

Gameld – Unique game identifier
Release Speed - Speed of the pitch at release
ZoneSpeed - Speed of the pitch at zone
PitchVerticalApproachAngle - Vertical approach angle of the pitch
ReleaseExtension - Release extension (feet)
ReleaseHeight - Release height (feet)
ReleaseSide - Release side (feet)
ArmAngleBR - Elevation angle of the pitching arm with respect to the torso at ball release
ArmSlotBR - Elevation angle of the pitching arm (vector from wrist to shoulder) with respect to the horizontal at ball release (0 is straight out to the side)
StrideLength - Absolute distance from stride leg foot plant to the rubber
StrideLengthPercentHeight - Distance from stride leg foot plant to the rubber as a percent of the pitchers height
StrideWidth - Distance (laterally - 1B/3B) from drive leg at peak knee height to stride leg foot plant (+ = stride leg towards arm side compared to drive leg, - = stride leg towards glove side compared to drive leg)
TimeToPlate - Time from first move to when the ball crosses the front of home plate
PeakHipsVeloX - Peak linear velocity of the hips towards the plate
PeakPitchHandVeloX - Peak linear velocity of the pitching wrist towards the plate
DLHipRotMin - Minimum drive leg hip rotation angle (maximum internal rotation angle)
HSSepMin - Hip shoulder separation minimum angle (greatest counter rotation angle)
PARotMax - Maximum pitching arm shoulder rotation angle
PAScapRetMin - Minimum pitching arm shoulder horizontal abduction angle (maximum scap retraction)
SLKneeFlexFP - Stride leg knee flexion angle at foot plant
PAElbowFlexBR - Elbow flexion angle of the pitching arm at ball release
SLKneeFlexBR - Stride leg knee flexion angle at ball release
TorsoFBBR - Torso forward bend angle at ball release
TorsoSBBR - Torso side bend angle at ball release
PeakMomDL - Peak total momentum of drive leg
PeakMomSL - Peak total momentum of stride leg
PeakMomTorso - Peak total momentum of torso
PeakMomLFA - Peak total momentum of lead forearm
PeakMomLUA - Peak total momentum of lead upper arm
PeakMomPFA - Peak total momentum of pitching forearm
PeakMomPUA - Peak total momentum of pitching upper arm
PeakMomTotalBody - Peak total momentum of total body
PeakMomTimeDL - Time which peak total momentum of drive leg occurs
PeakMomTimeSL - Time which peak total momentum of stride leg occurs
PeakMomTimeTorso - Time which peak total momentum of torso occurs
PeakMomTimeLFA - Time which peak total momentum of lead forearm occurs
PeakMomTimeLUA - Time which peak total momentum of lead upper arm occurs
PeakMomTimePFA - Time which peak total momentum of pitching forearm occurs
PeakMomTimePUA - Time which peak total momentum of pitching upper arm occurs
PeakMomTimeTotalBody - Time which peak total momentum of total body occurs
PeakPelvisRotVelo - Peak pelvis rotational velocity
PeakPelvisRotVeloTime - Time that peak pelvis rotational velocity occurs
PeakChestRotVelo - Peak chest rotational velocity
PeakChestRotVeloTime - Time that peak chest rotational velocity occurs
PeakElbowExtVelo - Peak elbow extension velocity
PeakElbowExtVeloTime - Time that peak elbow extension velocity occurs
PeakShoulderIRVelo - Peak shoulder internal rotation velocity
PeakShoulderIRVeloTime - Time that peak shoulder internal rotation velocity occurs
PelvisChestPeakTimeDiff - Time difference between peak pelvis and peak chest rotational velocity
PeakSLKneeExtVelo - Peak stride leg knee extension velocity that occurs after foot plant
ClosingSpeed - Change in angle of hip shoulder separation from peak to ball release divided by the time to rotate
ClosingTime - Time from peak hip shoulder separation to ball release
TimeFirstMove - Time first move occurs
TimeHandSeparation - Time hand separation occurs
TimePeakKneeLift - Time peak knee lift occurs
TimeFootPlant - Time foot plant occurs
TimeMER - Time max external rotation occurs
 All times are normalized so 0 seconds is ball release.

