Pitch Tracking

Pitch Type	#	# RHB	# LHB	%	MPH	PA	АВ	Н	1B	2B	3B	HR	so	Walks	BBE	ВА	SLG	WOBA	EV	LA	Spin	Extension	Whiff %	Put Away %
Four Seam	935	635	300	49.3	93.5	213	121	50	38	6	0	6	53	26	165	0.352	0.612	0.471	82.8	10.1	2293.8	5.7	24.5	23.3
Slider	604	359	245	31.9	79.9	173	99	39	27	10	0	2	52	16	134	0.298	0.556	0.449	84.9	13.2	2685.1	5.6	34.5	24.2
Changeup	280	268	12	14.8	85.3	72	52	17	9	5	1	2	10	9	59	0.321	0.577	0.418	84.9	3.9	2125.0	5.8	29.8	18.2
Curveball	76	63	13	4.0	71.9	9	8	2	0	0	1	1	0	1	8	0.286	0.875	0.471	80.5	20.5	2364.2	5.4	26.3	0.0

Left-Handed Batters

Pitch Type	#	LHB	%	MPH	PA	AB	Н	1 B	2B	3B	Hr	SO	Walks	BBE	ВА	SLG	WOBA	EV	LA	Spin	Extension	Whiff %	Put Away %
Four Seam	300	300	52.6	93.6	80	51	19	18	1	0	0	12	11	63	0.396	0.392	0.408	76.9	1.2	2285.7	5.7	17.0	18.8
Slider	245	245	43.0	79.7	69	46	17	13	3	0	1	15	5	59	0.315	0.500	0.410	82.6	16.6	2684.3	5.6	28.4	19.5
Changeup	12	12	2.1	84.8	2	1	0	0	0	0	0	1	0	1	0.000	0.000	0.000	87.9	-8.5	2115.8	5.8	16.7	50.0
Curveball	13	13	2.3	72.4	4	4	1	0	0	1	0	0	0	4	0.250	0.750	0.390	84.7	18.0	2330.8	5.4	20.0	0.0

Right-Handed Batters

Pitch Type	#	# RHB	%	MPH	PA	АВ	Н	1B	2B	3B	HR	so	Walks	BBE	ВА	SLG	WOBA	EV	LA	Spin	Extension	Whiff %	Put Away %
Four Seam	635	635	47.9	93.5	133	70	31	20	5	0	6	41	15	102	0.330	0.771	0.518	87.0	16.4	2297.6	5.7	27.8	25.2
Slider	359	359	27.1	80.1	104	53	22	14	7	0	1	37	11	75	0.286	0.604	0.480	86.9	10.3	2685.8	5.6	37.9	26.8
Changeup	268	268	20.2	85.3	70	51	17	9	5	1	2	9	9	58	0.333	0.588	0.425	84.8	4.2	2125.4	5.8	30.4	17.0
Curveball	63	63	4.8	71.7	5	4	1	0	0	0	1	0	1	4	0.333	1.000	0.536	76.4	22.9	2371.1	5.4	28.6	0.0

Release the Ball in the Same Location

- Four-seam wOBA overall .471
 - Left-handed batter wOBA .408
 - Right-handed batter wOBA .518
- Four-seam exit velocity overall 82.8 MPH
 - o Left-handed batter 76.9 MPH
 - Right-handed batter 87 MPH
- Four-seam whiff % overall 24.5%
 - o Left-handed batter 17.0%
 - Right-handed batter 27.8%
- Right-handed batters get more whiffs against four-seam
 - Left-handed batters cannot hit the four-seam effectively
 - wOBA much smaller and exit velocity

- Four-seam much better overall against left-handed hitters than right
- Four-seam and slider

ht

- o Released at the same side
- Changeup
 - Release height and side not the same as any other pitch
 - Extension longest of any pitch
- Curveball
 - Release height and side not the same as any other pitch
- Need consistency in release height and side
 - o Batters can tell what pitch is coming if all pitches are released at different points

Pitch Type Rel Side Rel Height Extension

5.7

5.7

5.4

6.0

-2.2

-2.2

-2.5

-2.1

Four Seam

Changeup

Curveball

Slider

5.7

5.6

5.4

Player B must conceal what pitch type is coming

Stay Ahead in the Count

Pitch Tracking Player B Behind in the Count

Pitch Type	#	# RHB	# LHB	%	MPH	PA	AB	H	1B	2B	3B	HR	so	Walks	BBE	ВА	S LG	WOBA	EV	LA	Spin	Extension	Whiff %	Put Away %
Four Seam	315	227	88	54.4	93.2	90	46	19	11	4	0	4	14	26	58	0.576	0.761	0.546	85.5	12.7	2289.8	5.7	20.3	32.6
Slider	152	96	56	26.3	79.6	62	31	15	12	3	0	0	13	16	38	0.577	0.581	0.550	87.2	15.5	2665.5	5.6	31.4	30.2
Changeup	89	87	2	15.4	85.4	25	12	4	1	2	0	1	4	9	15	0.571	0.750	0.554	87.3	-0.1	2127.9	5.8	37.8	30.8
Curveball	23	19	4	4.0	72.2	3	2	0	0	0	0	0	0	1	2	0.000	0.000	0.233	74.2	19.4	2449.4	5.4	55.6	0.0

Pitch Tracking Player B Ahead in the Count

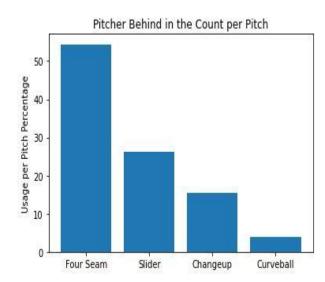
Pitch Type	#	# RHB	# LHB	%	MPH	PA	AB	Н	1B	2B	3B	HR	so	Walks	BBE	ВА	SLG	WOBA	EV	LA	Spin	Extension	Whiff %	Away %
Four Seam	248	170	78	49.4	93.8	58	30	9	8	0	0	1	27	0	51	0.161	0.400	0.315	81.0	10.3	2302.2	5.7	26.9	20.8
Slider	185	106	79	36.9	80.2	60	35	13	7	4	0	2	24	0	51	0.224	0.657	0.439	84.8	7.7	2697.7	5.6	37.1	21.8
Changeup	62	57	5	12.4	85.4	15	11	5	4	0	1	0	3	0	13	0.357	0.636	0.424	82.7	7.9	2109.2	5.8	26.9	14.3
Curveball	7	6	1	1.4	70.8	2	2	0	0	0	0	0	0	0	2	0.000	0.000	0.000	68.7	-10.0	2380.3	5.3	0.0	0.0

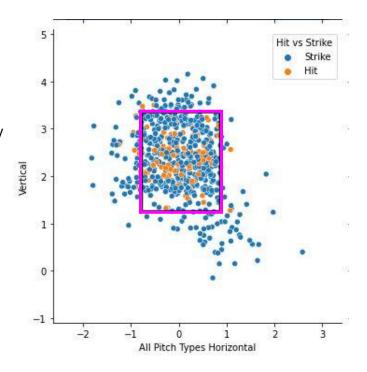
- Every pitch crushed when player B falls behind in the count with the exception of the curveball
 - Batting average above .500 for all pitches
 - Slugging
 - .761 four-seam
 - .581 slider

- .750 changeup
- o wOBA above .500 for all pitches except curveball
- Player B heavily relies on four-seam when behind
 - Over 50% of the time a batter will see a four-seam fastball
 - Need to add in variety
 - o Try using the curveball more
 - All other pitches hit quite well and for power
 - Player B walks a lot of batters with the four-seam, slider and changeup
 - Player B needs to learn to attack the strike zone and be confident in the pitch selected
- Player B is ahead
 - o wOBA under .450 for all pitches
 - Four-seam wOBA .315
 - Exit velocity decrease is dramatic
 - Four-seam decreases by 4.5 MPH
 - Slider decreases by 2.4 MPH
 - Changeup decreases by 4.6 MPH
 - Slugging elevated still for changeup and slider
 - Four-seam falls to .400 from .761
- Changeup still struggles even when player B is ahead
 - Player B needs to get the same release points for all pitches
 - Or at least close to the same release points
 - Combination of the pitches together will be more powerful
 - Changeup may get hit less often

Stay Low in the Zone

- Majority of the hits against player B happen in the middle or top of the strike zone
- Spin rate on fastball is average
 - Velocity is average
 - Living lower in the strike zone is better
 - Lower RPMs and lower velocity leads to more hits higher in the strike zone
 - Four-seam does not have that rising effect like higher RPM pitchers have
- Slider does not have a large amount of horizontal break creating less of a sweeping motion





- o Player B should increase the horizontal break to get more of a sweeping effect
 - This sweeping effect deceives batters
 - Left-handed batters think it is inside
 - Right-handed batters think it is outside
 - Both scenarios the slider breaks towards the plate for a strike
- Slider does have decent vertical break
 - Want batters to swing and miss
 - Lower in the zone keeps the ball out of the sweet spot for most batters
 - Batters swing over the top of the ball

Pitch Type	Vertical Inches of Break	Induced Inches Vertical Inches of Break	Horizontal Inches of Break
Four Seam	-17.0	14.0	-11.5
Slider	-44.9	-2.3	9.0
Changeup	-31.3	6.2	-16.1
Curveball	-55.6	-2.5	7.9