



Analyzing the NL MVP Race

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Research Question

- Who should be the National League MVP?
- Freddie Freeman was named the 2020 NL MVP, receiving 28 out of 30 first place votes

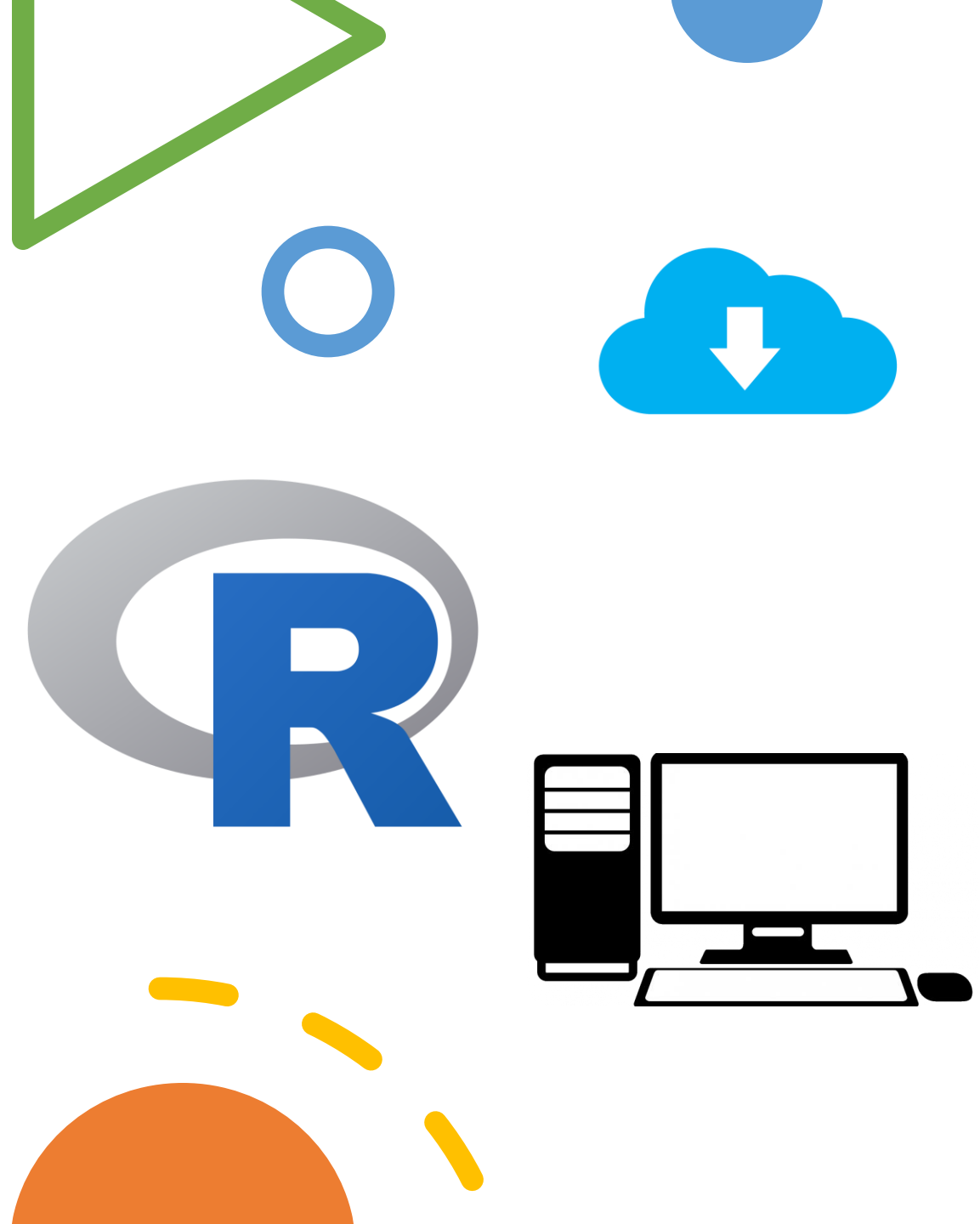
A large white silhouette of a baseball bat is positioned diagonally across the slide. The background is dark blue on the left and red on the right. A white circle is visible on the far left.

Data

- Comes from MLB's Statcast website
- Can find traditional stats (Batting Average, Home Runs, etc.)
- Information on advanced stats (Exit Velocity, wOBA, etc.) also available

Downloading Data

- Compatibility with R
- 1289 players for 2020 season
- Search via name
- Tiebreak with jersey number



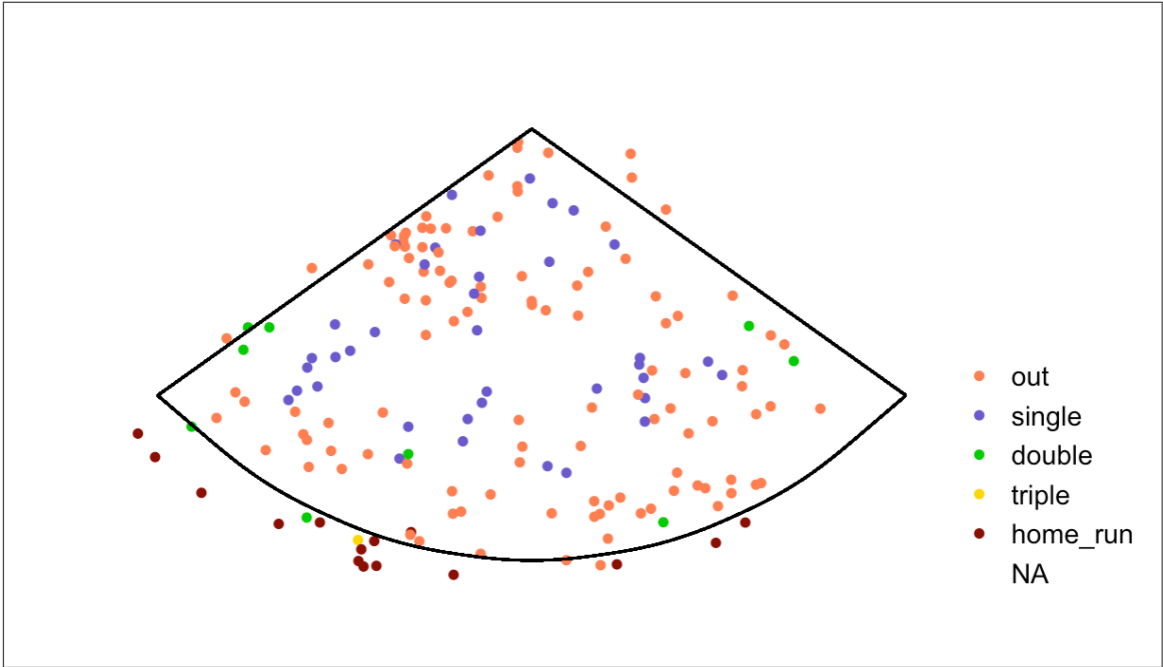
Mookie Betts



PA	AB	H	1B	2B	3B	HR	BB	IBB	AVG	OBP	SLG	OPS
245	219	64	38	9	1	16	24	1	0.292	0.359	0.562	0.921

Stat	Rank
PA	4
H	3
HR	2
BB	6
OPS	5
Average	4

Spray Chart for 'Mookie Betts'



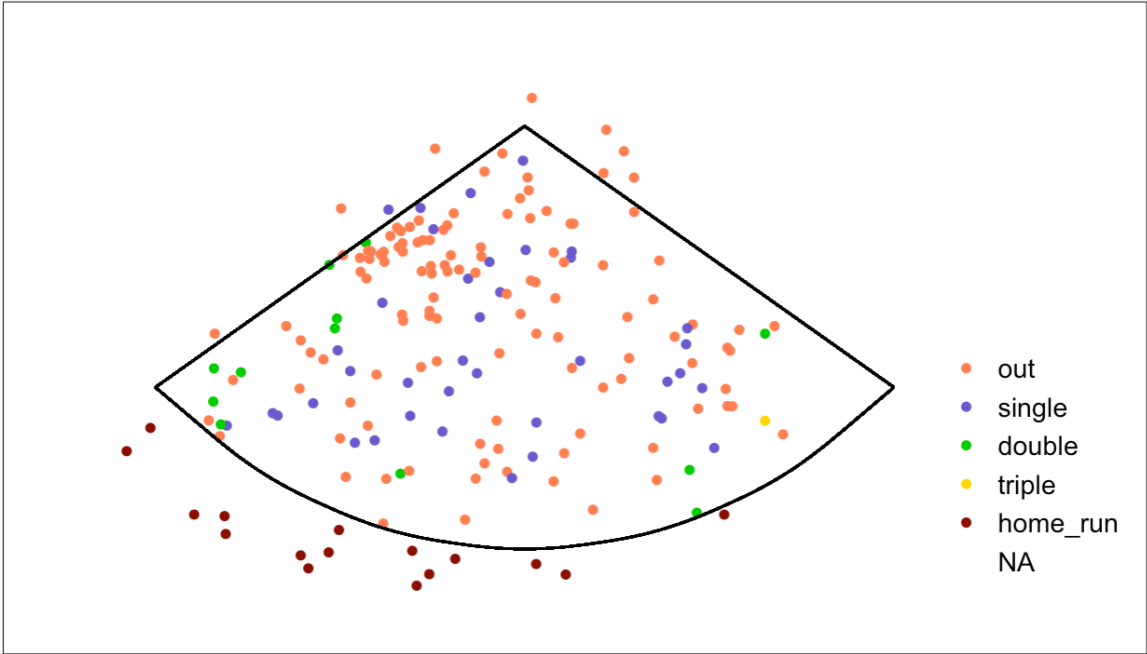
Manny Machado



PA	AB	H	1B	2B	3B	HR	BB	IBB	AVG	OBP	SLG	OPS
253	227	68	39	12	1	16	26	4	0.3	0.372	0.573	0.945

Stat	Rank
PA	3
H	2
HR	2
BB	5
OPS	4
Average	3.2

Spray Chart for 'Manny Machado'



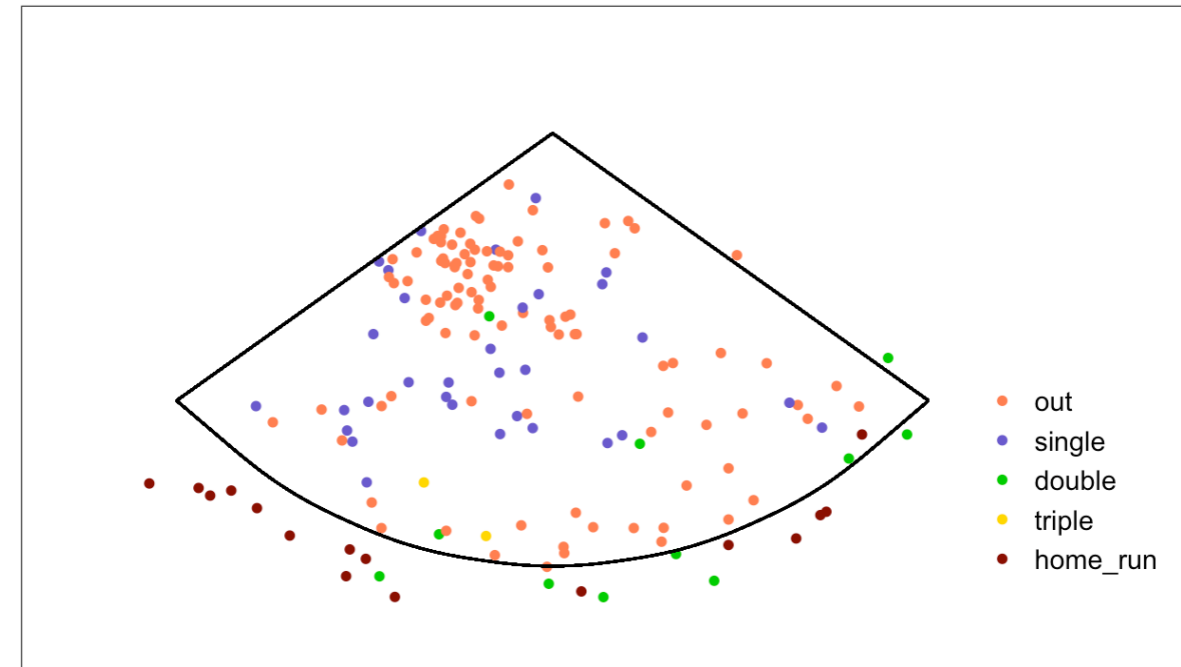
Fernando Tatis Jr.



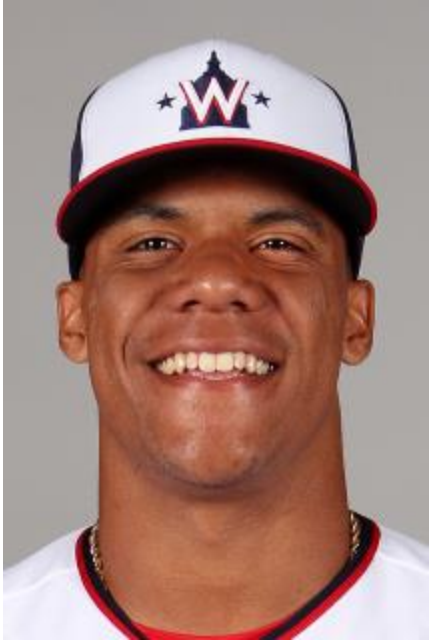
PA	AB	H	1B	2B	3B	HR	BB	IBB	AVG	OBP	SLG	OPS
257	225	62	32	11	2	17	27	1	0.276	0.346	0.569	0.915

Stat	Rank
PA	1
H	4
HR	1
BB	4
OPS	6
Average	3.2

Spray Chart for 'Fernando Tatis Jr.'



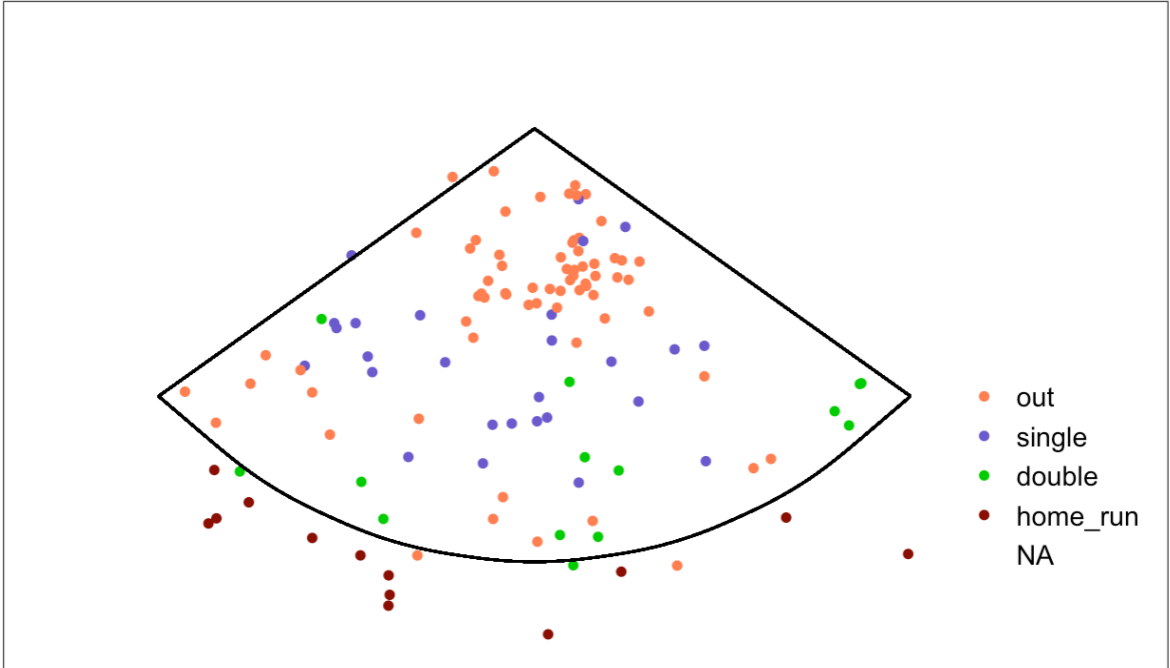
Juan Soto



PA	AB	H	1B	2B	3B	HR	BB	IBB	AVG	OBP	SLG	OPS
188	158	54	27	14	0	13	41	12	0.342	0.505	0.677	1.182

Stat	Rank
PA	6
H	6
HR	4
BB	2
OPS	1
Average	3.8

Spray Chart for 'Juan Soto'



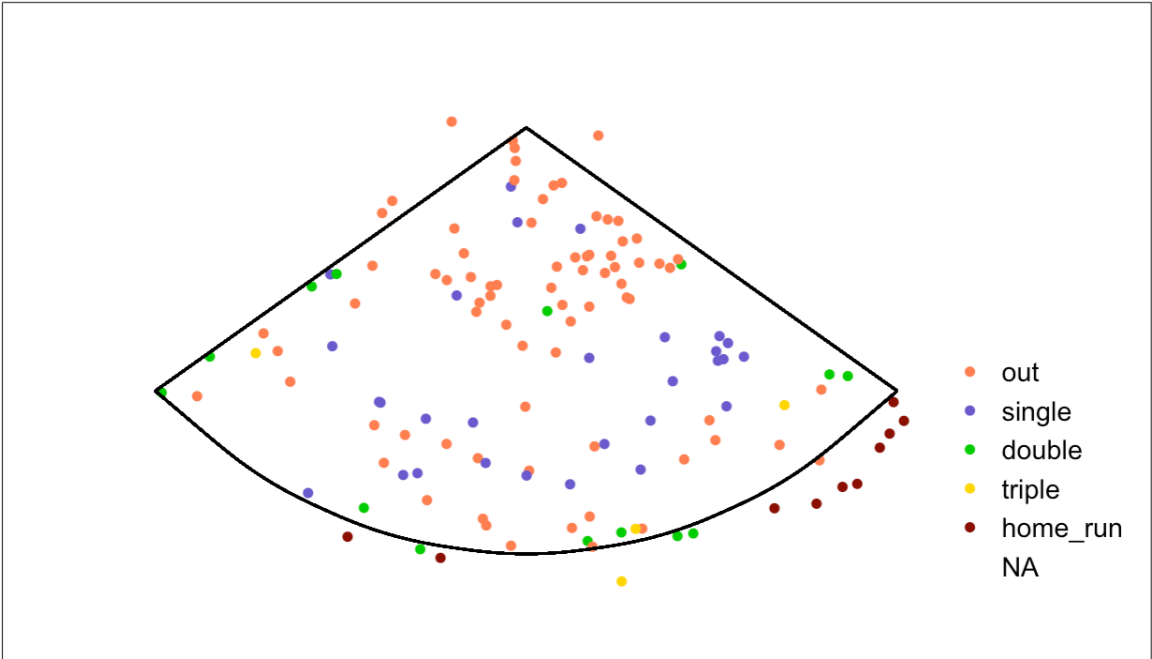
Mike Yastrzemski



PA	AB	H	1B	2B	3B	HR	BB	IBB	AVG	OBP	SLG	OPS
224	193	57	29	14	4	10	30	2	0.295	0.388	0.565	0.953

Stat	Rank
PA	5
H	5
HR	6
BB	3
OPS	3
Average	4.4

Spray Chart for 'Mike Yastrzemski'



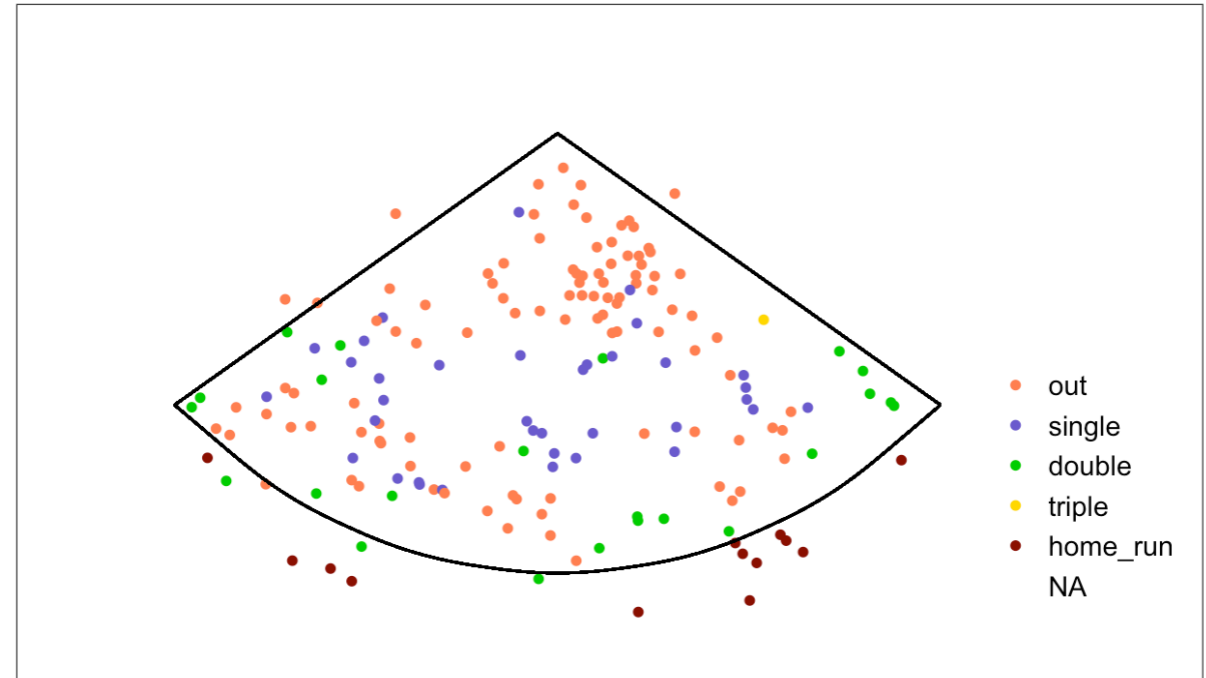
Freddie Freeman



PA	AB	H	1B	2B	3B	HR	BB	IBB	AVG	OBP	SLG	OPS
255	214	73	36	23	1	13	45	7	0.341	0.463	0.64	1.103

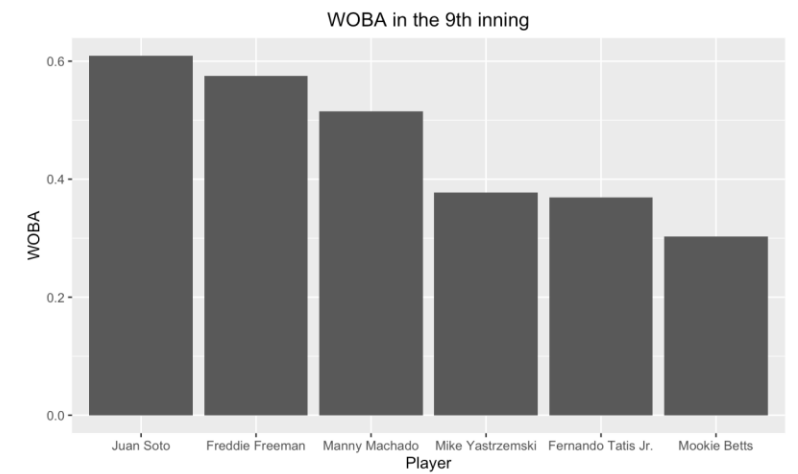
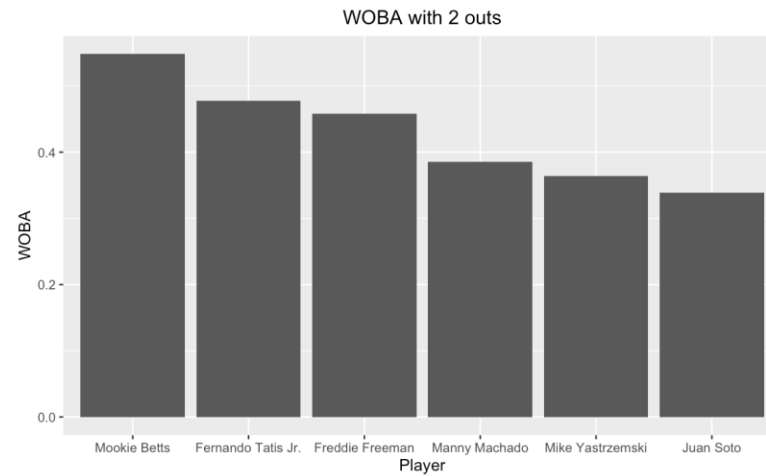
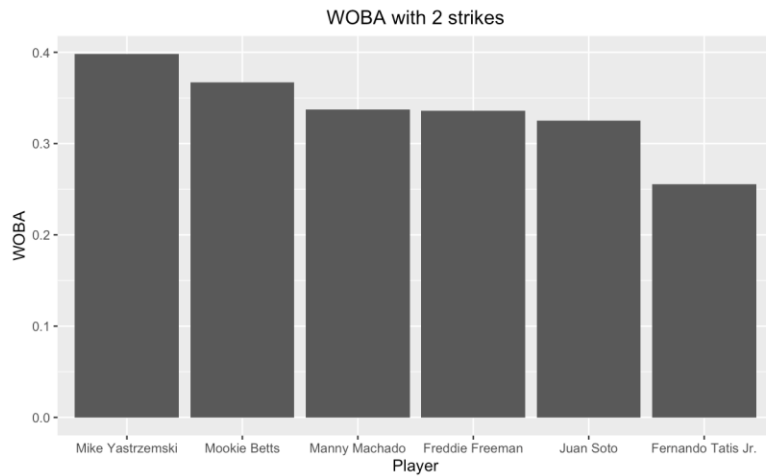
Stat	Rank
PA	2
H	1
HR	4
BB	1
OPS	2
Average	2

Spray Chart for 'Freddie Freeman'



Clutch Hitting

WOBA – Weighted On Base Average



Powerful Hitting



Player Name	Average Exit Velo	Hard Hit Rate
Fernando Tatis Jr.	95.9	62.2
Freddie Freeman	92.4	54.5
Juan Soto	92.1	51.6
Mookie Betts	90.7	43.9
Manny Machado	90.2	43.7
Mike Yastrzemski	88.2	42.3

Smart Hitting



Player Name	Chase %	In-Zone Swing %
Juan Soto	15.0	61.1
Mike Yastrzemski	21.1	58.3
Manny Machado	24.4	71.7
Mookie Betts	24.6	56.4
Freddie Freeman	24.8	78.1
Fernando Tatis Jr.	25.8	72.2

Final Decision

- Best with traditional stats: Freeman, Machado, Tatis
- Soto hurt by missed time (positive COVID-19 test)
- Exit velocity leaders: Tatis, Freeman, Soto
- Our decision: Freddie Freeman
 - 1. Freddie Freeman
 - 2. Juan Soto
 - 3. Manny Machado
 - 4. Mookie Betts
 - 5. Fernando Tatis Jr.
 - 6. Mike Yastrzemski
- Notable absences: Marcell Ozuna, Corey Seager, Trevor Bauer

