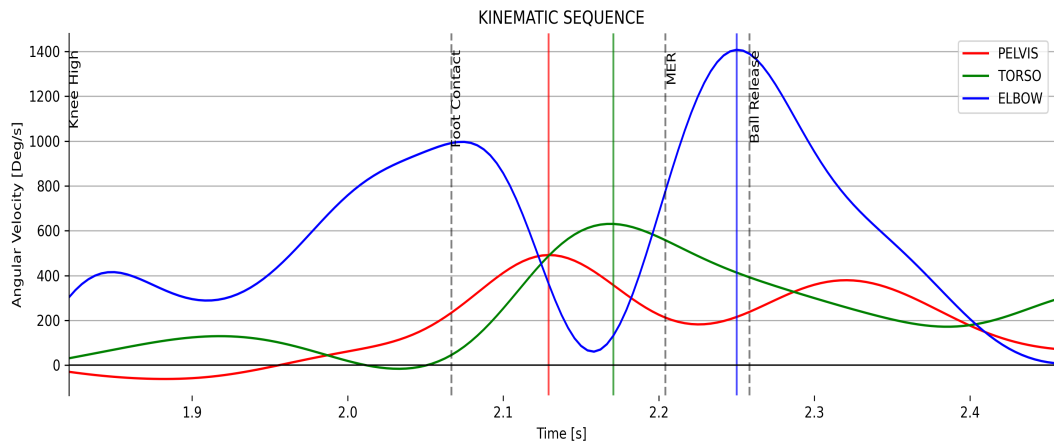
ARM COCKING

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

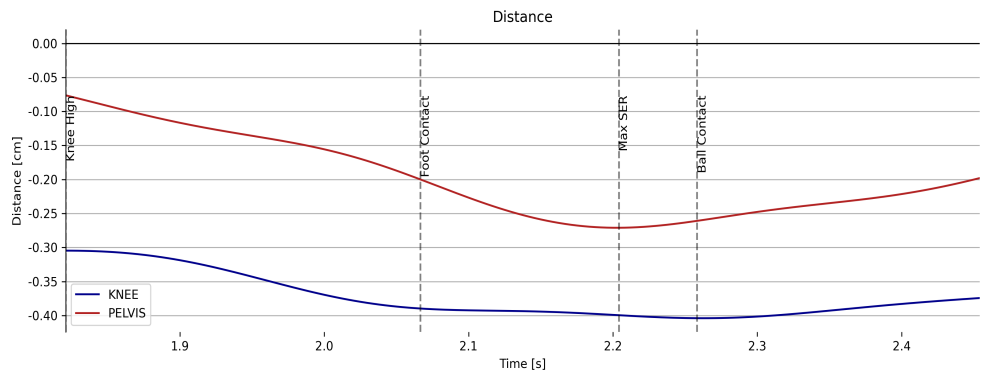
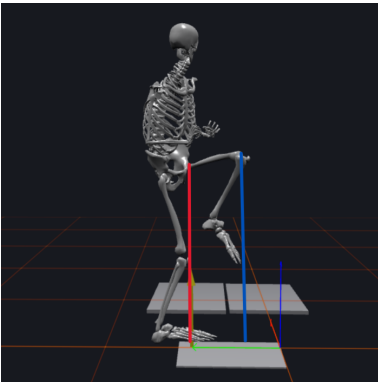


Kinematic Sequence

Segment	Major League	Peak Velocity	Timing [BC - FC (100%)]	Speed Gain
Pelvic	475 ~ 550	491	33 %	
Torso	600 ~ 800	630	54 %	1.28
Elbow	2500 ~ 4500	1407	96 %	2.23

STRIDE

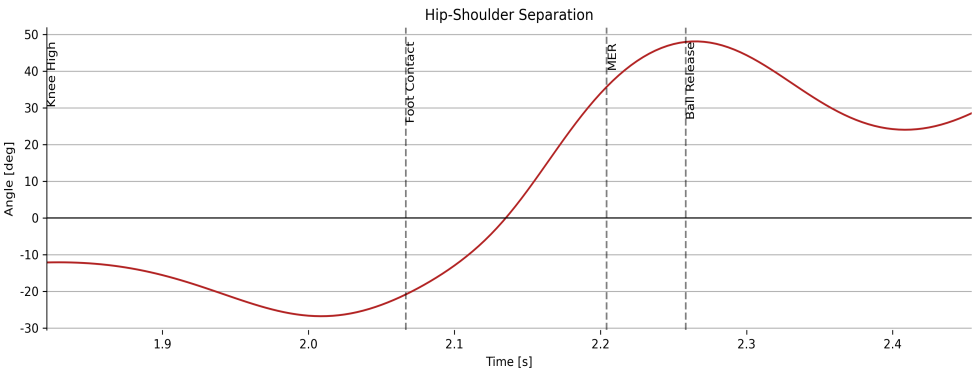
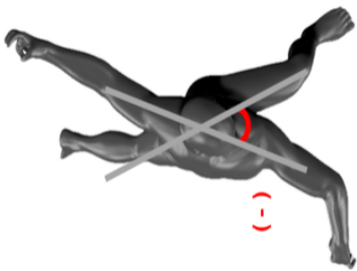
HEIGHT OF KNEE AND PELVIS



Height of knee and pelvis

Segment	at Knee High	Max
Knee	-0.3	-0.3
Pelvis	-0.08	-0.08

HIP/SHOULDER SEPARATION

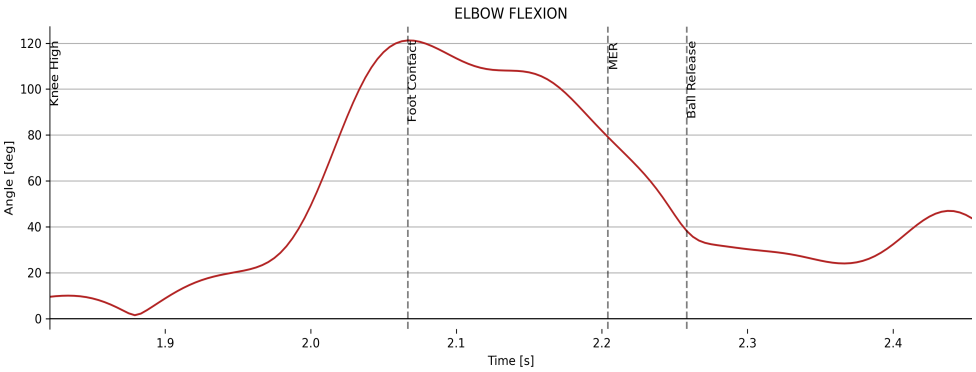
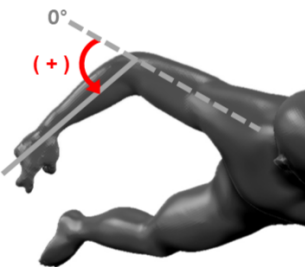


Hip-Shoulder Separation

at Foot Contact	Min	Min Timing [BC - FC (100%)]
-21	-21	0 %



ELBOW FLEXION



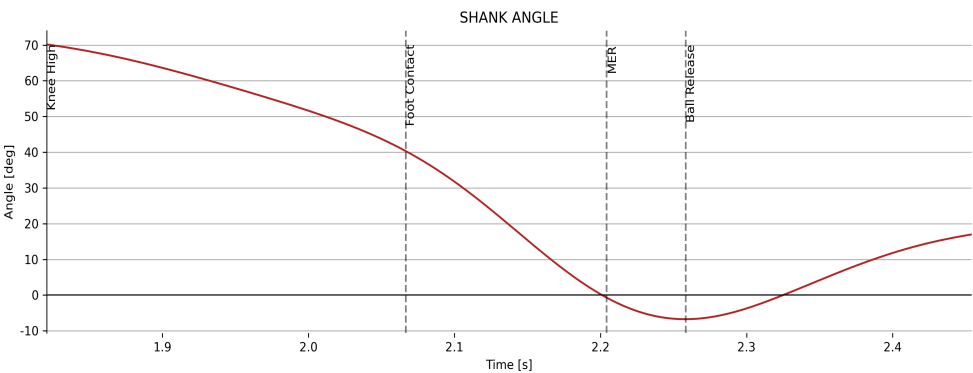
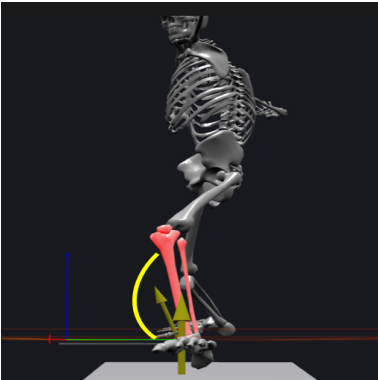
Elbow Flexion

at Foot Contact	Max	Max Timing [BC - FC (100%)]
121	121	0 %



Arm cocking

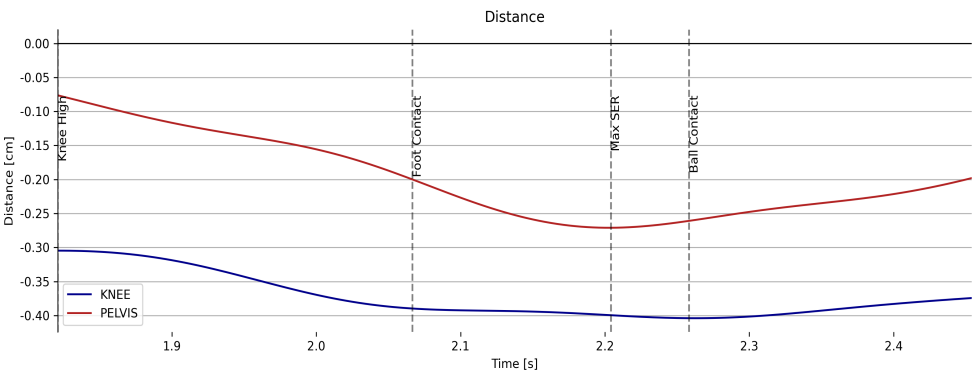
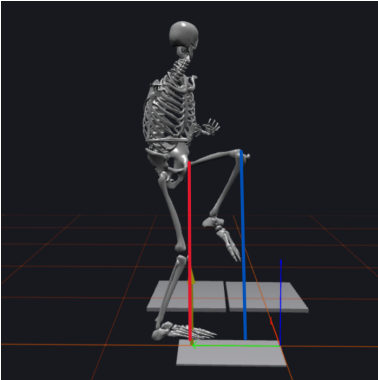
SHANK LATERAL TILT



shank angle

	at Knee High	at Foot Contact
	70.18	40.31

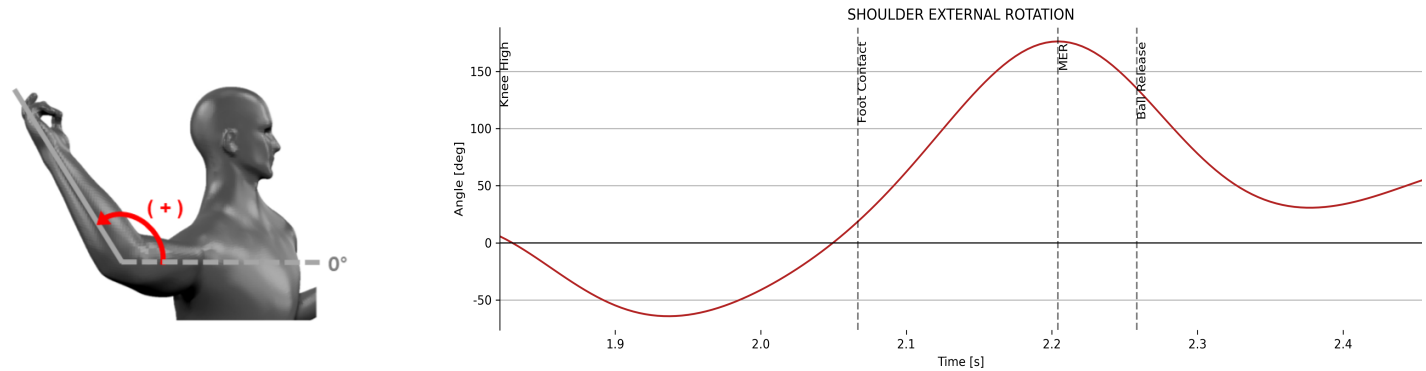
PELVIS HEIGHT



pelvis Height

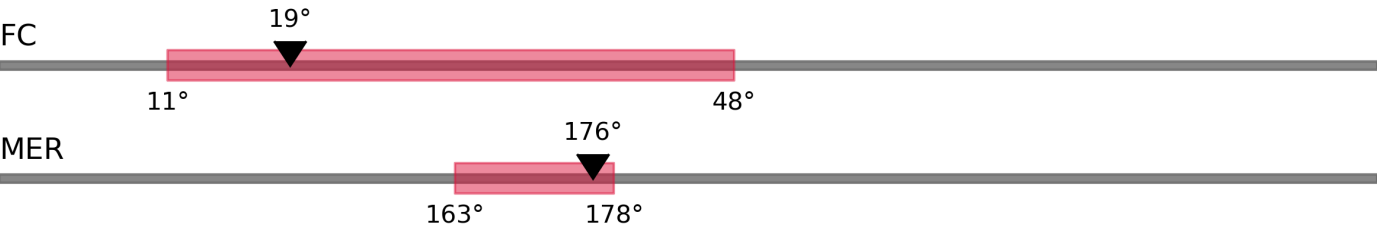
Segment	at Foot Contact	at Max SER	Max
Pelvis	-0.2	-0.27	-0.08

SHOULDER EXTERNAL ROTATION

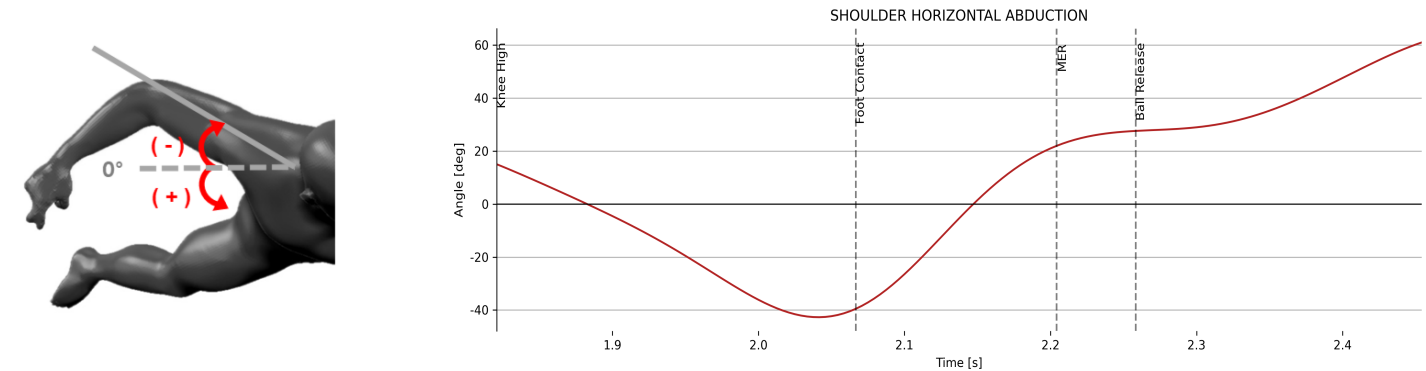


Shoulder External Rotation

at Foot Contact	at Max ER	Max	Max Timing [BC - FC (100%)]
19	176	176	72 %

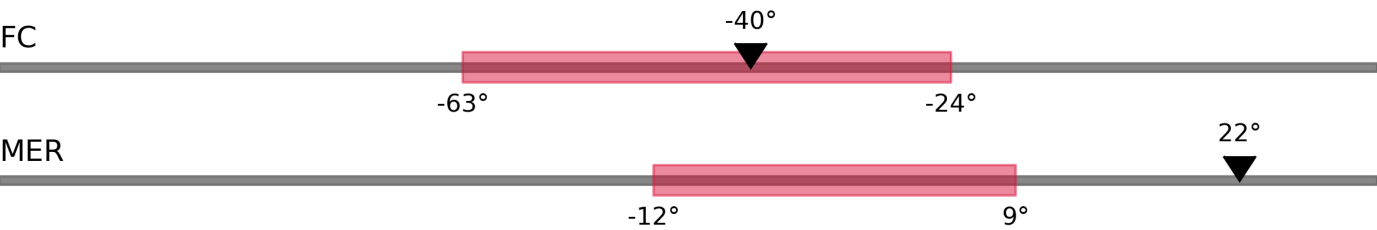


SHOULDER HORIZONTAL ABDUCTION

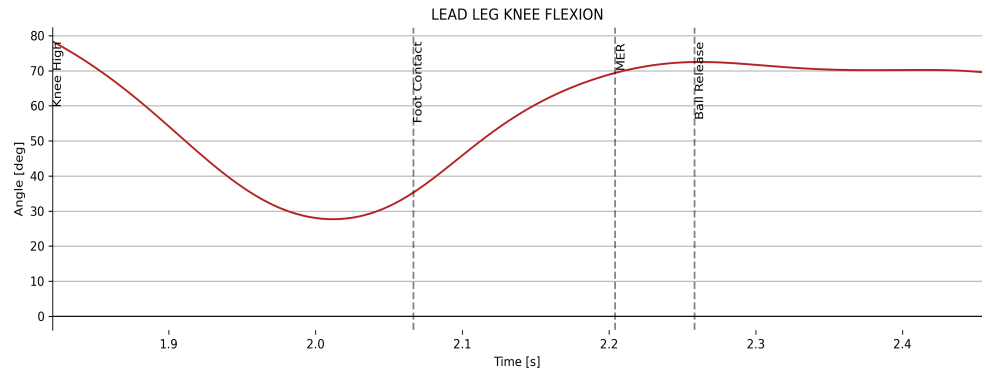
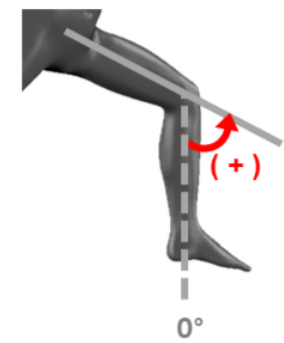


Shoulder Horizontal Abduction

at Foot Contact	at Max ER	Max	Max Timing [BC - FC (100%)]
-40	22	28	100 %

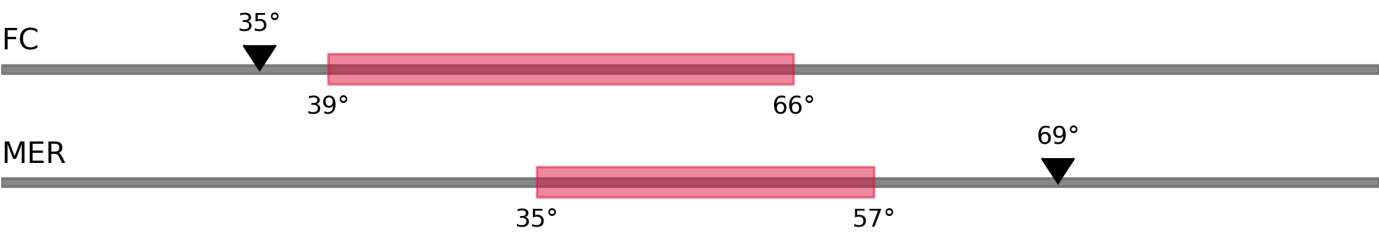


LEAD LEG KNEE FLEXION

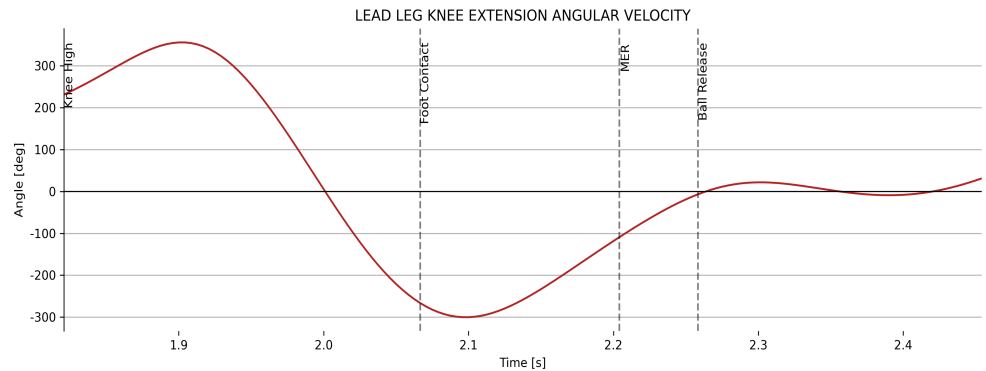


Lead Leg Knee Flexion

at Foot Contact	at Max ER	Max	Max Timing [BC - FC (100%)]
35	69	72	100 %



LEAD LEG KNEE EXTENSION ANGULAR VELOCITY



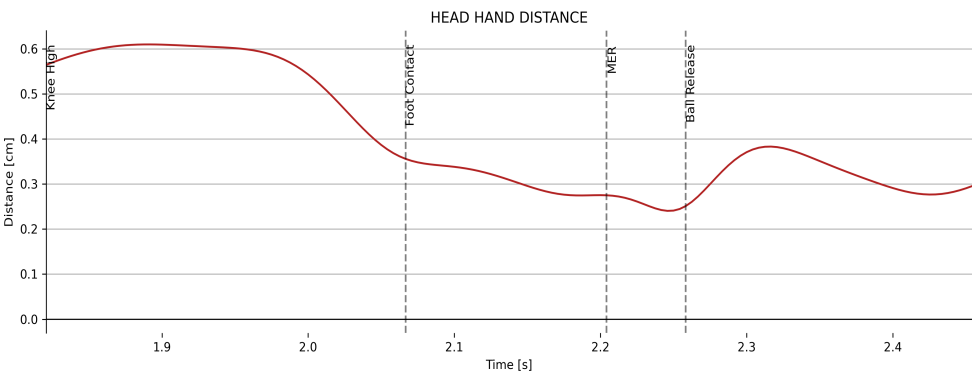
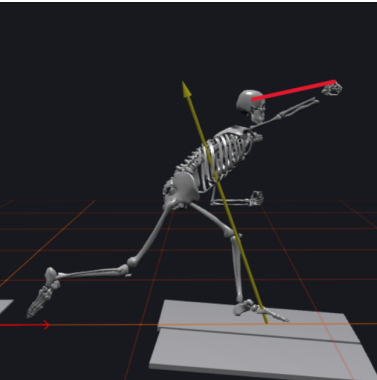
Lead Leg Knee Extension Angular Velocity

at Max ER	Max	Max Timing [BC - FC (100%)]
-109	-7	100 %



Arm acceleration

HEAD HAND DISTANCE

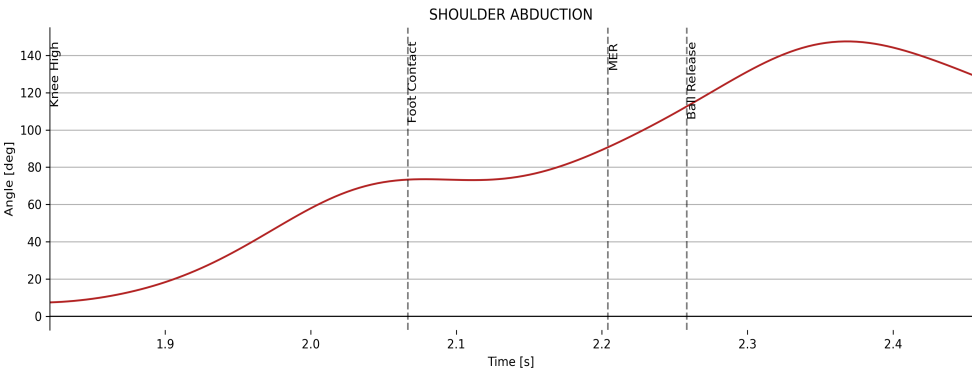
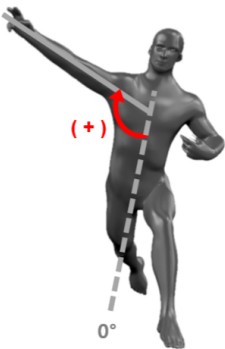


head_hand_distance

at Ball Release

0.25

SHOULDER ABDUCTION

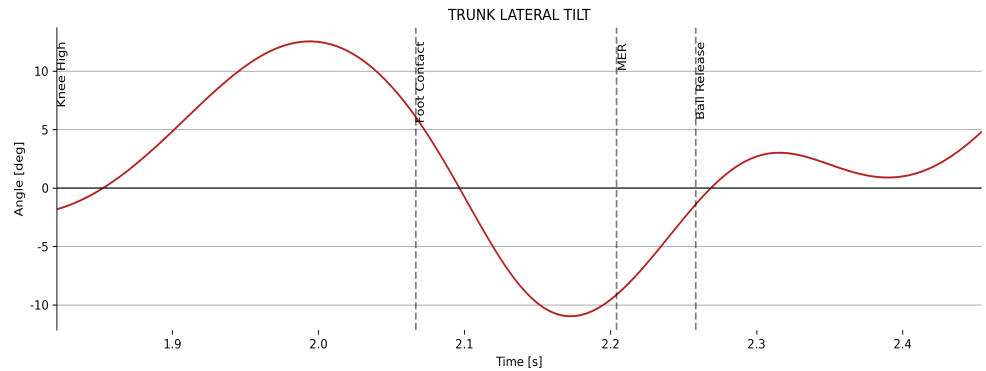


Shoulder Abduction

at Ball Release	Max	Max Timing [BC - FC (100%)]
113	113	100 %



TRUNK LATERAL TILT

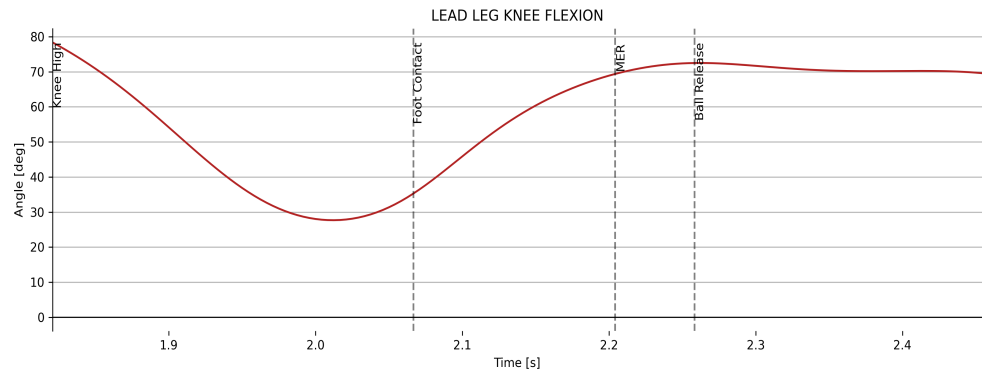
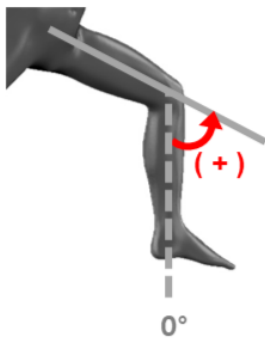


Trunk Lateral Tilt

at Ball Release	Max	Max Timing [BC - FC (100%)]
-1	6	0 %



LEAD LEG KNEE FLEXION

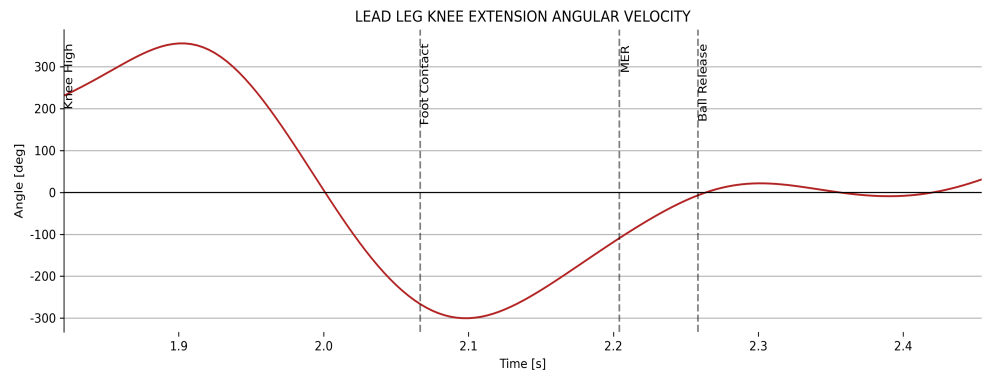


Lead Leg Knee Flexion

at Ball Release	Max	Max Timing [BC - FC (100%)]
72	72	100 %



LEAD LEG KNEE EXTENSION ANGULAR VELOCITY



Lead Leg Knee Extension Angular Velocity

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