

Determining the Nastiest Pitcher in 2019 MLB

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Goal

Who is the nastiest pitch in 2019 MLB?



Procedure

Data set

Obtain Statcast data from Baseball Savant
for all MLB pitchers in 2019

Determine which stats affect success of pitcher

Find pitcher who excels the most in those stats



Stat Testing

What makes a nasty pitcher?

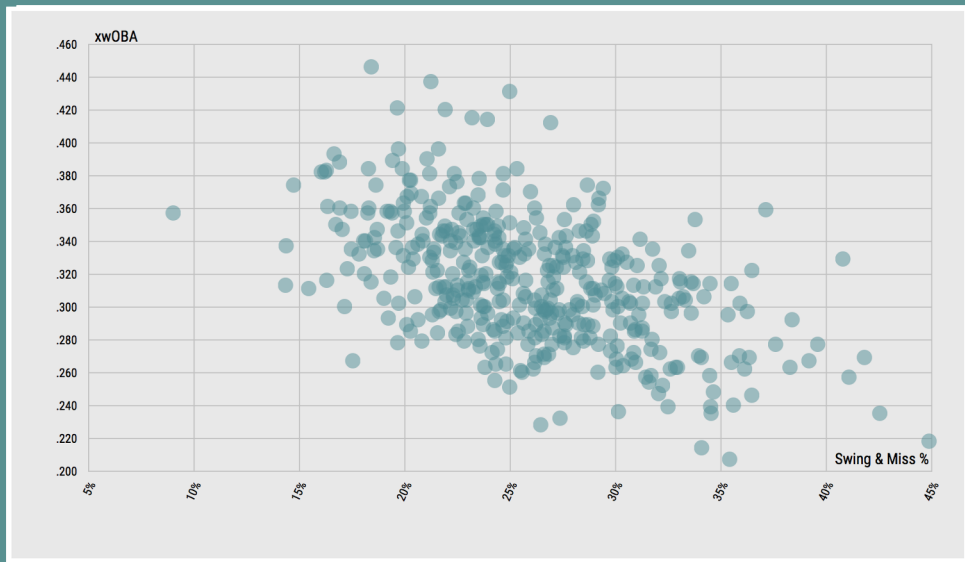
xwOBA - Best pitchers in MLB have the lowest xwOBA

Pitch Movement?

Spin Rate?

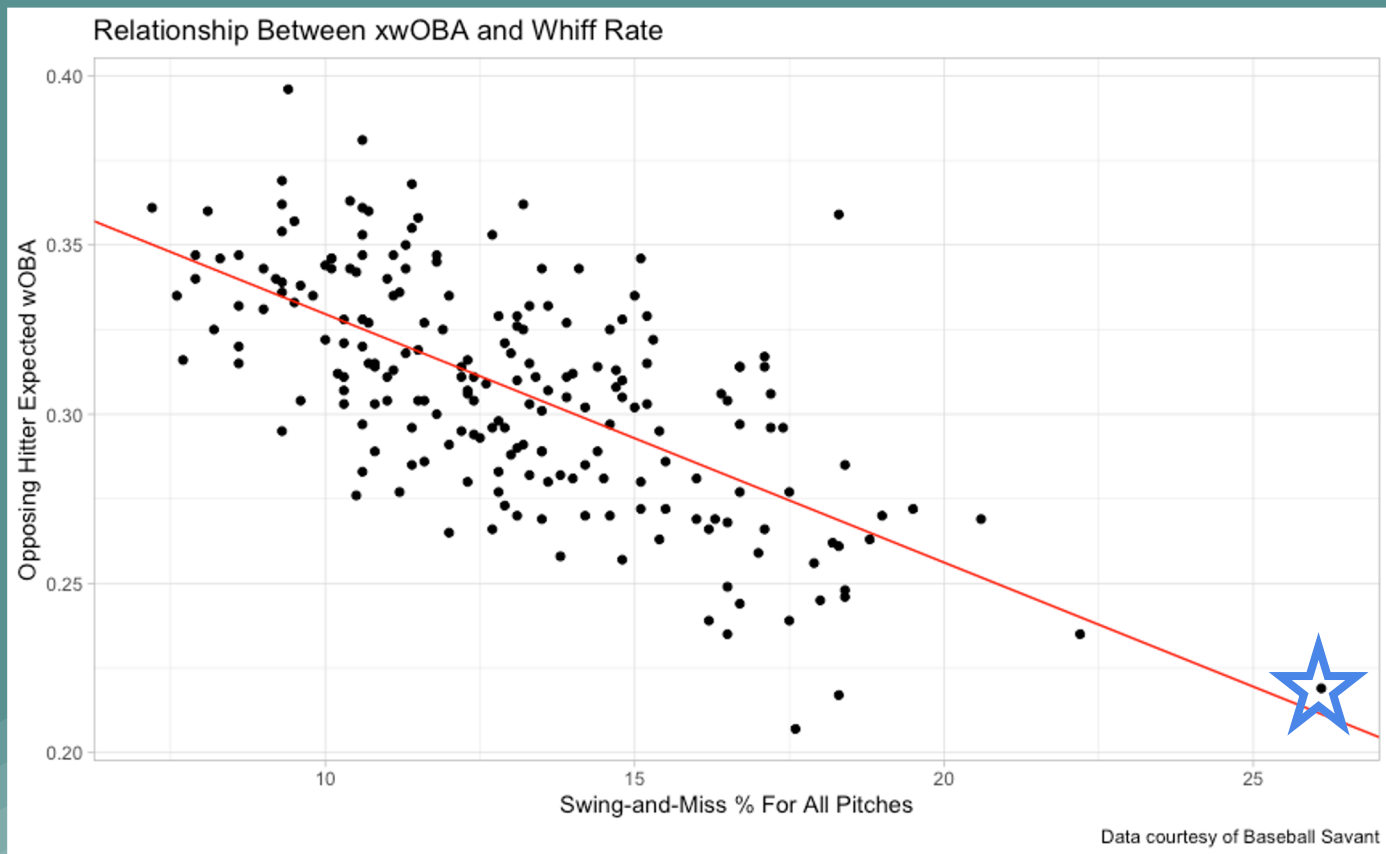
Pitch Velocity?

Whiff Rate?



Graphs from Baseball Savant

Results





THE NASTIEST PITCHER IN THE MLB: JOSH HADER

4-Seam Fastball

- 95.4 MPH
- 25.8% Swing and Miss Rate
- 59.0% Swing Rate

Slider

- 82.6 MPH
- 27.3% Swing and Miss Rate
- 53.6% Swing Rate

LEAGUE AVERAGES

- 93.5 MPH (FB), 84.4 MPH (SL)
- 12.9% Swing and Miss Rate
- 47.2% Swing Rate