Dan Straily End of Season Report

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Introduction

Making his debut in the KBO with the Lotte Giants, Dan Straily had a fantastic season. Over 194.2 IP, he showcased each of his four pitches and the improvements that he's made to them and the results were great. He was one of the two best pitchers in the KBO and is likely to win the KBO's Golden Glove award for the best pitcher. He accumulated 205 strikeouts, a remarkable feat in any league around the world, and the most in the KBO for the 2020 season.

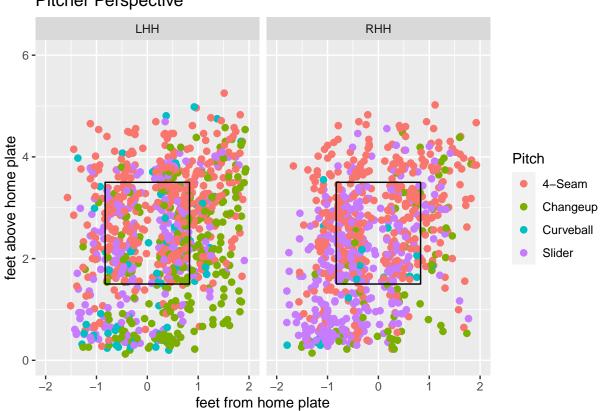
Since his last MLB stint with the Baltimore Orioles, Straily has made changes to the pitches in his arsenal, increasing their effectiveness and swing-and-miss ability. The main concern regarding Straily surrounds his batted ball profile and whether being a fly-ball heavy pitcher is sustainable in MLB. Some of this could be alleviated by throwing his secondary pitches, notably his changeup, more to reduce his reliance on his 4-seam fastball.

His KBO success and end-of-season numbers are very similar to and arguably even surpass the numbers that Josh Lindblom posted in 2019 with the Doosan Bears before jumping back to MLB with the Milwaukee Brewers. Lindblom makes much more sense as a Straily comp than Kwang Hyun-kim, given that Straily and Lindblom are more strikeout oriented, fly-ball pitchers while Kwang has carved out a niche as a groundball pitcher for the Cardinals. Straily's success in the KBO could present him with two options for the 2021 season and beyond.

I believe that Straily's success has opened a door back to MLB as a back end of the rotation starter who comes in to get strikeouts and go twice through the order. Or, he may remain in Korea with the KBO, where he can be the undisputed ace of a team and one of the best pitchers in the entire league.

Vitals	Pitch Type	Avg MPH	$\mathrm{Usg}\%$
Throws: RHP	4-Seam	89.7	44.2%
Age: 31	Slider	83.8	33.5%
DOB: 12/01/1988	Changeup	83.9	17.4%
Height: 6' 2"	Curveball	74.9	4.9%
Weight: 220 lbs			

Pitch locations for Dan Straily. Data for 1743 pitches from May 10th and July 31st to October 23rd starts was manually charted from ESPN/Twitch broadcasts.



Pitcher Perspective

Stats from FanGraphs for entire season (3157 pitches, 194.2 IP) for Dan Straily

Season	Team	К%	$\mathbf{BB\%}$	K-BB%	AVG	WHIP	BABIP	LOB%	ERA	FIP
2020	Lotte Giants	26.4%	6.6%	19.8%	0.206	1.02	0.274	75.5%	2.5	2.97

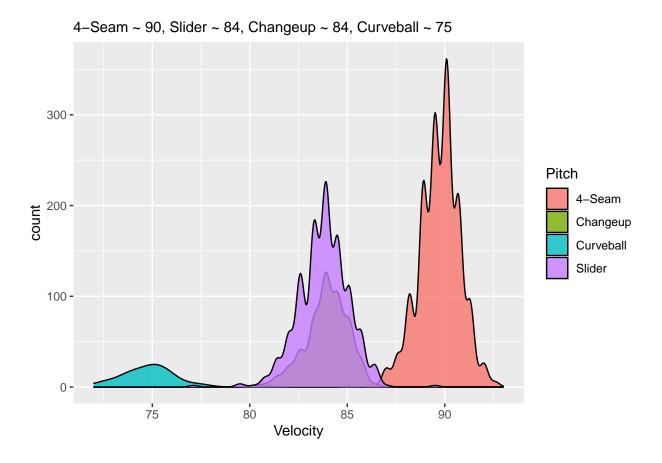
Overall Charted Stats for Dan Straily

Pitcher	Pitches	wOBA	xwOBA	xwOBACON	$\mathbf{CSW\%}$	$\mathbf{SwStr}\%$	Whiff%	$\mathbf{CS\%}$	$\mathbf{Swing}\%$	Contact%
Straily	1743	0.288	0.317	0.372	31.3	14.3	28.1	17.0	50.8	71.9
KBO	28058	0.338	0.340	0.363	27.5	10.3	22.0	17.2	47.0	78.0

Overall Charted Batted Ball Event Data for Dan Straily

Pitcher	BBEs	$\mathbf{GB}\%$	FB%	LD%	PU%	$\mathbf{Soft}\%$	Medium%	Hard%	Pull%	${\it Straight\%}$	Орро%
Straily	277	40.8	29.6	17.3	12.3	30.3	39.7	30	28.5	45.1	26.4
KBO		51.2	26.4	13.7	8.7	30.3	40.6	29	34.3	42.7	23.1

Dan Straily Velocity Distribution

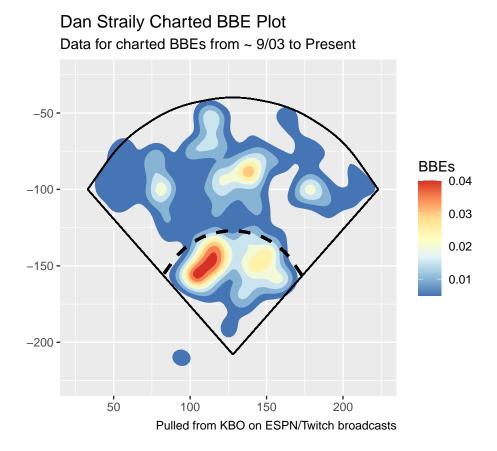


Dan Straily Pitch Usage by Batter Handedness

Bats	Pitches	$4\text{-}\mathrm{Seam}\%$	$\mathbf{Slider}\%$	Changeup%	Curveball%
LHH	928	42.2	24.9	25.8	6.8
RHH	815	46.3	43.1	7.9	2.7

Pitch	Velo	Usg $\%$	Pitches	wOBA	xwOBA	$\mathbf{CSW\%}$	$\mathbf{SwStr}\%$	Whiff%	$\mathbf{CS\%}$	$\mathbf{Swing}\%$	Contact%
4-Seam	89.7	44.2	769	0.331	0.392	27.2	9.2	18.7	17.9	49.3	81.3
Slider	83.8	33.5	582	0.250	0.259	38.1	20.6	35.9	17.5	57.4	64.1
Changeup	83.9	17.4	303	0.250	0.286	28.1	15.8	33.1	12.2	47.9	66.9
Curveball	74.9	4.9	85	0.446	0.272	31.8	11.8	38.5	20.0	30.6	61.5

Pitch	Velo	Usg $\%$	xwOBACON	BBEs	$\mathbf{GB}\%$	$\mathbf{FB}\%$	LD%	PU%	$\mathbf{Soft}\%$	$\mathbf{Med}\%$	Hard%
4-Seam	89.7	44.2	0.384	124	31.5	32.3	20.2	16.1	25.0	42.7	32.3
Slider	83.8	33.5	0.364	91	40.7	29.7	15.4	14.3	34.1	38.5	27.5
Changeup	83.9	17.4	0.364	52	61.5	19.2	17.3	1.9	38.5	34.6	26.9
Curveball	74.9	4.9	0.363	9	55.6	44.4	0.0	0.0	22.2	33.3	44.4



Dan Straily, a 31-year-old RHP with 803.1 IP of MLB experience spread across stints with the Athletics, Astros, Reds, Marlins, and Orioles, made his KBO debut with the Lotte Giants in 2020. Straily was one of the two best pitchers in the league and showcased excellent swing and miss stuff, with a revamped slider and changeup that missed a lot of bats. He made 31 starts for the Giants, going 194.2 IP and never missing a start, a new professional high for innings pitched. He was even able to limit some hard contact, which was his biggest problem in MLB; of course, it helps to have defensive wiz, Dixon Machado vacuumming up groundballs at shortstop where Straily allowed a lot batted balls.

Straily threw 4 pitches during his time with the Giants but made a few adjustments to his usage numbers. He throws his 4-seam fastball 44.2% of the time, coming in at about 89.7 mph and ~ 2,600 rpm with its usage fairly equally distributed against RHH and LHH. His slider was the biggest mover, jumping up to a 33.5% usage rate at 83.8 mph and ~ 2,900 rpm, a pretty significant increase in usage after throwing it about 20% of the time with the Orioles in 2019. He relied heavily on his slider against RHH, throwing it 43.1% of the time versus 24.6% of the time against LHH. His changeup, at about 83.9 mph, was a weapon against LHH and an excellent development in Straily's arsenal, with a 17.4% overall usage% that breaks down to 25.8% against LHH and just 7.9% against RHH. Lastly, Straily threw a curveball at 74.9 mph around 4.9% of the time, a higher rate than he ever did in MLB.

Straily's velocity numbers stayed pretty stable compared to his MLB numbers, but he focused more on increase the spin rate/movement profiles on his pitches. Since the NC Dino's home park displays spin rate, I've been able to get an idea of what some of his spin rates looked like. His fastball spin jumped from about 2,400 rpm to around 2,600 rpm with Lotte, along with an increase in spin efficiency. Along with those numbers, Straily's movement profile on his fastball has changed, with more rise and more horizontal movement that he had with Baltimore. He's always been a high spin guy (fastball spin in 72nd percentile and curveball spin in the 80th percentile in MLB) and these changes have maximized some of his pitches. His slider has also been a huge area of focus, with its spin rate jumping from 2,650 rpm in MLB up to around 2,900 rpm with Lotte.

While his 4-seam fastball accounts for his highest usage%, its heavy usage comes in extreme hitter counts where he needs to get back a strike. When Straily is ahead in the count, it's a steady diet of sliders against RHH and a combination of slider/changeups against LHH, depending on how the at-bat has played out. His curveball usage is pretty infrequent, mostly commonly coming in 0-0, 0-1, or 2-2 counts against LHH as a sort of change of pace pitch; in it's limited sample size, his curveball actually had an excellent whiff% of 38.5% but a swing% of just 30.6%.

Side	Count	Pitches	$4\text{-}\mathrm{Seam}\%$	$\mathbf{Slider}\%$	Changeup%	Curveball%
RHH	00	198	56.1	33.8	6.6	3.0
RHH	01	116	48.3	37.9	8.6	5.2
RHH	02	92	40.2	50.0	8.7	1.1
RHH	10	66	39.4	56.1	3.0	1.5
RHH	11	71	32.4	47.9	12.7	7.0
RHH	12	116	35.3	53.4	9.5	1.7
RHH	20	16	87.5	12.5	0.0	0.0
RHH	21	26	53.8	30.8	15.4	0.0
RHH	22	63	38.1	50.8	9.5	1.6
RHH	30	6	83.3	16.7	0.0	0.0
RHH	31	12	66.7	33.3	0.0	0.0
RHH	32	33	54.5	42.4	3.0	0.0

Dan Straily Pitch Usage by Batter Handedness and Count

Side	Count	Pitches	$4\text{-}\mathrm{Seam}\%$	$\mathbf{Slider}\%$	Changeup%	Curveball%
LHH	00	230	46.5	18.7	25.2	9.1
LHH	01	104	36.5	21.2	26.9	14.4
LHH	02	68	44.1	25.0	23.5	7.4
LHH	10	95	50.5	22.1	25.3	2.1
LHH	11	88	30.7	33.0	31.8	3.4
LHH	12	110	30.0	28.2	34.5	7.3
LHH	20	31	61.3	25.8	12.9	0.0
LHH	21	54	51.9	24.1	20.4	3.7
LHH	22	86	30.2	33.7	27.9	8.1
LHH	30	6	100.0	0.0	0.0	0.0
LHH	31	18	61.1	27.8	11.1	0.0
LHH	32	38	50.0	34.2	15.8	0.0

Dan Straily's KBO debut with the Lotte Giants was a rousing success and one of the best seasons in the league. Over his 194.2 IP, Straily struck out a league-leading 205 hitters, making him just the 10th pitcher to hit the 200-K mark in KBO history. His 26.4% K% was the second-highest in the KBO as he tied for the 2nd-best ERA in the league at 2.50 and posted the 3nd-best FIP in the league at 2.97.

Straily swing-and-miss stuff was on full display, with the 2nd-highest SwStr% in the KBO at 14.3%, thanks to his phenomenal slider and the emergence of his changeup as a reliable swing-and-miss weapon, mostly against LHH. His 14.3% SwStr% would've tied for 10th in MLB in 2020 with Dinelson Lamet, while Straily threw far more innings than anyone in MLB did.

On the back of his swing-and-miss stuff, Straily posted a 31.3% Called Strike + Whiff% (CSW%), which ranked 2nd in the KBO. Among MLB pitchers, that 31.3% mark puts him near the top 15 pitchers over the last few seasons, in company with Stephen Strasburg and Charlie Morton.

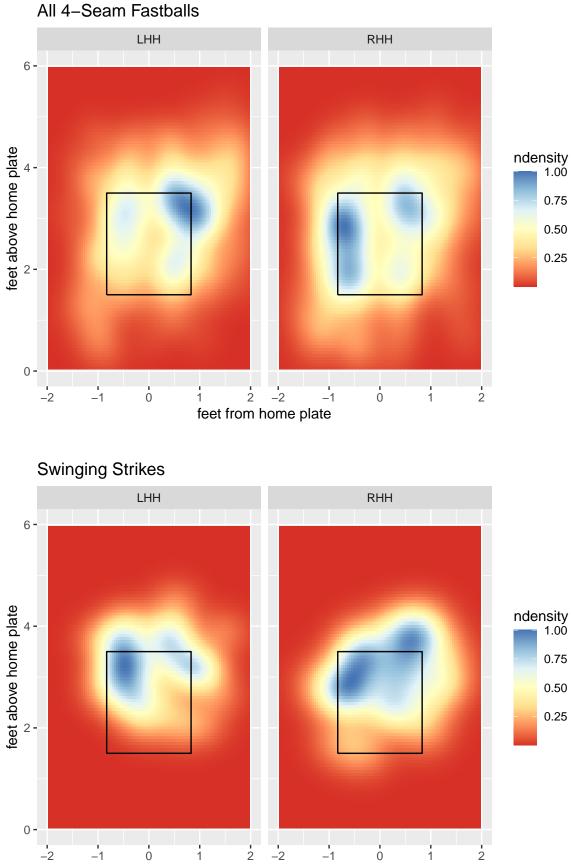
Straily allowed a wOBA of just 0.288, 6th-best in the KBO, and an xwOBA of 0.317, the 7th-lowest mark in the KBO. However, Straily also allowed an xwOBACON (xwOBA on contact) of 0.372, which was worse than average despite the lowest batting average allowed and third-lowest BABIP allowed, marks of 0.206 and 0.274.

This indicates that Dan Straily's batted ball profile was not ideal. He did do a good job of not allowing many HRs, with just 10 on the season for a 0.46 HR/9 rate, but his GB% of 40.8% was about 10 points below the KBO average of 51.2%. That 10 points showed up in his FB% and LD% that were both about 3.5% higher than the KBO average, but also in a slightly higher PU% (pop-up%) than average at 12.3% versus the KBO average of 8.7%. In terms of contact strength, Straily was average across the board, with his soft%, medium%, and hard-hit% all with plus-or-minus 1 percentage point of the KBO average. Allowing too much hard contact was Straily's downfall in 2019 and I fear his fly-ball tendencies may become more drastic again if an MLB return is indeed in store.

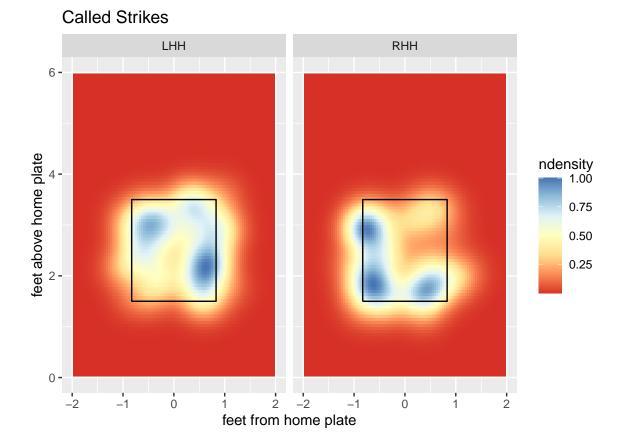
Regardless, Straily produced some of the most memorable and dominant performances in the KBO this season. He holds the unofficial record for swinging strikes in a game with 27 versus the SK Wyverns on May 10th and produced three more 20 whiff games, giving him four of the top eight swing and miss outings in the KBO. He produced a 38.2% CSW% against the powerful KT Wiz on September 22nd, with 24 called strikes and 15 whiffs out of 102 pitches.

Whatever path Dan Straily chooses, his 2020 KBO season was an impressive run for the veteran and a season worth remembering.

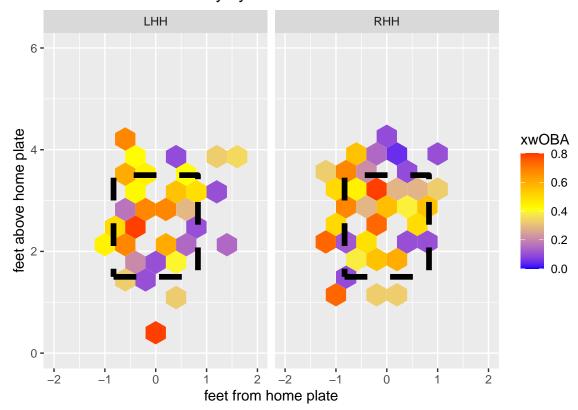
Dan Straily 4-Seam Fastball

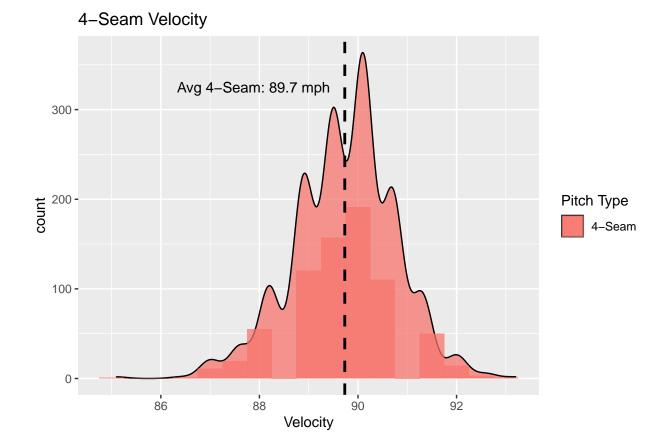


feet from home plate



xwOBA on Balls in Play by Pitch Location





Dan Straily 4-Seam Stats

Pitch	Velo	Usg $\%$	wOBA	xwOBA	$\mathbf{CSW\%}$	$\mathbf{SwStr}\%$	Whiff%	$\mathbf{CS\%}$	$\mathbf{Swing}\%$	Contact%
4-Seam	89.7	44.2	0.331	0.392	27.2	9.2	18.7	17.9	49.3	81.3

4-Seam Stats by Batter Handedness

Bats	$\mathbf{Usg}\%$	$\mathbf{CSW\%}$	$\mathbf{SwStr}\%$	Whiff%	$\mathbf{CS\%}$	$\mathbf{Swing}\%$	Contact%	Strike%
RHH	46.3	27.1	8.2	16.8	18.8	48.8	83.2	67.6
LHH	42.2	27.3	10.2	20.8	17.1	49.0	79.2	66.1

Dan Straily 4-Seam BBEs

Pitch	Velo	Usg $\%$	xwOBACON	BBEs	$\mathbf{GB}\%$	$\mathbf{FB}\%$	LD%	PU%	$\mathbf{Soft}\%$	$\mathbf{Med}\%$	Hard%
4-Seam	89.7	44.2	0.384	124	31.5	32.3	20.2	16.1	25	42.7	32.3

Dan Straily's main pitch is his 4-seam fastball, throwing it 44.2% of the time and averaging around 89.7 mph, touching 92 mph at times. That's a decrease of about 10% in terms of usage from his 2019 MLB stint, most of which has gone towards throwing his slider more. With Lotte, Straily's fastball focus has been to increase his spin rate and spin efficiency on his fastball. He's been successful as his fastball spin

rate has jumped from around 2,365 rpm to about 2,550-2,600 rpm with Lotte. Straily's fastball spin was already in the 72nd percentile among MLB pitchers and this improvement puts him among the top 10-15 MLB pitchers in terms of fastball spin.

With that increased and more efficient spin, his fastball movement has increased as well. He's gotten a little more rise, which was already about/just above average, while significantly increasing the horizontal movement on his fastball, which already broke 27% more break than average in 2019. Straily maximizes this movement/spin profile really well by throwing a lot of his fastballs up in the zone and away from hitters. With that extra spin and less drop, it's a deceiving pitch to hitters and results in all those swings and misses at the top of the strike zone. In terms of KBO 4-seamers, Straily's whiff% of 18.7% was the 3rd-best in the league, behind the 4-seam fastballs of Chris Flexen and Raùl Alcàntara, who average 92.5 mph and 93.8 mph on their fastballs respectively.

Left-handed hitters bear the brunt of the swing and miss approach, with a 20.8% whiff% compared to a 16.8% whiff% against RHH. On the flip side, Straily has an 18.9% called strike% against RHH and a 17.1% CS% against LHH. That's where some more of the movement profile plays. With the extreme amount of horizontal arm side break that he gets, fastballs up and away lead to whiffs from LHH as the pitch drops less than expected and moves away from them. Against RHH, Straily did an excellent job of using his fastball low in the zone for the called strike and on the outside edge of the zone, starting just off the plate before his fastball came back over the edge of the plate for a called strike. Pair that with similar movement up in the zone and it was an effective swing and miss combo.

The concern with Straily, and particularly with his 4-seam fastball, is the type of batted balls that he allows. His 4-seam had a good (for a 4-seam) 27.2% CSW% and a wOBA of 0.331, a little bit better than the KBO average. However, his xwOBA of 0.392 and xwOBACON of 0.384 are not as pretty, with both numbers below the KBO average. When opposing batters got the bat on Straily's 4-seam, they usually hit it pretty well; his 4-seam GB% of 31.5% was the 2nd lowest in the KBO (minimum of 35 BBEs) and his LD% of 20.2% was the highest in the KBO, along with a hard-hit% of 32.3% that grades out as average among KBO 4-seam fastballs. His unsightly 0.392 xwOBA is a product of when he throws his 4-seam fastball; it's the pitch that Straily throws the most in 3-0, 3-1, and 3-2 counts so it does results in some walks which reflects poorly on his xwOBA.

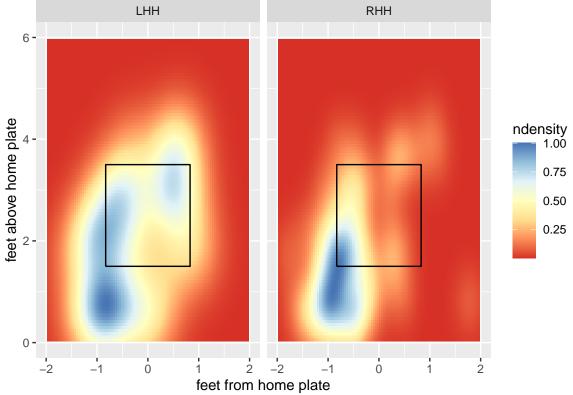
KBO hitters destroyed his fastball when he threw it down the middle of the plate (naturally), while RHH struggled with heaters up in the zone. Against LHH, Straily's fastball indeed most of it's weak contact down and away, using that horizontal movement away to go off of the end of the bat.

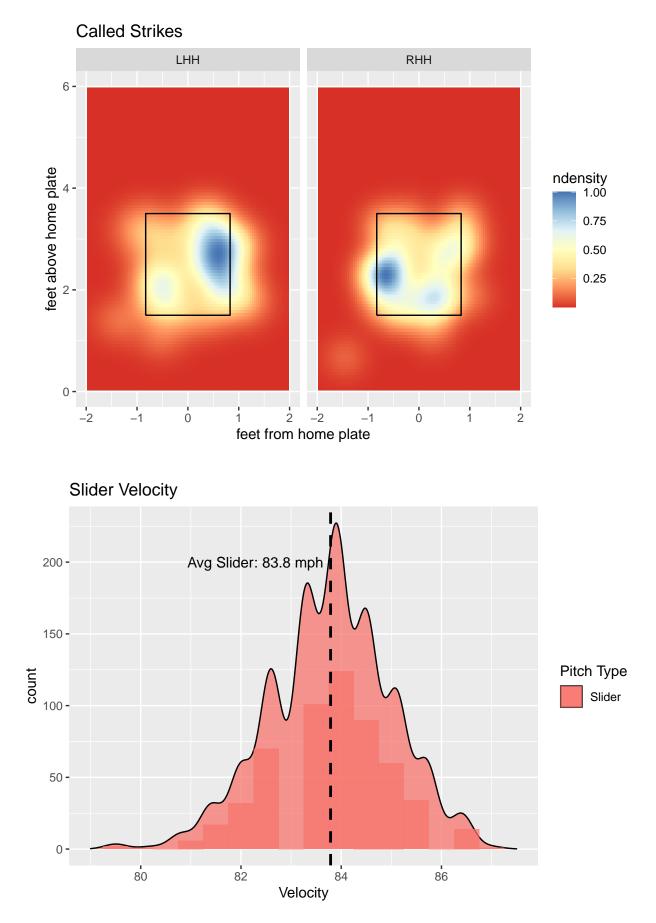
His batted ball profile is a concern because it's the same problem that his 4-seam had in MLB. With the Orioles, his 4-seam had an xSLG allowed of 0.753, an xwOBA of 0.470, an average EV of 92.5 mph, and an average launch angle of 27 degrees. That's a lot of hard-hit baseballs. Straily was able to deal with it in the KBO since he missed so many bats, but it may be more of a problem against MLB hitters. Straily has always been a "fly ball" pitcher, but in his most successful seasons, 2016 and 2017, he missed more bats, especially with his secondary pitches, while still getting ground balls at about a 33-35% clip, as opposed to a 27% GB% in 2019. Straily did only allow 0.46 HR/9 this season after averaging 1.50 HR/9 in MLB, but that may have been more a result of moving to the KBO.

Digging into his Baseball Savant page, there doesn't appear to be much that has changed from 2016-2017 to 2019 for Straily and his fastball usage. When push comes to shove the most important number surrounding Straily's fastball is 89.7 mph. While the increased spin and movement are helping counteract his below-average fastball velocity, if it drops much further, I have some doubts about whether it can be an effective pitch. However, Straily's increase in slider and changeup usage could help with his fastball effectiveness as hitters see it less frequently.

Dan Straily Slider







Pitch	Velo	Usg $\%$	wOBA	xwOBA	$\mathbf{CSW\%}$	$\mathbf{SwStr}\%$	Whiff%	$\mathbf{CS\%}$	$\mathbf{Swing}\%$	Contact%
Slider	83.8	33.5	0.25	0.259	38.1	20.6	35.9	17.5	57.4	64.1

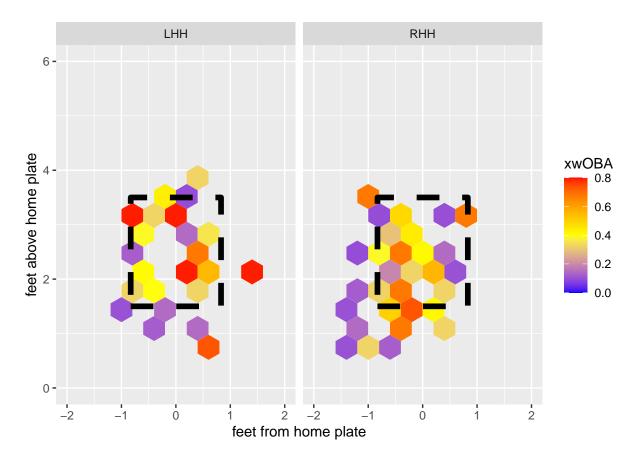
Dan Straily Slider Stats by Batter Handedness

Bats	$\mathrm{Usg}\%$	$\mathbf{CSW\%}$	$\mathbf{SwStr}\%$	Whiff%	$\mathbf{CS\%}$	$\mathbf{Swing}\%$	Contact%	Strike%
RHH	43.1	41.0	24.2	41.5	16.8	58.4	58.5	75.2
LHH	24.9	33.8	15.2	27.1	18.6	55.8	72.9	74.5

Dan Straily Slider BBEs

\mathbf{Pitch}	Velo	Usg $\%$	xwOBACON	BBEs	$\mathrm{GB}\%$	$\mathbf{FB}\%$	LD%	PU%	$\mathbf{Soft}\%$	$\mathbf{Med}\%$	Hard%
Slider	83.8	33.5	0.364	91	40.7	29.7	15.4	14.3	34.1	38.5	27.5

Dan Straily Slider xwOBA on Balls in Play



Dan Straily's slider might have been the best individual pitch in the KBO season. He threw it 33.5% of the time at 83.8 mph, with a spin rate around 2,900 rpm. He threw it heavily against both RHH and LHH, mixing up his approach when necessary and it was fantastic. According to Baseball Savant, his

slider moves more side to side than average, while breaking vertically a little less than normal, with an average of 6 inches of horizontal break that graded out as 13% more break than average.

His slider was incredibly effective as a swing-and-miss pitch, netting a 20.6% SwStr% and a Whiff% of 35.6%. Hitters produced just a 0.250 wOBA and 0.259 xwOBA against his slider. Straily is extremely confident in the pitch, especially against RHH.

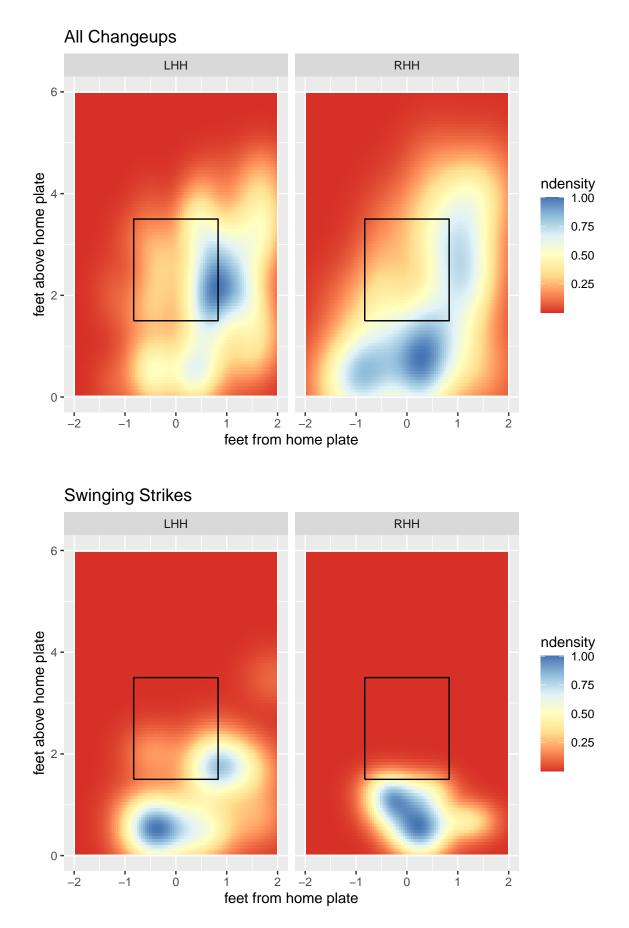
Against RHH, Straily threw his slider a whopping 43.1% of the time, netting a ridiculous 41.1% CSW% and 24.3% SwStr%. He threw it more than his fastball in almost every situation beyond the early parts of the count or when he was in a big hitter's count, throwing it 50% of the time in 0-2 counts, 56.1% in 1-0 counts, 53.4% in 1-2 counts, and 50.8% of the time in 2-2 counts. Straily primarily locates his slider down and away from RHH, where he nets most of those whiffs, plus a few called strikes that catch the edge of the strike zone.

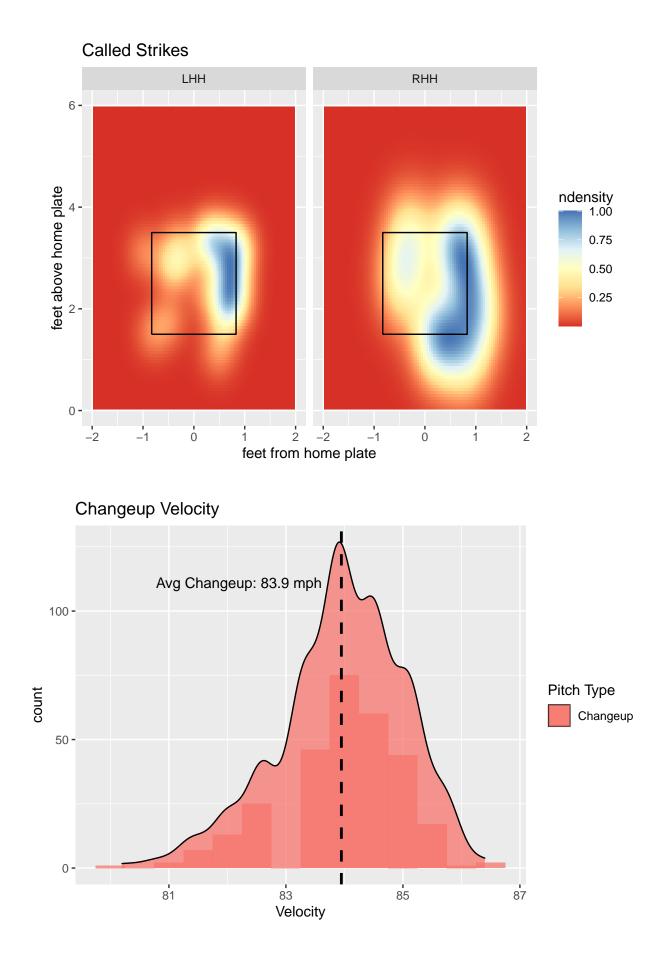
Against LHH, Straily's slider usage takes on a different form. He still throws it 24.9% of the time, but his approach changes. His slider has a 33.8% CSW% against LHH, but a 18.6% CS% versus a (relatively) lower SwStr% of 15.2%. His location shifts as well, depending on the goal of the pitch; when he's hunting called strikes against LHH, Straily tends to locate the pitch on the outside part of the zone, letting the late horizontal movement come back across the plate. For swings-and-misses, Straily loves to bury back foot sliders, working in the same place that he does against RHH. The drop and movement towards the hitter come late and almost always result in a swing over the top of the pitch.

A good sign is that his slider has a (slightly) better batted ball profile than his 4-seam, with an xwOBACON of 0.364. His slider had a GB% of 40.7% and a PU% of 14.3% in the KBO, while his LD% drops to just 15.4%, as his hard-hit% also drops to 27.5%. Again, when Straily's slider hung over the middle of the zone, it got hit pretty hard. But when he located it down and away or inside to RHH as well as down in the zone against LHH, they struggled to hit it very hard. Those were also his most common swing and miss locations, making that an excellent place to consistently attack with the horizontal movement that Straily's slider has.

It's not perfect, but I'm much more comfortable with Straily's slider BBE profile considering how many swings and misses he gets as well. In Straily's best MLB seasons, his slider had a whiff% around 30+% and a usage% similar to what he put up in the KBO. I believe that Straily's slider is a phenomenal pitch and can be a swing-and-miss weapon against both RHH and LHH MLB hitters.

Dan Straily Changeup





Pitch	Velo	Usg $\%$	wOBA	xwOBA	$\mathbf{CSW\%}$	$\mathbf{SwStr}\%$	Whiff%	$\mathbf{CS\%}$	$\mathbf{Swing}\%$	Contact%
Changeup	83.9	17.4	0.25	0.286	28.1	15.8	33.1	12.2	47.9	66.9

Dan Straily Changeup Stats by Batter Handedness

Bats	$\mathrm{Usg}\%$	$\mathbf{CSW\%}$	$\mathbf{SwStr}\%$	Whiff%	$\mathbf{CS\%}$	$\mathbf{Swing}\%$	Contact%	$\mathbf{Strike}\%$
LHH	25.8	28.0	16.3	32.5	11.7	50.2	67.5	61.9
RHH	7.9	28.1	14.1	37.5	14.1	37.5	62.5	51.6

Dan Straily Changeup BBEs

Pitch	Velo	Usg $\%$	xwOBACON	BBEs	$\mathbf{GB}\%$	$\mathbf{FB}\%$	LD%	PU%	$\mathbf{Soft}\%$	$\mathbf{Med}\%$	Hard%
Changeup	83.9	17.4	0.364	52	61.5	19.2	17.3	1.9	38.5	34.6	26.9

Date	Against	4-Seam%	Slider%	Changeup%	Curveball%
5.10	SK	51.1	29.8	16.0	3.2
7.31	Kia	40.9	44.3	7.8	7.0
8.06	SK	43.2	28.4	27.3	1.1
8.12	NC	40.2	34.6	21.5	3.7
8.18	Doosan	35.1	32.0	32.0	1.0
8.23	Samsung	45.9	38.8	12.2	3.1
8.29	Hanwha	41.6	35.4	15.0	8.0
9.04	Kia	42.4	34.3	17.2	6.1
9.10	Samsung	37.0	36.0	19.0	8.0
9.16	Kiwoom	54.6	22.2	18.5	4.6
9.22	KT	48.0	23.5	22.5	5.9
9.27	Kia	44.0	30.3	16.5	9.2
10.02	Hanwha	49.0	35.0	10.0	2.0
10.07	KT	43.9	39.8	11.2	5.1
10.13	LG	39.4	37.5	18.3	4.8
10.18	NC	50.0	30.6	16.7	2.8
10.23	SK	43.7	34.0	16.5	5.8

Dan Straily Pitch Usage by Start

The emergence of Dan Straily's changeup as a reliable swing-and-miss pitch was a phenomenal development for his continued success. Coming in around 83.9 mph, Straily threw it 17.4% of the time, mostly against LHH, with a 25.8% usage against LHH versus just 7.9% against RHH. As a pitch, it performed very well, with a 28.1% CSW% that was mostly carried by the 15.8% SwStr% that he induced along with a 0.250 wOBA and 0.286 xwOBA. For the most part, Straily threw his changeup out of the

zone, working away to LHH and inside against RHH, which accounts for his low CS% of 12.2% on the pitch. Most of Straily's swings-and-misses came on changeups in the dirt while changeups up resulted in more called strikes or balls in play.

One of the things that I noticed about Straily's outings is how he used his changeup. Early in games, he'd be incredibly reliant on his fastball and slider the first and second times through the order. But, as the game went on, he would incorporate his changeup more into his approach. Some of that variance is matchup dependent as he primarily throws the changeup against LHH, but it's something interesting to note. Mixing his changeup into his approach earlier in the game could reduce some of his reliance on his fastball against MLB hitters, which could help him be more effective if he's only going through an opposing lineup twice.

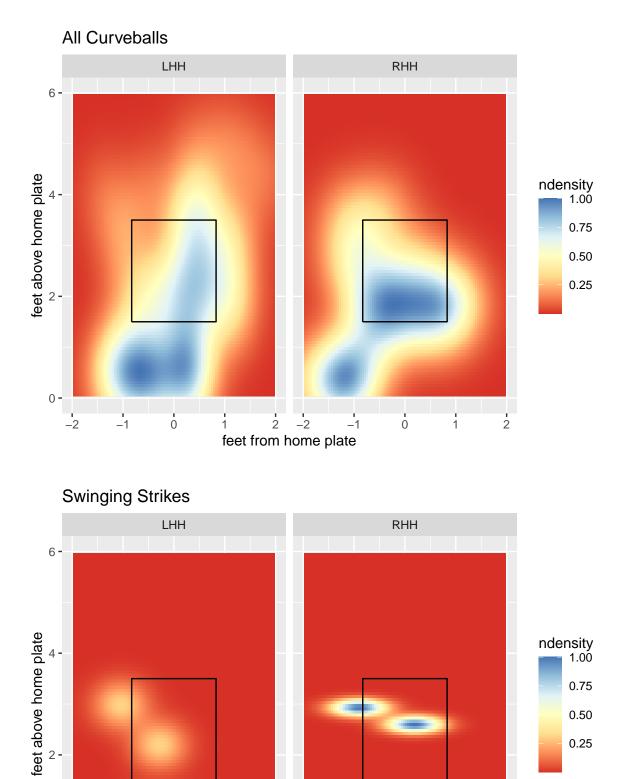
Throughout the season, his changeup usage fluctuated based on the opposing team but notably peaked against the Doosan Bears as he threw it 32% of the time. Doosan's main lineup is incredibly left-handed hitter heavy, so it made sense for Straily to attack them with a lot of changeups, with his pitch distribution almost spread evenly across all his pitches, with a 35% 4-seam% and 32% slider%.

His changeup usage was pretty stable in all counts against LHH; the only times his changeup usage dipped below 20% were in 2-0, 3-0, 3-1, and 3-2 counts where he needed a strike to get back on track, usually throwing his 4-seam in that situation. His highest usage situations were in 1-2 counts (34.5%), 1-1 counts (31.8%), and in 2-2 counts (27.9%) where getting a swing and miss was beneficial.

Straily's changeup has the most favorable batted ball profile out of all of his pitches, even if his xwOBACON of 0.364 is equal to his slider's xwOBACON. His changeup induced a 61.5% GB%, a 19.2 FB%, and allowed the least hard contact of any of his main pitches, with a hard-hit rate of 26.9%. His changeup breaks arm-side, which leads to a lot of that contact off of the end of the bat from LHH or jammed contact from RHH.

At it's best, Straily's changeup (thrown with a circle change grip) behaved like a slider from a LHP that just kept diving away from LHH. At 83.9 mph, his changeup's velocity and release are nearly identical to his slider, making it a great complement to his fastball/slider combination as a groundball and whiff pitch. Straily threw it just 17.4% of the time in the KBO and mostly against LHH, but I'd be interested in seeing what more of a 25% usage% looked like. Some of that will always be matchup dependent, but throwing his changeup would continue to reduce his dependence on his 4-seam fastball which does not perform as well as his changeup does.

Dan Straily Curveball



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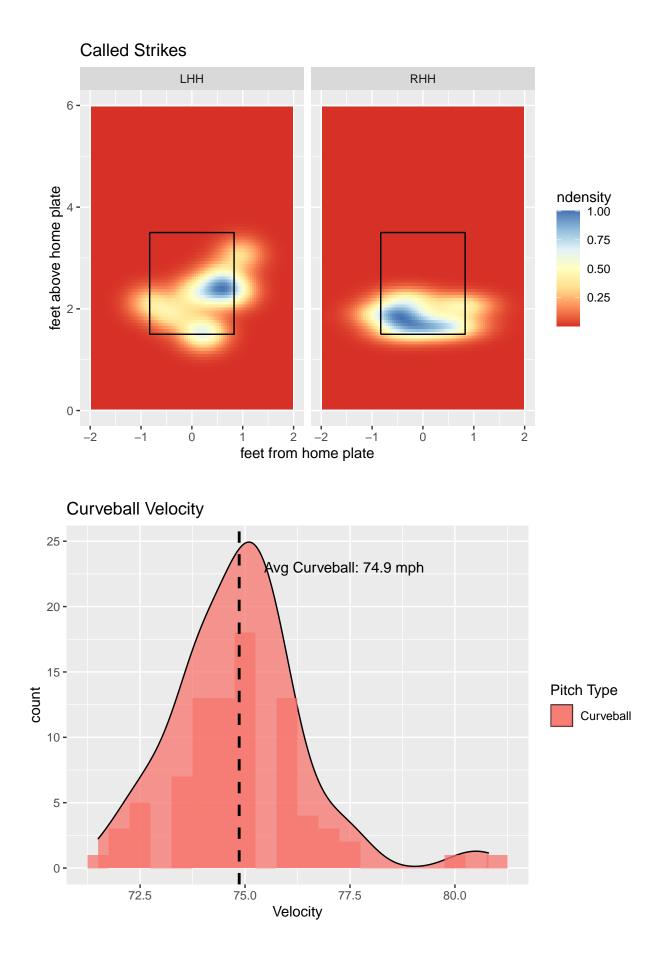
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Pitch	Velo	Usg $\%$	wOBA	xwOBA	$\mathbf{CSW\%}$	$\mathbf{SwStr}\%$	Whiff%	$\mathbf{CS\%}$	$\mathbf{Swing}\%$	Contact%
Curveball	74.9	4.9	0.446	0.272	31.8	11.8	38.5	20	30.6	61.5

Dan Straily Curveball Stats by Batter Handedness

Bats	$\mathbf{Usg}\%$	$\mathbf{CSW\%}$	$\mathbf{SwStr}\%$	Whiff%	$\mathbf{CS\%}$	$\mathbf{Swing}\%$	Contact%	Strike%
LHH	6.8	28.6	12.7	44.4	15.9	28.6	55.6	44.4
RHH	2.7	40.9	9.1	33.3	31.8	27.3	66.7	59.1

Dan Straily Curveball BBEs

Pitch	Velo	Usg $\%$	xwOBACON	BBEs	$\mathbf{GB}\%$	$\mathbf{FB}\%$	LD%	PU%	$\mathbf{Soft}\%$	$\operatorname{Med}\%$	Hard%
Curveball	74.9	4.9	0.363	9	55.6	44.4	0	0	22.2	33.3	44.4

Dan Straily continued to add a curveball to his repertoire in the KBO, throwing it 4.9% of the time, up from 3.5% of the time in 2019 with the Orioles. It averaged about 74.9 mph and around 2,900 rpm, about where it was in MLB. As mentioned earlier, Straily has always been a high spin guy, with his 2019 curveball spin of 2,729 rpm ranking in the 80th percentile and it's been interesting to see him incorporate that into his approach as his curveball usage increased over the season, peaking against teams he faced before.

The result this season has been a big looping curve that has a lot of late vertical drop. As a whole, it's more of a change of pace pitch from him, with a swing% of 30.6% that is one of the 3 lowest swing rates on an individual pitch in the KBO. When hitters have swung, they have not fared well, with a 38.5% whiff% that translates into an 11.8% SwStr%. But the absence of swings has allowed Straily to accumulate a good 20% CS% on the pitch, which is great because he frequently throws it in 0-0 and 0-1 counts against LHH. Getting those called strikes gets him ahead in the count and sets up the slider/changeup. His curveball locations are indicative of that approach, with most of his curveballs landing in the lower half of the zone or below.

Given that he only allowed 9 batted balls off of his curveball, it's hard to evaluate his batted ball profile and results. He allowed a wOBA of 0.446, but an xwOBA of just 0.272. His xwOBACON of 0.363 is similarly noisy as he induced 5 ground balls and 4 fly balls. The curveball could be a pitch that Straily throws more against MLB hitters, but it is hard to evaluate from this KBO season given the small sample size of curveballs that Straily threw. It served him well as a change of pace pitch and I think it's capable of the same thing in 2021 and MLB.

Resources

- KBO Wizard to host 28,000+ charted KBO pitches
- Breaking down Dan Straily's success and August 23rd start against the Samsung Lions
- Breaking down Dan Straily's slider
- A look at the effectivenss of Straily's changeup
- Straily's fastball, slider, and changeup
- Close up of Straily's changeup and grip
- A minute of 20 Straily whiffs against the NC Dinos on October 18th
- Dan Straily's Curveball
- More Dan Straily GIFs
- Dan Straily's FanGraphs page
- Dan Straily's Baseball Savant page
- Dan Straily's Brooks Baseball page