

DAILY BASEBALL PITCHING REPORT

16 MAY 2024 - 12 RIGHT-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
491°/s	717°/s	1077°/s
Pro range is 445 - 580°/s	Pro range is 770 - 940°/s	Pro range is 1235 - 1480°/s

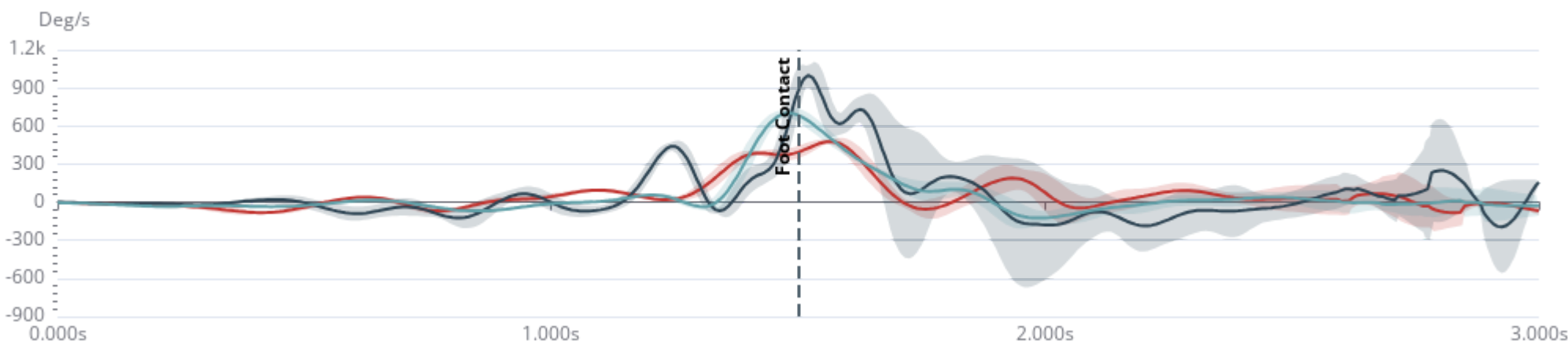
Speed Gain

Average speed-up from Pelvis to Torso was

1.46x

Pro range is 1.4x - 1.7x

Velocities Over Time



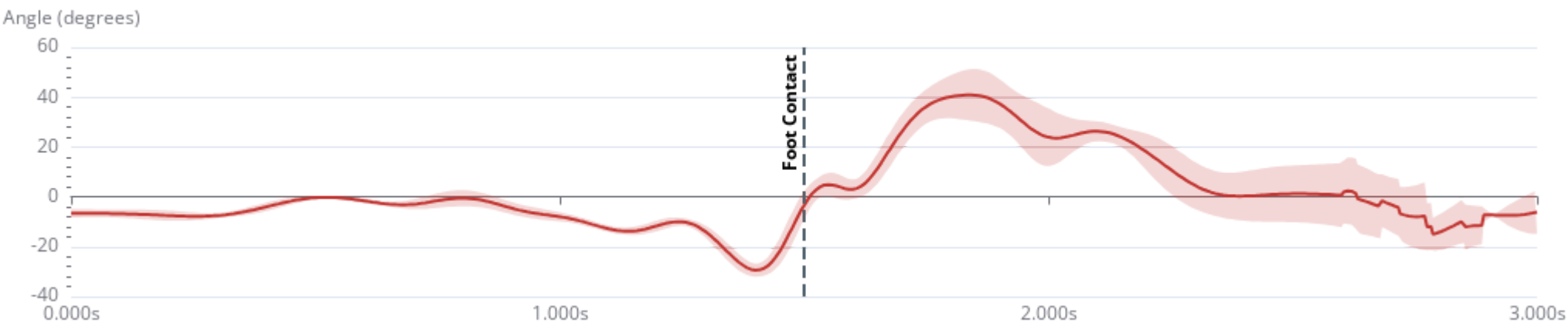
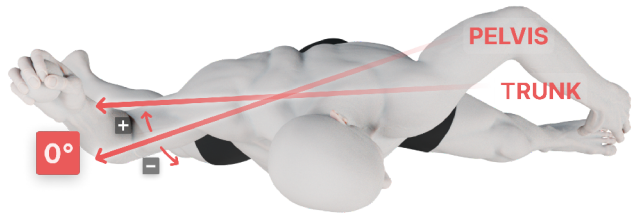
X-FACTOR

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

30°

X-Factor Over Time



WIND-UP AND LOADING

8%

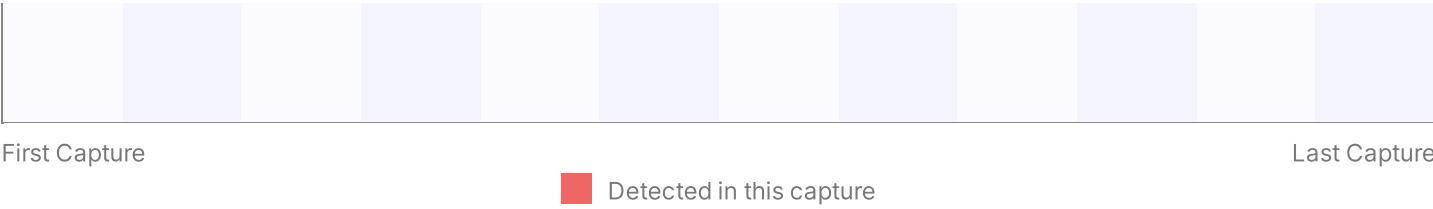
of pitches avoided the below inefficiencies during wind-up.

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

Sway

You did not exhibit Sway (shifting away from the batter during the wind-up) in **any of your pitches**.

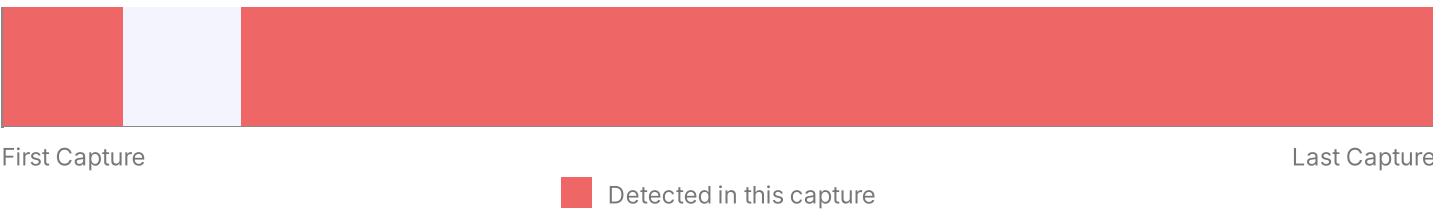
You effectively began to move towards home plate when lifting your stride leg.



Hanging Back

You exhibited Hanging Back (momentum moving backward or coming to a pause during wind-up) in **92% of your pitches**.

Maintaining forward momentum during knee raise can help improve throwing velocity.



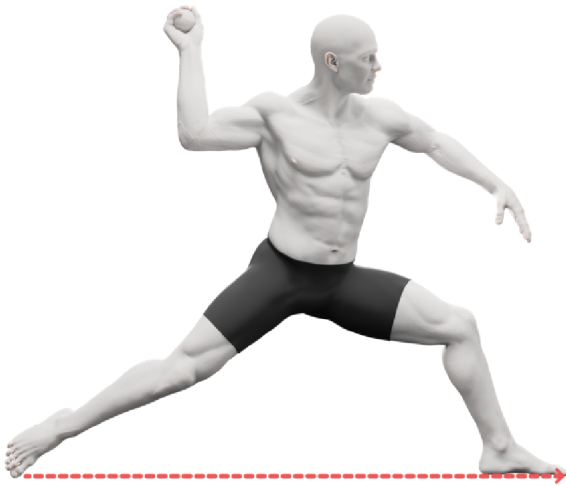
MOVEMENT THROUGH FOOT CONTACT

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



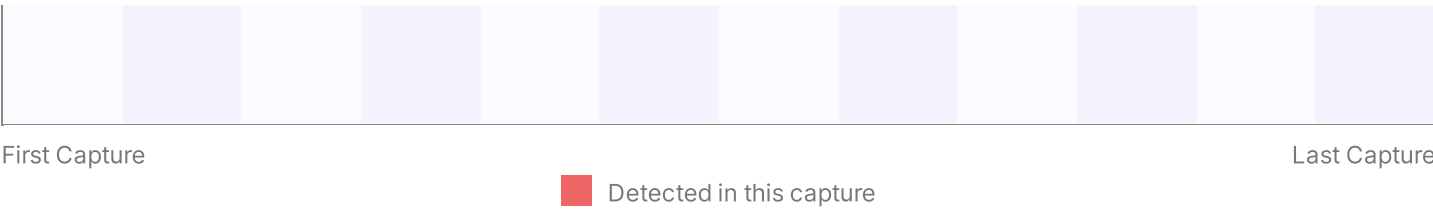
On average your stride length was

108% of your height (± 4%)

Closing the Front or Back

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

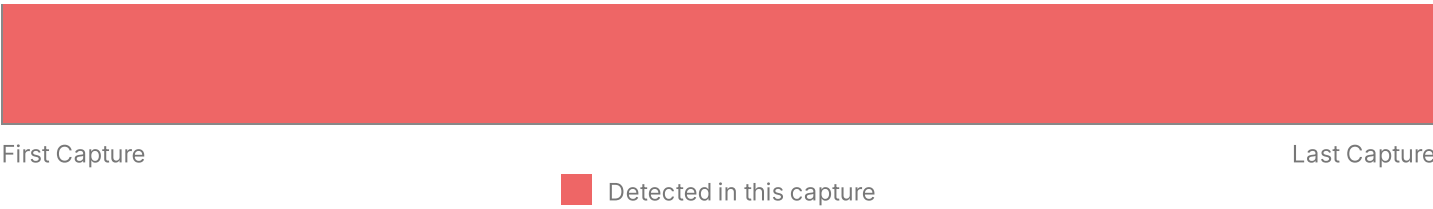
Keeping your shoulders and hips level through your pitch can make it easier to create a "stretch" during the pitch.



Flying Open

You flew open (your torso began to rotate too early in the delivery) in **100% of your pitches**

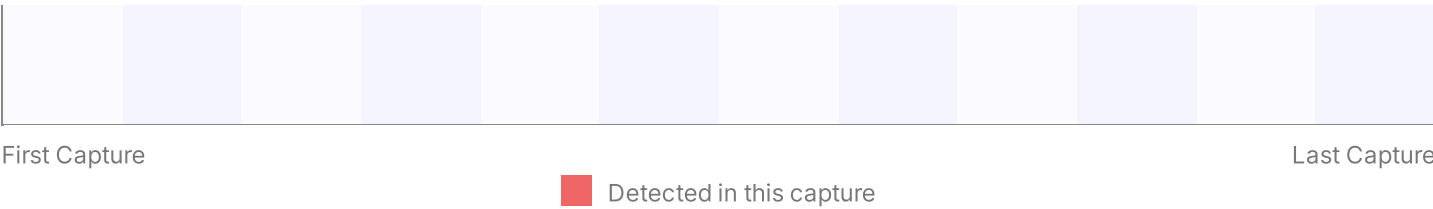
Holding the separation between your trunk and hips during your stride can help improve pitch velocity.



Late Rise

Your throwing hand was above your throwing elbow at the point of foot contact in **all of your pitches.**

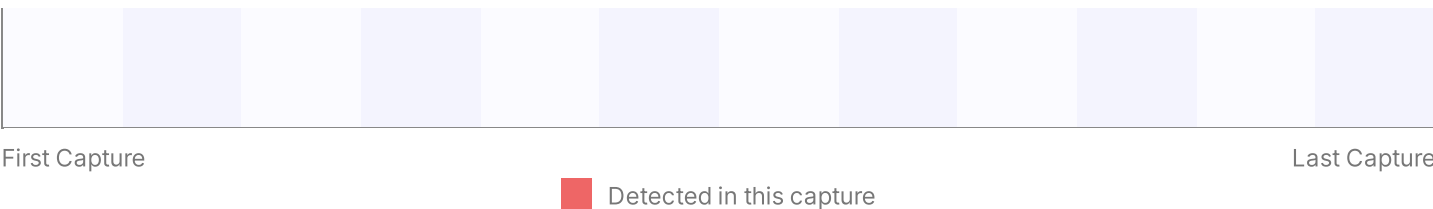
Good job keeping your throwing hand above your throwing elbow at foot contact.



Getting Out in Front

You did not exhibit Getting Out In Front (upper torso moving ahead of your pelvis too early in the pitch) in **any of your pitches.**

Keeping your head behind your hips at foot contact preserves pitch velocity.



ACCELERATION THROUGH BALL RELEASE

0%

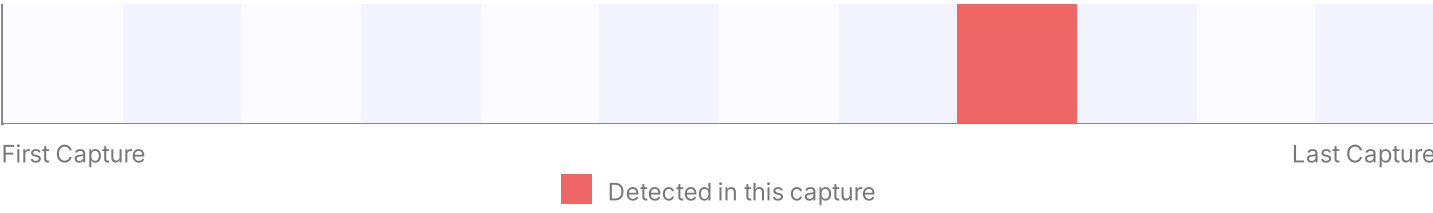
of pitches avoided the below inefficiencies through ball release.

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 **8% of your pitches**.

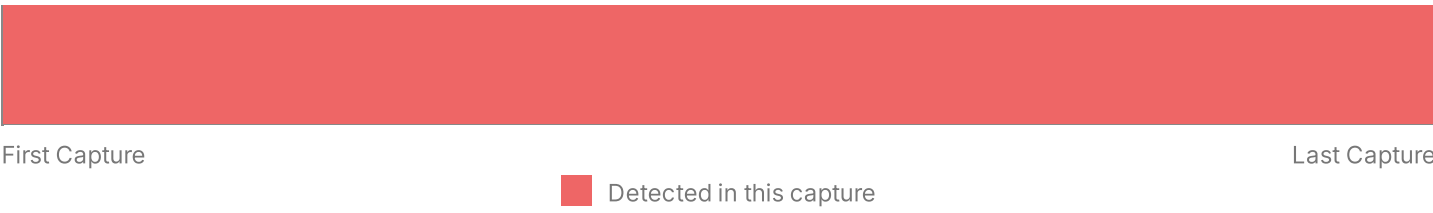
Collapsing the front knee as you contact the ground results in energy leaks from the ground up.



High Hand at Max Layback

Your throwing hand remained above the throwing elbow at the point of max shoulder external rotation in **100% of your pitches**.

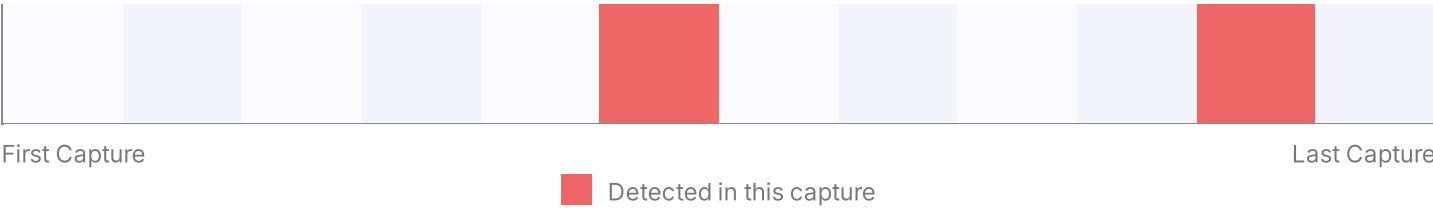
This could point to limited shoulder mobility or compensations elsewhere.



Early Release

You released the ball before your hand was in front of your lead foot **17% of the time**.

This increases the time the batter has to "read" the pitch.



Forearm Flyout

Your forearm was extended longer than most pitchers both at foot contact and at release in **17% of your pitches**.

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

