

Search Player Name or Team



(https://mlb.com)

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12/10

No Games Scheduled.



Statcast Search CSV Documentation

This is the documentation for the Statcast Search (/statcast search) CSV data downloads.

pitch_type

The type of pitch derived from Statcast.

game_date

Date of the Game.

release_speed

Pitch velocities from 2008-16 are via Pitch F/X, and adjusted to roughly out-of-hand release point. All
velocities from 2017 and beyond are Statcast, which are reported out-of-hand.

release_pos_x

Horizontal Release Position of the ball measured in feet from the catcher's perspective.

release_pos_z

Vertical Release Position of the ball measured in feet from the catcher's perspective.

player_name

• Player's name tied to the event of the search.

batter

MLB Player Id tied to the play event.

pitcher

• MLB Player Id tied to the play event.

events

• Event of the resulting Plate Appearance.

description

• Description of the resulting pitch.

spin_dir

• * Deprecated field from the old tracking system.

spin_rate_deprecated

* Deprecated field from the old tracking system. Replaced by release_spin

break_angle_deprecated

• * Deprecated field from the old tracking system.

break_length_deprecated

• * Deprecated field from the old tracking system.

zone

Zone location of the ball when it crosses the plate from the catcher's perspective.



des

Plate appearance description from game day.

game_type

• Type of Game. E = Exhibition, S = Spring Training, R = Regular Season, F = Wild Card, D = Divisional Series, L = League Championship Series, W = World Series

stand

• Side of the plate batter is standing.

p_throws

· Hand pitcher throws with.

home_team

• Abbreviation of home team.

away_team

• Abbreviation of away team.

type

• Short hand of pitch result. B = ball, S = strike, X = in play.

hit_location

• Position of first fielder to touch the ball.

bb_type

• Batted ball type, ground_ball, line_drive, fly_ball, popup.

balls

Pre-pitch number of balls in count.

strikes

Pre-pitch number of strikes in count.

game_year

· Year game took place.

pfx_x

Horizontal movement in feet from the catcher's perspective.

pfx_z

Vertical movement in feet from the catcher's perpsective.

plate_x

• Horizontal position of the ball when it crosses home plate from the catcher's perspective.

plate_z

• Vertical position of the ball when it crosses home plate from the catcher's perspective.

on_3b

Pre-pitch MLB Player Id of Runner on 3B.

on 2b

• Pre-pitch MLB Player Id of Runner on 2B.

on_1b

• Pre-pitch MLB Player Id of Runner on 1B.

outs_when_up

• Pre-pitch number of outs.

inning

• Pre-pitch inning number.

inning_topbot

• Pre-pitch top or bottom of inning.

hc_x

Hit coordinate X of batted ball.

hc_y

• Hit coordinate Y of batted ball.

tfs_deprecated

• * Deprecated field from old tracking system.

tfs_zulu_deprecated

• * Deprecated field from old tracking system.

fielder_2

Pre-pitch MLB Player Id of Catcher.

umpire

* Deprecated field from old tracking system.

sv_id

Non-unique Id of play event per game.

vx0

• The velocity of the pitch, in feet per second, in x-dimension, determined at y=50 feet.

vy0

• The velocity of the pitch, in feet per second, in y-dimension, determined at y=50 feet.

vy0

• The velocity of the pitch, in feet per second, in z-dimension, determined at y=50 feet.

ax

• The acceleration of the pitch, in feet per second per second, in x-dimension, determined at y=50 feet.

ay

• The acceleration of the pitch, in feet per second per second, in y-dimension, determined at y=50 feet.

az

• The acceleration of the pitch, in feet per second per second, in z-dimension, determined at y=50 feet.

sz_top

• Top of the batter's strike zone set by the operator when the ball is halfway to the plate.

sz bot

• Bottom of the batter's strike zone set by the operator when the ball is halfway to the plate.

hit distance

Projected hit distance of the batted ball.

launch_speed

• Exit velocity of the batted ball as tracked by Statcast. For the limited subset of batted balls not tracked directly, estimates are included based on the process described here (http://tangotiger.com/index.php/site/article/statcast-lab-no-nulls-in-batted-balls-launch-parameters).

launch_angle

• Launch angle of the batted ball as tracked by Statcast. For the limited subset of batted balls not tracked directly, estimates are included based on the process described here (http://tangotiger.com/index.php/site/article/statcast-lab-no-nulls-in-batted-balls-launch-parameters).

effective_speed

• Derived speed based on the the extension of the pitcher's release.

release_spin

Spin rate of pitch tracked by Statcast.

release_extension

Release extension of pitch in feet as tracked by Statcast.

game_pk

• Unique Id for Game.

pitcher

MLB Player Id tied to the play event.

fielder_2

MLB Player Id for catcher.

fielder_3

• MLB Player Id for 1B.

fielder 4

MLB Player Id for 2B.

fielder 5

MLB Player Id for 3B.

fielder_6

• MLB Player Id for SS.

fielder_7

• MLB Player Id for LF.

fielder_8

MLB Player Id for CF.

fielder_9

• MLB Player Id for RF.

release_pos_y

• Release position of pitch measured in feet from the catcher's perspective.

estimated_ba_using_speedangle

• Estimated Batting Avg based on launch angle and exit velocity.

estimated_woba_using_speedangle

• Estimated wOBA based on launch angle and exit velocity.

woba_value

wOBA value based on result of play.

woba_denom

wOBA denominator based on result of play.

babip_value

• BABIP value based on result of play.

iso_value

ISO value based on result of play.

launch_speed_angle

- Launch speed/angle zone based on launch angle and exit velocity.
 - 1: Weak
 - 2: Topped
 - 3: Under

- 4: Flare/Burner
- 5: Solid Contact
- 6: Barrel



at_bat_number

• Plate appearance number of the game.

pitch_number

Total pitch number of the plate appearance.

pitch_name

• The name of the pitch derived from the Statcast Data.

home_score

• Pre-pitch home score

away_score

Pre-pitch away score

bat_score

Pre-pitch bat team score

fld_score

· Pre-pitch field team score

post_home_score

Post-pitch home score

post_away_score

Post-pitch away score

post_bat_score

• Post-pitch bat team score

if_fielding_alignment

• Infield fielding alignment at the time of the pitch.

of_fielding_alignment

• Outfield fielding alignment at the time of the pitch.

Statcast Glossary (http://m.mlb.com/glossary/statcast)

Exit Velocity (EV)

(http://m.mlb.com/glossary/statcast/exitvelocity)

How fast, in miles per hour, a ball was hit by a batter.

Launch Angle (LA)

(http://m.mlb.com/glossary/statcast/launchangle)

How high/low, in degrees, a ball was hit by a batter.

Barrels

(http://m.mlb.com/glossary/statcast/barrel)

A batted ball with the perfect combination of exit velocity and launch angle

Hard Hit

(http://m.mlb.com/glossary/statcast/hard-

Statcast defines a 'hard-hit ball' as one hit with an exit velocity of 95 mph or higher.

Sweet Spot

spot)

a batted-ball event with a launch angle between eight and 32 degrees.

How hard, in miles per hour, a pitch is

Batted Ball Event (BBE)

(http://m.mlb.com/glossary/statcast/sweet- (http://m.mlb.com/glossary/statcast/battedball-event)

> A Batted Ball Event represents any batted ball that produces a result.

Pitch Velocity

(http://m.mlb.com/glossary/statcast/velocity)(http://m.mlb.com/glossary/statcast/pitch-

thrown.

Pitch Movement

movement)

The movement of a pitch is defined in inches, both in raw numbers and as a measurement against average.

Active Spin

spin)

Statcast refers to the spin that contributes to movement as Active Spin.

Spin Rate

(http://m.mlb.com/glossary/statcast/active- (http://m.mlb.com/glossary/statcast/spinrate)

> How much spin, in revolutions per minute, a pitch was thrown with.

Extension

Pop Time

(http://m.mlb.com/glossary/statcast/extensio(h)ttp://m.mlb.com/glossary/statcast/pop-

How far off the mound, in feet, a pitcher releases the pitch.

time) How quickly, in seconds, a catcher can get the ball out of his glove and to the

base on a stolen base or pickoff attempt.

Arm Strength

(http://m.mlb.com/glossary/statcast/armstrength)

How hard, in miles per hour, a fielder throws the ball.

Base-to-base Time

Lead Distance

How much time, in seconds, it takes a runner to get from one base to another, like Home To First.

Distance Covered

(http://m.mlb.com/glossary/statcast/distance(http://m.mlb.com/glossary/statcast/leadcovered) distance)

How far, in feet, a fielder or runner has traveled on a play.

How far, in feet, a runner is ranging off the bag at the time of a pitcher's first movement or pitch release.

Jump

(http://m.mlb.com/glossary/statcast/jump)

Jump is a Statcast metric that shows which players have the fastest reactions and most direct routes in the outfield.

Outs Above Average (OAA)

(http://m.mlb.com/glossary/statcast/outsabove-average)

A range-based metric of skill that shows how many outs a player has saved over his peers.

Catch Probability

(http://m.mlb.com/glossary/statcast/catchprobability)

The likelihood, in percent, that an outfielder will be able to make a catch on an individual batted ball.

Expected Batting Average (xBA)

(http://m.mlb.com/glossary/statcast/expectedbatting-average)

xBA measures the likelihood that a batted ball will become a hit.

Expected Weighted On-base Average (xwOBA)

(http://m.mlb.com/glossary/statcast/expectedra)

xwOBA is formulated using exit velocity, launch angle and, on certain types of

Expected Earned Run Avg (xERA)

(http://m.mlb.com/glossary/statcast/expected-

xERA is a simple 1:1 translation of xwOBA, converted to the ERA scale batted balls, Sprint Speed.

Sprint Speed

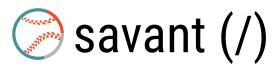
(http://m.mlb.com/glossary/statcast/sprint-speed)

A measurement of a player's top running speed, expressed in "feet per second in a player's fastest one-second window."

Bolt

(http://m.mlb.com/glossary/statcast/bolt)

A Bolt is any run where the Sprint Speed (defined as "feet per second in a player's fastest one-second window") of the runner is at least 30 ft/sec.



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