Son Hyeongi

UPLIFT

DAILY BASEBALL PITCHING REPORT

16 MAY 2024 - 13 LEFT-HAND PITCHES ANALYZED

KINEMATIC SEQUENCE

0%

of your pitches' kinematic sequence was in the correct order.

Kinematic sequence is a measure of how you transfer energy up from the ground to the ball.

Your most common sequence:

Trunk - Arm - Pelvis

Ideal sequence is **Pelvis - Trunk - Arm**

Average Peak Velocities

Pelvis	Trunk	Arm
537°/s	874°/s	1436°/s
Pro range is 445 - 580°/s	Pro range is 770 - 940°/s	Pro range is 1235 - 1480°/s

Speed Gain

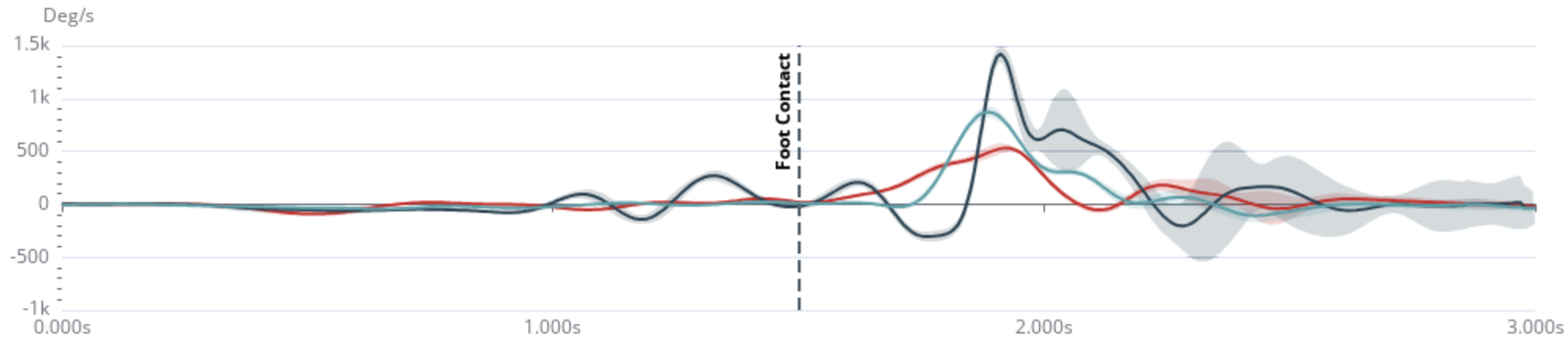
Average speed-up from Pelvis to Torso was

1.63x

Pro range is

1.4x - 1.7x

Velocities Over Time

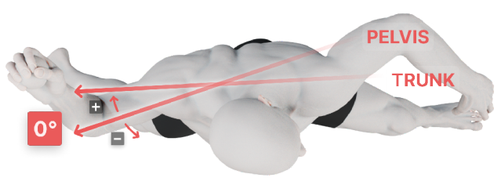


X-FACTOR

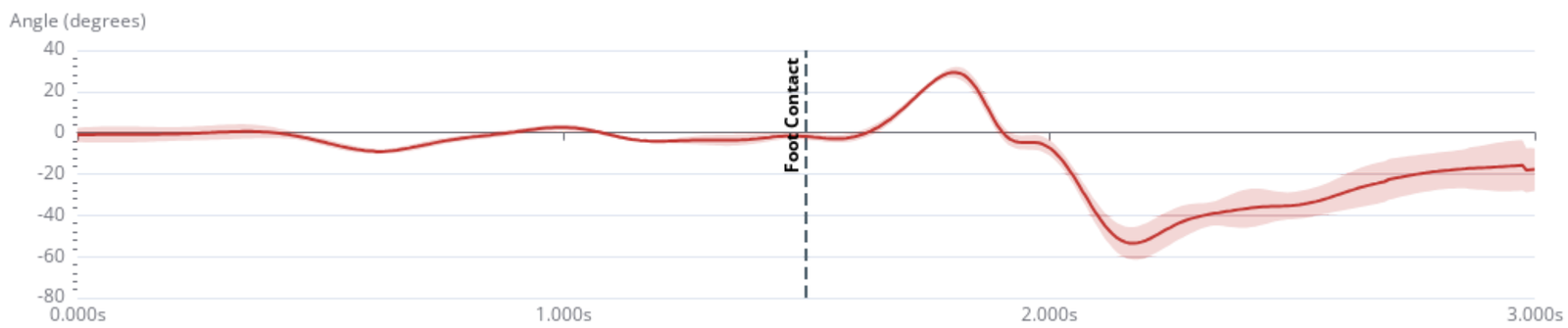
X-factor is a measure of the rotation of the trunk with respect to the pelvis.

Averaged across all pitches, your max X-Factor was

29°



X-Factor Over Time



WIND-UP AND LOADING

0%

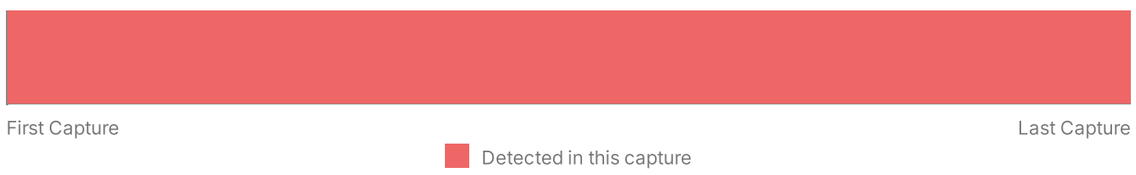
of pitches avoided the below inefficiencies during wind-up.

A good wind-up is the result of a pitcher preventing their momentum from moving away from home plate.

Sway

You exhibited Sway (shifting away from the batter during the wind-up) in **100% of your pitches.**

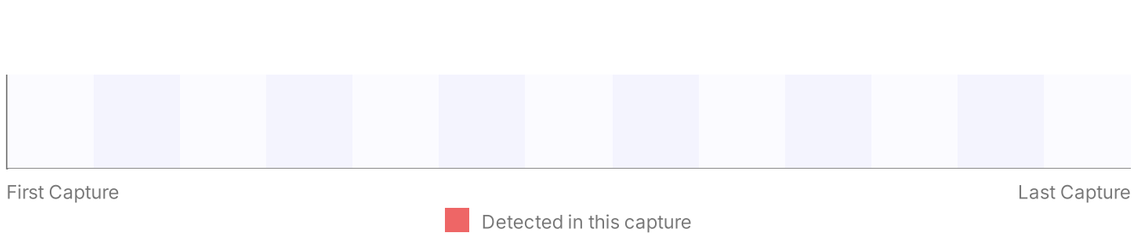
Allowing your hips to move towards the batter during your leg lift can help improve throwing velocity.



Hanging Back

You did not exhibit Hanging Back (momentum moving backward or coming to a pause during wind-up) in **any of your pitches.**

Maintaining forward momentum during knee raise will contribute to increased velocity.



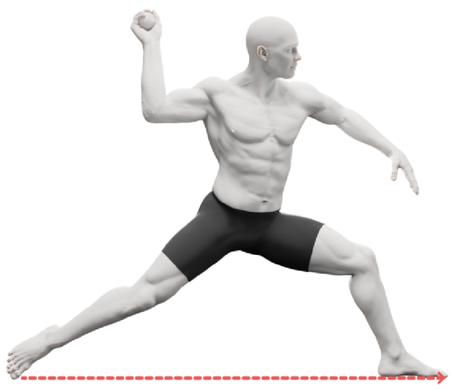
MOVEMENT THROUGH FOOT CONTACT

0%

of pitches avoided the below inefficiencies through foot contact.

Important factors in this phase include keeping a level pelvis, creating “stretch” to store and transfer energy through the rotation of your upper body, and avoiding arm positions that are associated with increased shoulder loading.

Stride Length



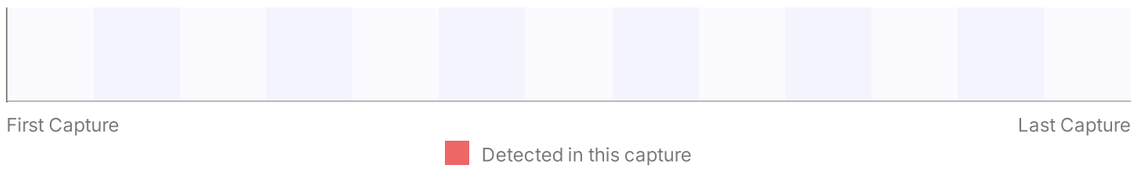
On average your stride length was

49% of your height (± 1%)

Closing the Front or Back

You did not exhibit Closing the Front or Back in **any of your pitches.**

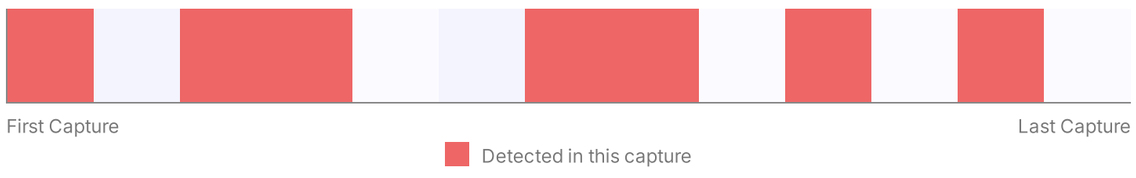
Keeping your shoulders and hips level through your pitch can make it easier to create a "stretch" during the pitch.



Flying Open

You flew open (your torso began to rotate too early in the delivery) in **54% of your pitches**

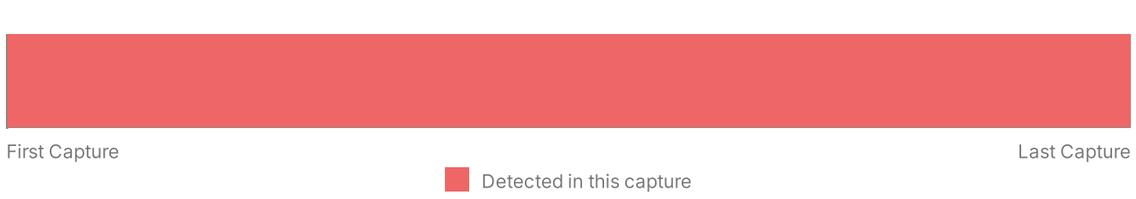
Holding the separation between your trunk and hips during your stride can help improve pitch velocity.



Late Rise

Your throwing hand was below your throwing elbow at the point of foot contact in **100% of your pitches.**

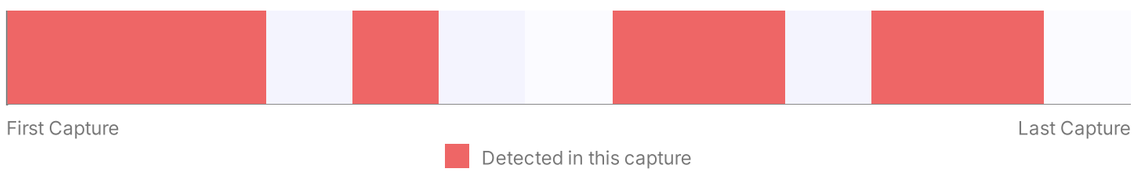
The throwing hand being below the elbow at the point of foot contact can increase shoulder loading.



Getting Out in Front

Your upper torso and head were ahead of your pelvis and lower body at foot contact—which is typically too early in the pitching motion—in **62% of your pitches.**

This position typically leads to reduced pitch velocity.



ACCELERATION THROUGH BALL RELEASE

0%

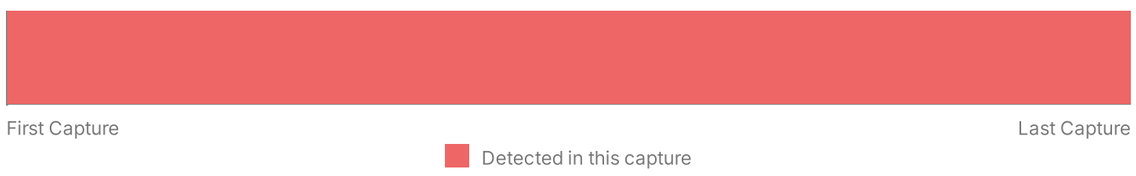
of pitches avoided the below inefficiencies through ball release.

Effectively transferring the energy generated in the earlier phases of the pitch through the release of the ball is dependent on maintaining good body position.

Knee Collapse

As you planted the front leg, your knee collapsed in **100% of your pitches.**

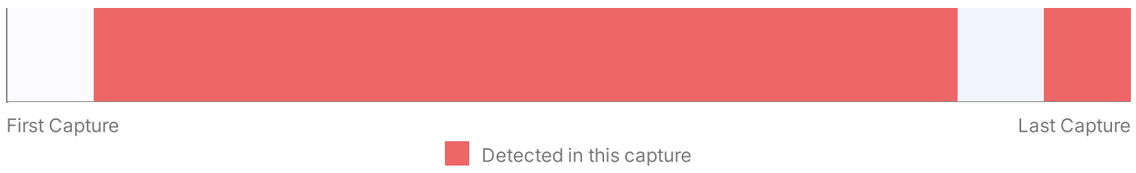
Collapsing the front knee as you contact the ground results in energy leaks from the ground up.



High Hand at Max Layback

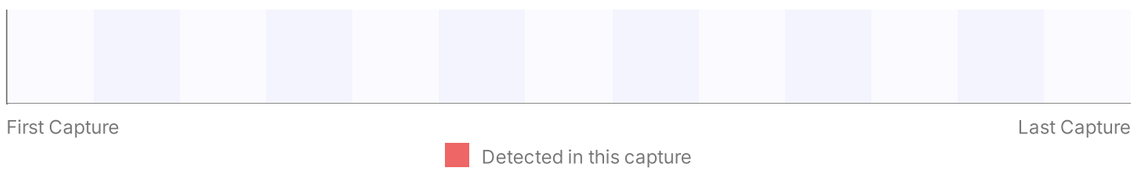
Your throwing hand remained above the throwing elbow at the point of max shoulder external rotation in **85% of your pitches.**

This could point to limited shoulder mobility or compensations elsewhere.



Early Release

You did not exhibit Early Release (releasing the ball before the throwing hand is in front of your lead foot) in **any of your pitches.**



Forearm Flyout

Your forearm was extended longer than most pitchers both at foot contact and at release in **46% of your pitches.**

A more extended elbow through the pitching motion is associated with increased valgus torque on your elbow.