Analysis of Bobby Miller's 2024 Season & 7th Inning Strategy vs. Padres (2/11/2025)

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I. Evaluation of Bobby Miller's Decline in 2024

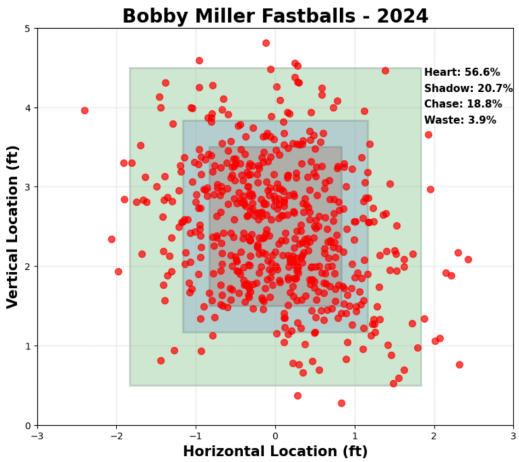
Following his promising 2023 debut season, several factors contributed to a sharp decline in performance from rookie Bobby Miller in 2024.

Pitch Changes:

Year	Pitch	MPH	BA	SLG	wOBA	xwOBA	HH%	Whiff%	Spin	ΔSpin
2023	CH	88.2	0.133	0.307	0.214	0.211	28.0	39.9	2290	-
2024	CH	86.4	0.130	0.217	0.211	0.197	25.0	41.0	2248	-42
2023	CU	80.6	0.184	0.303	0.231	0.242	36.2	36.0	2812	-
2024	CU	79.8	0.357	0.536	0.404	0.374	61.9	28.6	2651	-161
2023	FF	99.0	0.258	0.367	0.296	0.315	40.6	20.6	2341	-
2024	FF	97.6	0.327	0.634	0.447	0.460	50.6	16.7	2294	-47
2023	SI	98.8	0.256	0.378	0.329	0.346	40.3	18.3	2297	-
2024	SI	97.3	0.433	0.900	0.585	0.512	55.6	17.4	2260	-37
2023	SL	89.9	0.250	0.424	0.303	0.282	38.5	29.2	2510	-
2024	SL	88.6	0.333	0.619	0.418	0.346	33.3	27.5	2383	-127

Analysis:

- Across the board drop in spin rate, notably 6% on curveball and 5% on slider
- Measurable increase in HardHit% on fastball and sinker, massive increase on curveball
- Loss of 1.3 to 1.8 mph on all pitches suggests shoulder issues or mechanical inefficiencies
- Fastball misses started flying way out of the zone, limiting tunneling with off-speed (see figure).



2023: Heart 59.5%, Shadow 21.7%, Chase 15.5%, Waste 3.3%

Unlike the rest of his arsenal, the **sinker** was virtually identical in shape between 2023-24, but hitters had much higher production against it in 2024 (below).

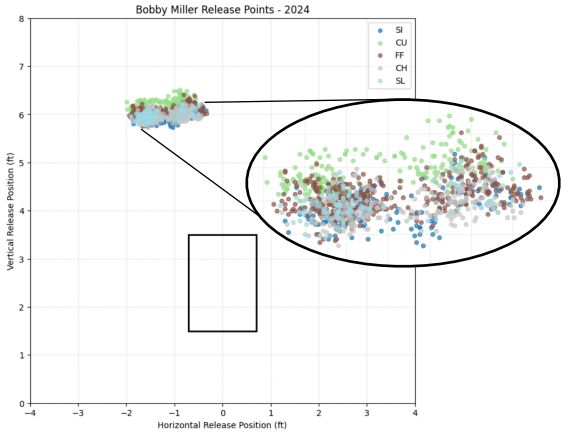
Year	MPH	iHB	iVB	VAA	Spin	PAR	HR/FB%	Brl%	HH%	xwOBA
2023	98.7	14.1	13.1	-5.0	2,297	17.8	10.5	5.1	36.7	0.331
2024	97.3	14.1	13.2	-5.4	2,260	8.6	57.1	14.8	55.6	0.537

Miller threw this pitch about 6% more in two-strike counts, now focusing on throwing it low and inside to righties, but his putaway rate dropped to 8.6% as he struggled to create outs with two strikes. After losing 1.4 mph, without the sinker being able to play off four effective pitches as it did in 2023, its barrel and hard-hit rates ballooned, as well as the home-run/fly ball ratio increasing by 46.6%.

Mechanics:

Miller also made several mechanical changes that had adverse effects on his pitches.

1) Miller tightened up his release point, but there is a clear shift in Miller's foot placement towards third base, which may have impacted his delivery and release point consistency. This change creates a more direct delivery to maintain shoulder health by lessening the external rotation and deceleration stress on the front of his shoulder. It *should* promote a more efficient, linear transfer of energy from his lower body through his core to his arm.



Graph shows more consistent release point density, but there are two clusters, indicating positioning adjustment

However, Miller did not make an adjustment on his landing foot (below). This left him more open coming to the plate, which isn't inherently bad. But Miller likely overcompensates for the change in approach angle by forcing his arm to work harder to catch up, placing undue stress on his shoulder, and contributing to his command issues.

Setup and landing, 6/17/23 (left) vs 8/23/24 (right)

2) Though Miller did a better job in 2024 with being consistent in his release point, he inadvertently added 1.28 inches between his curveball and fastball vertical release point, overall increasing the difference in arm angle between the two pitches from 3.4 to 4.9 degrees, limiting the curveball's ability to tunnel off his fastball. This, combined with both pitches losing spin, velocity, and movement, hindered the effectiveness of both pitches and led to the increase in HardHit%.

Recommendations:

- I believe Miller should consider abandoning his sinker, which has failed to create groundouts**.** The movement profile of his sinker is redundant with his changeup, and I recommend Miller explores swapping it for a cutter as another option for lefties or splitter if he wants a pitch that lives low.
- Restore proper hip-shoulder separation during the low-intensity phase of his throwing program, ensuring his hips initiate rotation *before* his upper body, maximizing energy transfer and arm speed.

II. Inning Analysis (B7, 9/26/24):

1) Musgrove's/Higashioka's Pitch Selection and Misses

During Muncy's at-bat, Musgrove and Higashioka struggled to locate pitches, often missing outside the established tunnel of their pitch sequences. Muncy has a great eye for the outer shadow of the zone and had already taken a curveball. Musgrove tries to get him looking with two backdoor sliders but can't locate, so they pivot to a curveball inside that fastball tunnel, but it misses for a walk, setting up Smith tying the game. For further evaluation, I'd be interested in seeing Higashioka and Musgroves' gameplan for facing Muncy, as well as the Dodger's internal scouting report for Musgrove past the 6th inning.

2) Hernandez substitution AB vs Tanner Scott

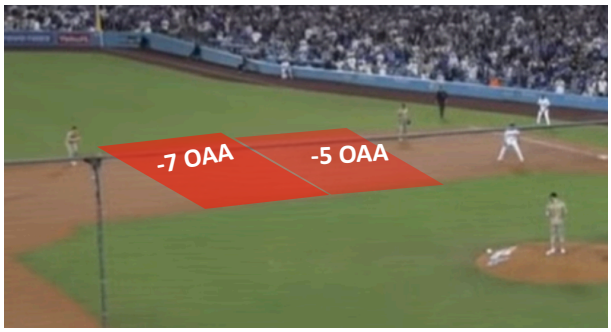
LHP Scott is brought in to face Lux, who is then substituted for Hernandez. This is a logical move for SD to force Lux's bat out of the lineup. For the Dodgers, Hernandez adds defensive utility with the substitution and had a hot bat, hitting .429 over the last 6 games. On paper, this is the best move for both teams.

Player	BA	OBP	SLG	OPS	wRC+
Hernandez vs LHP	0.235	0.278	0.404	0.682	90
Lux vs LHP	0.152	0.220	0.174	0.394	15
Hernandez vs RHP	0.226	0.282	0.354	0.636	79
Lux vs RHP	0.262	0.332	0.407	0.739	109

To fully analyze the substitution, I would want to look at Mike Shildt's bullpen substitution tendencies in high leverage to gauge why he chose not to have Scott stretching or warming earlier.

3) Ohtani vs Scott AB approach and results

Scott is likely rattled by the catcher's interference in Pages' at-bat and loses command. Higashioka calls for two sliders low & away (Ohtani's coldest zone with lefties). First misses way inside; the second one Scott leaves up in the zone. It is worth noting that in 2024, Cronenworth was the T-2nd



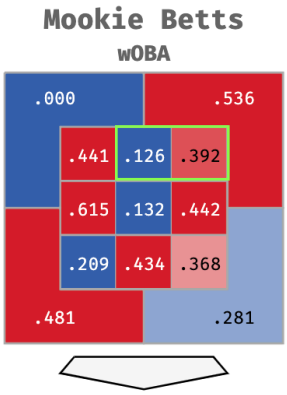
worst defender in the league on balls hit to his left side with -7 OAA; Arraez was T-10th worst defender on balls hit to his right side (-5 OAA) and was the 4th worst defender overall with -13 OAA.
Ohtani, fully aware of his struggles at the plate against Scott, simplifies his approach to hunt any mistake in the zone and pulls a hard chopper into a massive hole in San Diego's infield defense.
A context-informed statistic related to xBA factoring in opponent defensive history would be useful here.

4) Leaving in Scott to face Betts + the AB

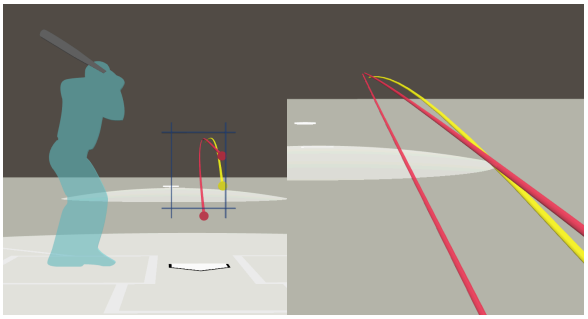
I question Padres' decision on only warming up one reliever instead of two after Smith's homer, given the importance of this game for them (Dodger's division title clinch on the line). Shildt trusts Scott as one of his best arms, but having two pitchers warming would have allowed him a quicker hook after seeing his lack of command. This would have been an opportunity to break the rhythm of the Dodger's offense.

Green indicates glove location, red indicates pitch location result

Higashioka calls three great locations against Betts: two high fastballs and a low inside slider. Scott misses all three locations.
Scott is able to get a high strike out the outer edge; Higashioka called for a pitch more middle, in Zone 2. This first miss would be less dangerous if Betts didn't have such a stark contrast between his success in Zone 2 and Zone 3. But Betts had a 18.7% swing rate on LHP fastballs in 0-0 counts and takes.



Zone coverage, 2024 vs LHP

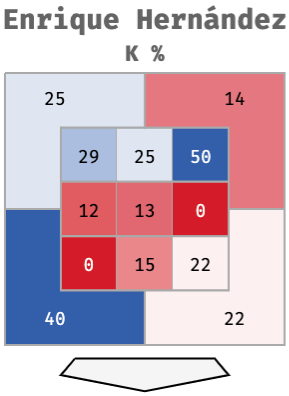


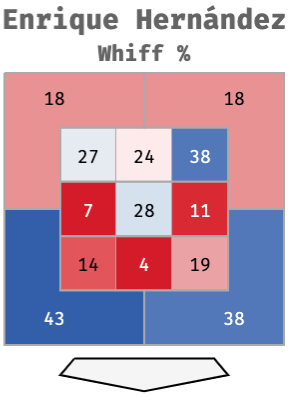
HP & Betts' Perspectives: We see clearly how the slider trajectory (yellow) is visually different from both fastballs (red) on release

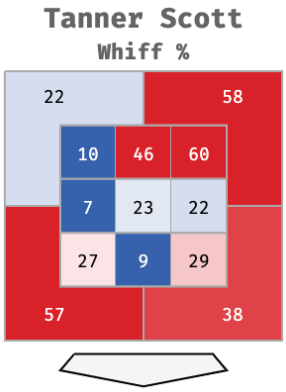
Higashioka repeats the location, but Scott misses low, crossing him up. Lacking fastball confidence, Higashioka calls for a slider. A well-located slider would've tunneled with the fastball, but Scott's hangs out over the plate, landing in Betts' hot zone for a two-run double. Though specific, seeing the average runs allowed by a reliever after an interference call or error may provide additional insight into how pitchers' command and mentality is affected by defensive blunders.

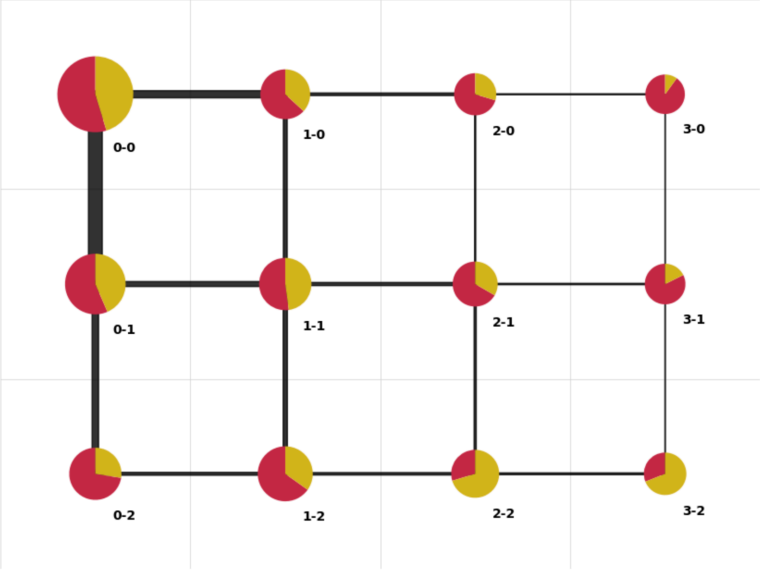
III. Actionable Insight for Hernandez vs. Tanner Scott

- Scott is a Fastball/Slider Guy: Four-seamer (60%) sits 97 with rise; Slider (40%) breaks hard glove side
- Favors the fastball when he gets behind or ahead. **Heavily** favors slider in 2-2 and 3-2 counts. Don't chase the fastball up & away, because that's your coldest zone and he's going to try and get you to swing under it
- Slider is his out pitch but he is not afraid of using it early in the count, so ignore inside sliders out of zone. That's the general pitch + location with the highest whiff for him
- Umpire (Visconti) tends to miss high/low just out of the zone & Higashioka frames well. Plan to expand the bottom of the zone but don't chase Scott's fastball up or the slider inside
- Scott walks a lot of guys and is susceptible to misses in the zone. He did **not** have much time to warm up so be patient and work the count to keep him off balance. Fight off the fastball and force him to throw a mistake slider in the middle or outer part of the zone (low) to do damage.









Flowchart of Scotts pitches by count to LHP in 2024. Line density and pie sizes proportional to # of pitches. (Source: Statcast via PyBaseball)