

Na Sung-bum Offensive Evaluation

By: Ben Howell

Email: Ben.Howell@utexas.edu

Twitter: [@benhowell71](https://twitter.com/benhowell71)

Website: benhowell71.com

Contents

Introduction	2
Stats & Graphics	3
Breakdown	6
Resources	8

Introduction

Na Sung-bum		
OF	Bats: L	Throws: L
6'0, 220 lbs	10/03/1989	Age: 31

Na Sung-bum, now 31 years old, has been interested in making the jump from the KBO to MLB for a few years now. Early in the 2019 season, the left-handed-hitting slugger for the NC Dinos tore his ACL and missed most of the KBO season after starting the season with a 199 wRC+ through his first 106 PAs. He returned to the KBO and the Dinos and put together the best season of his career. He plays respectable defense in the OF with a big arm but is more likely to split time between the OF and the DH than play the field full-time.

Na is one most powerful hitters in the KBO and one of the most aggressive. He is a pull hitter, and MLB teams will likely shift against him on the infield, but he does hit the ball hard and in the air to all parts of the field. At the plate, he doesn't have a huge leg kick and starts with his weight loaded onto his back foot.

While Na's power and ability to hit the ball in the air are unquestionable, he has his share of weaknesses. As an aggressive hitter with a high swing%, laying off of MLB breaking balls may be an issue, as well as being able to beat the shift. There's also the question of finding him a place to play reliably as he ages, and his mobility potentially starts to drop off. Na is a high whiff, high power guy who will need to platoon between the outfield and the DH.

Stats & Graphics

Table 2: Stats from FanGraphs

Season	PA	BB%	K%	BB/K	AVG	OBP	SLG	OPS	ISO	BABIP	wOBA	wRC+
2013	458	7.20%	20.70%	0.35	0.243	0.319	0.416	0.735	0.173	0.279	0.338	94
2014	536	7.80%	23.90%	0.33	0.329	0.400	0.597	0.997	0.268	0.397	0.431	143
2015	622	5.10%	20.40%	0.25	0.326	0.373	0.553	0.926	0.227	0.374	0.402	131
2016	653	10.30%	20.80%	0.49	0.309	0.388	0.497	0.885	0.187	0.371	0.395	120
2017	561	8.60%	20.70%	0.41	0.347	0.415	0.584	1.000	0.237	0.413	0.427	150
2018	620	7.10%	21.10%	0.34	0.318	0.381	0.518	0.899	0.200	0.378	0.386	123
2019	106	11.30%	24.50%	0.46	0.366	0.443	0.645	1.089	0.280	0.476	0.486	199
2020	584	8.40%	25.30%	0.33	0.324	0.390	0.596	0.987	0.272	0.395	0.432	155

Table 3: Na Sung-bum Charted Stats

Hitler	Pitches	wOBA	xwOBA	xwOBACON	SwStr%	CS%	Swing%	Contact%
Na	321	0.569	0.429	0.497	16.2	6.2	60.1	73.1
KBO	28058	0.338	0.339	0.362	10.3	17.2	47.0	78.0

Table 4: Na Sung-bum Batted Ball Profile

Hitler	BBEs	GB%	FB%	LD%	PU%	Soft%	Medium%	Hard%	Pull%	Straight%	Oppo%
Na	67	38.8	25.4	26.9	9.0	14.9	29.9	55.2	44.8	34.3	20.9
KBO		51.2	26.4	13.7	8.7	30.3	40.6	29.0	34.3	42.7	23.1

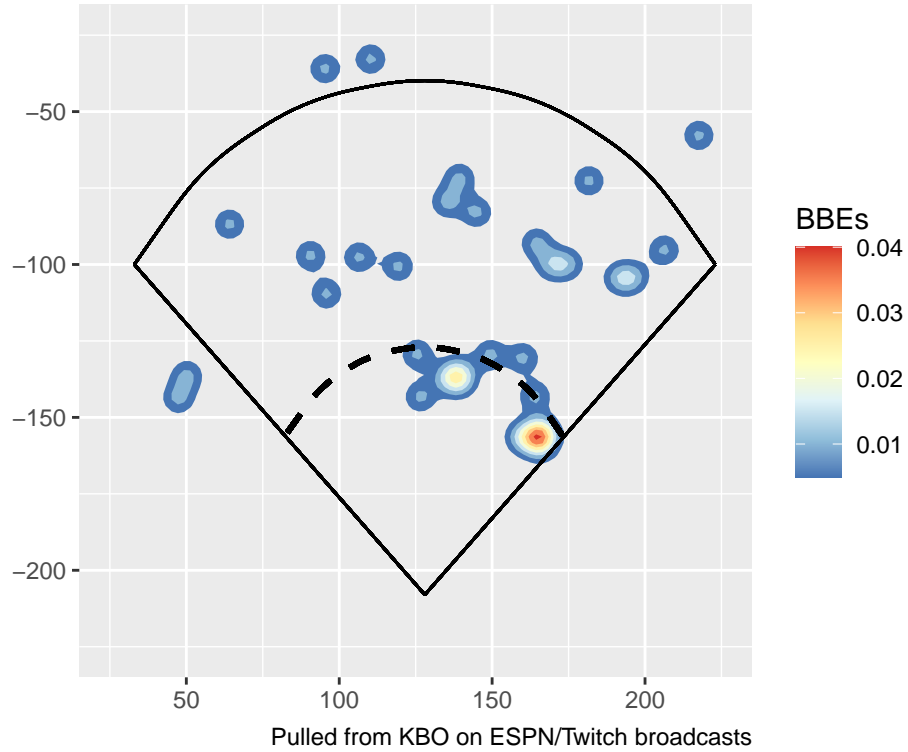
Table 5: Na Sung-bum Stats by Pitch Type

Pitch Type	Pitches	wOBA	xwOBA	xwOBACON	SwStr%	CS%	Swing%	Contact%
Fastball	150	0.596	0.437	0.514	13.3	8.0	51.3	74.0
Breaking	101	0.416	0.359	0.436	19.8	4.0	75.2	73.7
Offspeed	69	0.799	0.543	0.574	17.4	5.8	56.5	69.2

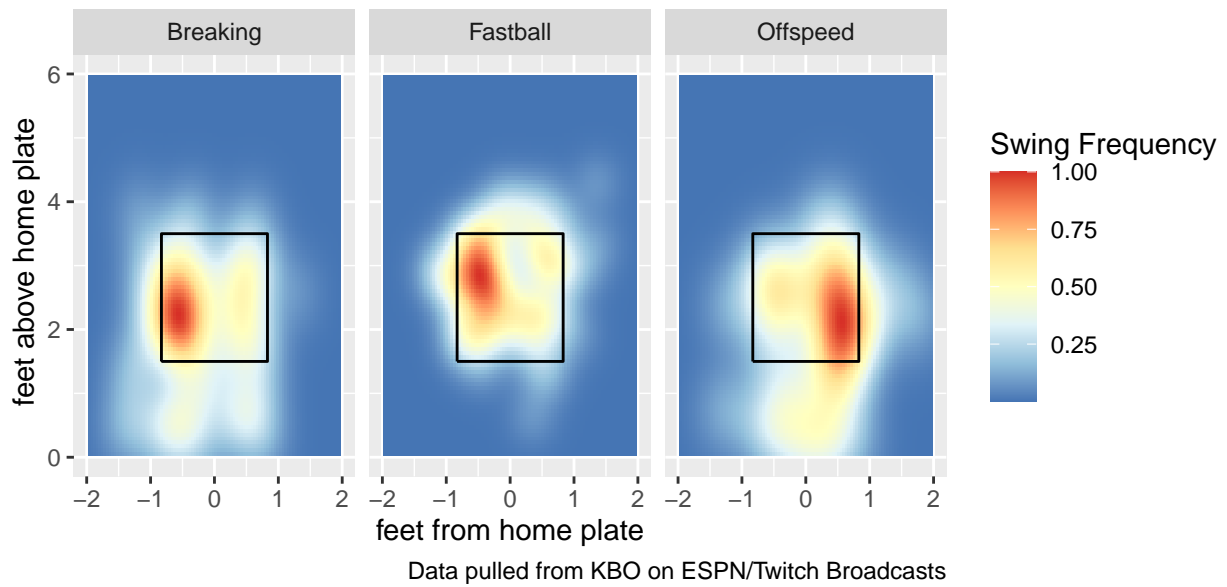
Table 6: Na Sung-bum Batted Ball Profile by Pitch Type

Pitch	BBEs	GB%	FB%	LD%	PU%	Soft%	Med%	Hard%	Pull%	Strht%	Oppo%
Breaking	26	42.3	15.4	26.9	15.4	19.2	46.2	34.6	46.2	42.3	11.5
Fastball	26	34.6	30.8	26.9	7.7	15.4	23.1	61.5	34.6	30.8	34.6
Offspeed	15	40.0	33.3	26.7	0.0	6.7	13.3	80.0	60.0	26.7	13.3

Batted Ball Data for Na Sung-bum Data for charted BBEs from ~ 9/03 to Present

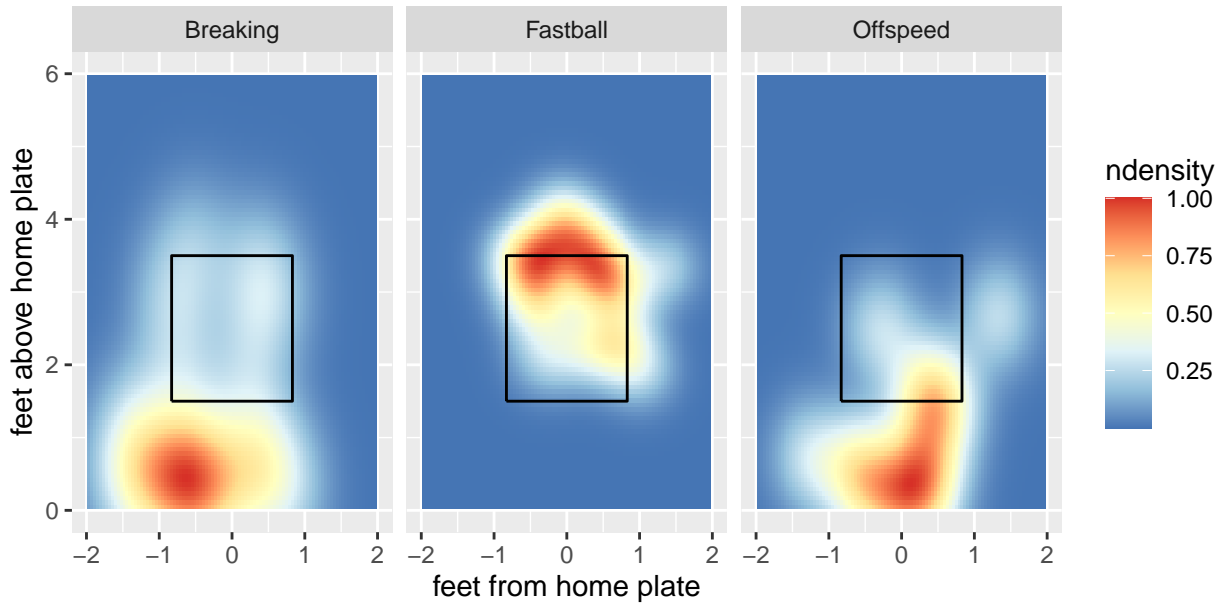


Na Sung-bum Swing Profile Pitcher Perspective

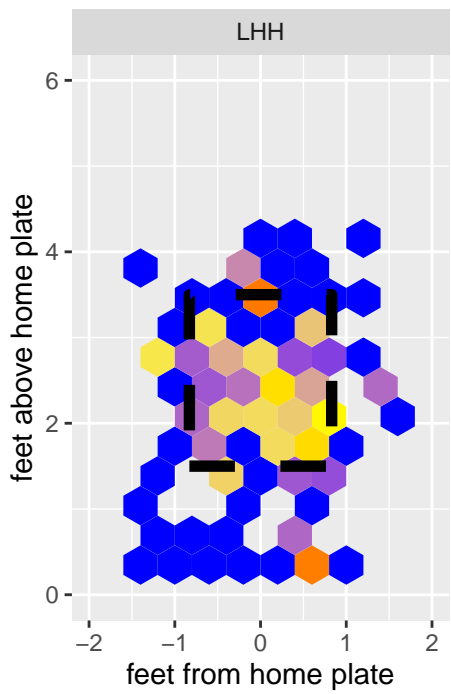


Swinging Strikes

Pitcher Perspective

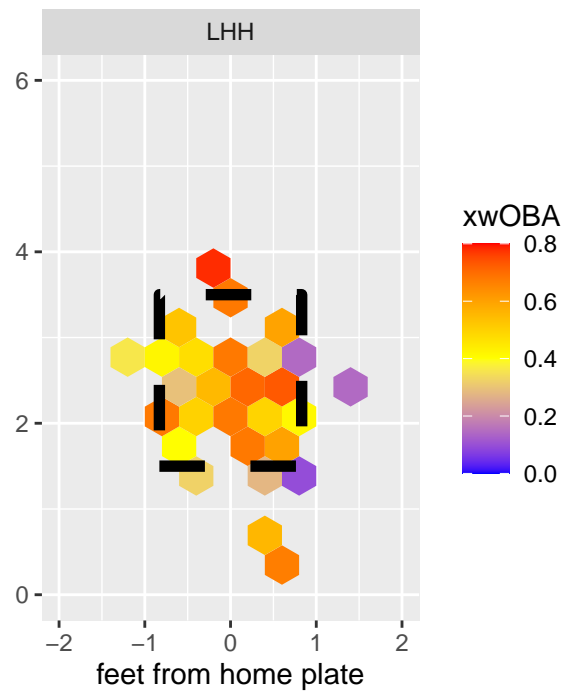


xwOBA on Swings



Includes BIP, Whiffs, foul balls

xwOBA on Balls in Play



LHP and RHP combined to account for lack of LHP

Table 7: Na Sung-bum Plate Discipline Stats

Region	Pitches	Swing%	Contact%	KBO Swing%	KBO Contact%
Chase	121	38.0	47.8	28.7	54.9
Shadow	114	75.4	77.9	56.8	83.5
Heart	65	90.8	86.4	72.2	87.4
Waste	20	10.0	50.0	4.3	22.6

Table 8: Na Sung-bum Baserunning Stats

Season	G	PA	SB	CS	Spd	wSB
2013	104	458	12	2	6.6	1.4
2014	123	536	14	5	5.9	0.5
2015	144	622	23	4	7.0	2.8
2016	144	653	7	4	4.4	0.1
2017	125	561	17	7	5.3	0.5
2018	144	620	15	2	6.0	2.2
2019	23	106	2	1	5.7	-0.1
2020	130	584	3	1	4.4	0.1

Table 9: Na Sung-bum vs Fastballs (90+ MPH vs sub 90-mph)

Velocity	Pitches	wOBA	xwOBA	xwOBACON	SwStr%	CS%	Swing%	Contact%
91.6	62	0.761	0.488	0.586	16.1	6.5	58.1	72.2
86.6	78	0.557	0.408	0.449	12.8	9.0	46.2	72.2

Table 10: Na Sung-bum vs Fastballs (90+ MPH vs sub 90-mph)

Velocity	BBEs	GB%	FB%	LD%	PU%	Soft%	Medium%	Hard%	Pull%	Straight%	Oppo%
91.6	10	30.0	40.0	30.0	0.0	0.0	30.0	70.0	20.0	30.0	50.0
86.6	13	46.2	23.1	15.4	15.4	30.8	15.4	53.8	38.5	30.8	30.8

Breakdown

Na Sung-bum, a 31-year-old OF, has played for the NC Dinos his entire career and the franchise's entire existence. Originally a pitcher through college, Na converted to hitting full-time in the KBO, and the results have been great. In his second season in the KBO, he slashed 0.329/0.400/0.597 with a 143 wRC+. Since then, he has never hit below 0.300 and has posted an SLG below 0.500 just once (2016). A month into the 2019 season, as Na was reportedly looking to jump to MLB in the offseason, he tore his right ACL in a gruesome injury that occurred while sliding into third base. Beyond that freak injury, Na has played 120+ games every season since 2014.

He didn't make the transition to MLB in 2019 after his injury but recovered well and returned to the KBO in 2020, lighting up the league in his best season yet. His 2020 wRC+ of 155 was his career-high, as was his 0.432 wOBA while slashing 0.324/0.390/0.596. His BABIP of 0.395 was the 2nd highest in the KBO, but he was also 2nd in xwOBACON on tracked batted balls at 0.497.

The biggest hurdle that Na will have to overcome to be successful as an MLB hitter is cutting down or keeping his K% even from the KBO to MLB. With a Swing% of 60.1%, he's one of the most aggressive hitters in the KBO, ranking 2nd in the league in Swing%. While his whiff% of 26.9% is a few points worse than the KBO average of 22.1%, that turns into an SwStr% of 16.2% that was tied for 10th-worst and a K% of 25.3% that was the 4th-highest in the KBO. That K% would have been the 26th-worst in MLB over the last few seasons, between Hunter Dozier and Choo Shin-soo. Na also rarely walks, with an 8.4% BB% and BB/K of 0.33 that was the 2nd-lowest in the KBO.

While more work needs to be done to examine the relationship between KBO and MLB K%, that's not a great initial sign. Park Byung-ho posted a 12.5% BB% and 25.9% K% in 2015 with the Kiwoom Heroes before joining the Minnesota Twins in 2016, where he posted an 8.6% BB% and 32.8% K%. Kim Jae-hwan of the Doosan Bears posted an 11.0% BB% and 19.7% K% in 2019 but didn't sign with an MLB team after being posted. (Both age and talent-wise, Park Byung-ho and Na Sung-bum are a step ahead of where Kim Jae-hwan was in 2019).

One thing that is not a concern is Na's ability to hit the ball hard. In 2020, his LD% of 26.9% was the 5th-highest in the KBO and his GB% of 38.8% was the 6th-lowest. He also led the league in hard-hit% at 55.2%, cumulating in his xwOBACON of 0.497 that ranked 2nd in the KBO. He hits with power to all fields but pulls the ball on the ground. His Pull% of 44.8% ranks 4th-highest in the league, so a short RF porch could be an ideal stadium for him.

Breaking down by pitch type, Na struggles the most with breaking pitches with an xwOBA of just 0.359 and xwOBACON of 0.436 that are far below his performances against fastballs and offspeed pitches. His SwStr% jumps up to 19.8% as he swings a whopping 75.8% of the time against breaking pitches. Breaking pitches create weaknesses in his batted ball profile, with his highest GB% of 42.3%, lowest FB% at 15.4%, and lowest hard-hit% at 34.6%. Breaking balls also exacerbate his pull frequency with a 46.2% Pull%, coming on a lot of those ground balls.

Na struggles with each pitch type in different areas of the strike zone, struggling at the top of the zone and at the bottom of the zone, where all the blue on his xwOBA on Swings map is located. He frequently swings at pitches on the inner half of the plate, whether it's a breaking ball or a fastball. Most of his breaking ball whiffs come on pitches down in the zone, like back foot curveballs or sliders. Against fastballs, his whiffs come up in the strike zone. Against offspeed pitches, he struggles to hit pitches that are down in the zone and breaking away from him from RHP. When he swings at pitches over the plate, Na fares extremely well, reinforcing his ability to hit the ball hard.

I don't think that MLB velocity is as much a concern for Na as it for someone like Kim Ha-seong, but Na needs to work on being more patient as a hitter. Fastballs up in the zone and breaking balls down in the zone are the name of the game in MLB and it's a bad sign that Na has those holes already against KBO pitching.

Na's power is undeniable, but considering his approach and the holes in his swing against KBO pitchers, I struggle to see Na being more productive than Park Byung-ho was in his short stint with the Twins (79 wRC+ and 32.8% K% in 244 PAs). The power is enticing, but I expect him to pair that with a lot of swing-and-miss against MLB pitchers.

Resources

- Check out Na Sung-bum's player page on the KBO Wizard
- Na Sung-bum FanGraphs page
- Na Sung-bum MyKBO page