

**“PROOF OF PRINCIPLE” FOR SITUATIONAL UNDERLYING VALUE (SUV) –  
A Statistic to Measure Clutch Performance by Individuals in the Team Sports of Major  
League Baseball, Professional Football (NFL) and NCAA Men’s College Basketball**

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**NOTE: Due to size limitations, this has been published in three separate parts, with the abstract and references to all three parts included with each. This is Part 1, directed exclusively to Major League Baseball.**

In Situational Underlying Value for Baseball, Football and Basketball – A Statistic (SUV) to Measure Individual Performance in Team Sports, an all-encompassing, overall statistic to measure “clutch” performance by individual players in the team sports of major league baseball, professional football (NFL), and NCAA men’s college basketball was developed, called “Situational Underlying Value” (SUV). This work supplements and extends the development and initial demonstrations of the use of the SUV statistic for these three team sports by tracking the performance of three specific teams in these three sports over a significant portion of their most recent seasons: (1) for major league baseball, 54 of the 162 games played by the Seattle Mariners in 2017; (2) for professional football, five of the 16 games played by the Seattle Seahawks in 2017; and (3) for NCAA Men’s College Basketball, the five games played by the Loyola of Chicago Ramblers in the 2018 NCAA Division I Men’s Basketball Tournament. The SUV statistics for the players who participated in these games are tracked and accumulated for comparison among themselves and, for those who participated in a significant portion of these games, further compared against the traditional statistics for each team over the entire season (or, in the case of the Loyola of Chicago Ramblers, the complete five games of the Basketball Tournament). The goal is to examine the efficacy of this one overarching statistic, the SUV, in representing player performance “in the clutch” vs. more subjective interpretation of the myriad of different “traditional” statistics currently used. Anomalies between the SUV and “traditional” statistics results are examined and explained, to the extent practicable given the scope of the SUV analysis (partial seasons). Whether or not this effort proves successful is left to the reader’s conclusion based on the results and comparisons performed.

**SITUATIONAL UNDERLYING VALUE (SUV) STATISTIC  
FOR MAJOR LEAGUE BASEBALL –  
PROOF OF PRINCIPLE**

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In Situational Underlying Value for Baseball, Football and Basketball – A Statistic (SUV) to Measure Individual Performance in Team Sports, an all-encompassing, overall statistic to measure “clutch” performance by individual players in the team sports of major league baseball, professional football, and NCAA men’s college basketball was developed, called “Situational Underlying Value” (SUV). [1] Based on the concept of “run expectancy,” it assigns an SUV to each base as a function of the number of outs, including a negative value for making an out. It can be used for both hitters and pitchers, with the higher the SUV (i.e., the more positive or less negative) reflecting better productivity for hitters and the lower the SUV (i.e., the more negative or less positive) reflecting likewise for pitchers. Its derivation is explained in Reference 1; reproduced here is the SUV table for major league baseball (variations for the American and National League are also discussed there to reflect the use of the designated hitter by the former, but will not be addressed here). For example, a double is worth 0.63, 0.44, or 0.23, respectively, with none, one or two outs when it occurs. Making the first, second or third out deducts 0.23, 0.16, or 0.10, respectively. Advancing base runners without additional outs always improves the SUV, attributable to the hitter if a direct result of his action (e.g., another hit) or the runner (e.g., stolen base or wild pitch). “Unearned” plays, such as errors, passed balls, or catcher’s interference, are tracked separately and the corresponding SUVs are not assigned to the individuals. Pinch runners also are not tracked unless they themselves are responsible for advancing (e.g., stolen base or wild pitch) or making an out (e.g., being picked off or thrown out trying to take an extra base).

base→ outs↓	3	2	1	0
0	0.87	0.63	0.39	-0.23
1	0.68	0.44	0.22	-0.16
2	0.29	0.23	0.12	-0.10

Reference 1 provides two example games to show how the SUVs accrue for each team’s hitters and pitchers. The goal of this work, the “Proof of Principle,” is to track the performance of an individual team over a substantial portion of an entire season. One-third of the 2017 season, i.e., 54 games, have been selected for the Seattle Mariners, starting with Game 002 and tracking every third game up through Game 161. The SUVs are based on the play-by-play descriptions provided in “Baseball Reference,” <https://www.baseball-reference.com/>. [2] While the SUV analyses for all 54 games are provided below, with a roll-up of cumulative SUVs every six games, the actual play-by-plays are only included for three particular games, particularly illustrative. For the rest, the reader should consult Reference 2. Below is an example of one such analysis, as follows:

Each hitter from Segura through Valencia had the number of “opportunities” totaled in the “Ops” column, i.e., appearances at the plate as a hitter which resulted in an outcome for that hitter (or the rare case where a pinch runner made a direct change himself to the SUV). His total SUV for the game is shown in the “SUV” column, with his average SUV per Opportunity for the game calculated in the “Avg” column. For example, Cano had five opportunities with a total SUV of 2.10, for an Average of  $2.10/5 = 0.420$ , indicating a

productive day where each appearance was worth 0.420 on average. The next three columns are labeled similarly, but include a “+” symbol to indicate that these are cumulative for the season through this game. The row “SUV” shows the total per inning (always the number of runs minus 0.49, including the “unearned” SUV), followed by the totals for Ops and SUV for the game (42 and 1.42 in this example), the Average per Op for the team for the game ( $1.42/34 = 0.034$  for this example), and the cumulatives for these through this game (1909, 8.55, and  $8.55/1909 = 0.004$ , respectively). Anything highlighted in yellow indicates an SUV attributable to an error, passed ball (PB), or catcher’s interference (CI), which is tracked for the team and highlighted for that player who receives no credit toward his SUV due to the error and for whom the SUV is calculated as if the error had not occurred, i.e., he had made the out. For the Mariners in this game, there was an “unearned” SUV of 0.17 in the seventh inning, involving both Gamel and Heredia. The game and cumulative totals for these (0.17 and 16.42 in this example) are also tracked. Finally, the total SUVs for the game (1.59, based on the Mariners scoring six runs over nine innings, i.e.,  $6 - [9][0.49] = 1.59$ , equal to  $1.42 + 0.17 = 1.59$ ) and cumulatively ( $8.55 + 16.42 = 24.97$ ) are highlighted in **bold red**. (In the rare case where a hitter batted twice in one inning, this is shown in a bolded box and included both Ops [e.g., see Game 059, June 6, Minnesota-3 @ Seattle-12; Zunino batted twice in the third inning, leading off with a single but also making last out for a total SUV over two Ops of  $0.39 - 0.10 = 0.29$ ].)

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg	
Segura	0.39		-0.16		0.12		0.44	-0.48		5	0.31	0.062	178	3.73	0.021	
Haniger	-0.40		1.00		-0.22		-0.47	-0.22		5	-0.31	-0.062	129	2.77	0.021	
Cano	0.44		-0.10			0.39	1.60		-0.23	5	2.10	0.420	200	9.39	0.047	
Cruz	-0.92			1.00		0.63	0.23		-0.16	5	0.78	0.156	198	11.73	0.059	
Seager	-0.23		-0.23		0.87	0.29			0.12	5	0.82	0.164	200	11.52	0.058	
Alonso	0.22		-0.16		-0.99	-0.74				4	-1.67	-0.418	41	2.05	0.050	
Ruiz									-0.22	1	-0.22	-0.220	52	-4.32	-0.083	
Zunino	-0.26		-0.10		-0.39		0.63			4	-0.12	-0.030	126	-9.12	-0.072	
Gamel	-0.22				-0.23		0.39	1.00		4	0.94	0.235	164	1.71	0.010	
Heredia			-0.23		-0.16		-0.40			3	-0.79	-0.263	142	-5.52	-0.039	
Valencia							-0.42			1	-0.42	-0.420	157	-1.37	-0.009	
SUV	-0.49	-0.49	0.51	0.51	-0.49	0.51	1.51	0.51	-0.49	42	1.42	0.034	1909	8.55	0.004	
Error/PB/CI							0.17				0.17	1.59		16.42	24.97	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg	
Hernandez	-0.49	-0.49	-0.49	2.84						3.33	1.37	0.411	27.00	-0.72	-0.027	
Albers				2.40	-0.49	1.02				1.67	2.93	1.758	13.67	2.82	0.206	
Lawrence						-0.51	-0.49			2.00	-1.00	-0.500	11.33	-4.47	-0.394	
Simmons							-0.49			1.00	-0.49	-0.490	3.00	-1.73	-0.577	
Diaz								-0.49		1.00	-0.49	-0.490	19.67	2.07	0.105	
SUV	-0.49	-0.49	-0.49	6.51	-0.49	0.51	-0.49	-0.49	-0.49	9.00	2.32	0.258	444.67	2.62	0.006	
Error/PB/CI					1.27						1.27	3.59		22.43	25.05	

The SUVs are similarly tracked for the pitchers, although not by individual hitter faced unless the pitcher worked only part of an inning (Hernandez and Albers in the fifth, Albers and Lawrence in the sixth). Each pitcher’s “Innings Pitched” (“IP” column) are tracked for the game along with his SUV (“SUV” column) and Average per inning pitched (“Avg” column). For example, Hernandez pitched 3.33 innings, with a total SUV of 1.37 for an Average per IP of  $1.37/3.33 = 0.411$ , not a very productive outing. The pitcher’s cumulative totals for these are tracked in the last three columns with the “+” symbols. The “SUV” row shows the totals per inning, again amounting to the number of runs yielded, including the “unearned” SUV tracked below in yellow, minus 0.49. The totals for IP and SUV follow, with the team’s Average per IP next, and finally the cumulatives for these three. As can be seen, the fourth inning was particularly bad for the Mariners, yielding seven runs with an SUV of  $7 - 0.49 = 6.51$ , of which 1.27 was attributed to the “unearned” variety (while Hernandez was pitching, and not counted against him). The opponent scored

a total of eight runs, for a total SUV =  $8 - (9)(0.49) = 3.59$ , shown in **bold red**, of which 1.27 was “unearned” (equal to  $2.32 + 1.27 = 3.59$ ). Cumulatives for these follow (2.62 and 22.43 [“unearned] for a total of 25.05, shown in **bold red**).

This is the pattern followed for each game (except the first, for which there is no cumulative shown). Below is a list of the 54 games analyzed, followed by the analyses for each of the 54 games (plus roll-ups for every six games).

Game #	Date	Opponent				Mariners			
		Team	Innings	Runs	SUV	Innings	Runs	SUV	
002	4-Apr	@Houston	8.00	2	-1.92	9.00	1	-3.41	
005	7-Apr	@Angels	8.00	5	1.08	9.00	1	-3.41	
008	10-Apr	Houston	9.00	0	-4.41	8.00	6	2.08	
011	14-Apr	Texas	9.00	1	-3.41	8.00	2	-1.92	
014	17-Apr	Miami	9.00	1	-3.41	8.00	6	2.08	
017	20-Apr	@Oakland	8.00	9	5.08	9.00	6	1.59	
020	23-Apr	@Oakland	9.00	1	-3.41	9.00	11	6.59	
023	26-Apr	@Detroit	9.00	1	-3.41	9.00	2	-2.41	
026	30-Apr	@Cleveland	8.00	12	8.08	9.00	4	-0.41	
029	4-May	Angels	9.00	3	-1.41	8.00	11	7.08	
032	7-May	Texas	9.00	3	-1.41	8.00	4	0.08	
035	11-May	@Toronto	8.00	7	3.08	9.00	2	-2.41	
038*	14-May	@Toronto	8.67	3	-1.31	9.00	2	-2.41	
041	17-May	Oakland	9.00	0	-4.41	8.00	4	0.08	
044	20-May	White Sox	9.00	16	11.59	9.00	1	-3.41	
047	24-May	@Washington	8.00	5	1.08	9.00	1	-3.41	
050	27-May	@Boston	8.00	6	2.08	9.00	0	-4.41	
053	30-May	@Colorado	9.00	4	-0.41	9.00	10	5.59	
056	2-Jun	Tampa Bay	9.00	4	-0.41	8.00	12	8.08	
059	6-Jun	Minnesota	9.00	3	-1.41	8.00	12	8.08	
062	9-Jun	Toronto	9.00	2	-2.41	8.00	4	0.08	
065	12-Jun	@Minnesota	9.00	3	-1.41	9.00	14	9.59	
068	15-Jun	@Minnesota	8.00	6	2.08	9.00	2	-2.41	
071	18-Jun	@Texas	9.00	3	-1.41	9.00	7	2.59	
074	21-Jun	Detroit	9.00	5	0.59	8.00	7	3.08	
077	24-Jun	Houston	9.00	5	0.59	9.00	2	-2.41	
080	28-Jun	Philadelphia	9.00	5	0.59	9.00	4	-0.41	
083	2-Jul	@Angels	9.00	3	-1.41	9.00	5	0.59	
086	5-Jul	Kansas City	10.00	9	4.10	10.00	6	1.10	
089	8-Jul	Oakland	9.00	4	-0.41	9.00	3	-1.41	
092	15-Jul	@White Sox	9.00	3	-1.41	9.00	4	-0.41	
095	18-Jul	@Houston	8.00	6	2.08	9.00	2	-2.41	
098	21-Jul	Yankees	9.00	5	0.59	9.00	1	-3.41	
101	24-Jul	Boston	9.00	0	-4.41	8.00	4	0.08	
104	28-Jul	Mets	9.00	7	2.59	9.00	5	0.59	
107	31-Jul	@Texas	9.00	4	-0.41	9.00	6	1.59	
110	3-Aug	@Kansas City	8.00	6	2.08	9.00	4	-0.41	
113	6-Aug	@Kansas City	8.00	9	5.08	9.00	1	-3.41	
116	10-Aug	Angels	9.00	6	1.59	9.00	3	-1.41	
119	13-Aug	Angels	9.00	4	-0.41	9.00	2	-2.41	
122	16-Aug	Baltimore	9.00	6	1.59	8.00	7	3.08	
125	20-Aug	@Tampa Bay	8.00	3	-0.92	9.00	0	-4.41	
128	23-Aug	@Atlanta	9.00	6	1.59	9.00	9	4.59	
131	27-Aug	@Yankees	8.00	10	6.08	9.00	1	-3.41	
134	30-Aug	@Baltimore	8.00	8	4.08	9.00	7	2.59	
137	3-Sep	Oakland	9.00	2	-2.41	8.00	10	6.08	
140	6-Sep	Houston	9.00	5	0.59	9.00	3	-1.41	
143	10-Sep	Angels	9.00	5	0.59	9.00	3	-1.41	
146	13-Sep	@Texas	9.00	1	-3.41	9.00	8	3.59	
149	16-Sep	@Houston	8.00	8	4.08	9.00	6	1.59	
152	20-Sep	Texas	9.00	8	3.59	9.00	6	1.59	
155	23-Sep	Cleveland	9.00	11	6.59	9.00	4	-0.41	
158	26-Sep	@Oakland	9.00	3	-1.41	9.00	6	1.59	
161	30-Sep	@Angels	9.00	4	-0.41	9.00	6	1.59	
<b>Totals</b>			<b>471.67</b>	<b>261</b>	<b>29.82</b>	<b>474.00</b>	<b>260</b>	<b>27.74</b>	

\* Toronto won on a two-out walk-off home run, so SUV adjusted for only two outs in the ninth (i.e., -0.39 instead of -0.49)

### GAME 002, APRIL 4, SEATTLE-1 @ HOUSTON-2

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	
Segura	-0.23		-0.10		-0.16		-0.23		-0.37	5	-1.09	-0.218	
Haniger	-0.16			0.63	-0.10		-0.16		-0.33	5	-0.12	-0.024	
Cano	0.23			-0.11	0.23		-0.10			4	0.25	0.063	
Cruz	-0.33			-0.62	-0.45			-0.23		4	-1.63	-0.408	
Seager		-0.23		0.12		0.39		-0.16		4	0.12	0.030	
Valencia		-0.16		0.94		-0.40		0.12		4	0.50	0.125	
Martin, L	-0.10			-0.45		-0.26		-0.22		4	-1.03	-0.258	
Zunino			-0.23	-0.74		0.23			-0.23	4	-0.97	-0.243	
Dyson			-0.16		-0.23	-0.45			0.44	4	-0.40	-0.100	
SUV	-0.49	-0.49	-0.49	0.51	-0.49	-0.49	-0.49	-0.49	-0.49	38	-4.37	-0.115	
Error/PB/CI				0.74	0.22						0.96	-3.41	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	
Iwakuma	-1.11	-0.49	0.51	-0.49	-0.49	0.51				6.00	-1.56	-0.260	
Scribner							-0.16				0.67	-0.16	-0.240
Rzepczynski							-0.33				0.33	-0.33	-0.990
Altavilla								-0.49			1.00	-0.49	-0.490
SUV	-0.49	-0.49	0.51	-0.49	-0.49	0.51	-0.49	-0.49	0.00	8.00	-2.54	-0.318	
Error/PB/CI	0.62										0.62	-1.92	

### GAME 005, APRIL 7, SEATTLE-1 @ L.A. ANGELS-5

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	0.50		-0.26			-0.16	-0.45			4	-0.37	-0.093	9	-1.46	-0.162
Haniger	-0.40		-0.22			0.12		-0.23		4	-0.73	-0.183	9	-0.85	-0.094
Cano	-0.26			-0.23		0.29		-0.16		4	-0.36	-0.090	8	-0.11	-0.014
Cruz	-0.33			-0.16		1.00		-0.10		4	0.41	0.103	8	-1.22	-0.153
Seager	-0.23		-0.10		-0.51			-0.23	4	-1.07	-0.268	8	-0.95	-0.119	
Valencia	-0.16			-0.23		0.39		-0.05	4	-0.05	-0.013	8	0.45	0.056	
Martin, L	-0.10			-0.16		0.63		-0.26	4	0.11	0.028	8	-0.92	-0.115	
Zunino		0.39		-0.10		-0.59		-0.33	4	-0.63	-0.158	8	-1.60	-0.200	
Heredia		-0.40			-0.23	-0.47			3	-1.10	-0.367				
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	-0.49	-0.49	35	-3.79	-0.108	73	-8.16	-0.112
Error/PB/CI								0.38			0.38	-3.41		1.34	-6.82
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Gallardo	0.51	-0.49	-0.58	-0.49	-0.49	1.39					5.00	-0.15	-0.030		
Fien						-0.88	1.51				2.00	0.63	0.315		
Overton								-0.49			1.00	-0.49	-0.490		
SUV	0.51	-0.49	0.51	-0.49	-0.49	0.51	1.51	-0.49	0.00	8.00	-0.01	-0.001	16.00	-2.55	-0.159
Error/PB/CI			1.09								1.09	1.08		1.71	-0.84

### GAME 008, APRIL 10, HOUSTON-0 @ SEATTLE-6

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg	
Segura	-0.23		-0.35							2	-0.58	-0.290	11	-2.04	-0.185	
Motter					-0.64	-0.47		-0.16		3	-1.27	-0.423				
Haniger	-0.16		-1.16		0.90	1.06		-0.10		5	0.54	0.108	14	-0.31	-0.022	
Cano	0.23			0.39	0.22	-0.33				4	0.51	0.128	12	0.40	0.033	
Cruz	-0.33			0.63	1.56		0.39			4	2.25	0.563	12	1.03	0.086	
Seager	-0.23		0.87	0.06		1.11				4	1.81	0.453	12	0.86	0.072	
Valencia	-0.16		-0.78	-0.22		-0.05				4	-1.21	-0.303	12	-0.76	-0.063	
Martin, L	-0.10		-0.86		0.63	-0.55				4	-0.88	-0.220	12	-1.80	-0.150	
Zunino		0.39	-0.74		0.39	-0.39				4	-0.35	-0.088	12	-1.95	-0.163	
Dyson		0.63		0.63	-0.59		-0.23			4	0.44	0.110	8	0.04	0.005	
SUV	-0.49	-0.49	-0.49	-0.49	2.51	1.51	0.51	-0.49	0.00	38	1.26	0.033	111	-6.90	-0.062	
Error/PB/CI						0.82					0.82	2.08		2.16	-4.74	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg	
Paxton	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49				7.00	-3.43	-0.490			
Altavilla								-0.49			1.00	-0.49	-0.490	2.00	-0.98	-0.490
Scribner								-0.49	1.00		-0.49	-0.490	1.67	-0.65	-0.39	
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	9.00	-4.41	-0.490	25.00	-6.96	-0.278	
Error/PB/CI											0.00	-4.41		1.71	-5.25	

### GAME 011, APRIL 14, TEXAS-1 @ SEATTLE-2

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Heredia	-0.23		-0.10		-0.40		0.63			4	-0.10	-0.025	7	-1.20	-0.171
Haniger	0.22			-0.23	-0.26		0.76			4	0.49	0.123	18	0.18	0.010
Cano	0.44			-0.16	-0.22		-0.59			4	-0.53	-0.133	16	-0.13	-0.008
Cruz	-0.92			1.00		0.39	-0.92			4	-0.45	-0.113	16	0.58	0.036
Seager	0.39		0.18		0.63		-0.23			4	0.97	0.243	16	1.83	0.114
Motter	-0.78		0.34		-0.59		-0.16			4	-1.19	-0.298	7	-2.46	-0.351
Valencia	-0.10		0.12		-0.47		-0.10			4	-0.55	-0.138	16	-1.31	-0.082
Zunino		-0.23	-0.74		-0.45					3	-1.42	-0.473	15	-3.37	-0.225
Dyson		-0.16		0.39		0.63				3	0.86	0.287	11	0.90	0.082
SUV	-0.49	-0.49	-0.49	0.51	-0.49	-0.49	0.51	-0.49	0.00	34	-1.92	-0.056	145	-8.82	-0.061
Error/PB/CI											0.00	-1.92		2.16	-6.66
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Hernandez	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	-0.01		7.33	-2.44	-0.333			
Rzepczynski								-0.48		0.67	-0.48	-0.720	1.00	-0.81	-0.810
Diaz									-0.49	1.00	-0.49	-0.490			
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	-0.49	-0.49	9.00	-3.41	-0.379	34.00	-10.37	-0.305
Error/PB/CI											0.00	-3.41		1.71	-8.66

### GAME 014, APRIL 17, MIAMI-1 @ SEATTLE-6

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Dyson	0.39	-0.22		0.76		-0.16				4	0.77	0.193	15	1.67	0.111
Haniger	-0.40		0.39	-0.31		-0.10				4	-0.42	-0.105	22	-0.24	-0.011
Cano	1.78		-0.40	0.94			-0.23			4	2.09	0.523	20	1.96	0.098
Cruz	1.00		-0.15	-0.33			-0.16			4	0.36	0.090	20	0.94	0.047
Seager	-0.16		0.12		-0.23		-0.10			4	-0.37	-0.093	20	1.46	0.073
Motter	-0.10		0.29		1.00		-0.23			4	0.96	0.240	11	-1.50	-0.136
Valencia		0.39	-0.74		-0.16			-0.16		4	-0.67	-0.168	20	-1.98	-0.099
Martin, L	-0.40		0.63	-0.10			-0.10			4	0.03	0.007	16	-1.77	-0.111
Zunino	-0.26		-0.42		-0.23					3	-0.91	-0.303	18	-4.28	-0.238
SUV	2.51	-0.49	-0.49	1.51	0.51	-0.49	-0.49	-0.49	0.00	35	1.84	0.053	180	-6.98	-0.039
Error/PB/CI				0.24							0.24	2.08		2.40	-4.58
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Miranda	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49			7.00	-3.43	-0.490			
Vincent								-0.49		1.00	-0.49	-0.490			
Scribner									0.51	1.00	0.51	0.510	2.67	-0.14	-0.053
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	9.00	-3.41	-0.379	43.00	-13.78	-0.320
Error/PB/CI											0.00	-3.41		1.71	-12.07

### GAME 017, APRIL 20, SEATTLE-6 @ OAKLAND-9

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Dyson	0.39	0.78			-0.23		-0.16		-0.10	5	0.68	0.136	20	2.35	0.118
Haniger	-0.18	-1.16			-0.16		0.12			4	-1.38	-0.345	26	-1.62	-0.062
Cano	0.78		-0.23		-0.10		-0.22			4	0.23	0.058	24	2.19	0.091
Cruz	-0.26		-0.16			0.63		-0.23		4	-0.02	-0.005	24	0.92	0.038
Seager	-0.22		-0.10			-0.42		-0.16		4	-0.90	-0.225	24	0.56	0.023
Motter		0.63		-0.23		1.56		-0.10		4	1.86	0.465	15	0.36	0.024
Valencia	0.39		-0.16		-0.16				0.63	4	0.70	0.175	24	-1.28	-0.053
Martin, L	-0.35		0.12		-0.10				-0.18	4	-0.51	-0.128	20	-2.28	-0.114
Zunino	1.22		-0.33			-0.23			0.16	4	0.82	0.205	22	-3.46	-0.157
SUV	0.51	1.51	-0.49	-0.49	-0.49	1.51	-0.49	-0.49	0.51	37	1.48	0.040	217	-5.50	-0.025
Error/PB/CI				0.11							0.11	1.59		2.51	-2.99
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Paxton	-0.49	-0.49	2.14	-0.49	1.95					4.33	2.62	0.605	11.33	-0.81	-0.071
Scribner					-0.92	0.51				1.67	-0.41	-0.246	4.33	-0.55	-0.127
Altavilla						2.51				1.00	2.51	2.510	3.00	1.53	0.510
Marshall								-0.49		1.00	-0.49	-0.490	1.00	-0.49	-0.490
SUV	-0.49	-0.49	2.51	-0.49	1.51	0.51	2.51	-0.49	0.00	8.00	4.23	0.529	51.00	-9.55	-0.187
Error/PB/CI			0.37		0.48						0.85	5.08		2.56	-6.99

### CUMULATIVES THROUGH 6 GAMES

Mariner	+Ops	+SUV	+Avg		Pitcher	+IP	+SUV	+Avg
Dyson	20	2.35	0.118		Rzepczynski	1.00	-0.81	-0.810
Cano	24	2.19	0.091		Miranda	7.00	-3.43	-0.490
Cruz	24	0.92	0.038		Vincent	1.00	-0.49	-0.490
Motter	15	0.36	0.024		Overton	1.00	-0.49	-0.490
Seager	24	0.56	0.023		Diaz	1.00	-0.49	-0.490
Valencia	24	-1.28	-0.053		Marshall	1.00	-0.49	-0.490
Haniger	26	-1.62	-0.062		Hernandez	7.33	-2.44	-0.333
Martin, L	20	-2.28	-0.114		Iwakuma	6.00	-1.56	-0.260
Zunino	22	-3.46	-0.157		Scribner	4.33	-0.55	-0.127
Heredia	7	-1.20	-0.171		Paxton	11.33	-0.81	-0.071
Segura	11	-2.04	-0.185		Gallardo	5.00	-0.15	-0.030
SUV	217	-5.50	-0.025		Fien	2.00	0.63	0.315
Error/PB/CI		2.51	-2.99		Altavilla	3.00	1.53	0.510
					SUV	51.00	-9.55	-0.187
					Error/PB/CI		2.56	-6.99

### GAME 020, APRIL 23, SEATTLE-11 @ OAKLAND-1

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Dyson	0.63		-0.40	-0.10		-0.45		-0.10		5	-0.42	-0.084	25	1.93	0.077
Haniger	-0.18		0.44		0.39		0.39		0.63	5	1.67	0.334	31	0.05	0.002
Cano	0.54		0.68		-0.40		0.87		-0.42	5	1.27	0.254	29	3.46	0.119
Cruz	-0.26		1.00		-0.26		1.74		1.00	5	3.22	0.644	29	4.14	0.143
Vogelbach	-0.22		-0.86		-0.22		0.39		0.78	5	-0.13	-0.026			
Motter		-0.23	3.36			-0.23	-0.40		0.90	5	3.40	0.680	20	3.76	0.188
Heredia		-0.16	-0.10			0.22	-0.48		-0.76	5	-1.28	-0.256	12	-2.48	-0.207
Freeman		-0.10		-0.23		0.44		-0.23	-0.62	5	-0.74	-0.148			
Zunino			0.39	-0.16		-0.47		-0.16		4	-0.40	-0.100	26	-3.86	-0.148
SUV	0.51	-0.49	4.51	-0.49	-0.49	-0.49	2.51	-0.49	1.51	44	6.59	0.150	261	1.09	0.004
Error/PB/CI											0.00	6.59		2.51	3.60
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Gallardo	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	0.67			6.33	-2.27	-0.358	11.33	-2.42	-0.214
Zych							-0.16			0.67	-0.16	-0.240			
Rzepczynski							-0.49			1.00	-0.49	-0.490	2.00	-1.30	-0.650
Scribner								-0.49		1.00	-0.49	-0.490	5.33	-1.04	-0.195
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	-0.49	9.00	-3.41	-0.379	60.00	-12.96	-0.216
Error/PB/CI											0.00	-3.41		2.56	-10.40

### GAME 023, APRIL 26, SEATTLE-2 @ DETROIT-1

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg	
Segura	-0.23		-0.10			0.63	-0.16			4	0.14	0.035	19	-2.50	-0.132	
Gamel	-0.16			-0.23		0.63	-0.10			4	0.14	0.035	8	0.23	0.029	
Cano	-0.10			-0.16		1.00		-0.23		4	0.51	0.128	37	3.09	0.084	
Cruz		1.00		-0.10		0.76		0.22		4	1.88	0.470	37	6.19	0.167	
Seager	-0.23			-0.23	1.00		-0.48			4	0.06	0.015	32	1.50	0.047	
Heredia	0.22				0.44	0.87			-0.23	4	1.30	0.325	20	-2.39	-0.120	
Vogelbach	-0.48				0.22				-0.16	3	-0.42	-0.140	9	-0.88	-0.098	
Motter						-0.78			-0.10	2	-0.88	-0.440	26	2.57	0.099	
Ruiz		-0.23		-0.47	-1.60					3	-2.30	-0.767	6	-2.30	-0.383	
Powell		-0.16		-0.45		-0.23				3	-0.84	-0.280				
SUV	-0.49	0.51	-0.49	-0.49	-0.49	2.51	-0.49	-0.49	-0.49	35	-0.41	-0.012	331	-1.46	-0.004	
Error/PB/CI											0.00	-0.41		2.24	0.78	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg	
De Jong	0.51	-0.49	3.73								2.67	3.75	1.406			
Fien			3.78								0.33	3.78	11.340	2.33	4.41	1.890
Overton				-0.49	-0.49	-0.49	2.29	-0.49			5.00	0.33	0.066	6.00	-0.16	-0.027
SUV	0.51	-0.49	7.51	-0.49	-0.49	-0.49	2.51	-0.49	0.00	8.00	7.86	0.983	77.00	-8.97	-0.116	
Error/PB/CI							0.22				0.22	8.08		3.24	-5.73	

### GAME 026, APRIL 30, SEATTLE-4 @ CLEVELAND-12

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23		-0.10			0.63	-0.16			4	0.14	0.035	19	-2.50	-0.132
Gamel	-0.16			-0.23		0.63	-0.10			4	0.14	0.035	8	0.23	0.029
Cano	-0.10			-0.16		1.00		-0.23		4	0.51	0.128	37	3.09	0.084
Cruz		1.00		-0.10		0.76		0.22		4	1.88	0.470	37	6.03	0.163
Seager	0.23				-0.23	1.00		-0.48		4	0.06	0.015	32	1.50	0.047
Heredia		0.22			0.44	0.87			-0.23	4	1.30	0.325	20	-2.39	-0.120
Vogelbach		-0.48			0.22				-0.16	3	-0.42	-0.140	9	-0.88	-0.098
Motter						-0.78			-0.10	2	-0.88	-0.440	26	2.57	0.099
Ruiz			-0.23		-0.47	-1.60				3	-2.30	-0.767	6	-2.30	-0.383
Powell			-0.16		-0.45		-0.23			3	-0.84	-0.280			
SUV	-0.49	0.51	-0.49	-0.49	-0.49	2.51	-0.49	-0.49	-0.49	35	-0.41	-0.012	331	-2.33	-0.007
Error/PB/CI											0.00	-0.41		3.11	0.78
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
De Jong	0.51	-0.49	3.73							2.67	3.75	1.406			
Fien			3.78							0.33	3.78	11.340	2.33	4.41	1.890
Overton				-0.49	-0.49	-0.49	2.13	-0.49		5.00	0.17	0.034	6.00	-0.32	-0.053
SUV	0.51	-0.49	7.51	-0.49	-0.49	-0.49	2.51	-0.49	0.00	8.00	7.70	0.963	77.00	-9.76	-0.127
Error/PB/CI							0.38				0.38	8.08		4.03	-5.73

### GAME 029, MAY 4, L.A. ANGELS-3 @ SEATTLE-11

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23	-0.45		0.22		0.39		0.39		5	0.32	0.064	24	-2.18	-0.091
Gamel	0.22		0.39	1.22		0.87		1.00		5	3.70	0.740	13	3.93	0.302
Cano	-0.26		-0.40	-0.31		-0.65		-0.59		5	-2.21	-0.442	42	0.88	0.021
Cruz	1.11		-0.26	0.83		-0.10		-0.47		5	1.11	0.222	42	7.14	0.170
Seager	-0.33		0.23	-0.22			-0.23	1.06		5	0.51	0.102	37	2.01	0.054
Valencia		-0.23	1.17		0.39		1.00	0.94		5	3.27	0.654	29	1.99	0.069
Heredia		0.22	1.71		-0.40		0.22	-0.45		5	1.30	0.260	25	-1.09	-0.044
Zunino		0.44	-0.33		-0.26		-0.48			4	-0.63	-0.158	30	-4.49	-0.150
Dyson		-0.47		-0.23	-0.22			0.63		4	-0.29	-0.073	32	0.98	0.031
SUV	0.51	-0.49	2.51	1.51	-0.49	0.51	0.51	2.51	0.00	43	7.08	0.165	374	4.75	0.013
Error/PB/CI											0.00	7.08		3.11	7.86
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Miranda	-0.49	1.45	-0.49	-0.49	-0.49	-0.49	-0.49			7.00	-1.49	-0.213	14.00	-4.92	-0.351
Zych								0.51		1.00	0.51	0.510	3.33	-0.40	-0.120
Overton									-0.49	1.00	-0.49	-0.490	7.00	-0.81	-0.116
SUV	-0.49	1.51	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	9.00	-1.47	-0.163	86.00	-11.23	-0.131
Error/PB/CI			0.06								0.06	-1.41		4.09	-7.14

### GAME 032, MAY 7, TEXAS-3 @ SEATTLE-4

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	0.39		0.12		-0.22		1.00			4	1.29	0.323	28	-0.89	-0.032
Gamel	-0.40		-0.22			0.39				3	-0.23	-0.077	16	3.70	0.231
Valencia							1.77			1	1.77	1.770	30	3.76	0.125
Cano	-0.48			0.39		-0.78	-0.51			4	-1.38	-0.345	46	-0.50	-0.011
Cruz		-0.23		-0.40		-0.10		-0.23		4	-0.96	-0.240	46	6.18	0.134
Seager		0.22		-0.26			0.39	1.00		4	1.35	0.338	41	3.36	0.082
Motter		-0.26		-0.22			0.63	-0.16		4	-0.01	-0.003	30	2.56	0.085
Heredia		-0.22			-0.23		-0.35	-0.10		4	-0.90	-0.225	29	-1.99	-0.069
Ruiz			-0.23		-0.16					2	-0.39	-0.195	8	-2.69	-0.336
Freeman							-0.65			1	-0.65	-0.650	6	-1.39	-0.232
Dyson			-0.16		0.12		0.23			3	0.19	0.063	35	1.17	0.033
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	2.51	0.51	0.00	34	0.08	0.002	408	4.83	0.012
Error/PB/CI											0.00	0.08		3.11	7.94
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Overton	0.51	0.51	-0.49	-0.01						3.33	0.52	0.156	10.33	-0.29	-0.028
Bergman				-0.48	-0.49	-0.49	0.51			3.67	-0.95	-0.259			
Vincent								-0.16		0.67	-0.16	-0.240	1.67	-0.65	-0.390
Rzepczynski								-0.33		0.33	-0.33	-0.990	3.00	-2.08	-0.693
Diaz									-0.49	1.00	-0.49	-0.490	3.00	-1.47	-0.490
SUV	0.51	0.51	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	-0.49	9.00	-1.41	-0.157	95.00	-12.64	-0.133
Error/PB/CI											0.00	-1.41		4.09	-8.55

### GAME 035, MAY 11, SEATTLE-2 @ TORONTO-7

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	0.63	0.63	-0.16		0.12		-0.10		5	1.12	0.224	33	0.23	0.007	
Gamel	-0.42	-0.42	0.12		-0.22				4	-0.94	-0.235	20	2.76	0.138	
Cruz	1.56	-0.37	-0.22				0.63		4	1.60	0.400	50	7.78	0.156	
Seager	0.22	-0.33			-0.23		-0.42		4	-0.76	-0.190	45	2.60	0.058	
Valencia	-0.26		0.39		-0.16		0.46		4	0.43	0.108	34	4.19	0.123	
Motter	-0.22		-0.40		0.12		-0.65		4	-1.15	-0.288	34	1.41	0.041	
Freeman		-0.23	-0.26		-0.22		-0.51		4	-1.22	-0.305	10	-2.61	-0.261	
Gosewisch		-0.16	-0.22				-0.23		4	-0.84	-0.210				
Dyson		-0.10			-0.23		-0.16		4	-0.65	-0.163	39	0.52	0.013	
SUV	1.51	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	37	-2.41	-0.065	445	2.42	0.005	
Error/PB/CI										0.00	-2.41		3.11	5.53	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
De Jong	0.51	-0.49	-0.49	-0.49	4.51					5.00	3.55	0.710	7.67	7.30	0.952
Curtis						-0.49				1.00	-0.49	-0.490			
Gaviglio							0.51	-0.49		2.00	0.02	0.010			
SUV	0.51	-0.49	-0.49	-0.49	4.51	-0.49	0.51	-0.49	0.00	8.00	3.08	0.385	103.00	-9.56	-0.093
Error/PB/CI										0.00	3.08		4.09	-5.47	

### CUMULATIVES THROUGH 12 GAMES

Mariner	+Ops	+SUV	+Avg		Pitcher	+IP	+SUV	+Avg
Cruz	50	7.78	0.156		Rzepczynski	3.00	-2.08	-0.693
Gamel	20	2.76	0.138		Diaz	3.00	-1.47	-0.490
Valencia	34	4.19	0.123		Marshall	1.00	-0.49	-0.490
Seager	45	2.60	0.058		Curtis	1.00	-0.49	-0.490
Motter	34	1.41	0.041		Vincent	1.67	-0.65	-0.390
Dyson	39	0.52	0.013		Iwakuma	11.67	-4.37	-0.375
Segura	33	0.23	0.007		Miranda	14.00	-4.92	-0.351
Haniger	31	0.05	0.002		Hernandez	7.33	-2.44	-0.333
Cano	46	-0.50	-0.011		Bergman	3.67	-0.95	-0.259
Heredia	29	-1.99	-0.069		Gallardo	11.33	-2.42	-0.214
Vogelbach	9	-0.88	-0.098		Scribner	5.33	-1.04	-0.195
Martin, L	20	-2.28	-0.114		Zych	3.33	-0.40	-0.120
Zunino	30	-4.49	-0.150		Paxton	11.33	-0.81	-0.071
Gosewisch	4	-0.84	-0.210		Overton	10.33	-0.29	-0.028
Freeman	10	-2.61	-0.261		Gaviglio	2.00	0.02	0.010
Powell	3	-0.84	-0.280		Altavilla	3.00	1.53	0.510
Ruiz	8	-2.69	-0.336		De Jong	7.67	7.30	0.952
SUV	445	2.42	0.005		Fien	2.33	4.41	1.890
Error/PB/CI		3.11	5.53		SUV	103.00	-9.56	-0.093
					Error/PB/CI		4.09	-5.47

### GAME 038, MAY 14, SEATTLE-2 @ TORONTO-3 (WALK-OFF HOME RUN, 2 OUTS)

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23		-0.16		0.90		-0.16			4	0.35	0.088	37	0.58	0.016
Gamel	-0.16		-0.10		-0.55		-0.10			4	-0.91	-0.228	24	1.85	0.077
Cruz	0.12			0.39	-0.39			-0.23		4	-0.11	-0.028	54	7.67	0.142
Seager	-0.22			0.63		-0.23		-0.16		4	0.02	0.005	49	2.62	0.053
Valencia		0.39		-0.59		-0.16		-0.10		4	-0.46	-0.115	38	3.73	0.098
Motter	-0.40		-0.47		0.12			-0.23		4	-0.98	-0.245	38	0.43	0.011
Heredia	-0.15		-0.45		-0.22			-0.16		4	-0.98	-0.245	33	-2.97	-0.090
Dyson	-0.33				-0.23		1.00		-0.10	4	0.34	0.085	43	0.86	0.020
Ruiz		-0.23		0.22		-0.23				3	-0.24	-0.080	11	-2.93	-0.266
SUV	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	0.51	-0.49	-0.49	35	-2.97	-0.085	480	-0.55	-0.001
Error/PB/CI					0.56					0.56	-2.41		3.67	3.12	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Miranda	-0.49	-0.49	-0.49	-0.49	-0.49	0.39				5.00	-2.06	-0.412	19.00	-6.98	-0.367
Pazos						1.12				1.00	1.12	1.120			
Vincent							-0.49			1.00	-0.49	-0.490	2.67	-1.14	-0.428
Rzepczynski								-0.04		0.67	-0.04	-0.060	3.67	-2.12	-0.578
Zych								-0.45		0.33	-0.45	-1.350	3.67	-0.85	-0.232
Diaz									0.61	0.67	0.61	0.915	3.67	-0.86	-0.235
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	1.51	-0.49	-0.49	0.61	8.67	-1.31	-0.151	111.67	-10.87	-0.097
Error/PB/CI										0.00	-1.31		4.09	-6.78	

### GAME 041, MAY 17, OAKLAND-0 @ SEATTLE-4

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg	
Segura	-0.23		-0.23		1.10		-0.23			4	0.41	0.103	41	0.99	0.024	
Gamel	0.68		-0.16		0.00		0.22			4	0.74	0.185	28	2.59	0.093	
Cruz	0.16		-0.10		0.01		-0.26			4	-0.19	-0.048	58	7.64	0.132	
Seager	0.12			-0.23	0.12		-0.22			4	-0.21	-0.053	53	2.41	0.045	
Valencia	-0.22			-0.16	-0.51			-0.23		4	-1.12	-0.280	42	2.77	0.066	
Motter		-0.23		-0.10		-0.23		-0.16		4	-0.72	-0.180	42	-0.29	-0.007	
Powell	0.22				0.39	-0.16		-0.10		4	0.35	0.088	7	-0.49	-0.070	
Heredia	-0.26				0.63	0.12				3	0.49	0.163	36	-2.48	-0.069	
Gosewisch	-0.22				-0.13	-0.22				3	-0.57	-0.190	7	-1.41	-0.201	
SUV	0.51	-0.49	-0.49	-0.49	2.51	-0.49	-0.49	-0.49	0.00	34	-0.82	-0.024	514	-0.50	-0.001	
Error/PB/CI					0.90						0.90	0.08		3.70	3.20	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg	
Bergman	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.01		7.33	-3.44	-0.469	11.00	-4.39	-0.399
Pazos									-0.48	-0.49	1.67	-0.97	-0.582	2.67	0.15	0.056
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	9.00	-4.41	-0.490	120.67	-14.49	-0.120	
Error/PB/CI											0.00	-4.41		3.30	-11.19	

### GAME 044, MAY 20, CHICAGO WHITE SOX-16 @ SEATTLE-1

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg	
Segura	-0.23			-0.23		0.16		-0.33		4	-0.63	-0.158	45	0.36	0.008	
Gamel	0.22			-0.16		-0.10			0.39	4	0.35	0.088	32	2.94	0.092	
Cruz	-0.48			-0.10			-0.23			3	-0.81	-0.270	61	6.83	0.112	
Gosewisch									-0.78	1	-0.78	-0.780	8	-2.19	-0.274	
Seager	0.39			-0.23			-0.16		-0.10	4	-0.10	-0.025	57	2.31	0.041	
Motter	-0.40				0.22		0.12			3	-0.06	-0.020	45	-0.35	-0.008	
Heredia	-0.48			-0.26		-0.22				3	-0.96	-0.320	39	-3.44	-0.088	
Freeman		-0.23		-0.22			0.39			3	-0.06	-0.020	13	-2.67	-0.205	
Ruiz		-0.16			0.63		-0.78			3	-0.31	-0.103	14	-3.24	-0.231	
Dyson		-0.10			-0.18					2	-0.28	-0.140	45	0.58	0.013	
Powell							0.23			1	0.23	0.230	8	-0.26	-0.033	
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	-0.49	-0.49	31	-3.41	-0.110	545	-3.91	-0.007	
Error/PB/CI											0.00	-3.41		3.70	-0.21	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg	
Gallardo	2.88	-0.49	0.51	3.02							3.67	5.92	1.615	15.00	3.59	0.239
Overton				1.49	-0.49	-0.49	4.51	-0.49		4.33	4.53	1.045	14.67	4.40	0.300	
Freeman									0.51	1.00	0.51	0.510				
SUV	3.51	-0.49	0.51	4.51	-0.49	-0.49	4.51	-0.49	0.51	9.00	10.96	1.218	129.67	-3.53	-0.027	
Error/PB/CI	0.63										0.63	11.59		3.93	0.40	

### GAME 047, MAY 24, SEATTLE-1 @ WASHINGTON-5

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg	
Segura	-0.23	-0.45			-0.16		-0.10			4	-0.94	-0.235	49	-0.58	-0.012	
Seager	0.44	-0.23			-0.10			-0.23		4	-0.12	-0.030	61	2.19	0.036	
Cano	0.78	0.44				-0.23		0.22		4	1.21	0.303	50	0.71	0.014	
Valencia	-0.26	-0.37				0.22		-0.26		4	-0.67	-0.168	46	1.94	0.042	
Gamel	-0.22	-0.33				0.44				3	-0.11	-0.037	35	2.57	0.073	
Motter								-0.22		1	-0.22	-0.220	46	-0.57	-0.012	
Heredia	0.39		0.39		-0.41				-0.23	4	0.14	0.035	43	-3.30	-0.077	
Zunino	-0.40		-0.78		-0.51				-0.16	4	-1.85	-0.463	34	-6.34	-0.186	
Dyson	0.44	-0.10				-0.23		-0.10	4	0.01	0.002	49	0.59	0.012		
Pitcher (NL)	-0.47			-0.23						2	-0.70	-0.350				
Powell							-0.16			1	-0.16	-0.160	9	-0.42	-0.047	
SUV	0.51	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	35	-3.41	-0.097	580	-8.45	-0.015	
Error/PB/CI											0.00	-3.41		4.83	-3.62	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg	
Gaviglio	2.89	0.51	-0.49	-0.49	-0.49	-0.49					6.00	1.44	0.240	8.00	1.46	0.183
Diaz							-0.49				1.00	-0.49	-0.490	4.67	-1.35	-0.289
Vincent								-0.49			1.00	-0.49	-0.490	3.67	-1.63	-0.445
SUV	3.51	0.51	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	0.00	8.00	0.46	0.057	137.67	-4.19	-0.030	
Error/PB/CI	0.62										0.62	1.08		5.67	1.48	

### GAME 050, MAY 27, SEATTLE-0 @ BOSTON-6

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23		-0.26		-0.62			-0.16		4	-1.27	-0.318	53	-1.85	-0.035
Valencia	0.22		-0.22			-0.23		-0.10		4	-0.33	-0.083	50	1.61	0.032
Cano	-0.26			-0.23		-0.16			-0.23	4	-0.88	-0.220	54	-0.17	-0.003
Cruz	-0.22			-0.16		-0.10			-0.16	4	-0.64	-0.160	65	6.03	0.093
Seager		-0.23		-0.10			-0.23		-0.10	4	-0.66	-0.165	65	1.53	0.024
Motter		-0.16			-0.23		-0.16			3	-0.55	-0.183	49	-1.12	-0.023
Heredia		-0.10			0.22		0.12			3	0.24	0.080	46	-3.06	-0.067
Zunino			-0.23		-0.26		-0.22			3	0.39	0.130	52	0.98	0.019
Dyson			0.22		0.40			-0.23		3	0.39	0.130	52	0.98	0.019
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	32	-4.41	-0.138	612	-12.86	-0.021
Error/PB/CI											0.00	-4.41		4.83	-8.03
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Whalen	2.51	-0.49	-0.49	-0.49	-0.49	1.77					5.33	2.32	0.435		
Lawrence						-0.26	-0.49	0.51			2.67	-0.24	-0.090		
SUV	2.51	-0.49	-0.49	-0.49	-0.49	1.51	-0.49	0.51	0.00	8.00	2.08	0.260	145.67	-2.11	-0.014
Error/PB/CI											0.00	2.08		5.67	3.56

### GAME 053, MAY 30, SEATTLE-10 @ COLORADO-4

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg	
Segura	0.39	0.18		0.39		-0.40			0.23	-1.16	6	-0.37	-0.062	59	-2.22	-0.038
Valencia	-0.78	-0.51		-0.78		-0.48			0.12		5	-2.43	-0.486	55	-0.82	-0.015
Cano	-0.10		0.39	-0.10				1.00	-0.51		5	0.68	0.136	59	0.51	0.009
Cruz	0.39									1	0.39	0.390	66	6.42	0.097	
Gamel			1.11		-0.23		0.87		0.39	4	2.14	0.535	39	4.71	0.121	
Seager	1.61	1.13		-0.16		-0.42		0.63		5	2.79	0.558	70	4.32	0.062	
Heredia	0.39	0.76		0.12		-0.72		0.87		5	1.42	0.284	51	-1.64	-0.032	
Zunino	1.11	-0.40		0.23		-0.22			-0.78	5	-0.06	-0.012	42	-7.11	-0.169	
Dyson	-0.42	-0.26		-0.45			-0.23	1.32		5	-0.04	-0.008	57	0.94	0.016	
Pitcher (NL)	-0.37	-0.22					-0.16			3	-0.75	-0.250	5	-1.45	-0.290	
Powell					0.39					1	0.39	0.390	10	-0.03	-0.003	
Motter								1.24		1	1.24	1.240	50	0.12	0.002	
SUV	-0.49	2.51	2.51	-0.49	-0.49	-0.49	0.51	-0.49	2.51	46	5.40	0.117	658	-7.46	-0.011	
Error/PB/CI		0.13						0.06			0.19	5.59		5.02	-2.44	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg	
Miranda	-0.49	-0.49	-0.49	-0.49	1.51						5.00	-0.45	-0.090	24.00	-7.43	-0.310
Lawrence						-0.49	-0.49	0.73			2.67	-0.25	-0.094	5.33	-0.49	-0.092
Zych								0.23		0.00	0.23		3.67	-0.62	-0.169	
Rzepczynski							-0.45			0.33	-0.45	-1.350	4.00	-2.57	-0.643	
Altavilla								0.51	1.00	0.51	0.510	4.00	2.04	0.510		
SUV	-0.49	-0.49	-0.49	-0.49	1.51	-0.49	-0.49	0.51	0.51	9.00	-0.41	-0.046	154.67	-2.52	-0.016	
Error/PB/CI											0.00	-0.41		5.67	3.15	

### CUMULATIVES THROUGH 18 GAMES

Mariner	+Ops	+SUV	+Avg	Pitcher	+IP	+SUV	+Avg
Gamel	39	4.71	0.121	Rzepczynski	4.00	-2.57	-0.643
Cruz	66	6.42	0.097	Marshall	1.00	-0.49	-0.490
Seager	70	4.32	0.062	Curtis	1.00	-0.49	-0.490
Dyson	57	0.94	0.016	Vincent	3.67	-1.63	-0.445
Cano	59	0.51	0.009	Bergman	11.00	-4.39	-0.399
Motter	50	0.12	0.002	Hernandez	7.33	-2.44	-0.333
Haniger	31	0.05	0.002	Miranda	24.00	-7.43	-0.310
Powell	10	-0.03	-0.003	Iwakuma	11.67	-4.37	-0.375
Valencia	55	-0.82	-0.015	Diaz	4.67	-1.35	-0.289
Heredia	51	-1.64	-0.032	Scribner	5.33	-1.04	-0.195
Segura	59	-2.22	-0.038	Zych	3.67	-0.62	-0.169
Vogelbach	9	-0.88	-0.098	Paxton	11.33	-0.81	-0.071
Martin, L	20	-2.28	-0.114	Lawrence	5.33	-0.49	-0.092
Zunino	42	-7.11	-0.169	Pazos	2.67	0.15	0.056
Freeman	13	-2.67	-0.205	Gaviglio	8.00	1.46	0.183
Ruiz	14	-3.24	-0.231	Gallardo	15.00	3.17	0.211
Gosewisch	8	-2.19	-0.274	Overton	14.67	4.24	0.289
Pitcher (NL)	5	-1.45	-0.290	Whalen	5.33	2.32	0.435
SUV	658	-7.46	-0.011	Freeman	1.00	0.51	0.510
Error/PB/CI		5.02	-2.44	Altavilla	4.00	2.04	0.510
				De Jong	7.67	7.30	0.952
				Fien	2.33	4.41	1.890
				SUV	154.67	-2.52	-0.016
				Error/PB/CI		5.67	3.15

### GAME 056, JUNE 2, TAMPA BAY-4 @ SEATTLE-12

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Gamel	0.39	-0.16		-0.16		0.12	-0.33			5	-0.14	-0.028	44	4.57	0.104
Heredia	0.16	-0.10		-0.10		-0.22		-0.23		5	-0.49	-0.098	56	-2.13	-0.038
Cano	0.39		0.39		-0.23		0.39			4	0.94	0.235	63	1.45	0.023
Smith							0.44			1	0.44	0.440			
Cruz	-0.78		0.63		0.22		1.11			4	1.18	0.295	70	7.60	0.109
Powell							-0.31			1	-0.31	-0.310	11	-0.34	-0.031
Seager	-0.86		-0.35		-0.26		-0.61	-0.39		5	-2.47	-0.494	75	1.85	0.025
Valencia	1.00		2.10		0.40		0.78			4	4.28	1.070	59	3.46	0.059
Motter	3.36		-0.16		-0.62		0.44			4	3.02	0.755	54	3.14	0.058
Dyson	-0.10		-0.10			-0.23	1.56			4	1.13	0.283	61	2.07	0.034
Zunino		-0.23		-0.23		-0.16	0.17			4	-0.45	-0.113	46	-7.56	-0.164
SUV	4.51	-0.49	2.51	-0.49	-0.49	-0.49	3.51	-0.49	0.00	41	7.13	0.174	699	-0.33	0.000
Error/PB/CI	0.95										0.95	8.08		5.97	5.64
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Bergman	-0.49	-0.49	-0.49	1.51	-0.49	-0.49				6.00	-0.94	-0.157	17.00	-5.33	-0.314
Pazos							1.51			1.00	1.51	1.510	3.67	1.66	0.453
Altavilla							-0.49	-0.49		2.00	-0.98	-0.490	6.00	1.06	0.177
SUV	-0.49	-0.49	-0.49	1.51	-0.49	-0.49	1.51	-0.49	-0.49	9.00	-0.41	-0.046	163.67	-2.93	-0.018
Error/PB/CI											0.00	-0.41		5.67	2.74

### GAME 059, JUNE 6, MINNESOTA-3 @ SEATTLE-12

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Heredia	0.39	-0.10		0.87	0.28		-0.23			5	1.21	0.242	61	-0.92	-0.015
Valencia	0.63		-0.23	1.74	-0.26					4	1.88	0.470	63	5.34	0.085
Smith							-0.16			1	-0.16	-0.160	2	0.28	0.140
Cano	1.98		0.22	0.63	0.34		-0.10			5	3.07	0.614	68	4.52	0.066
Cruz	-0.23		0.44	0.76						3	0.97	0.323	73	8.57	0.117
Powell					-0.62		-0.23			2	-0.85	-0.425	13	-1.19	-0.092
Seager	-0.16		1.46	1.98		-0.23		-0.16		5	2.89	0.578	80	4.74	0.059
Motter	0.23		0.01	-0.23		0.22		-0.10		5	0.13	0.026	59	3.27	0.055
Gamel	-0.33		-0.39	-0.16		0.44				4	-0.44	-0.110	48	4.13	0.086
Zunino		-0.23		0.29		-0.47				4	-0.41	-0.103	50	-7.97	-0.159
Dyson	-0.16		0.63	-0.23	-0.45					4	-0.21	-0.053	65	1.86	0.029
SUV	2.51	-0.49	1.51	6.51	-0.49	-0.49	-0.49	-0.49	0.00	42	8.08	0.192	741	7.75	0.010
Error/PB/CI											0.00	8.08		5.97	13.72
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Paxton	-0.49	-0.49	-0.49	1.51	0.51					5.00	0.55	0.110	16.33	-0.26	-0.016
Zych						-0.49				1.00	-0.49	-0.490	4.67	-1.11	-0.238
Altavilla							-0.49	-0.49		2.00	-0.98	-0.490	8.00	0.08	0.010
Vincent								-0.49		1.00	-0.49	-0.490	4.67	-2.12	-0.454
SUV	-0.49	-0.49	-0.49	1.51	0.51	-0.49	-0.49	-0.49	-0.49	9.00	-1.41	-0.157	172.67	-4.34	-0.025
Error/PB/CI											0.00	-1.41		5.67	1.33

### GAME 062, JUNE 9, TORONTO-2 @ SEATTLE-4

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Gamel	-0.23		0.83			-0.16		0.63		4	1.07	0.268	52	5.20	0.100
Heredia	-0.16		-0.22			-0.10		-0.64		4	-1.12	-0.280	65	-2.04	-0.031
Cano	-0.10			-0.23			0.63	-0.15		4	0.15	0.038	72	4.67	0.065
Cruz	-0.23		-0.16			-0.42	0.12			4	-0.69	-0.173	77	7.88	0.102
Seager	-0.16		-0.10			0.22	1.17			4	1.13	0.283	84	5.87	0.070
Valencia	-0.10			-0.23			0.33	-0.62		4	-0.62	-0.155	67	4.72	0.070
Zunino		-0.23		-0.16		0.44				3	0.05	0.017	53	-7.92	-0.149
Dyson		0.50		-0.10		0.76				3	1.16	0.387	68	3.02	0.044
Motter		-0.37			-0.23	-0.45				3	-1.05	-0.350	62	2.22	0.036
SUV	-0.49	-0.49	0.51	-0.49	-0.49	-0.49	1.51	0.51	0.00	33	0.08	0.002	774	7.83	0.010
Error/PB/CI											0.00	0.08		5.97	13.80
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Gaviglio	-0.49	0.27	0.51	-0.49	-0.49	-0.49				6.00	-1.18	-0.197	14.00	0.28	0.020
Cloyd							-0.49			1.00	-0.49	-0.490			
Vincent								-0.49		1.00	-0.49	-0.490	5.67	-2.61	-0.461
Diaz									-0.49	1.00	-0.49	-0.490	5.67	-1.84	-0.325
SUV	-0.49	0.51	0.51	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	9.00	-2.65	-0.294	181.67	-6.99	-0.038
Error/PB/CI		0.24									0.24	-2.41		5.91	-1.08

### GAME 065, JUNE 12, SEATTLE-14 @ MINNESOTA-3

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Gamel	0.39	0.68		0.39	0.22		-0.40		-0.23	6	1.05	0.175	58	6.25	0.108
Haniger	-0.18	1.78		0.63	-0.26		0.44		0.22	6	2.63	0.438	37	2.68	0.072
Cano	-0.61	0.78		-0.61	-0.22		-0.30		-0.15	6	-1.11	-0.185	78	3.56	0.046
Cruz	1.10	0.06		0.22		0.39	-0.62		1.00	6	2.15	0.358	83	10.03	0.121
Seager	-0.26	-0.22		-0.09		0.87		-0.23	0.89	6	0.96	0.160	90	6.83	0.076
Valencia	-0.22		-0.23	1.00		-0.27		1.00	-0.22	6	1.06	0.177	73	5.78	0.079
Zunino		-0.23	0.22	1.00		-0.26		1.00		5	1.73	0.346	58	-6.19	-0.107
Heredia		0.22	-0.26	-0.51		-0.22		-0.16		5	-0.93	-0.186	70	-2.97	-0.042
Smith	0.44	-0.22		-0.23		0.39	-0.10			5	0.28	0.056	7	0.56	0.080
SUV	1.51	3.51	-0.49	2.51	-0.49	0.51	-0.49	1.51	1.51	51	7.82	0.153	825	15.65	0.019
Error/PB/CI	1.29			0.48							1.77	9.59		7.74	23.39
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Gallardo	1.51	-0.49	-0.49	-0.49	-0.49	0.51				6.00	0.06	0.010	21.00	3.23	0.154
Zych							-0.49			1.00	-0.49	-0.490	5.67	-1.60	-0.282
Pazos							-0.49			1.00	-0.49	-0.490	4.67	1.17	0.251
Cishek									-0.87	1.00	-0.87	-0.870			
SUV	1.51	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	-0.49	-0.49	9.00	-1.79	-0.199	190.67	-8.78	-0.046
Error/PB/CI									0.38		0.38	-1.41		6.29	-2.49

### GAME 068, JUNE 15, SEATTLE-2 @ MINNESOTA-6

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Gamel	-0.23		0.89			0.61		-0.16		4	1.11	0.278	62	7.36	0.119
Haniger	-0.16		-0.22			-0.40		-0.10		4	-0.88	-0.220	41	1.80	0.044
Cano	-0.10			-0.23		0.78			-0.23	4	0.22	0.055	82	3.78	0.046
Cruz		-0.23		-0.16		-0.48			-0.16	4	-1.03	-0.258	87	9.00	0.103
Seager	-0.16		-0.10				0.63		0.23	4	0.60	0.150	94	7.43	0.079
Valencia	-0.10			0.39			-0.42		-0.33	4	-0.46	-0.115	77	5.32	0.069
Dyson		-0.23		-0.40			-0.37			3	-1.00	-0.333	71	2.02	0.028
Ruiz		-0.16		-0.26			-0.33			3	-0.75	-0.250	17	-3.99	-0.235
Motter			0.23		-0.22			-0.23		3	-0.22	-0.073	65	2.00	0.031
SUV	-0.49	-0.49	0.51	-0.49	-0.49	0.51	-0.49	-0.49	-0.49	33	-2.41	-0.073	858	13.24	0.015
Error/PB/CI											0.00	-2.41		7.74	20.98
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Miranda	4.51	-0.49	0.51	-0.49						4.00	4.04	1.010	28.00	-3.39	-0.121
De Jong				-0.49	-0.49	-0.49	-0.49	-0.49		4.00	-1.96	-0.490	11.67	5.34	0.458
SUV	4.51	-0.49	0.51	-0.49	-0.49	-0.49	-0.49	-0.49	0.00	8.00	2.08	0.260	198.67	-6.70	-0.034
Error/PB/CI											0.00	2.08		6.29	-0.41

### GAME 071, JUNE 18, SEATTLE-7 @ TEXAS-3

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Gamel	0.39	0.44		-0.10			-0.16			4	0.57	0.143	66	7.93	0.120
Heredia									0.39	1	0.39	0.390	71	-2.58	-0.036
Haniger	0.63	-0.30			-0.23		-0.10		-0.40	5	-0.40	-0.080	46	1.40	0.030
Cano	-0.59	-0.62			0.33			0.63	0.44	5	0.19	0.038	87	3.97	0.046
Cruz	-0.47		0.63		-0.26			-0.42	-0.30	5	-0.82	-0.164	92	8.18	0.089
Seager	1.17		1.00		-0.33			1.00	-0.62	5	2.22	0.444	99	9.65	0.097
Valencia	1.71		-1.02			-0.23		-0.31		4	0.15	0.038	81	5.47	0.068
Dyson	-0.10		-0.10			-0.16		-0.31		4	-0.67	-0.168	75	1.35	0.018
Ruiz		-0.23		-0.23		-0.10		0.12		4	-0.44	-0.110	21	-4.43	-0.211
Smith		0.22		-0.16			-0.23	-0.51		4	-0.68	-0.170	11	-0.12	-0.011
SUV	3.51	-0.49	0.51	-0.49	-0.49	-0.49	-0.49	1.51	-0.49	41	0.51	0.012	899	13.75	0.015
Error/PB/CI	0.77							1.31			2.08	2.59		9.82	23.57
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Bergman	-0.49	1.51	-0.49	-0.49	-0.49	-0.27				5.67	-0.72	-0.127	22.67	-6.05	-0.267
Rzepczynski						-0.22				0.33	-0.22	-0.660	4.33	-2.79	-0.644
Cishek							-0.04			0.67	-0.04	-0.060	1.67	-0.91	-0.546
Pazos							1.06			0.00	1.06		4.67	2.23	0.478
Vincent							-0.51	-0.49		1.33	-1.00	-0.750	7.00	-3.61	-0.516
Diaz									-0.49	1.00	-0.49	-0.490	6.67	-2.33	-0.350
SUV	-0.49	1.51	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	-0.49	9.00	-1.41	-0.157	207.67	-8.11	-0.039
Error/PB/CI											0.00	-1.41		6.29	-1.82

### CUMULATIVES THROUGH 24 GAMES

Mariner	+Ops	+SUV	+Avg	Pitcher	+IP	+SUV	+Avg
Gamel	66	7.93	0.120	Rzepczynski	4.33	-2.79	-0.644
Seager	99	9.65	0.097	Cishek	1.67	-0.91	-0.546
Cruz	92	8.18	0.089	Vincent	7.00	-3.61	-0.516
Valencia	81	5.47	0.068	Marshall	1.00	-0.49	-0.490
Cano	87	3.97	0.046	Curtis	1.00	-0.49	-0.490
Motter	65	2.00	0.031	Cloyd	1.00	-0.49	-0.490
Haniger	46	1.40	0.030	Iwakuma	11.67	-4.37	-0.375
Dyson	75	1.35	0.018	Diaz	6.67	-2.33	-0.350
Smith	11	-0.12	-0.011	Hernandez	7.33	-2.44	-0.333
Heredia	71	-2.58	-0.036	Zych	5.67	-1.60	-0.282
Segura	59	-2.22	-0.038	Bergman	22.67	-6.05	-0.267
Powell	13	-1.19	-0.092	Scribner	5.33	-1.04	-0.195
Vogelbach	9	-0.88	-0.098	Miranda	28.00	-3.39	-0.121
Zunino	58	-6.19	-0.107	Lawrence	5.33	-0.49	-0.092
Martin, L	20	-2.28	-0.114	Paxton	16.33	-0.26	-0.016
Freeman	13	-2.67	-0.205	Altavilla	8.00	0.08	0.010
Ruiz	21	-4.43	-0.211	Gaviglio	14.00	0.28	0.020
Gosewisch	8	-2.19	-0.274	Gallardo	21.00	3.23	0.154
Pitcher (NL)	5	-1.45	-0.290	Overton	14.67	4.24	0.289
SUV	899	13.75	0.015	Whalen	5.33	2.32	0.435
Error/PB/CI		9.82	23.57	De Jong	11.67	5.34	0.458
				Pazos	4.67	2.23	0.478
				Freeman	1.00	0.51	0.510
				Fien	2.33	4.41	1.890
				SUV	207.67	-8.11	-0.039
				Error/PB/CI		6.29	-1.82

### GAME 074, JUNE 21, DETROIT-5 @ SEATTLE-7

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23			-0.23		0.68	0.12			4	0.34	0.085	63	-1.88	-0.030
Gamel	-0.16			-0.16		1.00	0.23			4	0.91	0.228	70	8.84	0.126
Cano	-0.10			-0.10		-0.86	1.88			4	0.82	0.205	91	4.79	0.053
Cruz		-0.23			-0.23	1.88	0.89			4	2.31	0.578	96	10.49	0.109
Seager	-0.16			-0.16	0.12	-0.22				4	-0.42	-0.105	103	9.23	0.090
Valencia	-0.10			-0.10	-0.74		-0.23			4	-1.17	-0.293	85	4.30	0.051
Haniger		-0.23			-0.23	1.00	0.22			4	0.76	0.190	50	2.16	0.043
Dyson		-0.16			-0.22	-0.23	-0.26			4	-0.43	-0.108	79	0.92	0.012
Zunino		-0.10			-0.44	-0.16	-0.22			4	-0.04	-0.010	62	-6.23	-0.100
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	2.51	3.51	-0.49	0.00	36	3.08	0.086	935	16.83	0.018
Error/PB/CI											0.00	3.08		9.82	26.65
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Paxton	-0.49	-0.49	0.51	0.51	-0.49	1.95				5.33	1.50	0.281	21.67	1.24	0.057
Zych					-0.92	-0.49				1.67	-1.41	-0.846	7.33	-3.01	-0.410
Vincent							-0.49			1.00	-0.49	-0.490	8.00	-4.10	-0.513
Diaz								0.51		1.00	0.51	0.510	7.67	-1.82	-0.237
SUV	-0.49	-0.49	0.51	0.51	-0.49	1.51	-0.49	-0.49	0.51	9.00	0.11	0.012	216.67	-8.00	-0.037
Error/PB/CI						0.48					0.48	0.59		6.77	-1.23

### GAME 077, JUNE 24, HOUSTON-5 @ SEATTLE-2

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23			-0.23		0.63		-0.16		4	0.01	0.003	67	-1.87	-0.028
Gamel	-0.16			-0.16		-0.59		-0.10		4	-1.01	-0.253	74	7.83	0.106
Cano	-0.10			-0.10		1.00			-0.23	4	0.57	0.143	95	5.36	0.056
Cruz		-0.23			0.39	-1.16			0.44	4	-0.56	-0.140	100	9.93	0.099
Seager	-0.16				1.11		-0.23		-0.31	4	0.41	0.103	107	9.64	0.090
Haniger	-0.10				-0.61		0.22		0.12	4	-0.37	-0.093	54	1.79	0.033
Dyson		-0.23		-0.87		-0.15		0.23	4	-1.02	-0.255	83	-0.10	-0.001	
Motter		-0.16		-0.51		-0.33			3	-1.00	-0.333	68	1.00	0.015	
Zunino								1.00	1	1.00	1.000	63	-5.23	-0.083	
Ruiz		-0.10			0.63		-0.23	-0.74	4	-0.44	-0.110	25	-4.87	-0.195	
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	-0.49	0.51	36	-2.41	-0.067	971	14.42	0.015
Error/PB/CI											0.00	-2.41		9.82	24.24
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Gaviglio	-0.49	-0.49	1.51	-0.49	-0.49	-0.49				6.00	-0.94	-0.157	20.00	-0.66	-0.033
Zych						-0.01				0.33	-0.01	-0.030	7.67	-3.02	-0.394
Rzepczynski						0.00				0.00	0.00		4.33	-2.79	-0.644
Cishek						2.08				0.67	2.08	3.120	2.33	1.17	0.501
Altavilla							-0.49	-0.49	2.00	-0.98	-0.490	10.00	-0.90	-0.090	
SUV	-0.49	-0.49	1.51	-0.49	-0.49	-0.49	2.51	-0.49	0.90	0.15	0.017	225.67	-7.85	-0.035	
Error/PB/CI						0.44					0.44	0.59		7.21	-0.64

### GAME 080, JUNE 28, PHILADELPHIA-5 @ SEATTLE-4

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	0.50		-0.23	0.23		0.23			-0.16	5	0.57	0.114	72	-1.30	-0.018
Gamel	-0.40		0.44	-0.45			-0.23		-0.10	5	-0.74	-0.148	79	7.09	0.090
Cano	-0.26		-0.37		1.00		0.22			4	0.59	0.148	99	5.95	0.060
Cruz	0.83		-0.33		-0.23		-0.26			4	0.01	0.002	104	9.94	0.096
Seager	0.23			1.00	-0.16		-0.22			4	0.85	0.213	111	10.49	0.095
Haniger	-0.45			-0.23	-0.10			-0.23		4	-1.01	-0.253	58	0.78	0.013
Valencia		-0.23		1.00		-0.23		-0.16		4	0.38	0.095	89	4.68	0.053
Dyson		-0.16		0.22		-0.16		-0.10		4	-0.20	-0.050	87	-0.30	-0.003
Zunino		-0.10		-0.26		-0.33			-0.23	4	-0.92	-0.230	67	-6.15	-0.092
SUV	0.51	-0.49	-0.49	1.51	0.51	-0.49	-0.49	-0.49	-0.49	38	-0.47	-0.012	1009	13.95	0.014
Error/PB/CI	0.06										0.06	-0.41		9.88	23.83
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Hernandez	-0.49	-0.49	2.51	-0.49	-0.49	-0.49				6.00	0.06	0.010	13.33	-2.38	-0.179
Pazos							-0.49			1.00	-0.49	-0.490	5.67	1.74	0.307
Vincent								-0.49		1.00	-0.49	-0.490	9.00	-4.59	-0.510
Diaz									1.73	0.67	1.73	2.595	8.33	-0.09	-0.011
Cishek									-0.22	0.33	-0.22	-0.660	2.67	0.95	0.356
SUV	-0.49	-0.49	2.51	-0.49	-0.49	-0.49	-0.49	-0.49	1.51	9.00	0.59	0.066	234.67	-7.26	-0.031
Error/PB/CI											0.00	0.59		7.21	-0.05

### GAME 083, JULY 2, SEATTLE-5 @ L.A. ANGELS-3

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23		0.76		1.22			0.39	0.29	5	2.43	0.486	77	1.13	0.015
Gamel	-0.16		-0.30		-0.70			0.63	-0.51	5	-1.04	-0.208	84	6.05	0.072
Cano	-0.10		0.12			-0.23		1.98		4	1.77	0.443	103	7.72	0.075
Haniger		-0.23	-0.74			-0.16		-0.23		4	-1.36	-0.340	62	-0.58	-0.009
Seager		-0.16		-0.23		-0.10		-0.16		4	-0.65	-0.163	115	9.84	0.086
Valencia	-0.10		-0.16				-0.23	-0.10		4	-0.59	-0.148	93	4.09	0.044
Heredia		0.39	-0.10			0.22			0.39	4	0.90	0.225	75	-1.68	-0.022
Zunino		-0.40		-0.23		-0.26		-0.40		4	-1.29	-0.323	71	-7.44	-0.105
Powell		0.68		0.22		-0.22		-0.26		4	0.42	0.105	17	-0.77	-0.045
SUV	-0.49	-0.49	0.51	-0.49	0.51	-0.49	-0.49	2.51	-0.49	38	0.59	0.016	1047	14.54	0.014
Error/PB/CI											0.00	0.59		9.88	24.42
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Paxton	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	1.67			6.33	-1.27	-0.201	28.00	-0.03	-0.001
Cishek							-1.16			0.67	-1.16	-1.740	3.33	-0.21	-0.063
Vincent								2.67		0.33	2.67	8.010	9.33	-1.92	-0.206
Rzepczynski								-0.54		0.33	-0.54	-1.620	4.67	-3.33	-0.714
Diaz								-0.62	-0.49	1.33	-1.11	-0.833	9.67	-1.20	-0.124
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	1.51	-0.49	9.00	-1.41	-0.157	243.67	-8.67	-0.036
Error/PB/CI											0.00	-1.41		7.21	-1.46

### GAME 086, JULY 5, KANSAS CITY-9 @ SEATTLE-6 (10 INNINGS)

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	0.63	1.32		-0.16			-0.18			-0.23	5	1.38	0.276	82	2.51	0.031
Valencia	-0.40	-0.16		-0.10			0.22			-0.16	5	-0.60	-0.120	98	3.49	0.036
Cano	0.44	-0.10			-0.23		-0.92			-0.10	5	-0.91	-0.182	108	6.81	0.063
Cruz	0.17		1.00		-0.16			-0.23			4	0.78	0.195	108	10.72	0.099
Gamel	0.89		0.63		-0.10			-0.16			4	1.26	0.315	88	7.31	0.083
Haniger	-0.22		-0.42			-0.23		-0.10			4	-0.97	-0.243	66	-1.55	-0.023
Zunino	1.00	-0.37			-0.16			-0.23			4	0.24	0.060	75	-7.20	-0.096
Dyson	0.87	-0.33			-0.10						3	0.44	0.147	90	0.14	0.002
Heredia									-0.16		1	-0.16	-0.160	76	-1.84	-0.024
Motter	-0.42		-0.23			0.39		-0.10			4	-0.36	-0.090	72	0.64	0.009
SUV	1.51	2.51	0.51	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	39	1.10	0.028	1086	15.64	0.014	
Error/PB/CI											0.00	1.10		9.88	25.52	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	IP	SUV	Avg	+IP	+SUV	+Avg
Miranda	3.51	-0.49	-0.49	-0.49	1.51						5.00	3.55	0.710	33.00	0.16	0.005
Zych						-0.49	-0.49	-0.23			2.33	-1.21	-0.519	10.00	-4.23	-0.423
Rzepczynski								0.19			0.33	0.19	0.570	5.00	-3.14	-0.628
Diaz								-0.45	-0.49		1.33	-0.94	-0.705	11.00	-2.14	-0.195
Pazos										1.59	0.33	1.59	4.770	6.00	3.33	0.555
Vincent										0.08	0.67	0.08	0.120	10.00	-1.84	-0.184
SUV	3.51	-0.49	-0.49	-0.49	1.51	-0.49	-0.49	-0.49	-0.49	2.51	10.00	3.26	0.326	253.67	-5.41	-0.021
Error/PB/CI											0.84	0.84	4.10	8.05	2.64	

### GAME 089, JULY 8, OAKLAND-4 @ SEATTLE-3

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23		1.00		0.44		-0.48			4	0.73	0.183	86	3.24	0.038
Gamel	-0.16		0.78		0.22		-0.23			4	0.61	0.153	92	7.92	0.083
Cano	-0.10		-0.48		-0.41		-0.16			4	-1.15	-0.288	112	5.66	0.051
Cruz		-0.23		-0.23	-0.51		-0.10			4	-1.07	-0.268	112	9.65	0.086
Seager		0.22		-0.16		-0.23		-0.23		4	-0.40	-0.100	119	9.44	0.079
Valencia		-0.26		0.01		-0.16		-0.16		4	-0.57	-0.143	102	2.92	0.029
Haniger		-0.22		-0.33		-0.10		0.23		4	-0.42	-0.105	70	-1.97	-0.028
Dyson			0.63		1.00		0.39		-0.33	4	1.69	0.423	94	1.83	0.019
Zunino			-0.42		-0.23		-0.40			3	-1.05	-0.350	78	-8.25	-0.106
SUV	-0.49	-0.49	1.51	-0.49	0.51	-0.49	-0.49	-0.49	-0.49	35	-1.63	-0.047	1121	14.01	0.012
Error/PB/CI					0.22						0.22	-1.41		10.10	24.11
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Moore	-0.49	0.51	0.51	-0.49	0.51	-0.49				6.00	0.06	0.010			
Pazos							-0.49			1.00	-0.49	-0.490	7.00	2.84	0.406
Vincent							-0.49			1.00	-0.49	-0.490	11.00	-2.33	-0.212
Diaz									0.51	1.00	0.51	0.510	12.00	-1.63	-0.136
SUV	-0.49	0.51	0.51	-0.49	0.51	-0.49	-0.49	-0.49	0.51	9.00	-0.41	-0.046	262.67	-5.82	-0.022
Error/PB/CI											0.00	-0.41		8.05	2.23

### CUMULATIVES THROUGH 30 GAMES

Mariner	+Ops	+SUV	+Avg		Pitcher	+IP	+SUV	+Avg
Cruz	112	9.65	0.086		Rzepczynski	5.00	-3.14	-0.628
Gamel	92	7.92	0.086		Marshall	1.00	-0.49	-0.490
Seager	119	9.44	0.079		Curtis	1.00	-0.49	-0.490
Cano	112	5.66	0.051		Cloyd	1.00	-0.49	-0.490
Segura	86	3.24	0.038		Zych	10.00	-4.23	-0.423
Valencia	102	2.92	0.029		Iwakuma	11.67	-4.37	-0.375
Dyson	94	1.83	0.019		Bergman	22.67	-6.05	-0.267
Motter	72	0.64	0.009		Vincent	11.00	-2.33	-0.212
Smith	11	-0.12	-0.011		Scribner	5.33	-1.04	-0.195
Heredia	76	-1.84	-0.024		Hernandez	13.33	-2.38	-0.179
Haniger	70	-1.97	-0.028		Diaz	12.00	-1.63	-0.136
Powell	17	-0.77	-0.045		Lawrence	5.33	-0.49	-0.092
Vogelbach	9	-0.88	-0.098		Altavilla	10.00	-0.90	-0.090
Zunino	78	-8.25	-0.106		Cishek	3.33	-0.21	-0.063
Martin, L	20	-2.28	-0.114		Gaviglio	20.00	-0.66	-0.033
Ruiz	25	-4.87	-0.195		Paxton	28.00	-0.03	-0.001
Freeman	13	-2.67	-0.205		Miranda	33.00	0.16	0.005
Gosewisch	8	-2.19	-0.274		Moore	6.00	0.06	0.010
Pitcher (NL)	5	-1.45	-0.290		Gallardo	21.00	3.23	0.154
SUV	1121	14.01	0.012		Overton	14.67	4.24	0.289
Error/PB/CI		10.10	24.11		Pazos	7.00	2.84	0.406
					Whalen	5.33	2.32	0.435
					De Jong	11.67	5.34	0.458
					Freeman	1.00	0.51	0.510
					Fien	2.33	4.41	1.890
					SUV	262.67	-5.82	-0.022
					Error/PB/CI		8.05	2.23

### GAME 092, JULY 15, SEATTLE-4 @ CHICAGO WHITE SOX-3

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23		-0.10		0.40		-0.10			4	-0.03	-0.008	90	3.21	0.036
Gamel	-0.16			0.39	-0.62			0.39		4	0.00	0.000	96	7.92	0.083
Cano	-0.10			-0.18		0.39		-0.78		4	-0.67	-0.168	116	4.99	0.043
Cruz		-0.23		-0.37		1.61		-0.10		4	0.91	0.228	116	10.56	0.091
Seager		1.00		-0.33		-0.23			-0.23	4	0.21	0.053	123	9.65	0.078
Valencia		-0.16		0.01		-0.16			-0.16	4	-0.47	-0.118	106	2.45	0.023
Haniger		-0.10			-0.18				-0.10	3	-0.38	-0.127	73	-2.35	-0.032
Heredia						-0.10				1	-0.10	-0.100	77	-1.94	-0.025
Dyson			-0.23		-0.55		-0.23			3	-1.01	-0.337	97	0.82	0.008
Ruiz			-0.16		0.83		-0.16			3	0.51	0.170	28	-4.36	-0.156
SUV	-0.49	0.51	-0.49	-0.49	0.51	1.51	-0.49	-0.49	-0.49	34	-1.03	-0.030	1155	12.98	0.011
Error/PB/CI					0.62						0.62	-0.41		10.72	23.70
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Hernandez	0.51	-0.49	-0.11	-0.49	-0.78					5.00	-1.36	-0.272	18.33	-3.74	-0.204
Cishek						-1.09				1.00	-1.09	-1.090	4.33	-1.30	-0.300
Zych							-0.49			1.00	-0.49	-0.490	11.00	-4.72	-0.429
Vincent							-0.49			1.00	-0.49	-0.490	12.00	-2.82	-0.235
Diaz								-0.49		1.00	-0.49	-0.490	13.00	-2.12	-0.163
SUV	0.51	-0.49	0.51	-0.49	0.51	-0.49	-0.49	-0.49	-0.49	9.00	-3.92	-0.436	271.67	-9.74	-0.036
Error/PB/CI			0.62		1.29	0.60					2.51	-1.41		10.56	0.82

### GAME 095, JULY 18, SEATTLE-2 @ HOUSTON-6

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23		-0.22			-0.23		-0.26		4	-0.94	-0.235	94	2.27	0.024
Gamel	-0.16			-0.23		-0.16		0.89		4	0.34	0.085	100	8.26	0.083
Cano	-0.10			-0.16		0.12		0.23		4	0.09	0.023	120	5.08	0.042
Cruz		-0.23		-0.10		-0.22		-0.45		4	-1.00	-0.250	120	9.56	0.080
Seager		-0.16			0.63		-0.23		-0.23	4	0.01	0.002	127	9.66	0.076
Valencia		-0.10			-0.18		-0.16		-0.16	4	-0.60	-0.150	110	1.85	0.017
Dyson			-0.23		0.16		-0.10		-0.10	4	-0.27	-0.068	101	0.55	0.005
Ruiz			-0.16		-0.55			0.50		3	-0.21	-0.070	31	-4.57	-0.147
Heredia			0.12		-0.39			-0.40		3	-0.67	-0.223	80	-2.61	-0.033
SUV	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	-0.49	0.51	-0.49	34	-3.25	-0.096	1189	9.73	0.008
Error/PB/CI					0.84						0.84	-2.41		11.56	21.29
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Gaviglio	0.51	0.51	-0.49	0.91	-0.49	0.51				6.00	1.46	0.243	26.00	0.80	0.031
Pagan								0.51	-0.49		2.00	0.02	0.010		
SUV	0.51	0.51	-0.49	1.51	-0.49	0.51	0.51	-0.49	0.00	8.00	1.48	0.185	279.67	-8.26	-0.030
Error/PB/CI					0.60						0.60	2.08		11.16	2.90

### GAME 098, JULY 21, N.Y. YANKEES-5 @ SEATTLE-1

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23	-0.48		-0.10			-0.16		-0.10	5	-1.07	-0.214	99	1.20	0.012
Valencia	-0.16	-0.22			-0.23		-0.10			4	-0.71	-0.178	114	1.14	0.010
Cano	0.12		-0.23		-0.16			0.63		4	0.36	0.090	124	5.44	0.044
Cruz	0.29		0.28		-0.10			-0.42		4	0.05	0.013	124	9.61	0.078
Seager	0.94		0.55			0.39		-0.37		4	1.51	0.378	131	11.17	0.085
Haniger	0.29		-0.47			-0.40		0.18		4	-0.40	-0.100	77	-2.75	-0.036
Heredia	-0.74		-0.62							2	-1.36	-0.680	82	-3.97	-0.048
Dyson					-0.26			-0.51		2	-0.77	-0.385	103	-0.22	-0.002
Gamel		0.63		-0.23		-0.33			0.39	4	0.46	0.115	104	8.72	0.084
Zunino		-0.42		-0.16			-0.23		-0.78	4	-1.59	-0.398	82	-9.84	-0.120
SUV	0.51	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	37	-3.52	-0.095	1226	6.21	0.005
Error/PB/CI					0.11						0.11	-3.41		11.67	17.88
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Moore	-0.49	-0.49	1.51	-0.49	2.51	-0.49				6.00	2.06	0.343	12.00	2.12	0.177
Pagan							-0.49	-0.49	-0.49	3.00	-1.47	-0.490	5.00	-1.45	-0.290
SUV	-0.49	-0.49	1.51	-0.49	2.51	-0.49	-0.49	-0.49	-0.49	9.00	0.59	0.066	288.67	-7.67	-0.027
Error/PB/CI											0.00	0.59		11.16	3.49

### GAME 101, JULY 24, BOSTON-0 @ SEATTLE-4

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	0.39	1.11		0.23			-0.23			4	1.50	0.375	103	2.70	0.026
Valencia	-0.40	-0.33		1.17			-0.16			4	0.28	0.070	118	1.42	0.012
Cano	-0.26		-0.23	-0.62			-0.10			4	-1.21	-0.303	128	4.23	0.033
Cruz	-0.22		0.22		-0.23			-0.23		4	-0.46	-0.115	128	9.15	0.071
Seager		1.00	-0.26		-0.16			-0.16		4	0.42	0.105	135	11.59	0.086
Haniger		-0.23	-0.22		-0.10			-0.10		4	-0.65	-0.163	81	-3.40	-0.042
Gamel		0.68		0.39		-0.23				3	0.84	0.280	107	9.56	0.089
Heredia		0.54		-0.40		0.00				3	0.14	0.047	85	-3.83	-0.045
Zunino		-0.26		-0.26		-0.26				3	-0.78	-0.260	85	-10.62	-0.125
SUV	-0.49	2.51	-0.49	0.51	-0.49	-0.49	-0.49	-0.49	0.00	33	0.08	0.002	1259	6.29	0.005
Error/PB/CI											0.00	0.08		11.67	17.96
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Paxton	-0.49	-0.49	-0.49	-0.49	-0.49	-0.87	-0.49			7.00	-3.81	-0.544	35.00	-3.84	-0.110
Vincent								-0.49		1.00	-0.49	-0.490	13.00	-3.31	-0.255
Phelps									-0.49	1.00	-0.49	-0.490			
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	0.00	9.00	-4.79	-0.532	297.67	-12.46	-0.042
Error/PB/CI						0.38					0.38	-4.41		11.54	-0.92

### GAME 104, JULY 28, N.Y. METS-7 @ SEATTLE-5

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg	
Segura	-0.23		-0.16		0.39	0.23		-0.62		5	-0.39	-0.078	108	2.31	0.021	
Gamel	-0.16		-0.10		-0.78	-0.45			0.39	5	-1.10	-0.220	112	8.46	0.076	
Cano	-0.10			-0.23	-0.15	-0.23		-0.78	5	-1.49	-0.298	133	2.74	0.021		
Cruz		0.39		-0.16	0.29		-0.16		-0.10	5	0.26	0.052	133	9.41	0.071	
Seager		-0.40		0.12	1.77		-0.10			4	1.39	0.348	139	12.98	0.093	
Valencia	-0.26		-0.22	-0.51				0.39		4	-0.60	-0.150	122	0.82	0.007	
Haniger	-0.22			0.76	-0.23	0.63				4	0.94	0.235	85	-2.46	-0.029	
Dyson			-0.23	0.87	-0.16		-0.13			4	0.35	0.088	107	0.13	0.001	
Zunino			1.00		0.87	0.12		-0.76		4	1.23	0.308	89	-9.39	-0.106	
SUV	-0.49	-0.49	0.51	-0.49	3.51	-0.49	-0.49	-0.49	-0.49	40	0.59	0.015	1299	6.88	0.005	
Error/PB/CI											0.00	0.59		11.67	18.55	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg	
Miranda	1.51	-0.49	1.27	-0.65	-0.49	-0.49				6.00	0.66	0.110	39.00	0.82	0.021	
Vincent							-0.49				1.00	-0.49	-0.490	14.00	-3.80	-0.271
Rzepczynski								1.00			0.00	1.00		5.00	-2.14	-0.428
Phelps								1.51			1.00	1.51	1.510	2.00	1.02	0.510
Lawrence									-0.49		1.00	-0.49	-0.490	6.33	-0.98	-0.155
SUV	1.51	-0.49	1.51	-0.49	-0.49	-0.49	-0.49	2.51	-0.49	9.00	2.19	0.243	306.67	-10.27	-0.033	
Error/PB/CI					0.24	0.16					0.40	2.59		11.94	1.67	

### GAME 107, JULY 31, SEATTLE-6 @ TEXAS-4

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Gamel	-0.23		-0.26	-0.33			0.61		-0.16	5	-0.37	-0.074	117	8.09	0.069
Segura	-0.16		0.23		-0.23		-0.40		0.44	5	-0.12	-0.024	113	2.19	0.019
Cano	-0.10		-0.62		-0.16	-0.31		0.72	5	-0.47	-0.094	138	2.27	0.016	
Cruz	-0.23		0.63	-0.10		0.12		0.12	5	0.54	0.108	138	9.95	0.072	
Seager	-0.16		0.87		-0.23	-0.51		-0.22	5	-0.25	-0.050	144	12.73	0.088	
Valencia	-0.10		0.76		-0.16		-0.23		4	0.27	0.068	126	1.09	0.009	
Heredia	-0.22		0.39	-0.10		-0.16		4	-0.09	-0.023	89	-3.92	-0.044		
Martin, L		-0.23	-0.65		1.06		-0.10		4	0.08	0.020	24	-2.20	-0.092	
Ruiz		0.22	0.23		-0.39			0.39	4	0.45	0.113	35	-4.12	-0.118	
SUV	-0.49	-0.49	2.51	-0.49	0.51	-0.49	-0.49	1.51	41	0.04	0.001	1340	6.92	0.005	
Error/PB/CI		0.22	0.17	0.61	0.33			0.22		1.55	1.59		13.22	20.14	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Hernandez	1.51	1.51	-0.82	-0.49	-0.49	0.43				5.33	1.65	0.309	23.67	-2.09	-0.088
Rzepczynski						-0.92	-0.23			1.00	-1.15	-1.150	6.00	-3.29	-0.548
Phelps						-0.26	-0.49			1.67	-0.75	-0.450	3.67	0.27	0.074
Diaz								-0.49	1.00	-0.49	-0.490	14.00	-2.61	-0.186	
SUV	1.51	1.51	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	9.00	-0.74	-0.082	315.67	-11.01	-0.035	
Error/PB/CI			0.33							0.33	-0.41		12.27	1.26	

### CUMULATIVES THROUGH 36 GAMES

Mariner	+Ops	+SUV	+Avg												
Seager	144	12.73	0.088												
Cruz	138	9.95	0.072												
Gamel	117	8.09	0.069												
Segura	113	2.19	0.019												
Cano	138	2.27	0.016												
Motter	72	0.64	0.009												
Valencia	126	1.09	0.009												
Dyson	107	0.13	0.001												
Smith	11	-0.12	-0.011												
Haniger	85	-2.46	-0.029												
Heredia	89	-3.92	-0.044												
Powell	17	-0.77	-0.045												
Martin, L	24	-2.20	-0.092												
Vogelbach	9	-0.88	-0.098												
Zunino	89	-9.39	-0.106												
Ruiz	35	-4.12	-0.118												
Freeman	13	-2.67	-0.205												
Gosewisch	8	-2.19	-0.274												
Pitcher (NL)	5	-1.45	-0.290												
SUV	1340	6.92	0.005												
Error/PB/CI		13.22	20.14												
Pitcher															
Rzepczynski										6.00	-3.29	-0.548			
Marshall									1.00	-0.49	-0.490				
Curtis								1.00	-0.49	-0.490					
Cloyd								1.00	-4.72	-0.429					
Zych								11.00	-4.37	-0.375					
Iwakuma								11.67	-4.37	-0.375					
Pagan								5.00	-1.45	-0.290					
Vincent								14.00	-3.80	-0.271					
Bergman								22.67	-6.05	-0.267					
Scribner								5.33	-1.04	-0.195					
Diaz								14.00	-2.61	-0.186					
Cishek								4.33	-1.30	-0.300					
Lawrence								6.33	-0.98	-0.155					
Paxton								35.00	-3.84	-0.110					
Altavilla								10.00	-0.90	-0.090					
Hernandez								23.67	-2.09	-0.088					
Miranda								39.00	0.82	0.021					
Gaviglio								26.00	0.80	0.031					
Phelps								3.67	0.27	0.074					
Gallardo								21.00	3.23	0.154					
Moore								12.00	2.12	0.177					
Overton								14.67	4.24	0.289					
Whalen								5.33	2.32	0.435					
Pazos								7.00	2.84	0.406					
De Jong								11.67	5.34	0.458					
Freeman								1.00	0.51	0.510					
Fien								2.33	4.41	1.890					
SUV								315.67	-11.01	-0.035					
Error/PB/CI									12.27	1.26					

### GAME 110, AUGUST 3, SEATTLE-4 @ KANSAS CITY-6

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Gamel	-0.23		-0.16		-0.23	-0.22			-0.16	5	-1.00	-0.200	122	7.09	0.058
Segura	-0.16		0.07		-0.16		-0.23		0.23	5	-0.25	-0.050	118	1.94	0.016
Cano	-0.10		0.12		0.12		-0.16		0.89	5	0.87	0.174	143	3.14	0.022
Cruz		-0.23	-0.51		0.29		0.23		-0.22	5	-0.44	-0.088	143	9.51	0.067
Seager	1.00		-0.23	-0.51		-0.33			4	-0.07	-0.018	148	12.66	0.086	
Valencia	-0.38		1.00		0.63		-0.23		4	1.02	0.255	130	2.11	0.016	
Dyson	0.45		0.33		-0.18		-0.16		4	0.44	0.110	111	0.57	0.005	
Heredia	-0.33		-0.26		0.54		-0.10		4	-0.15	-0.037	93	-4.07	-0.044	
Zunino		-0.23	-0.33		-0.26				3	-0.82	-0.273	92	-10.21	-0.111	
Martin, L								-0.23	1	-0.23	-0.230	25	-2.43	-0.097	
SUV	-0.49	0.51	-0.49	0.51	-0.49	0.51	-0.49	-0.49	0.51	40	-0.63	-0.016	1380	6.29	0.005
Error/PB/CI			0.22								0.22	-0.41		13.44	19.73
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Gallardo	-0.49	-0.49	-0.49	-0.49	1.51	1.02				5.00	0.57	0.114	26.00	3.80	0.146
Rzepczynski						-0.51				1.00	-0.51	-0.510	7.00	-3.80	-0.543
Pagan							0.68	0.51		2.00	1.19	0.595	7.00	-0.26	-0.037
SUV	-0.49	-0.49	-0.49	-0.49	1.51	0.51	1.51	0.51	0.00	8.00	1.25	0.156	323.67	-9.76	-0.030
Error/PB/CI						0.83					0.83	2.08		13.10	3.34

### GAME 113, AUGUST 6, SEATTLE-1 @ KANSAS CITY-9

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg	
Dyson	0.61	-0.33			-0.10			-0.10		4	0.08	0.020	115	0.65	0.006	
Segura	-0.40		-0.23			-0.23			-0.23	4	-1.09	-0.273	122	0.85	0.007	
Cano	0.46		-0.16			-0.16			0.22	4	0.36	0.090	147	3.50	0.024	
Cruz	-0.65		-0.10			-0.10			-0.26	4	-1.11	-0.278	147	8.40	0.057	
Seager	-0.51			-0.23			-0.23		-0.22	4	-1.19	-0.298	152	11.47	0.075	
Ruiz		-0.23		-0.16			-0.16			3	-0.55	-0.183	38	-4.67	-0.123	
Martin, L	0.22		-0.10			-0.10				3	0.02	0.007	28	-2.41	-0.086	
Heredia	-0.26			-0.23			-0.23			3	-0.72	-0.240	96	-4.79	-0.050	
Espinosa	1.11			-0.16			-0.16			3	0.79	0.263				
SUV	-0.49	0.51	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	32	-3.41	-0.107	1412	2.88	0.002	
Error/PB/CI											0.00	-3.41		13.44	16.32	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg	
Ramirez	-0.49	-0.49	3.51	-0.49	-0.49	2.02					5.00	3.57	0.714			
Lawrence						-1.51					1.00	-1.51	-1.510	7.33	-2.49	-0.340
Martin, C							2.16	-0.49			2.00	1.67	0.835			
SUV	-0.49	-0.49	3.51	-0.49	-0.49	0.51	3.51	-0.49	0.00	8.00	3.73	0.466	331.67	-6.03	-0.018	
Error/PB/CI							1.35				1.35	5.08		14.45	8.42	

### GAME 116, AUGUST 10, L.A. ANGELS-6 @ SEATTLE-3

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg	
Segura	0.39		0.22		-0.48			1.00		4	1.13	0.283	126	1.98	0.016	
Valencia	-0.78		-0.26			0.39		-0.16		4	-0.81	-0.203	134	1.30	0.010	
Cano	0.12		-0.22			-0.78		0.23		4	-0.65	-0.163	151	2.85	0.019	
Cruz	-0.22			-0.23		-0.10		1.77		4	1.22	0.305	151	9.62	0.064	
Seager		-0.23		-0.16			-0.23	-0.10		4	-0.72	-0.180	156	10.75	0.069	
Heredia	0.44		0.12			0.44		-0.23	4	0.77	0.193	100	-4.02	-0.040		
Gamel	-0.37		-0.22			-0.31		-0.16	4	-1.06	-0.265	126	6.03	0.048		
Zunino	-0.33			-0.23					2	-0.56	-0.280	94	-10.77	-0.115		
Alonso						-0.39			1	-0.39	-0.390					
Ruiz								-0.10	1	-0.10	-0.100	39	-4.77	-0.122		
Dyson		-0.23		0.22			-0.23		3	-0.24	-0.080	118	0.41	0.003		
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	2.51	-0.49	35	-1.41	-0.040	1447	1.47	0.001	
Error/PB/CI											0.00	-1.41		13.44	14.91	
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg	
Paxton	-0.49	0.51	-0.49	1.51	-0.49	-0.49	-0.49				7.00	-0.43	-0.061	42.00	-4.27	-0.102
Lawrence								-0.49			1.00	-0.49	-0.490	8.33	-2.98	-0.358
Diaz									2.84	0.67	2.84	4.260	14.67	0.23	0.016	
Zych									-0.33	0.33	-0.33	-0.990	11.33	-5.05	-0.446	
SUV	-0.49	0.51	-0.49	1.51	-0.49	-0.49	-0.49	-0.49	2.51	9.00	1.59	0.177	340.67	-4.44	-0.013	
Error/PB/CI											0.00	1.59		14.45	10.01	

### GAME 119, AUGUST 13, L.A. ANGELS-4 @ SEATTLE-2

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23		-0.37		0.39	0.39		0.23		5	0.41	0.082	135	1.51	0.011
Heredia	-0.16		1.00		0.63					3	1.47	0.490	107	-3.61	-0.034
Dyson					-0.78		0.12			2	-0.66	-0.330	124	0.71	0.006
Cano	-0.10		-0.33		1.00	-0.10		-0.45		5	0.02	0.004	160	4.15	0.026
Cruz		-0.23		0.39	-0.59		0.39			4	-0.04	-0.010	159	10.04	0.063
Alonso	-0.16		1.61	1.24		0.63				4	3.32	0.830	9	3.34	0.371
Valencia	0.23		-0.23	0.76		-1.12				4	-0.36	-0.090	138	0.94	0.007
Gamel	-0.33		-0.16	0.68		-0.39				4	-0.20	-0.050	131	5.60	0.043
Zunino		0.63	0.12	-1.60			0.39			4	-0.46	-0.115	98	-11.23	-0.115
Martin, L		-0.42	-0.22		1.00		-0.78			4	-0.42	-0.105	36	-4.10	-0.114
SUV	-0.49	-0.49	0.51	1.51	2.51	0.51	-0.49	-0.49	0.00	39	3.08	0.079	1521	2.14	0.001
Error/PB/CI											0.00	3.08		13.44	15.58
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Gonzales	0.51	-0.49	-0.49	-0.49	3.43					4.33	2.47	0.570			
Zych					-0.92	-0.49	0.39			1.67	-1.02	-0.612	13.00	-6.07	-0.467
Pagan						-0.88				1.00	-0.88	-0.880	8.00	-1.14	-0.143
Vincent							-0.49			1.00	-0.49	-0.490	15.00	-4.29	-0.286
Diaz								2.25		0.67	2.25	3.375	15.33	2.48	0.162
Rzepczynski								-0.74		0.33	-0.74	-2.220	7.33	-4.54	-0.619
SUV	0.51	-0.49	-0.49	-0.49	2.51	-0.49	-0.49	-0.49	1.51	9.00	1.59	0.177	358.67	-3.88	-0.011
Error/PB/CI											0.00	1.59		15.07	11.19

### GAME 122, AUGUST 16, BALTIMORE-6 @ SEATTLE-7

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23		-0.37		0.39	0.39		0.23		5	0.41	0.082	135	1.51	0.011
Heredia	-0.16		1.00		0.63					3	1.47	0.490	107	-3.61	-0.034
Dyson					-0.78		0.12			2	-0.66	-0.330	124	0.71	0.006
Cano	-0.10		-0.33		1.00	-0.10		-0.45		5	0.02	0.004	160	4.15	0.026
Cruz		-0.23		0.39	-0.59		0.39			4	-0.04	-0.010	159	10.04	0.063
Alonso	-0.16		1.61	1.24		0.63				4	3.32	0.830	9	3.34	0.371
Valencia	0.23		-0.23	0.76		-1.12				4	-0.36	-0.090	138	0.94	0.007
Gamel	-0.33		-0.16	0.68		-0.39				4	-0.20	-0.050	131	5.60	0.043
Zunino		0.63	0.12	-1.60			0.39			4	-0.46	-0.115	98	-11.23	-0.115
Martin, L		-0.42	-0.22		1.00		-0.78			4	-0.42	-0.105	36	-4.10	-0.114
SUV	-0.49	-0.49	0.51	1.51	2.51	0.51	-0.49	-0.49	0.00	39	3.08	0.079	1521	2.14	0.001
Error/PB/CI											0.00	3.08		13.44	15.58
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Gonzales	0.51	-0.49	-0.49	-0.49	3.43					4.33	2.47	0.570			
Zych					-0.92	-0.49	0.39			1.67	-1.02	-0.612	13.00	-6.07	-0.467
Pagan						-0.88				1.00	-0.88	-0.880	8.00	-1.14	-0.143
Vincent							-0.49			1.00	-0.49	-0.490	15.00	-4.29	-0.286
Diaz								2.25		0.67	2.25	3.375	15.33	2.48	0.162
Rzepczynski								-0.74		0.33	-0.74	-2.220	7.33	-4.54	-0.619
SUV	0.51	-0.49	-0.49	-0.49	2.51	-0.49	-0.49	-0.49	1.51	9.00	1.59	0.177	358.67	-3.88	-0.011
Error/PB/CI											0.00	1.59		15.07	11.19

### GAME 125, AUGUST 20, SEATTLE-0 @ TAMPA BAY-3

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23		-0.10			-0.10			-0.23	4	-0.66	-0.165	139	0.85	0.006
Valencia	-0.16			-0.23			-0.23			3	-0.62	-0.207	141	0.32	0.002
Alonso									0.22	1	0.22	0.220	10	3.56	0.356
Cano	-0.10		-0.16			0.33		-0.26	4	-0.19	-0.048	164	3.96	0.024	
Cruz	0.39		-0.10			-0.26		-0.22	4	-0.19	-0.048	163	9.85	0.060	
Haniger	-0.40			-0.23		0.12				3	-0.51	-0.170	88	-2.97	-0.034
Motter	-0.26			-0.16		-0.45				3	-0.87	-0.290	75	-0.23	-0.003
Heredia	-0.22			-0.10				-0.23		3	-0.55	-0.183	110	-4.16	-0.038
Gamel		0.39			-0.23		-0.16			3	0.00	0.000	134	5.60	0.042
Ruiz		-0.78			-0.16					2	-0.94	-0.470	43	-6.31	-0.147
Martin, L							-0.10			1	-0.10	-0.100	37	-4.20	-0.114
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	31	-4.41	-0.142	1552	-2.27	-0.001
Error/PB/CI											0.00	-4.41		13.44	11.17
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Gallardo	0.51	-0.49	-0.49	-0.49	-0.49	-0.49	1.77			6.33	-0.17	-0.027	32.33	3.63	0.112
Rzepczynski								-0.26		0.67	-0.26	-0.390	8.00	-4.80	-0.600
Lawrence								-0.49		1.00	-0.49	-0.490	9.33	-3.47	-0.372
SUV	0.51	-0.49	-0.49	-0.49	-0.49	-0.49	1.51	-0.49	0.00	8.00	-0.92	-0.115	366.67	-4.80	-0.013
Error/PB/CI											0.00	-0.92		15.07	10.27

### CUMULATIVES THROUGH 42 GAMES

Mariner	+Ops	+SUV	+Avg		Pitcher	+IP	+SUV	+Avg
Alonso	10	3.56	0.356		Rzepczynski	8.00	-4.80	-0.600
Espinosa	3	0.79	0.263		Marshall	1.00	-0.49	-0.490
Cruz	163	9.85	0.060		Curtis	1.00	-0.49	-0.490
Seager	160	9.27	0.058		Cloyd	1.00	-0.49	-0.490
Gamel	134	5.60	0.042		Zych	13.00	-6.07	-0.467
Cano	164	3.96	0.024		Iwakuma	11.67	-4.37	-0.375
Segura	139	0.85	0.006		Lawrencee	9.33	-3.47	-0.372
Dyson	124	0.71	0.006		Bergman	26.67	-8.63	-0.324
Valencia	141	0.32	0.002		Cishek	4.33	-1.30	-0.300
Motter	75	-0.23	-0.003		Vincent	15.00	-4.29	-0.286
Smith	11	-0.12	-0.011		Scribner	5.33	-1.04	-0.195
Haniger	88	-2.97	-0.034		Pagan	8.00	-1.14	-0.143
Heredia	110	-4.16	-0.038		Paxton	42.00	-4.27	-0.102
Powell	17	-0.77	-0.045		Altavilla	10.00	-0.90	-0.090
Vogelbach	9	-0.88	-0.098		Hernandez	23.67	-2.09	-0.088
Martin, L	37	-4.20	-0.114		Miranda	43.67	0.82	0.019
Zunino	98	-11.23	-0.115		Gaviglio	26.00	0.80	0.031
Ruiz	43	-6.31	-0.147		Phelps	3.67	0.27	0.074
Freeman	13	-2.67	-0.205		Gallardo	32.33	3.63	0.112
Gosewisch	8	-2.19	-0.274		Diaz	15.33	2.48	0.162
Pitcher (NL)	5	-1.45	-0.290		Moore	12.00	2.12	0.177
SUV	1552	-2.27	-0.001		Overton	14.67	4.24	0.289
Error/PB/CI		13.44	11.17		Whalen	5.33	2.32	0.435
					De Jong	11.67	5.34	0.458
					Freeman	1.00	0.51	0.510
					Gonzales	4.33	2.47	0.570
					Pazos	7.33	4.39	0.599
					Ramirez	5.00	3.57	0.714
					Martin, C	2.00	1.67	0.835
					Fien	2.33	4.41	1.890
					SUV	366.67	-4.80	-0.013
					Error/PB/CI		15.07	10.27

### GAME 128, AUGUST 23, SEATTLE-9 @ ATLANTA-6

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23	-0.22		-0.23	-0.74			0.87	-0.16	6	-0.71	-0.118	145	0.14	0.001
Alonso	-0.16		0.39	-0.16		-0.23		0.63	-0.10	6	0.37	0.062	16	3.93	0.246
Cano	0.23		1.11							2	1.34	0.670	166	5.30	0.032
Motter				0.23		-0.16		1.13		3	1.20	0.400	78	0.97	0.012
Valencia	-0.33		-0.61	-0.33		-0.10		0.63		5	-0.74	-0.148	146	-0.42	-0.003
Seager		0.39	1.02		-0.23		-0.23	1.74		5	2.69	0.538	165	11.96	0.072
Haniger		1.11	0.98		-0.16		-0.16	-0.23		5	1.54	0.308	93	-1.43	-0.015
Zunino		-0.61	-0.76		0.23		0.12	-0.16		5	-1.18	-0.236	103	-12.41	-0.120
Heredia		-0.05	0.12		0.12		0.23			4	0.42	0.105	114	-3.74	-0.033
Gamel							-0.10			1	-0.10	-0.100	135	5.50	0.041
Picher (NL)		0.89	-0.74		0.29			-0.23		4	0.21	0.053	9	-1.24	-0.138
Cruz						-0.45				1	-0.45	-0.450	164	9.40	0.057
SUV	-0.49	1.51	1.51	-0.49	-0.49	-0.49	-0.49	4.51	-0.49	47	4.59	0.098	1599	2.32	0.001
Error/PB/CI											0.00	4.59		13.44	15.76
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Ramirez	1.51	0.51	-0.49	-0.49	-0.49	-0.49				6.00	0.06	0.010	11.00	3.63	0.330
Rzepczynski							-0.43			0.33	-0.43	-1.290	8.33	-5.23	-0.628
Phelps						0.84				0.67	0.84	1.260	4.33	1.11	0.256
Vincent							0.96			0.67	0.96	1.440	15.67	-3.33	-0.213
Diaz							-0.45	-0.49	1.33	0.67	-0.94	-0.705	16.67	1.54	0.092
SUV	1.51	0.51	-0.49	-0.49	-0.49	-0.49	1.51	0.51	-0.49	9.00	0.49	0.054	375.67	-4.31	-0.011
Error/PB/CI							1.10				1.10	1.59		16.17	11.86

### GAME 131, AUGUST 27, SEATTLE-1 @ N.Y. YANKEES-10

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23		0.39		-0.59		-0.10			4	-0.53	-0.133	149	-0.39	-0.003
Alonso	0.22		0.63		-0.41			-0.23		4	0.21	0.053	20	4.14	0.207
Cano	0.46		-0.59		-0.51					3	-0.64	-0.213	169	4.66	0.028
Motter			-0.41					-0.16		2	-0.57	-0.285	80	0.40	0.005
Cruz	1.22		-0.51			-0.23		-0.10		4	0.38	0.095	168	9.78	0.058
Seager	-0.76			0.39		-0.40			-0.23	4	-1.00	-0.250	169	10.96	0.065
Haniger	-0.62			-0.40		-0.26			-0.16	4	-1.44	-0.360	97	-2.87	-0.030
Gamel		-0.23		-0.48		-0.22				3	-0.93	-0.310	138	4.57	0.033
Valencia								-0.10	1	-0.10	-0.100	147	-0.52	-0.004	
Zunino		-0.16			0.39		-0.23			3	0.00	0.000	106	-12.41	-0.117
Heredia		-0.10			0.63		-0.16			3	0.37	0.123	117	-3.37	-0.029
SUV	0.51	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	-0.49	35	-4.25	-0.121	1634	-1.93	-0.001
Error/PB/CI	0.22					0.62					0.84	-3.41		14.28	12.35
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Albers	2.28	-0.49	0.51	-0.49	-0.49	0.51				6.00	1.83	0.305			
Altavilla							1.51	-0.49		2.00	1.02	0.510	12.00	0.12	0.010
SUV	5.51	-0.49	0.51	-0.49	-0.49	0.51	1.51	-0.49	0.00	8.00	2.85	0.356	383.67	-1.46	-0.004
Error/PB/CI	3.23										3.23	6.08		19.40	17.94

### GAME 134, AUGUST 30, SEATTLE-7 @ BALTIMORE-8

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Gamel	-0.23		0.68	-0.16			-0.23			4	0.06	0.015	142	4.63	0.033
Segura									0.12	1	0.12	0.120	150	-0.27	-0.002
Alonso	0.44		0.44	-0.10						3	0.78	0.260	23	4.92	0.214
Valencia							-0.16		-0.22	2	-0.38	-0.190	149	-0.90	-0.006
Cruz	-0.37		1.32		-0.23		-0.10			4	0.62	0.155	172	10.40	0.060
Cano	-0.33		0.68		-0.16			-0.23		4	-0.04	-0.010	173	4.62	0.027
Seager		-0.23	-0.86		-0.10			-0.16		4	-1.35	-0.338	173	9.61	0.056
Haniger	-0.16	1.88				0.63	1.00			4	3.35	0.838	101	0.48	0.005
Zunino	-0.10	1.71			-0.42		-0.10			4	1.09	0.273	110	-11.32	-0.103
Heredia		-0.56			0.22			-0.23	4	-0.57	-0.143	121	-3.94	-0.033	
Motter		0.22	-0.23		-0.92			-0.16	4	-1.09	-0.273	84	-0.69	-0.008	
SUV	-0.49	-0.49	5.51	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	38	2.59	0.068	1672	0.66	0.000
Error/PB/CI											0.00	2.59		14.28	14.94
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Miranda	-0.49	1.51	-0.87	2.51	0.99					4.33	3.65	0.842	48.00	4.47	0.093
Pagan					-0.48	0.43				1.00	-0.05	-0.050	9.00	-1.19	-0.132
Phelps						0.08				0.67	0.08	0.120	5.00	1.19	0.238
Vincent							-0.49			1.00	-0.49	-0.490	16.67	-3.82	-0.229
Bergman							-0.04			0.67	-0.04	-0.060	27.33	-8.67	-0.317
Rzepczynski							0.55			0.33	0.55	1.650	8.67	-4.68	-0.540
SUV	-0.49	1.51	-0.49	2.51	0.51	0.51	-0.49	0.51	0.00	8.00	3.70	0.463	391.67	2.24	0.006
Error/PB/CI			0.38								0.38	4.08		19.78	22.02

### GAME 137, SEPTEMBER 3, OAKLAND-2 @ SEATTLE-10

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	0.39	-1.12		0.23		0.63		0.63		5	0.76	0.152	155	0.49	0.003
Alonso	-0.40	-0.39		0.12		0.39		1.00		5	0.72	0.144	28	5.64	0.201
Cano	1.78		0.39	1.00		-1.18		0.76		5	2.75	0.550	178	7.37	0.041
Cruz	0.22		-0.40	0.29		-0.33		1.00		5	0.78	0.156	177	11.18	0.063
Seager	-0.26		-0.26	-0.74			-0.23	0.87		5	-0.62	-0.124	178	8.99	0.051
Haniger	0.23		0.40		-0.83		1.00	-0.22		5	0.58	0.116	106	1.06	0.010
Gamel	-0.45		-0.62		-0.42		-0.16	0.06		5	-1.59	-0.318	147	3.04	0.021
Heredia		0.39		-0.23	-0.10		-0.10	0.23		5	0.19	0.038	126	-3.75	-0.030
Ruiz		0.63		-0.16		1.00		0.63		4	2.10	0.525	47	-4.21	-0.090
Beckham								-0.45		1	-0.45	-0.450			
SUV	1.51	-0.49	-0.49	0.51	-0.49	0.51	0.51	4.51	0.00	45	5.22	0.116	1717	5.88	0.003
Error/PB/CI					0.86						0.86	6.08		15.14	21.02
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Albers	-0.49	-0.49	-0.49	-0.49	-0.49	0.51				6.00	-1.94	-0.323	12.00	-0.11	-0.009
Pagan						-0.49	0.63			1.00	0.14	0.140	10.00	-1.05	-0.105
Rzepczynski								1.39		0.00	1.39		8.67	-3.29	-0.380
Vincent								-1.51		1.00	-1.51	-1.510	17.67	-5.33	-0.302
Simmons								-0.49	1.00	-0.49	-0.49				
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	0.51	-0.49	9.00	-2.41	-0.268	400.67	-0.17	0.000
Error/PB/CI											0.00	-2.41		19.78	19.61

### GAME 140, SEPTEMBER 6, HOUSTON-5 @ SEATTLE-3

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	0.39	-1.12		0.23		0.63		0.63		5	0.76	0.152	155	0.49	0.003
Alonso	-0.40	-0.39		0.12		0.39		1.00		5	0.72	0.144	28	5.64	0.201
Cano	1.78		0.39	1.00		-1.18		0.76		5	2.75	0.550	178	7.37	0.041
Cruz	0.22		-0.40	0.29		-0.33		1.00		5	0.78	0.156	177	11.18	0.063
Seager	-0.26		-0.26	-0.74			-0.23	0.87		5	-0.62	-0.124	178	8.99	0.051
Haniger	0.23		0.40		-0.83		1.00	-0.22		5	0.58	0.116	106	1.06	0.010
Gamel	-0.45		-0.62		-0.42		-0.16	0.06		5	-1.59	-0.318	147	3.04	0.021
Heredia		0.39		-0.23	-0.10		-0.10	0.23		5	0.19	0.038	126	-3.75	-0.030
Ruiz		0.63		-0.16		1.00		0.63		4	2.10	0.525	47	-4.21	-0.090
Beckham								-0.45		1	-0.45	-0.450			
SUV	1.51	-0.49	-0.49	0.51	-0.49	0.51	0.51	4.51	0.00	45	5.22	0.116	1717	5.88	0.003
Error/PB/CI					0.86						0.86	6.08		15.14	21.02
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Albers	-0.49	-0.49	-0.49	-0.49	-0.49	0.51				6.00	-1.94	-0.323	12.00	-0.11	-0.009
Pagan							-0.49	0.63		1.00	0.14	0.140	10.00	-1.05	-0.105
Rzepczynski								1.39		0.00	1.39		8.67	-3.29	-0.380
Vincent								-1.51		1.00	-1.51	-1.510	17.67	-5.33	-0.302
Simmons									-0.49	1.00	-0.49	-0.490			
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	0.51	-0.49	9.00	-2.41	-0.268	400.67	-0.17	0.000
Error/PB/CI											0.00	-2.41		19.78	19.61

### GAME 143, SEPTEMBER 10, L.A. ANGELS-5 @ SEATTLE-3

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	0.39	-1.12		0.23		0.63		0.63		5	0.76	0.152	155	0.49	0.003
Alonso	-0.40	-0.39		0.12		0.39		1.00		5	0.72	0.144	28	5.64	0.201
Cano	1.78		0.39	1.00		-1.18		0.76		5	2.75	0.550	178	7.37	0.041
Cruz	0.22		-0.40	0.29		-0.33		1.00		5	0.78	0.156	177	11.18	0.063
Seager	-0.26		-0.26	-0.74			-0.23	0.87		5	-0.62	-0.124	178	8.99	0.051
Haniger	0.23		0.40		-0.83		1.00	-0.22		5	0.58	0.116	106	1.06	0.010
Gamel	-0.45		-0.62		-0.42		-0.16	0.06		5	-1.59	-0.318	147	3.04	0.021
Heredia		0.39		-0.23	-0.10		-0.10	0.23		5	0.19	0.038	126	-3.75	-0.030
Ruiz		0.63		-0.16		1.00		0.63		4	2.10	0.525	47	-4.21	-0.090
Beckham								-0.45		1	-0.45	-0.450			
SUV	1.51	-0.49	-0.49	0.51	-0.49	0.51	0.51	4.51	0.00	45	5.22	0.116	1717	5.88	0.003
Error/PB/CI					0.86						0.86	6.08		15.14	21.02
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Albers	-0.49	-0.49	-0.49	-0.49	-0.49	0.51				6.00	-1.94	-0.323	12.00	-0.11	-0.009
Pagan							-0.49	0.63		1.00	0.14	0.140	10.00	-1.05	-0.105
Rzepczynski								1.39		0.00	1.39		8.67	-3.29	-0.380
Vincent								-1.51		1.00	-1.51	-1.510	17.67	-5.33	-0.302
Simmons									-0.49	1.00	-0.49	-0.490			
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	0.51	-0.49	9.00	-2.41	-0.268	400.67	-0.17	0.000
Error/PB/CI											0.00	-2.41		19.78	19.61

### CUMULATIVES THROUGH 48 GAMES

Mariner	+Ops	+SUV	+Avg		Pitcher	+IP	+SUV	+Avg
Espinosa	3	0.79	0.263		Marshall	1.00	-0.49	-0.490
Alonso	36	3.95	0.110		Curtis	1.00	-0.49	-0.490
Cruz	185	10.70	0.058		Cloyd	1.00	-0.49	-0.490
Seager	186	9.48	0.051		Simmons	1.00	-0.49	-0.490
Cano	186	7.50	0.040		Zych	13.00	-6.07	-0.467
Gamel	155	1.77	0.011		Lawrence	9.33	-3.47	-0.372
Haniger	114	1.09	0.010		Bergman	27.33	-8.67	-0.317
Segura	163	0.96	0.006		Iwakuma	11.67	-4.37	-0.375
Dyson	124	0.71	0.006		Scribner	5.33	-1.04	-0.195
Valencia	149	-0.90	-0.006		Rzepczynski	9.00	-2.03	-0.226
Motter	84	-0.69	-0.008		Vincent	19.00	-3.35	-0.176
Smith	11	-0.12	-0.011		Cishek	4.33	-1.30	-0.300
Heredia	132	-4.33	-0.033		Pagan	11.33	-1.64	-0.145
Powell	17	-0.77	-0.045		Paxton	42.00	-4.27	-0.102
Ruiz	47	-4.21	-0.090		Hernandez	23.67	-2.09	-0.088
Zunino	117	-11.24	-0.096		Altavilla	12.33	-0.10	-0.008
Vogelbach	9	-0.88	-0.098		Albers	12.00	-0.11	-0.009
Martin, L.	37	-4.20	-0.114		Gaviglio	26.00	0.80	0.031
Pitcher (NL)	9	-1.24	-0.138		Moore	18.00	0.96	0.053
Freeman	13	-2.67	-0.205		Miranda	48.00	4.47	0.093
Gosewisch	8	-2.19	-0.274		Gallardo	33.33	3.14	0.094
Beckham	1	-0.45	-0.450		Ramirez	17.67	2.30	0.130
SUV	1786	3.06	0.002		Diaz	17.67	3.05	0.173
Error/PB/CI		15.14	18.20		Phelps	5.00	1.19	0.238
					Overton	14.67	4.24	0.289
					Whalen	5.33	2.32	0.435
					De Jong	11.67	5.34	0.458
					Freeman	1.00	0.51	0.510
					Gonzales	4.33	2.47	0.570
					Pazos	7.33	4.39	0.599
					Martin, C	2.00	1.67	0.835
					Fien	2.33	4.41	1.890
					SUV	418.67	0.79	0.002
					Error/PB/CI		20.00	20.79

### GAME 146, SEPTEMBER 13, SEATTLE-8 @ TEXAS-1

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	0.39		-0.22		1.77		0.39	-0.78		5	1.55	0.310	168	2.51	0.015
Haniger	-0.78			-0.23	0.12		1.11	-0.10		5	0.12	0.024	119	1.21	0.010
Cano	-0.10			-0.16	0.29		-0.61			4	-0.58	-0.145	190	6.92	0.036
Beckham									-0.23	1	-0.23	-0.230	2	-0.68	-0.340
Cruz	-0.23		0.12	-0.51		0.22				4	-0.40	-0.100	189	10.30	0.054
Vogelbach									-0.16	1	-0.16	-0.160	10	-1.04	-0.104
Seager	-0.16		-0.22		-0.23	1.56		0.12	5	1.07	0.214	191	10.55	0.055	
Valencia	-0.10			-0.23	0.22	0.16		-0.22	5	-0.17	-0.034	154	-1.07	-0.007	
Zunino		0.39		1.00	0.44	1.00				4	2.83	0.708	121	-8.41	-0.070
Heredia		-0.40		0.22	-0.41	-0.10				4	-0.69	-0.173	136	-5.02	-0.037
Gamel		-0.26		-0.15	-0.51		0.39			4	-0.53	-0.133	159	1.24	0.008
SUV	-0.49	-0.49	-0.49	-0.49	2.51	-0.49	4.51	-0.49	-0.49	42	2.81	0.067	1828	5.87	0.003
Error/PB/CI						0.78					0.78	3.59		15.92	21.79
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Leake	-0.49	-1.43	-0.49	-0.49	-0.49	0.96				5.67	-2.43	-0.429			
Pazos						-0.45	-0.23			0.67	-0.68	-1.020	8.00	3.71	0.464
Pagan							-0.26			0.67	-0.26	-0.390	12.00	-1.90	-0.158
Rzepczynski								-0.49		1.00	-0.49	-0.490	10.00	-2.52	-0.252
Diaz									-0.49	1.00	-0.49	-0.490	18.67	2.56	0.137
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	-0.49	-0.49	9.00	-4.35	-0.483	427.67	-3.56	-0.008
Error/PB/CI		0.94									0.94	-3.41		20.94	17.38

### GAME 149, SEPTEMBER 16, SEATTLE-6 @ HOUSTON-8

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23		-0.33			1.00		0.63	-0.16	5	0.91	0.182	173	3.42	0.020
Haniger	-0.16			-0.23		0.39		0.87	1.00	5	1.87	0.374	124	3.08	0.025
Cano	-0.10			-0.16		-0.40		1.13	-0.10	5	0.37	0.074	195	7.29	0.037
Cruz		-0.23		-0.10		-0.26		1.24		4	0.65	0.163	193	10.95	0.057
Seager	-0.16			-0.23	-0.22			0.76		4	0.15	0.038	195	10.70	0.055
Valencia	-0.10				0.22					2	0.12	0.060	156	-0.95	-0.006
Alonso						-0.23				1	-0.23	-0.230	37	3.72	0.101
Zunino							-0.59			1	-0.59	-0.590	122	-9.00	-0.074
Heredia			-0.23	0.68		-0.16				3	0.29	0.097	139	-4.73	-0.034
Gamel							-0.47			1	-0.47	-0.470	160	0.77	0.005
Ruiz		0.22		0.44		-0.10	-0.45			4	0.11	0.028	51	-4.10	-0.080
Motter			-0.48	-1.60						2	-2.08	-1.040	86	-2.77	-0.032
Hannemann							0.39	-0.23		2	0.16	0.080			
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	3.51	0.51	39	1.26	0.032	1867	7.13	0.004
Error/PB/CI			0.33								0.33	1.59		16.25	23.38
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Ramirez	-0.49	3.51	-0.49	-0.49	2.26					4.00	4.30	1.075	21.67	6.60	0.305
Simmons					-0.75					1.00	-0.75	-0.750	2.00	-1.24	-0.620
Miranda						-0.71				1.00	-0.71	-0.710	49.00	3.76	0.077
Vincent						0.51				1.00	0.51	0.510	20.00	-2.84	-0.142
Garton							0.51			1.00	0.51	0.510			
SUV	-0.49	3.51	-0.49	-0.49	1.51	-0.49	0.51	0.51	0.00	8.00	3.86	0.483	435.67	0.30	0.001
Error/PB/CI						0.22					0.22	4.08		21.16	21.46

### GAME 152, SEPTEMBER 20, TEXAS-8 @ SEATTLE-6

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	0.39		-0.16		0.12		0.44	-0.48		5	0.31	0.062	178	3.73	0.021
Haniger	-0.40	1.00		-0.22		-0.47	-0.22			5	-0.31	-0.062	129	2.77	0.021
Cano	0.44		-0.10			0.39	1.60	-0.23		5	2.10	0.420	200	9.39	0.047
Cruz	-0.92		1.00		0.63	0.23		-0.16		5	0.78	0.156	198	11.73	0.059
Seager		-0.23	-0.23		0.87	0.29		0.12		4	0.82	0.164	200	11.52	0.058
Alonso	0.22		-0.16		-0.99	-0.74				4	-1.67	-0.418	41	2.05	0.050
Ruiz								-0.22		1	-0.22	-0.220	52	-4.32	-0.083
Zunino	-0.26		-0.10		-0.39		0.63			4	-0.12	-0.030	126	-9.12	-0.072
Gamel	-0.22			-0.23		0.39	1.00			4	0.94	0.235	164	1.71	0.010
Heredia		-0.23		-0.16	-0.40					3	-0.79	-0.263	142	-5.52	-0.039
Valencia							-0.42			1	-0.42	-0.420	157	-1.37	-0.009
SUV	-0.49	-0.49	0.51	0.51	-0.49	0.51	1.51	0.51	-0.49	42	1.42	0.034	1909	8.55	0.004
Error/PB/CI						0.17					0.17	1.59		16.42	24.97
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Hernandez	-0.49	-0.49	-0.49	2.84						3.33	1.37	0.411	27.00	-0.72	-0.027
Albers				2.40	-0.49	1.02				1.67	2.93	1.758	13.67	2.82	0.206
Lawrence						-0.51	-0.49			2.00	-1.00	-0.500	11.33	-4.47	-0.394
Simmons							-0.49			1.00	-0.49	-0.490	3.00	-1.73	-0.577
Diaz								-0.49		1.00	-0.49	-0.490	19.67	2.07	0.105
SUV	-0.49	-0.49	-0.49	6.51	-0.49	0.51	-0.49	-0.49	-0.49	9.00	2.32	0.258	444.67	2.62	0.006
Error/PB/CI					1.27						1.27	3.59		22.43	25.05

### GAME 155, SEPTEMBER 23, CLEVELAND-11 @ SEATTLE-4

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23		0.12		-0.16		-0.23			4	-0.50	-0.125	182	3.23	0.018
Motter									0.76	1	0.76	0.760	87	-2.01	-0.023
Haniger	0.33		0.23		-0.10		-0.16		-1.18	5	-0.88	-0.176	134	1.89	0.014
Cano	-0.26		-0.45			-0.23	-0.10		0.89	5	-0.15	-0.030	205	9.24	0.045
Cruz	-0.33			-0.23		0.22		1.00	-0.22	5	0.44	0.088	203	12.17	0.060
Seager		-0.23	0.22		1.22		0.39			4	1.60	0.400	204	13.12	0.064
Alonso	-0.16		-0.26		-0.37					3	-0.79	-0.263	44	1.26	0.029
Beckham							-0.40			1	-0.40	-0.400	3	-1.08	-0.360
Gamel	-0.10		0.40							2	0.30	0.150	166	2.01	0.012
Valencia					0.12		-0.48			2	-0.36	-0.180	159	-1.73	-0.011
Zunino		0.39	-0.62		0.29			0.39	4	0.45	0.113	130	-8.67	-0.067	
Heredia		-0.78		-0.23	-0.74				3	-1.75	-0.583	145	-7.27	-0.050	
Vogelbach								0.87	1	0.87	0.870	11	-0.17	-0.015	
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	0.51	1.51	40	-0.41	-0.010	1949	8.14	0.004
Error/PB/CI											0.00	-0.41		16.42	24.56
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Moore	0.51	-0.49	1.05	-0.49						4.00	0.58	0.145	22.00	1.54	0.070
Gonzales					-0.49	-0.87				2.00	-1.36	-0.680	6.33	1.11	0.175
Altavilla							0.89			1.00	0.89	0.890	13.33	0.79	0.059
Garton								0.13		1.00	0.13	0.130	2.00	0.64	0.320
Miranda									4.51	1.00	4.51	4.510	50.00	8.27	0.165
SUV	0.51	-0.49	1.51	-0.49	-0.49	-0.49	1.51	0.51	4.51	9.00	4.75	0.528	453.67	7.37	0.016
Error/PB/CI				0.46			0.38	0.62	0.38		1.84	6.59		24.27	31.64

### GAME 158, SEPTEMBER 26, SEATTLE-6 @ OAKLAND-3

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Gamel	0.63		0.22		-0.10		1.00		-0.26	5	1.49	0.298	171	3.50	0.020
Haniger	-0.42		-0.48			-0.23	-0.31		-0.33	5	-1.77	-0.354	139	0.12	0.001
Cano	-0.37			-0.23		-0.16	-0.39			4	-1.15	-0.288	209	8.09	0.039
Cruz	-0.33			0.22		-0.10		0.39		4	0.18	0.045	207	12.35	0.060
Alonso		0.39		1.78			0.39	-0.40		4	2.16	0.540	48	3.42	0.071
Zunino		-0.40		-0.16			0.63	0.44		4	0.51	0.128	134	-8.16	-0.061
Valencia		0.44		-0.10			1.98			3	2.32	0.773	162	0.59	0.004
Hannemann								-0.92		1	-0.92	-0.920	3	-0.76	-0.253
Beckham		-0.92			-0.23		0.39		0.50	4	-0.26	-0.065	7	-1.34	-0.191
Motter			-0.23		-0.16		-0.18		-0.40	4	-0.97	-0.243	91	-2.98	-0.033
SUV	-0.49	-0.49	-0.49	1.51	-0.49	-0.49	3.51	-0.49	-0.49	38	1.59	0.042	1987	9.73	0.005
Error/PB/CI											0.00	1.59		16.42	26.15
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Paxton	0.51	-0.49	-0.49	-0.49	-0.49	1.77				5.33	0.32	0.060	47.33	-3.95	-0.083
Pagan						-0.26	-0.49			1.67	-0.75	-0.450	13.67	-2.65	-0.194
Vincent								-0.49		1.00	-0.49	-0.490	21.00	-3.33	-0.159
Diaz									-0.49	1.00	-0.49	-0.490	20.67	1.58	0.076
SUV	0.51	-0.49	-0.49	-0.49	-0.49	1.51	-0.49	-0.49	-0.49	9.00	-1.41	-0.157	462.67	5.96	0.013
Error/PB/CI											0.00	-1.41		24.27	30.23

### GAME 161, SEPTEMBER 30, SEATTLE-6 @ L.A. ANGELS-4

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Gamel	-0.23		-0.16		-0.10		-0.22		-0.23	5	-0.94	-0.188	176	2.56	0.015
Haniger	-0.50		0.12			0.63		0.39	0.44	5	1.08	0.216	144	1.20	0.008
Cano	0.46	-0.22				-0.42		0.63	-0.37	5	0.08	0.016	214	8.17	0.038
Cruz	-0.22			-0.23		0.46		1.00	-0.33	5	0.68	0.136	212	13.03	0.061
Seager		-0.23		-0.16		-0.65		1.98		4	0.94	0.235	208	14.06	0.068
Alonso	0.22		-0.10		-0.51			1.00		4	0.61	0.153	52	4.03	0.078
Ruiz	0.44			-0.23		-0.23	-0.23	-0.23		4	-0.25	-0.063	56	-4.57	-0.082
Beckham		-0.92			-0.16		0.22	-0.16		4	-1.02	-0.255	11	-2.36	-0.215
Hannemann			-0.23		1.00		-0.26	-0.10		4	0.41	0.103	7	-0.35	-0.050
SUV	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	-0.49	4.51	-0.49	40	1.59	0.040	2027	11.32	0.006
Error/PB/CI											0.00	1.59		16.42	27.74
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Albers	-0.49	-0.49	-0.49	0.51	1.21					4.33	0.25	0.058	18.00	3.07	0.171
Altavilla					0.30	0.51				1.67	0.81	0.486	15.00	1.60	0.107
Lawrence							-0.49			1.00	-0.49	-0.490	12.33	-4.96	-0.402
Pagan								-0.04		0.67	-0.04	-0.060	14.33	-2.69	-0.188
Rzepczynski								0.29		0.00	0.29		10.00	-2.23	-0.223
Diaz								-0.74	-0.49	1.33	-1.23	-0.923	22.00	0.35	0.016
SUV	-0.49	-0.49	-0.49	0.51	1.51	0.51	-0.49	-0.49	-0.49	9.00	-0.41	-0.046	471.67	5.55	0.012
Error/PB/CI											0.00	-0.41		24.27	29.82

## CUMULATIVES THROUGH 54 GAMES

Mariner	+Ops	+SUV	+Avg	Pitcher	+IP	+SUV	+Avg
Espinosa	3	0.79	0.263	Simmons	3.00	-1.73	-0.577
Alonso	52	4.03	0.078	Marshall	1.00	-0.49	-0.490
Seager	208	14.06	0.068	Curtis	1.00	-0.49	-0.490
Cruz	212	13.03	0.061	Cloyd	1.00	-0.49	-0.490
Cano	214	8.17	0.038	Zych	13.00	-6.07	-0.467
Segura	182	3.23	0.018	Leake	5.67	-2.43	-0.429
Gamel	176	2.56	0.015	Lawrence	12.33	-4.96	-0.402
Haniger	144	1.20	0.008	Iwakuma	11.67	-4.37	-0.375
Dyson	124	0.71	0.006	Bergman	27.33	-8.67	-0.309
Valencia	162	0.59	0.004	Cishek	4.33	-1.30	-0.300
Smith	11	-0.12	-0.011	Scribner	5.33	-1.04	-0.195
Vogelbach	11	-0.17	-0.015	Pagan	14.33	-2.69	-0.188
Motter	91	-2.98	-0.033	Rzepczynski	10.00	-2.23	-0.185
Powell	17	-0.77	-0.045	Vincent	21.00	-3.33	-0.159
Hanneman	7	-0.35	-0.050	Paxton	47.33	-3.95	-0.083
Heredia	145	-7.27	-0.050	Hernandez	27.00	-0.72	-0.027
Zunino	134	-8.16	-0.061	Diaz	22.00	0.35	0.016
Ruiz	56	-4.57	-0.082	Gaviglio	26.00	0.80	0.031
Martin, L.	37	-4.20	-0.114	Moore	22.00	1.54	0.070
Pitcher (NL)	9	-1.24	-0.138	Gallardo	33.33	3.14	0.094
Freeman	13	-2.67	-0.205	Altavilla	15.00	1.60	0.107
Beckham	11	-2.36	-0.215	Miranda	50.00	8.27	0.165
Gosewisch	8	-2.19	-0.274	Albers	18.00	3.07	0.171
SUV	2027	11.32	0.006	Gonzales	6.33	1.11	0.175
Error/PB/CI		16.42	27.74	Phelps	5.00	1.19	0.238
				Overton	14.67	4.24	0.289
				Ramirez	21.67	6.60	0.305
				Garton	2.00	0.64	0.320
				Whalen	5.33	2.32	0.435
				De Jong	11.67	5.34	0.458
				Pazos	8.00	3.71	0.464
				Freeman	1.00	0.51	0.510
				Martin, C	2.00	1.67	0.835
				Fien	2.33	4.41	1.890
				SUV	471.67	5.55	0.012
				Error/PB/CI	24.27	29.82	

## AS ABOVE, BUT RANKED BY MOST OPPORTUNITIES & INNINGS PITCHED

Mariner	+Ops	+SUV	+Avg	Pitcher	+IP	+SUV	+Avg
Cano	214	8.17	0.038	Miranda	50.00	8.27	0.165
Cruz	212	13.03	0.061	Paxton	47.33	-3.95	-0.083
Seager	208	14.06	0.068	Gallardo	33.33	3.14	0.094
Segura	182	3.23	0.018	Bergman	27.33	-8.67	-0.309
Gamel	176	2.56	0.015	Hernandez	27.00	-0.72	-0.027
Valencia	162	0.59	0.004	Gaviglio	26.00	0.80	0.031
Heredia	145	-7.27	-0.050	Moore	22.00	1.54	0.070
Haniger	144	1.20	0.008	Diaz	22.00	0.35	0.016
Zunino	134	-8.16	-0.061	Ramirez	21.67	6.60	0.305
Dyson	124	0.71	0.006	Vincent	21.00	-3.33	-0.159
Motter	91	-2.98	-0.033	Albers	18.00	3.07	0.171
Ruiz	56	-4.57	-0.082	Altavilla	15.00	1.60	0.107
Alonso	52	4.03	0.078	Overton	14.67	4.24	0.289
Martin, L.	37	-4.20	-0.114	Pagan	14.33	-2.69	-0.188
Powell	17	-0.77	-0.045	Zych	13.00	-6.07	-0.467
Freeman	13	-2.67	-0.205	Lawrence	12.33	-4.96	-0.402
Smith	11	-0.12	-0.011	Iwakuma	11.67	-4.37	-0.375
Vogelbach	11	-0.17	-0.015	De Jong	11.67	5.34	0.458
Beckham	11	-2.36	-0.215	Rzepczynski	10.00	-2.23	-0.185
Pitcher (NL)	9	-1.24	-0.138	Pazos	8.00	3.71	0.464
Gosewisch	8	-2.19	-0.274	Gonzales	6.33	1.11	0.175
Hanneman	7	-0.35	-0.050	Leake	5.67	-2.43	-0.429
Espinosa	3	0.79	0.263	Scribner	5.33	-1.04	-0.195
SUV	2027	11.32	0.006	Whalen	5.33	2.32	0.435
Error/PB/CI		16.42	27.74	Phelps	5.00	1.19	0.238
				Cishek	4.33	-1.30	-0.300
				Simmons	3.00	-1.73	-0.577
				Fien	2.33	4.41	1.890
				Garton	2.00	0.64	0.320
				Martin, C	2.00	1.67	0.835
				Marshall	1.00	-0.49	-0.490
				Curtis	1.00	-0.49	-0.490
				Cloyd	1.00	-0.49	-0.490
				Freeman	1.00	0.51	0.510
				SUV	471.67	5.55	0.012
				Error/PB/CI	24.27	29.82	

## **COMPLETE MARINER BATTING STATISTICS FOR 2017 SEASON\***

\* - bats left-handed, # - bats both, else - bats right, ? - unknown; OPS\_Lg for OPS+ does not include pitchers.

\*WAR not shown.

## COMPLETE MARINER PITCHING STATISTICS FOR 2017 SEASON\*

Rk	Pos	Name	Age	W	L	W-L%	ERA	G	GS	GF	CG	SHO	SV	IP	H	R	ER	HR	BB	IBB	SO	HBP	BK	WP	BF	ERA+	FIP	WHIP	H9	HR9	BB9	SO9	SO/W
1	SP	Ariel Miranda*	28	8	7	.533	5.12	31	29	1	0	0	0	160.0	140	93	91	37	63	1	137	5	0	8	678	82	5.73	1.269	7.9	2.1	3.5	7.7	2.17
2	SP	James Paxton*	28	12	5	.703	2.98	24	24	0	0	0	0	136.0	113	47	45	9	37	1	156	3	1	15	552	141	2.61	1.103	7.5	0.6	2.4	10.3	4.22
3	SP	Yovani Gallardo	31	5	10	.333	5.72	28	22	4	0	0	1	130.2	138	84	83	24	60	3	94	2	0	7	578	74	5.53	1.515	9.5	1.7	4.1	6.5	1.57
4	SP	Felix Hernandez	31	6	5	.545	4.36	16	16	0	0	0	0	86.2	86	46	42	17	26	0	78	6	0	8	368	97	5.02	1.292	8.9	1.8	2.7	8.1	3.00
5	SP	Sam Gaviglio	27	3	5	.375	4.62	12	11	1	0	0	0	62.1	63	37	32	15	21	1	40	2	2	1	259	91	6.11	1.348	9.1	2.2	3.0	5.8	1.90
6	SP	Erasmo Ramirez	27	1	3	.250	3.92	11	11	0	0	0	0	62.0	57	31	27	12	15	1	54	1	0	0	257	108	4.71	1.161	8.3	1.7	2.2	7.8	3.60
Rk	Pos	Name	Age	W	L	W-L%	ERA	G	GS	GF	CG	SHO	SV	IP	H	R	ER	HR	BB	IBB	SO	HBP	BK	WP	BF	ERA+	FIP	WHIP	H9	HR9	BB9	SO9	SO/W
7	CL	Edwin Diaz	23	4	6	.400	3.27	66	0	52	0	0	34	66.0	44	28	24	10	32	2	89	3	1	3	278	129	4.02	1.152	6.0	1.4	4.4	12.1	2.78
8	RP	Nick Vincent	30	3	3	.500	3.20	69	0	7	0	0	0	64.2	62	23	23	3	13	5	50	0	0	0	262	132	2.82	1.160	8.6	0.4	1.8	7.0	3.85
9	RP	James Pazos*	26	4	5	.444	3.86	59	0	7	0	0	0	53.2	51	30	23	7	24	0	65	5	1	4	240	110	4.05	1.398	8.6	1.2	4.0	10.9	2.71
10	RP	Tony Zych	26	6	3	.667	2.66	45	0	7	0	0	1	40.2	30	12	12	2	21	3	35	5	1	1	173	160	3.99	1.254	6.6	0.4	4.6	7.7	1.67
11	RP	Marc Brzezynski*	31	2	2	.500	4.02	64	0	6	0	0	1	31.1	29	16	14	2	20	5	25	1	0	3	137	106	4.40	1.564	8.3	0.6	5.7	7.2	1.25
Rk	Pos	Name	Age	W	L	W-L%	ERA	G	GS	GF	CG	SHO	SV	IP	H	R	ER	HR	BB	IBB	SO	HBP	BK	WP	BF	ERA+	FIP	WHIP	H9	HR9	BB9	SO9	SO/W
12		Andrew Moore	23	1	5	.167	5.34	11	9	1	0	0	0	59.0	60	36	35	14	8	0	31	1	0	0	243	79	5.65	1.153	9.2	2.1	1.2	4.7	3.88
13		Christian Bergman	29	4	5	.444	5.00	13	8	2	0	0	0	54.0	61	31	20	12	15	1	33	3	0	0	230	85	5.82	1.407	10.2	2.0	2.5	5.5	2.20
14		Emilio Pagan	26	2	3	.400	3.22	34	0	9	0	0	0	50.1	39	20	18	7	8	0	56	1	0	1	196	131	3.28	0.934	7.0	1.3	1.4	10.0	7.00
15		Dan Altavilla	24	1	1	.500	4.24	41	0	13	0	0	0	46.2	43	27	22	9	20	1	52	1	0	9	203	100	4.79	1.350	8.3	1.7	3.9	10.0	2.60
16		Casey Lawrence	29	2	0	1.000	5.57	23	0	10	0	0	0	42.0	56	27	26	9	14	1	45	1	0	1	192	76	4.87	1.667	12.0	1.9	3.0	9.6	3.21
17		Andrew Albers*	31	5	1	.833	3.51	9	6	2	0	0	1	41.0	43	22	16	6	10	0	37	2	0	1	178	121	4.13	1.293	9.4	1.3	2.2	8.1	3.70
18		Marco Gonzales*	25	1	1	.500	5.40	10	7	1	0	0	0	36.2	53	22	22	5	11	0	30	1	0	2	169	79	4.28	1.745	13.0	1.2	2.7	7.4	2.73
19		Mike Leake	29	3	1	.750	2.53	5	5	0	0	0	0	32.0	32	10	9	1	2	0	27	2	0	1	128	168	2.25	1.063	9.0	0.3	0.6	7.6	13.50
20		Hisashi Iwakuma	36	0	2	.000	4.35	6	6	0	0	0	0	31.0	27	16	15	7	12	0	16	2	0	1	128	98	6.42	1.258	7.8	2.0	3.5	4.6	1.33
21		Chase De Jong	23	0	3	.000	6.35	7	4	2	0	0	0	28.1	31	20	20	5	13	0	13	0	0	0	125	67	5.91	1.553	9.8	1.6	4.1	4.1	1.00
22		Steve Cishek	31	1	1	.500	3.15	23	0	8	0	0	1	20.0	13	7	7	3	7	1	15	1	1	1	80	136	4.81	1.000	5.9	1.4	3.2	6.8	2.14
23		Dillon Overton*	25	0	0	.638	9	1	4	0	0	0	0	18.1	21	15	13	4	2	1	8	0	0	3	79	67	5.45	1.255	10.3	2.0	1.0	3.9	4.00
24		Ryan Garton	27	0	0	.154	13	0	3	0	0	0	0	11.2	5	2	2	1	1	0	7	0	0	0	42	281	3.33	0.514	3.9	0.8	0.8	5.4	7.00
25		David Phelps	30	2	1	.667	3.12	10	0	1	0	0	0	8.2	9	3	3	0	5	0	11	1	0	0	41	141	2.70	1.615	9.3	0.0	5.2	11.4	2.20
26		Jean Machi	35	1	0	1.000	1.17	5	0	0	0	0	0	7.2	7	2	1	1	4	0	4	0	0	0	31	375	5.38	1.435	8.2	1.2	4.7	4.7	1.00
27		Evan Marshall	27	0	0	.939	6	0	2	0	0	0	0	7.2	12	8	8	1	5	1	4	0	0	0	38	47	5.77	2.217	14.1	1.2	5.9	4.7	0.80
28		Shane Simmonds	26	0	2	.000	7.04	9	0	3	0	0	0	7.2	4	6	6	1	4	0	8	0	0	1	30	62	4.33	1.043	4.7	1.2	4.7	9.4	2.00
29		Robert Whalen	23	0	1	.000	6.14	2	1	1	0	0	0	7.1	7	5	5	1	2	0	2	2	0	0	31	72	6.02	1.227	8.6	1.2	2.5	2.5	1.00
30		Evan Scribner	31	0	2	.000	11.05	8	0	4	0	0	0	7.1	13	9	9	3	0	0	6	0	0	0	34	40	6.84	1.773	16.0	3.7	0.0	7.4	3.1
31		Casey Fien	33	0	0	.000	15.00	6	0	2	0	0	0	6.0	9	10	10	3	4	0	6	0	0	0	29	30	9.68	2.167	13.5	4.5	6.0	9.0	1.50
32		Chris Heston	29	0	1	.000	19.80	2	1	0	0	0	0	5.0	14	12	11	3	5	0	3	0	0	0	34	23	12.76	3.800	25.2	5.4	9.0	5.4	0.60
33		Zac Curtis*	24	0	0	.000	3	0	2	0	0	0	0	4.2	3	3	0	1	1	0	2	2	0	0	21	7.02	0.857	5.8	1.9	3.9	3.0	2.00	
34		Ryan Weber	26	0	0	.245	1	1	0	0	0	0	0	3.2	3	1	1	0	0	0	0	0	0	0	14	188	3.16	0.818	7.4	0.0	0.0	0.0	0.00
35		Max Povse	23	0	0	.000	7.36	3	0	2	0	0	0	3.2	9	5	3	1	1	0	2	0	0	0	21	63	6.43	2.727	22.1	2.5	2.5	4.9	2.00
36		Cody Martin	27	0	0	.000	13.50	1	0	1	0	0	0	2.0	5	4	3	0	2	0	0	0	0	0	13	37	6.16	3.500	22.5	0.0	9.0	0.0	0.00
37		Carlos Ruiz	38	0	0	.000	9.00	1	0	1	0	0	0	1.0	2	1	1	2	0	1	0	0	0	0	7	64	20.16	4.000	18.0	9.0	18.0	9.0	0.50
38		Mike Freeman	29	0	0	.000	9.00	1	0	1	0	0	0	1.0	3	1	1	0	0	0	0	0	0	0	6	64	3.16	3.000	27.0	0.0	0.0	0.0	0.00
39		Thiago Vieira	23	0	0	.000	1.00	1	0	1	0	0	0	1.0	0	0	0	0	0	0	0	0	0	0	3	1.16	0.000	0.0	0.0	0.0	0.0	0.0	
40		Tyler Clwyd	30	1	0	1.000	0.00	1	0	0	0	0	0	1.0	2	0	0	0	0	0	0	0	0	0	4	1.16	2.000	18.0	0.0	0.0	0.0	0.00	
		<b>Team Totals</b>	<b>27.9</b>	<b>78</b>	<b>84</b>	<b>.481</b>	<b>4.46</b>	<b>162</b>	<b>162</b>	<b>161</b>	<b>1</b>	<b>0</b>	<b>39</b>	<b>1440.1</b>	<b>1399</b>	<b>772</b>	<b>713</b>	<b>237</b>	<b>490</b>	<b>28</b>	<b>1244</b>	<b>53</b>	<b>7</b>	<b>73</b>	<b>6132</b>	<b>95</b>	<b>4.70</b>	<b>1.312</b>	<b>8.7</b>	<b>1.5</b>	<b>3.1</b>	<b>7.8</b>	<b>2.54</b>
		<b>Rank in 15 AL teams</b>	<b>9</b>	<b>6</b>	<b>8</b>	<b>8</b>	<b>6</b>	<b>6</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>13</b>	<b>5</b> </																			

statistics for batting and pitching for the top 10 players with the most Opportunities and Innings Pitched, using a lower limit of 124 Opportunities (Dyson) and 21.00 Innings Pitched (Vincent). No contribution from Error/PB/CI is included here. The totals for each group of 10 players, along with the mean and standard deviation, in each category, “+SUV” and “+Avg” are calculated to enable a normalization of the statistics for each of the 10 players per group as follows:

$$\text{Normalized Statistic (+SUV or +Avg)} = \int_{-\infty}^x \frac{1}{\sigma\sqrt{2\pi}} e^{-\left(\frac{(x-\mu)^2}{2\sigma^2}\right)} dx$$

where  $\mu$  = mean and  $\sigma$  = standard deviation.

These normalized statistics, representing the percentiles of the normal distribution where the statistics occur, are calculated for both “+SUV” and “+Avg” for the players in each group. Within each group, these two normalized statistics for each player are then averaged (“Both” column) and used to rank the players from first through tenth. Note that, for batters, higher values are desirable. For pitchers, the lower values are desirable. The reason for considering both “+SUV” and “+Avg” is that the former reflects longevity (most Opportunities or Innings Pitched) over a season while the second reflects expected performance per Opportunity or Inning Pitched. Combined, both aspects are reflected. This is akin to giving additional weight to the 0.300-hitter who had 150 hits in 500 at-bats over the one with 30 hits in 100 at-bats.

As an example calculation, consider Seager, who has a +SUV = 14.06 and +Avg = 0.068. When normalized to the mean +SUV = 2.81 and mean +Avg = 0.011 (with respective standard deviations of 7.41 and 0.042), his normalized +SUV and +Avg become as follows:

$$\text{Normalized + SUV} = \int_{-\infty}^{14.06} \frac{1}{(7.41)\sqrt{2\pi}} e^{-\left(\frac{(14.06-2.81)^2}{2[7.41]^2}\right)} dx = 0.936$$

$$\text{Normalized + Avg} = \int_{-\infty}^{0.068} \frac{1}{(0.042)\sqrt{2\pi}} e^{-\left(\frac{(0.068-0.011)^2}{2[0.042]^2}\right)} dx = 0.915$$

These indicate that his +SUV occurs at the 93.6%ile and +Avg at the 91.5%ile, both the highest among the 10 batters. The average of the two is 0.925, which ranks him first overall among the batters, just slightly above Cruz at 0.903. Since lower values are optimal for pitchers, Bergman ranks first with 0.033, significantly ahead of the next pitcher, Vincent, at 0.195. Given his lowest +SUV = -8.67 and lowest +Avg = -0.309 among the 10 pitchers with at least 21.00 Innings Pitched, this comes as no surprise.

What is especially interesting, and the goal of developing the SUV statistic, are insights into players’ performance “in the clutch” that may not be readily indicated by the myriad of other statistics currently being used.<sup>1</sup> Below are the season statistics (now including WAR) for the top

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<sup>1</sup> Since only 54 of the total 162 games have been analyzed for SUV, all the following “insights” regarding individual players should be taken with “a grain of salt” as merely illustrative as if the entire season had been analyzed for SUV. As will be shown below for Ramirez, if the selected games happened to correspond to atypically better or poorer performances by the player than what transpired over the entire season, the “insights” may be biased by the limited selection. While 1/3 of the season is considered to be a significant sample for analysis, it remains possible that atypical player performance has been highlighted. All subsequent “insights” are

10 batters and pitchers from the SUV lists based on the compilations shown above from Reference 2. To characterize player performance based on such multiple statistics, the approach taken is similar to that for the two SUV statistics, “+SUV” and “+Avg,” i.e., the players are ranked by normalization of the statistics for selected categories, then these normalized values are averaged to yield one overall result, used to rank the players. For batting, a combination of longevity (Runs, Hits, RBIs, and WAR [Wins Against Replacement]) and expected performance per “at-bat (AB)” statistics (Runs/AB, Hits/AB [Batting Average], OBP [On-Base Percentage] and SLG [Slugging Percentage]), i.e., a total of eight statistics, are used. For pitching, four longevity (Hits, Earned Runs, Bases-on-Ball + Hits-By-Pitch, and WAR) and two expected performance per Inning Pitched statistics (Earned Run Average and Walks+Hit-Batters per IP), i.e., a total of six statistics, are used. Note that, for pitchers, all but the WAR statistic indicate better performance with lower values. Therefore, to incorporate WAR consistently with the rest, its normalized value is subtracted from 1.00 (since we are dealing with probabilities), such that the lower value (“1-WAR”) represents better performance.

Within the constraints of the comparison (SUV analysis is based on only one-third, i.e., 54 games, of the season vs. Reference 2’s complete season; and the subjectivity of which statistics to select for the comparison and use of normalization and subsequent averaging to yield a “performance measure” that can be compared to the SUV), the results provide insights that might not readily be found from the current myriad of statistics. Among the batters, Seager and Cruz stood out as the top performers, with a fairly wide margin over the next lower player (Cano); while Zunino and Heredia were the poorest, significantly below the next higher player (Dyson). When the full season “traditional” statistics are used, Cruz stands out at the top and Heredia at the bottom, similar to the SUV results, with Seager and Zunino falling in the middle. Again, this comparison is arbitrary, and the SUV analysis uses only 54 of the 162 games, but if one envisions the SUV results to be representative of a full-season performance, they indicate that Seager performed well in the clutch, much better than his “traditional” statistics would seem to indicate. Meanwhile, Zunino did not perform well in the clutch, despite fairly good “traditional” statistics. Such insight could be quite valuable to an owner, general manager, and manager (and hitting coach) when assembling a roster and line-up.

For pitchers based on their SUV, Bergman stood out at the top, with Vincent and Paxton next and well above the rest of the group; while Ramirez and Miranda were the poorest, well below the next higher player (Gallardo). Based on the full season’s “traditional” statistics, Vincent comes out on top, followed by Diaz and Ramirez (the bottom performer based on the SUV), with Bergman and Paxton in the middle. Gallardo and Miranda are at the bottom, consistent with their SUV ranks. However, there is quite a discrepancy for Ramirez – a good performer according to the “traditional” statistics, but a poor one according to SUV. Ignoring the possibility (likelihood [see footnote]) that this discrepancy is the result of Ramirez’ games included for the SUV just happening to be his worst, this suggests that he does not perform well in the clutch despite good “traditional” statistics.<sup>2</sup> Meanwhile, Bergman performs much better in the clutch than his

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intended to be illustrative only, not necessarily reflecting deviations from any individual player’s overall performance, either better or worse.

<sup>2</sup> In fact, review of the four games where Ramirez pitched (#s 113, 128, 143 and 149) among the 54 selected for the SUV analysis indicates that he performed quite poorly relative to what would have been expected if all of his games were included. Over those four games, he pitched 21.67 innings, yielding 27 hits, 16 earned runs, and six walks (no-hit batters), corresponding to an ERA = 6.65 and WHBIP = 1.52 (WAR was not tracked). If his season statistics were apportioned by the ratio of 21.67 innings to his total of 62 innings, the expected hits, earned runs, walks (plus hit-batters), ERA and WHBIP would have been 19.92, 9.44, 5.59, 3.92 and 1.18, respectively. All but the walks (plus hit-batters) over those four games were at least 29% higher than would have been expected,

“traditional” statistics would seem to indicate. Again, to the extent the SUV results for 54 games are representative for an entire season, such insight could be quite valuable to an owner, general manager, and manager (and pitching coach).

### **COMPLETE SEASON BATTER STATISTICS FOR TOP 10 MARINERS FROM SUV LIST**

Mariner	AB	R	H	RBI	R/AB	H/AB (BA)	RBI/AB	OBP	SLG	WAR	
Zunino	387	52	97	64	0.134	0.251	0.165	0.331	0.509	3.3	
Valencia	450	54	115	66	0.120	0.256	0.147	0.314	0.411	1.0	
Cano	592	79	166	97	0.133	0.280	0.164	0.338	0.453	3.4	
Segura	524	80	157	45	0.153	0.300	0.086	0.349	0.427	3.2	
Seager	578	72	144	88	0.125	0.249	0.152	0.323	0.450	2.5	
Gamel	509	68	140	59	0.134	0.275	0.116	0.322	0.413	1.0	
Dyson	346	56	87	30	0.162	0.251	0.087	0.324	0.350	2.6	
Haniger	369	58	104	47	0.157	0.282	0.127	0.352	0.491	3.0	
Cruz	556	91	160	119	0.164	0.288	0.214	0.375	0.549	4.1	
Heredia	386	43	96	24	0.111	0.249	0.062	0.315	0.337	1.1	
Mean	469.70	65.30	126.60	63.90	0.139	0.268	0.132	0.334	0.439	2.52	
Std Dev	93.28	15.12	30.00	30.05	0.018	0.019	0.046	0.019	0.067	1.12	
Rank	Normalized	Cumulative	R	H	RBI	R/AB	H/AB (BA)	RBI/AB	OBP	SLG	WAR
1	Cruz	<b>0.929</b>	0.955	0.867	0.967	0.907	0.851	0.964	0.982	0.951	0.922
2	Cano	<b>0.712</b>	0.818	0.905	0.865	0.376	0.743	0.757	0.576	0.583	0.785
3	Segura	<b>0.639</b>	0.834	0.845	0.265	0.766	0.952	0.156	0.776	0.429	0.729
4	Haniger	<b>0.573</b>	0.315	0.226	0.287	0.834	0.767	0.459	0.819	0.782	0.666
5	Seager	<b>0.507</b>	0.671	0.719	0.789	0.213	0.160	0.671	0.280	0.566	0.493
6	Zunino	<b>0.471</b>	0.190	0.162	0.501	0.395	0.180	0.767	0.432	0.853	0.758
7	Gamel	<b>0.418</b>	0.571	0.672	0.435	0.379	0.644	0.362	0.263	0.348	0.087
8	Valencia	<b>0.301</b>	0.227	0.350	0.528	0.148	0.256	0.626	0.147	0.337	0.087
9	Dyson	<b>0.295</b>	0.269	0.093	0.130	0.890	0.191	0.161	0.298	0.091	0.529
10	Heredia	<b>0.103</b>	0.070	0.154	0.092	0.065	0.155	0.063	0.160	0.063	0.102

### **COMPLETE SEASON PITCHER STATISTICS FOR TOP 10 MARINERS FROM SUV LIST**

Pitcher	IP	H	ER	BB+HBP	ERA	WHPB	WAR	
Miranda	160.00	140	91	68	5.12	1.30	0.8	
Paxton	136.00	113	45	40	2.98	1.13	3.8	
Gallardo	130.67	138	83	62	5.72	1.53	-0.2	
Hernandez	86.67	86	42	32	4.36	1.36	0.8	
Gaviglio	62.33	63	32	23	4.62	1.38	0.2	
Ramirez	62.00	57	27	16	3.92	1.18	0.7	
Diaz	66.00	44	24	35	3.27	1.20	0.9	
Vincent	64.67	62	23	13	3.20	1.16	1.4	
Moore	59.00	60	35	9	5.34	1.17	0.0	
Bergman	54.00	61	30	18	5.00	1.46	0.2	
Mean	88.13	82.40	43.20	31.60	4.35	1.29	0.86	
Std Dev	38.97	35.32	24.22	20.25	0.97	0.14	1.14	
Rank	Normalized	Cumulative	H	ER	BB+HBP	ERA	WHPB	1-WAR
1	Vincent	<b>0.214</b>	0.282	0.202	0.179	0.118	0.186	0.318
2	Diaz	<b>0.300</b>	0.139	0.214	0.567	0.133	0.264	0.486
3	Ramirez	<b>0.302</b>	0.236	0.252	0.221	0.328	0.221	0.556
4	Paxton	<b>0.368</b>	0.807	0.530	0.661	0.078	0.128	0.005
5	Moore	<b>0.431</b>	0.263	0.367	0.132	0.845	0.205	0.775
6	Gaviglio	<b>0.503</b>	0.291	0.322	0.336	0.609	0.745	0.719
7	Bergman	<b>0.529</b>	0.272	0.293	0.251	0.748	0.894	0.719
8	Hernandez	<b>0.543</b>	0.541	0.480	0.508	0.504	0.702	0.521
9	Miranda	<b>0.789</b>	0.949	0.976	0.964	0.785	0.538	0.521
10	Gallardo	<b>0.921</b>	0.942	0.950	0.933	0.920	0.958	0.824

especially the earned runs and ERA (70% higher). Therefore, it appears the four games out of the 54 selected for the SUV analysis just happened to be poor ones for Ramirez, atypical of his overall performance. Analysis of all 162 games for SUV would be expected to bring these into better alignment.



Bottom of the 3rd, Yankees Batting, Ahead 6-1, Mariners' Andrew Albers facing 7-8-9										
03	6-1	0	---	4,(1-2)	O	NYY Todd Frazier	Andrew Albers	-1%	92% Strikeout Looking	
03	6-1	1	---	4,(1-2)	O	NYY Jacoby Ellsbury	Andrew Albers	0%	92% Groundout: 2B-1B	
03	6-1	2	---	2,(0-1)	O	NYY Ronald Torreyes	Andrew Albers	0%	92% Single to CF (Ground Ball thru SS-2B)	
03	6-1	2	1-	3,(1-1)	O	NYY Aaron Hicks	Andrew Albers	0%	93% Single to RF (Ground Ball thru 2B-1B); Torreyes to 2B	
03	6-1	2	1-	2-12	6,(1-2)	R	NYY Starlin Castro	Andrew Albers	3%	99% Single to CF (Fly ball to Short CF); Torreyes Scores; Hicks to 3B
03	7-1	2	1-	4,(1-2)	O	NYY Gary Sanchez	Andrew Albers	-1%	95% Groundout: SS-2B/Foulout at 2B	
1 run, 3 hits, 0 errors, 2 LOB. Mariners J, Yankees J.										
Top of the 4th, Mariners Batting, Behind 1-7, Yankees' Masahiro Tanaka facing 3-6-7										
14	1-7	0	---	5,(3-1)	SE	Kyle Seager	Masahiro Tanaka	-2%	93% Walk	
14	1-7	0	1-	5,(2-2)	O	SEA Mitch Haniger	Masahiro Tanaka	2%	94% Strikeout Swinging	
14	1-7	1	1-	5,(2-2)	OD	SEA Ben Gamel	Masahiro Tanaka	2%	97% Ground Ball Double Play: SS-1B (SS-2B)	
0 runs, 0 hits, 0 errors, 0 LOB. Mariners J, Yankees J.										
Bottom of the 4th, Yankees Batting, Ahead 7-1, Mariners' Andrew Albers facing 4-5-6										
04	7-1	0	---	2,(1-0)	O	NYY Aaron Judge	Andrew Albers	1%	97% Double to LF (Line Drive to LF Line)	
04	7-1	0	+	2,(0-1)	O	NYY Didi Gregorius	Andrew Albers	-1%	97% Groundout: -1B (Front of Home)	
04	7-1	1	+	2-1	5,(3-1)	O	NYY Chase Headley	Andrew Albers	0%	98% Lineout: LF (Deep LF)
04	7-1	2	+	2-2	5,(2-2)	O	NYY Todd Frazier	Andrew Albers	0%	96% Flyball: CF (Deep CF-RF)
0 runs, 1 hit, 0 errors, 1 LOB. Mariners J, Yankees J.										
Top of the 5th, Mariners Batting, Behind 1-7, Yankees' Masahiro Tanaka facing 8-9-1										
15	1-7	0	---	2,(0-1)	SE	Mike Zunino	Masahiro Tanaka	-2%	94% Single to SS (Ground Ball to SS-2B Hole)	
15	1-7	0	1-	1,(0-0)	SE	Guillermo Heredia	Masahiro Tanaka	-3%	92% Single to CF (Ground Ball thru SS-2B); Zunino to 2B	
15	1-7	0	1-	6,(3-2)	O	SEA Jean Segura	Masahiro Tanaka	3%	94% Strikeout Swinging	
15	1-7	1	1-	1,(0-0)	O	SEA Yonder Alonso	Masahiro Tanaka	1%	96% Groundout: 1B-P; Zunino to 3B; Heredia to 2B	
15	1-7	2	2-	2,(0-1)	O	SEA Robinson Cano	Masahiro Tanaka	2%	98% Groundout: 2B-1B (Deep 2B-1B)	
0 runs, 0 hits, 0 errors, 2 LOB. Mariners J, Yankees J.										
Bottom of the 5th, Yankees Batting, Ahead 7-1, Mariners' Andrew Albers facing 8-9-1										
05	7-1	0	---	6,(1-2)	O	NYY Jacoby Ellsbury	Andrew Albers	0%	97% Strikeout Looking	
05	7-1	1	---	3,(1-1)	O	NYY Ronald Torreyes	Andrew Albers	0%	97% Groundout: SS-1B	
05	7-1	2	---	1,(0-0)	O	NYY Aaron Hicks	Andrew Albers	0%	97% Popfly: SS (Deep 3B)	
0 runs, 0 hits, 0 errors, 0 LOB. Mariners J, Yankees J.										
Top of the 6th, Mariners Batting, Behind 1-7, Yankees' Masahiro Tanaka facing 4-5-6										
16	1-7	0	---	3,(2-0)	SE	Nelson Cruz	Masahiro Tanaka	-1%	98% Reached on ES (Ground Ball)	
16	1-7	0	1-	6,(3-2)	O	SEA Kyle Seager	Masahiro Tanaka	1%	97% Strikeout Swinging	
16	1-7	1	1-	6,(3-2)	O	SEA Mitch Haniger	Masahiro Tanaka	1%	98% Strikeout Swinging	
16	1-7	2	1-	5,(2-2)	O	SEA Ben Gamel	Masahiro Tanaka	1%	98% Groundout: 1B unassisted (2B-1B)	
0 runs, 0 hits, 1 error, 2 LOB. Mariners J, Yankees J.										
Bottom of the 6th, Yankees Batting, Ahead 7-1, Mariners' Andrew Albers facing 2-3-4										
06	7-1	0	---	5,(1-2)	NY	Starlin Castro	Andrew Albers	0%	99% Single to CF (Line Drive to Deep CF-CF)	
06	7-1	0	1-	6,(3-2)	NY	Gary Sanchez	Andrew Albers	0%	99% Walk; Castro to 2B	
Dan Altavilla replaces Andrew Albers pitching.										
b6	7-1	0	12-	2,(1-0)	O	NYY Aaron Judge	Dan Altavilla	0%	99% Wild Pitch; Castro to 3B; Sanchez to 2B	
b6	7-1	0	23-	4,(3-0)	O	NYY Aaron Judge	Dan Altavilla	0%	99% Walk	
b6	7-1	0	123	5,(2-2)	O	NYY Didi Gregorius	Dan Altavilla	0%	99% Strikeout Swinging	
b6	7-1	1	123	1,(0-0)	ROD	NYY Chase Headley	Dan Altavilla	0%	99% Double Play: Flyball: CF/Sacrifice Fly (Deep CF); Castro Scores; Sanchez out at 3B	
1 run, 1 hit, 0 errors, 1 LOB. Mariners J, Yankees B.										
Top of the 7th, Mariners Batting, Behind 1-8, Yankees' Masahiro Tanaka facing 8-9-1										
t7	1-8	0	---	3,(0-2)	SE	Mike Zunino	Masahiro Tanaka	0%	99% Strikeout Swinging	
t7	1-8	1	---	3,(0-2)	SE	Guillermo Heredia	Masahiro Tanaka	0%	100% Strikeout Swinging	
t7	1-8	2	---	3,(1-1)	O	SEA Jean Segura	Masahiro Tanaka	0%	100% Groundout: 2B-1B	
0 runs, 0 hits, 0 errors, 0 LOB. Mariners J, Yankees B.										
Bottom of the 7th, Yankees Batting, Ahead 8-1, Mariners' Dan Altavilla facing 7-8-9										
b7	B-1	0	---	5,(3-1)	NY	Todd Frazier	Dan Altavilla	0%	100% Walk	
b7	B-1	0	1-	1,(0-0)	NY	Jacoby Ellsbury	Dan Altavilla	0%	100% Single to RF (Ground Ball thru 2B-1B); Frazier to 2B	
b7	B-1	0	12-	1,(0-0)	O	NYY Ronald Torreyes	Dan Altavilla	0%	100% Single to LF (Line Drive to Short LF); Frazier to 3B; Ellsbury to 2B	
b7	B-1	0	123	5,(2-2)	O	NYY Aaron Hicks	Dan Altavilla	0%	100% Popfly: SS (Deep SS-2B)	
Greg Bird pinch hits for Starlin Castro (DH) batting 2nd.										
b7	B-1	1	123	3,(1-1)	RH	NYY Greg Bird	Dan Altavilla	0%	100% Single to RF (Ground Ball thru 2B-1B); Frazier Scores; Ellsbury Scores; Torreyes to 3B	
b7	10-1	1	1-3	3,(0-2)	O	NYY Gary Sanchez	Dan Altavilla	0%	100% Strikeout Swinging	
b7	10-1	2	1-3	6,(3-2)	O	NYY Aaron Judge	Dan Altavilla	0%	100% Strikeout Looking	
2 runs, 3 hits, 0 errors, 2 LOB. Mariners J, Yankees 10.										
Top of the 8th, Mariners Batting, Behind 1-10, Yankees' Caleb Smith facing 2-3-4										
t8	1-10	0	---	3,(2-0)	O	SEA Yonder Alonso	Caleb Smith	0%	100% Flyball: CF (Deep LF-CF)	
t8	1-10	1	---	4,(0-2)	O	SEA Taylor Motter	Caleb Smith	0%	100% Flyball: RF (Deep RF)	
t8	1-10	2	---	3,(1-1)	O	SEA Nelson Cruz	Caleb Smith	0%	100% Lineout: RF (Deep CF-RF)	
0 runs, 0 hits, 0 errors, 0 LOB. Mariners J, Yankees 10.										
Bottom of the 8th, Yankees Batting, Ahead 10-1, Mariners' Dan Altavilla facing 5-6-7										
b8	10-1	0	---	4,(3-1)	NY	Didi Gregorius	Dan Altavilla	0%	100% Single to RF (Ground Ball)	
Austin Romine pinch hits for Chase Headley (1B).										
b8	10-1	0	1-	3,(1-1)	O	NYY Austin Romine	Dan Altavilla	0%	100% Groundout: -1B (Front of Home); Gregorius to 2B	
b8	10-1	1	2-	3,(0-2)	O	NYY Todd Frazier	Dan Altavilla	0%	100% Strikeout Swinging	
b8	10-1	2	2-	1,(0-0)	O	NYY Jacoby Ellsbury	Dan Altavilla	0%	100% Groundout: 2B-1B (2B-1B)	
0 runs, 1 hit, 0 errors, 1 LOB. Mariners J, Yankees 10.										
Top of the 9th, Mariners Batting, Behind 1-10, Yankees' Caleb Smith facing 5-6-7										
t9	1-10	0	---	4,(1-2)	O	SEA Kyle Seager	Caleb Smith	0%	100% Strikeout Looking	
t9	1-10	1	---	5,(2-2)	O	SEA Mitch Haniger	Caleb Smith	0%	100% Groundout: 3B-1B	
Danny Valencia pinch hits for Ben Gamel (LF) batting 7th.										
t9	1-10	2	---	1,(0-0)	O	SEA Danny Valencia	Caleb Smith	0%	100% Flyball: LF (Deep LF)	
0 runs, 0 hits, 0 errors, 0 LOB. Mariners J, Yankees 10.										

#### Play-by-Play Explanation

Score: The score from the perspective of the batting team.

Rob: This shows the number of players on base at the start of the play. "1-3" would mean runners on first and third. Clicking on this will show the defensive players and baserunners on the field for this play.

PW: When available, the number of pitches in this plate appearance. Clicking on this number will show the sequence of pitches thrown including, when available, things like runner going, ball blocked, attempted pickoffs and the like. We believe this data to be as accurate as humanly possible, but there are going to be some errors in the data, so please take it with a grain of salt. Clicking on this will show the defensive players and baserunners on the field for this play.

PO: This has a "O" for every out on the play and an "R" for every run scored on the play. Some plays will have both in no particular order.

Batter: The batter at the plate when this play occurred. If the play is a baserunning event, then the batter's name will be repeated as indicated by quotes.

Pitcher: The pitcher on the mound when this play occurred.

wWPA: Winning Team's Win Probability Added. The amount that this play increased or decreased the eventual winning team's probability of winning the game. [More About Win Probability Added](#)

wWE: Winning Team's Win Expectancy. The probability of the eventual winning team winning the game at the end of this play given two average teams playing each other. [More About Win Probability Added](#)

Play Detail: This is an explanation of the play that occurred. In some cases, batted ball location and type will be indicated within parentheses. Again, these are best efforts to record the game as it happened. Also, plays made on the baserunners (including the batter as a baserunner) will be indicated in parentheses after the baserunner's name. Advancement of baserunners is given in cases where the advancement is not easily deduced or obvious from the play. For example, advancement for a walk will not be given, but for a single or double it will be given.

The first inning, with errors involved in the scoring for both teams, is of primary interest for illustration here. Seattle's inning goes as follows. Segura makes the first out ( $SUV = -0.23$ ). Alonso singles ( $SUV = 0.22$ ) and advance to second on an error (unearned  $SUV = 0.44 - 0.22 = 0.22$ ). Cano singles ( $SUV = 0.22$ ), advancing Alonso to third ( $SUV = 0.68 - 0.44 = 0.24$ ), giving Cano a total of 0.46. Cruz doubles ( $SUV = 0.44$ ) scoring Alonso ( $SUV = 1 - 0.68 = 0.32$ ) and advancing Cano to third base ( $SUV = 0.68 - 0.22 = 0.46$ ), giving Cruz a total of 1.22. With runners on second and third, Seager strikes out ( $SUV = -0.16$ ), leaving Cano at third, now with two outs ( $SUV = 0.29 - 0.68 = -0.39$ ), and Cruz at second ( $SUV = 0.23 - 0.44 = -0.21$ ), giving Seager at

total of -0.76. Finally, Haniger ends the inning with the third out ( $SUV = -0.10$ ), stranding both runners ( $SUV = -0.29$  for stranding Cano, plus  $SUV = -0.23$  for stranding Cano), giving Haniger a total of -0.62. Therefore, when the six players' SUVs ( $-0.23 + 0.22 + 0.46 + 1.22 - 0.76 - 0.62 = 0.29$ ) are combined with the unearned SUV due to the error (0.22), the total SUV becomes the expected  $1 - 0.49 = 0.51$  for one run scored.

The Yankees' first inning is even more interesting, including three errors, and is likely as complicated as any SUV calculation can get. However, since only the pitcher's SUV is of interest, the individuals' SUVs are not separately tracked. Here is how Albers' SUV is calculated. Hicks makes the first out (Albers' SUV = -0.23). Castro doubles (Albers' SUV = 0.44, cumulative =  $-0.23 + 0.44 = 0.21$ ). Sanchez singles in Castro (Albers' SUV =  $1 - 0.44 = 0.56$  for scoring Castro, plus  $SUV = 0.22$  for the single) and advances to second on an error (unearned SUV =  $0.44 - 0.22 = 0.22$ ), but this is not charged to Albers. Therefore, Albers' cumulative SUV =  $0.21 + 0.56 + 0.22 = 0.99$ , with 0.22 unearned being tracked separately. Judge walks, adding 0.22 to Albers' SUV, now at 1.21. Gregorius reaches first on an error (unearned SUV = 0.22), advancing Sanchez to third (unearned SUV =  $0.68 - 0.44 = 0.24$ ) and Judge to second (unearned SUV =  $0.44 - 0.22 = 0.22$ ). Without the error, a second out ( $SUV = -0.16$ ) would have been recorded, with Sanchez remaining at second ( $SUV = 0.23 - 0.44 = -0.21$ ) and Judge at first ( $SUV = 0.12 - 0.22 = -0.10$ ). Therefore, without the error, Albers would have recorded an SUV =  $-0.16 - 0.21 - 0.10 = -0.47$ , bringing his total to  $1.21 - 0.47 = 0.74$ . The error receives an SUV =  $0.22 + 0.24 + 0.22 - (-0.47) = 1.15$ , which brings the cumulative unearned SUV now to  $0.22 + 1.15 = 1.37$ . Headley next grounds into what would have been a force out at second, but instead is an error, allowing Sanchez to score (unearned SUV =  $1 - 0.68 = 0.32$ ), Judge to reach third (unearned SUV =  $0.68 - 0.44 = 0.24$ ), Gregorius to reach second (unearned SUV =  $0.44 - 0.22 = 0.22$ ), and Headley to reach first (unearned SUV = 0.22). Without the error, a second out ( $SUV = -0.16$ ) would have been recorded, with Sanchez scoring ( $SUV = 1 - 0.68 = 0.32$ ), Judge reaching third ( $SUV = 0.29 - 0.44 = -0.15$ ), Gregorius erased ( $SUV = -0.22$ ) and Headley reaching first ( $SUV = 0.12$ ). The aggregate of this for Albers is  $-0.16 + 0.32 - 0.15 - 0.22 + 0.12 = -0.09$ , bringing his total to  $0.74 - 0.09 = 0.65$ . The cumulative unearned SUV now rises to  $1.37 + 0.32 + 0.24 + 0.22 + 0.22 - (-0.09) = 2.46$ . Frazier strikes out for the second out (Albers' SUV =  $0.29 - 0.68 = -0.39$  for keeping Judge at third, plus  $0.23 - 0.44 = -0.21$  for doing likewise with Gregorius at second, plus  $0.12 - 0.22 = -0.10$  for keeping Headley at first, plus  $SUV = -0.16$  for the second out). Albers' cumulative SUV is now  $0.65 - 0.39 - 0.21 - 0.10 - 0.16 = -0.21$ . Next, Ellsbury doubles (Albers' SUV = 0.23), driving in Judge and Gregorius (Albers' SUV =  $1 - 0.29 = 0.71$  for Judge, plus  $1 - 0.23 = 0.77$  for Gregorius), and advancing Headley to third (Albers' SUV =  $0.29 - 0.12 = 0.17$ ). However, an error allows Headley to score (unearned SUV =  $1 - 0.29 = 0.71$ ) and Ellsbury to advance to third (unearned SUV =  $0.29 - 0.23 = 0.06$ ), neither of which would have occurred without the error. Totaling up Albers' SUV now yields  $-0.21 + 0.23 + 0.71 + 0.77 + 0.17 = 1.67$ . The unearned SUV now rises to  $2.46 + 0.71 + 0.06 = 3.23$ . Torreyes next singles (Albers' SUV = 0.12), driving in Ellsbury from third (Albers' SUV =  $1 - 0.29 = 0.71$ ), raising Albers' cumulative SUV to  $1.67 + 0.12 + 0.71 = 2.50$ . Finally, Hicks makes the third out (Albers' SUV =  $-0.12$  for stranding Torreyes, plus  $-0.10$  for the third out). Albers' cumulative SUV for this inning becomes  $2.50 - 0.12 - 0.10 = 2.28$ . Adding this to the total unearned SUV = 3.23 yields 5.51, which corresponds to  $6 - 0.49 = 5.51$  for six runs scored in the inning.

Since Albers experienced no more errors over the remaining five innings he pitched, his total SUV acquired the generic -0.49 for each inning without a score and  $1 - 0.49 = 0.51$  for each of the two innings where he yielded an additional run, bringing his total for the game to  $2.28 + (3)(-0.49) + (2)(0.51) = 1.83$ . Seattle made no more errors, so the total unearned SUV for the game remains at

3.23. Reliever Altavilla yielded two runs in the seventh and none in the eighth for a cumulative SUV =  $2.00 - 0.49 - 0.49 = 1.02$ . Thus, the total SUV for the two Seattle pitchers becomes  $1.83 + 1.02 = 2.85$  which, when combined with the unearned SUV = 3.23, equals 6.08, consistent with an eight-inning game SUV (Yankees were home) of  $10 - (8)(0.49) = 6.08$ .

Seattle never scored again, so each of their remaining eight innings had SUVs = -0.49, with innings two, seven, eight and nine having the simplest “three up and three down” SUV =  $-0.23 - 0.16 - 0.10 = -0.49$ . Scoring only one run for the game, the total SUV is  $1 - (9)(0.49) = -3.41$ , consistent with the total for all the players’ SUVs (-4.25) plus the total unearned SUV (0.84), i.e.,  $-4.25 + 0.84 = -3.41$ . The Yankees made an error in the sixth, so the SUV calculation for that inning went as follows: Cruz reaches first on an error (SUV = -0.23 for Cruz since he should have been out, with an unearned SUV =  $0.39 - [-0.23] = 0.62$ ); Seager strikes out for first out (SUV =  $0.22 - 0.39 = -0.17$  for leaving Cruz at first, plus -0.23 for making the first out, giving Seager a total of -0.40); Haniger strikes out for the second out (SUV =  $0.12 - 0.22 = -0.10$  for leaving Cruz at first, plus -0.16 for making the second out, giving Haniger a total of -0.26); finally Gamel makes out number three (SUV = -0.12 for stranding Cruz, plus -0.10 for the third out, giving Gamel a total of -0.22); total SUV for inning =  $0.62$  (unearned)  $- 0.23 - 0.40 - 0.26 - 0.22 = -0.49$ . The reader is left to calculate the SUVs for the other innings based on the play-by-play provided.

#### GAME 059, JUNE 6, MINNESOTA-3 @ SEATTLE-12

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
<b>Heredia</b>	0.39	-0.10		0.87	0.28		-0.23			5	1.21	0.242	61	-0.92	-0.015
<b>Valencia</b>	0.63		-0.23	1.74	-0.26					4	1.88	0.470	63	5.34	0.085
<b>Smith</b>						-0.16				1	-0.16	-0.160	2	0.28	0.140
<b>Cano</b>	1.98		0.22	0.63	0.34		-0.10			5	3.07	0.614	68	4.52	0.066
<b>Cruz</b>	-0.23		0.44	0.76						3	0.97	0.323	73	8.57	0.117
<b>Powell</b>				-0.62			-0.23			2	-0.85	-0.425	13	-1.19	-0.092
<b>Seager</b>	-0.16		1.46	1.98		-0.23		-0.16		5	2.89	0.578	80	4.74	0.059
<b>Motter</b>	0.23		0.01	-0.23		0.22		-0.10		5	0.13	0.026	59	3.27	0.055
<b>Gamel</b>	-0.33		-0.39	-0.16		0.44				4	-0.44	-0.110	48	4.13	0.086
<b>Zunino</b>		-0.23		0.29		-0.47				4	-0.41	-0.103	50	-7.97	-0.159
<b>Dyson</b>		-0.16		0.63	-0.23	-0.45				4	-0.21	-0.053	65	1.86	0.029
<b>SUV</b>	2.51	-0.49	1.51	6.51	-0.49	-0.49	-0.49	-0.49	0.00	42	8.08	0.192	741	7.75	0.010
<b>Error/PB/CI</b>											0.00	8.08		5.97	13.72
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
<b>Paxton</b>	-0.49	-0.49	-0.49	1.51	0.51					5.00	0.55	0.110	16.33	-0.26	-0.016
<b>Zych</b>						-0.49				1.00	-0.49	-0.490	4.67	-1.11	-0.238
<b>Altavilla</b>							-0.49	-0.49		2.00	-0.98	-0.490	8.00	0.08	0.010
<b>Vincent</b>									-0.49	1.00	-0.49	-0.490	4.67	-2.12	-0.454
<b>SUV</b>	-0.49	-0.49	-0.49	1.51	0.51	-0.49	-0.49	-0.49	-0.49	9.00	-1.41	-0.157	172.67	-4.34	-0.025
<b>Error/PB/CI</b>											0.00	-1.41		5.67	1.33

**Play by Play** View Pitches ▾ Box Score Explanation wWE and wWPA Explanation Share & more ▾ Glossary

Inn	Score	Out	Rob	Pit(cnt)	R/O	@Bat	Batter	Pitcher	wWPA	wWE	Play Description
<b>Top of the 1st, Twins Batting, Tied 0-0, Mariners' James Paxton facing 1-2-3</b>											
t1	0-0	0	---	4,(2-1)	O	MIN	Brian Dozier	James Paxton	2%	52%	Flyball: RF
t1	0-0	1	---	7,(3-2)	O	MIN	Joe Mauer	James Paxton	2%	54%	Groundout: SS-1B
t1	0-0	2	---	3,(1-1)	O	MIN	Miguel Sano	James Paxton	1%	55%	Groundout: 2B-1B (Deep SS-2B) 0 runs, 0 hits, 0 errors, 0 LOB. Twins 0, Mariners 0.
<b>Bottom of the 1st, Mariners Batting, Tied 0-0, Twins' Hector Santiago facing 1-2-3</b>											
b1	0-0	0	---	5,(3-1)	SEA	Guillermo Heredia	Hector Santiago	3%	58%	Walk	
b1	0-0	0	1-	5,(3-1)	SEA	Danny Valencia	Hector Santiago	5%	64%	Walk; Heredia to 2B	
<b>b1 0-0</b>	<b>0 12- 4,(1-2)</b>	<b>RRR</b>	<b>SEA</b>	<b>Robinson Cano</b>	<b>Hector Santiago</b>	<b>17%</b>	<b>81% Home Run (Line Drive to Deep RF); Heredia Scores; Valencia Scores</b>				
b1	3-0	0	---	3,(0-2)	O	SEA	Nelson Cruz	Hector Santiago	-1%	79%	Strikeout Swinging
b1	3-0	1	---	2,(1-0)	O	SEA	Kyle Seager	Hector Santiago	-1%	78%	Popfly: 3B
b1	3-0	2	---	5,(1-2)	SEA	Taylor Motter	Hector Santiago	1%	79%	Single to LF (Line Drive to Short LF)	
b1	3-0	2	1-	3,(1-1)	SEA	Ben Gamel	Hector Santiago	1%	80%	Motter Steals 2B	
b1	3-0	2	2-	9,(3-2)	O	SEA	Ben Gamel	Hector Santiago	-2%	78%	Strikeout Looking
											3 runs, 2 hits, 0 errors, 1 LOB. Twins 0, Mariners 3.
<b>Top of the 2nd, Twins Batting, Behind 0-3, Mariners' James Paxton facing 4-5-6</b>											
t2	0-3	0	---	5,(3-1)	MIN	Robbie Grossman	James Paxton	-3%	74%	Walk	
t2	0-3	0	1-	7,(2-2)	OO	MIN	Max Kepler	James Paxton	7%	81%	Ground Ball Double Play: SS-2B-1B
t2	0-3	2	---	6,(3-2)	O	MIN	Eduardo Escobar	James Paxton	1%	82%	Strikeout Swinging
											0 runs, 0 hits, 0 errors, 0 LOB. Twins 0, Mariners 3.
<b>Bottom of the 2nd, Mariners Batting, Ahead 0-3, Twins' Hector Santiago facing 8-9-1</b>											
b2	3-0	0	---	4,(1-2)	O	SEA	Mike Zunino	Hector Santiago	-1%	81%	Strikeout Swinging
b2	3-0	1	---	3,(1-1)	O	SEA	Jarrod Dyson	Hector Santiago	-1%	80%	Groundout: P-1B
b2	3-0	2	---	7,(2-2)	O	SEA	Guillermo Heredia	Hector Santiago	-1%	80%	Strikeout Looking
											0 runs, 0 hits, 0 errors, 0 LOB. Twins 0, Mariners 3.
<b>Top of the 3rd, Twins Batting, Behind 0-3, Mariners' James Paxton facing 7-8-9</b>											
t3	0-3	0	---	3,(0-2)	O	MIN	Chris Gimenez	James Paxton	2%	82%	Strikeout Swinging
t3	0-3	1	---	4,(1-2)	O	MIN	Ehire Adrianza	James Paxton	1%	83%	Lineout: P
t3	0-3	2	---	5,(1-2)	O	MIN	Byron Buxton	James Paxton	1%	84%	Strikeout Looking
											0 runs, 0 hits, 0 errors, 0 LOB. Twins 0, Mariners 3.
<b>Bottom of the 3rd, Mariners Batting, Ahead 3-0, Twins' Hector Santiago facing 2-3-4</b>											
b3	3-0	0	---	4,(2-1)	O	SEA	Danny Valencia	Hector Santiago	-1%	83%	Foul Popfly: C (Behind Home)
b3	3-0	1	---	7,(3-2)	SEA	Robinson Cano	Hector Santiago	1%	84%	Walk	
b3	3-0	1	1-	5,(3-1)	SEA	Nelson Cruz	Hector Santiago	2%	86%	Walk; Cano to 2B	
<b>b3 3-0</b>	<b>1 12- 3,(1-1)</b>	<b>R</b>	<b>SEA</b>	<b>Kyle Seager</b>	<b>Hector Santiago</b>	<b>7%</b>	<b>92% Double to RF (Line Drive to Deep RF Line); Cano Scores; Cruz to 3B</b>				
b3	4-0	1	23	6,(3-2)	RO	SEA	Taylor Motter	Hector Santiago	1%	93%	Flyball: LF/Sacrifice Fly (Deep LF-CF); Cruz Scores; Seager to 3B
											Randy Rosario replaces Hector Santiago pitching
b3	5-0	2	-3	6,(3-2)	O	SEA	Ben Gamel	Randy Rosario	-1%	92%	Strikeout Swinging (C-1B)
											2 runs, 1 hit, 0 errors, 1 LOB. Twins 0, Mariners 5.
<b>Top of the 4th, Twins Batting, Behind 0-5, Mariners' James Paxton facing 1-2-3</b>											
t4	0-5	0	---	2,(1-0)	R	MIN	Brian Dozier	James Paxton	-4%	88%	Home Run (Fly Ball to Deep LF Line)
t4	1-5	0	---	2,(0-1)	O	MIN	Joe Mauer	James Paxton	2%	89%	Foul Lineout: LF (LF into Foul Terr.)
t4	1-5	1	---	3,(2-0)	MIN	Miguel Sano	James Paxton	-3%	87%	Double to CF (Line Drive to Deep CF-RF)	
t4	1-5	1	-2-	2,(0-1)	MIN	Robbie Grossman	James Paxton	-1%	85%	Wild Pitch; Sano to 3B	
t4	1-5	1	-3	5,(3-1)	MIN	Robbie Grossman	James Paxton	-2%	83%	Walk	
<b>t4 1-5</b>	<b>1 1-3 2,(0-1)</b>	<b>RO</b>	<b>MIN</b>	<b>Max Kepler</b>	<b>James Paxton</b>	<b>1%</b>	<b>84% Groundout: 2B-SS/Forceout at 2B (2B-1B); Sano Scores</b>				
t4	2-5	2	1-	2,(0-1)	MIN	Eduardo Escobar	James Paxton	-3%	81%	Single to RF (Line Drive to Short RF Line); Kepler to 3B	
t4	2-5	2	1-3	3,(1-1)	O	MIN	Chris Gimenez	James Paxton	5%	86%	Popfly: 2B (Deep 2B)
											2 runs, 3 hits, 0 errors, 2 LOB. Twins 2, Mariners 5.
<b>Bottom of the 4th, Mariners Batting, Ahead 5-2, Twins' Randy Rosario facing 8-9-1</b>											
b4	5-2	0	---	7,(3-2)	SEA	Mike Zunino	Randy Rosario	2%	88%	Single to LF (Ground Ball thru SS-3B Hole)	
b4	5-2	0	1-	3,(0-2)	SEA	Jarrod Dyson	Randy Rosario	2%	90%	Hit By Pitch; Zunino to 2B	
b4	5-2	0	12-	1,(0-0)	SEA	Guillermo Heredia	Randy Rosario	3%	93%	Single to LF (Ground Ball thru SS-3B Hole); Zunino to 3B; Dyson to 2B	
<b>b4 5-2</b>	<b>0 123 8,(3-2)</b>	<b>RRR</b>	<b>SEA</b>	<b>Danny Valencia</b>	<b>Randy Rosario</b>	<b>5%</b>	<b>98% Double to CF (Line Drive to Deep LF-CF); Zunino Scores; Dyson Scores; Heredia Scores</b>				
b4	8-2	0	-2-	3,(2-0)	SEA	Robinson Cano	Randy Rosario	1%	98%	Single to CF (Ground Ball thru SS-2B); Valencia to 3B	
											Alex Wimmers replaces Randy Rosario pitching
<b>b4 8-2</b>	<b>0 1-3 4,(1-2)</b>	<b>R</b>	<b>SEA</b>	<b>Nelson Cruz</b>	<b>Alex Wimmers</b>	<b>0%</b>	<b>99% Single to LF (Line Drive to Short LF-CF); Valencia Scores; Cano to 2B</b>				
b4	9-2	0	12-	4,(2-1)	RRR	SEA	Kyle Seager	Alex Wimmers	1%	100%	Home Run (Fly Ball to Deep RF Line); Cano Scores; Powell Scores
b4	12-2	0	---	1,(0-1)	O	SEA	Taylor Motter	Alex Wimmers	0%	100%	Popfly: SS (Deep SS-3B Hole)
b4	12-2	1	---	6,(3-2)	O	SEA	Ben Gamel	Alex Wimmers	0%	100%	Strikeout Swinging
b4	12-2	2	---	5,(2-2)	O	SEA	Mike Zunino	Alex Wimmers	0%	100%	Strikeout Looking
											7 runs, 6 hits, 0 errors, 0 LOB. Twins 2, Mariners 12.
<b>Top of the 5th, Twins Batting, Behind 2-12, Mariners' James Paxton facing 8-9-1</b>											
t5	2-12	0	---	10,(3-2)	O	MIN	Ehire Adrianza	James Paxton	0%	100%	Groundout: 3B-1B (Weak 3B)
t5	2-12	1	---	6,(2-2)	MIN	Byron Buxton	James Paxton	0%	100%	Single to LF (Line Drive)	
t5	2-12	1	1-	5,(2-2)	MIN	Brian Dozier	James Paxton	0%	100%	Wild Pitch; Buxton to 2B	
t5	2-12	1	-2-	6,(3-2)	MIN	Brian Dozier	James Paxton	0%	99%	Walk	
<b>t5 2-12</b>	<b>1 12- 3,(0-2)</b>	<b>R</b>	<b>MIN</b>	<b>Joe Mauer</b>	<b>James Paxton</b>	<b>-1%</b>	<b>99% Single to CF (Line Drive to Deep CF); Buxton Scores; Dozier to 3B</b>				
t5	3-12	1	1-3	6,(3-2)	O	MIN	Miguel Sano	James Paxton	1%	99%	Strikeout Swinging
t5	3-12	2	1-3	3,(2-0)	O	MIN	Robbie Grossman	James Paxton	0%	100%	Flyball: RF (Short RF Line)
											1 run, 2 hits, 0 errors, 2 LOB. Twins 3, Mariners 12.
<b>Bottom of the 5th, Mariners Batting, Ahead 12-3, Twins' Alex Wimmers facing 9-1-2</b>											
b5	12-3	0	---	6,(3-2)	O	SEA	Jarrod Dyson	Alex Wimmers	0%	100%	Strikeout Swinging
b5	12-3	1	---	3,(1-1)	SEA	Guillermo Heredia	Alex Wimmers	0%	100%	Single to P (Line Drive)	
b5	12-3	1	1-	7,(3-2)	O	SEA	Danny Valencia	Alex Wimmers	0%	100%	Popfly: 3B (SS-3B Hole)
<b>b5 12-3</b>	<b>2 1-1 6,(3-2)</b>	<b>SEA</b>	<b>Robinson Cano</b>	<b>Alex Wimmers</b>	<b>0%</b>	<b>100% Walk; Heredia to 2B</b>					
b5	12-3	2	12-	3,(1-1)	SEA	Boog Powell	Craig Breslow	0%	100%	Wild Pitch; Heredia to 3B; Cano to 2B	
b5	12-3	2	23	5,(2-2)	O	SEA	Boog Powell	Craig Breslow	0%	100%	Lineout: CF (Deep LF-CF)
											0 runs, 1 hit, 0 errors, 2 LOB. Twins 3, Mariners 12.

Top of the 6th, Twins Batting, Behind 3-12, Mariners' Tony Zych facing 5-6-7						
Tony Zych replaces James Paxton pitching						
t6 3-12	0 ---	2,(0-1)	MIN Max Kepler	Tony Zych	0%	99% Single to LF (Line Drive to Short LF)
t6 3-12	0 1--	5,(1-2) O	MIN Eduardo Escobar	Tony Zych	0%	100% Groundout: 1B-SS/Forceout at 2B (2B-1B)
t6 3-12	1 1--	8,(3-2)	MIN Chris Gimenez	Tony Zych	0%	99% Walk; Escobar to 2B
t6 3-12	1 12-	6,(2-2) O	MIN Ehrie Adrianza	Tony Zych	0%	100% Strikeout Looking
t6 3-12	2 12-	8,(1-2) O	MIN Byron Buxton	Tony Zych	0%	100% Strikeout Looking
0 runs, 1 hit, 0 errors, 2 LOB. Twins 3, Mariners 12.						
Bottom of the 6th, Mariners Batting, Ahead 12-3, Twins' Craig Breslow facing 5-6-7						
b6 12-3	0 ---	6,(3-2) O	SEA Kyle Seager	Craig Breslow	0%	100% Lineout: LF (Deep LF)
b6 12-3	1 ---	2,(0-1)	SEA Taylor Motter	Craig Breslow	0%	100% Single to CF (Ground Ball thru SS-2B)
b6 12-3	1 1--	3,(1-1)	SEA Ben Gamel	Craig Breslow	0%	100% Single to CF (Ground Ball thru SS-2B); Motter to 2B
b6 12-3	1 12-	4,(1-2) O	SEA Mike Zunino	Craig Breslow	0%	100% Strikeout Swinging
b6 12-3	2 12-	3,(1-1) O	SEA Jarrod Dyson	Craig Breslow	0%	100% Lineout: CF (Deep CF)
0 runs, 2 hits, 0 errors, 2 LOB. Twins 3, Mariners 12.						
Top of the 7th, Twins Batting, Behind 3-12, Mariners' Dan Altavilla facing 1-2-3						
Dan Altavilla replaces Tony Zych pitching						
t7 3-12	0 ---	4,(2-1) O	MIN Brian Dozier	Dan Altavilla	0%	100% Popfly: 3B (SS-3B Hole)
t7 3-12	1 ---	6,(3-2) O	MIN Joe Mauer	Dan Altavilla	0%	100% Lineout: LF (Deep LF Line)
t7 3-12	2 ---	4,(2-1)	MIN Miguel Sano	Dan Altavilla	0%	100% Single to CF (Ground Ball)
t7 3-12	2 1--	2,(1-0)	MIN Robbie Grossman	Dan Altavilla	0%	100% Double to RF (Line Drive to Deep RF Line); Sano to 3B
t7 3-12	2 -23	2,(0-1) O	MIN Max Kepler	Dan Altavilla	0%	100% Popfly: SS (Deep SS)
0 runs, 2 hits, 0 errors, 2 LOB. Twins 3, Mariners 12.						
Bottom of the 7th, Mariners Batting, Ahead 12-3, Twins' Buddy Boshers facing 1-2-3						
Buddy Boshers replaces Craig Breslow pitching						
b7 12-3	0 ---	3,(0-2) O	SEA Guillermo Heredia	Buddy Boshers	0%	100% Popfly: 1B (Weak 2B-1B)
Tyler Smith pinch hits for Danny Valencia (1B) batting 2nd						
b7 12-3	1 ---	4,(1-2) O	SEA Tyler Smith	Buddy Boshers	0%	100% Strikeout Swinging (C-1B)
b7 12-3	2 ---	5,(1-2) O	SEA Robinson Cano	Buddy Boshers	0%	100% Groundout: 2B-1B
0 runs, 0 hits, 0 errors, 0 LOB. Twins 3, Mariners 12.						
Top of the 8th, Twins Batting, Behind 3-12, Mariners' Dan Altavilla facing 6-7-8						
Taylor Motter moves from SS to 1B Tyler Smith moves from PH to SS						
t8 3-12	0 ---	1,(0-0) O	MIN Eduardo Escobar	Dan Altavilla	0%	100% Single to RF (Ground Ball)
t8 3-12	0 1--	6,(1-2) O	MIN Chris Gimenez	Dan Altavilla	0%	100% Popfly: 3B (Deep 3B)
t8 3-12	1 1--	2,(0-1) O	MIN Ehrie Adrianza	Dan Altavilla	0%	100% Flyball: CF (Deep LF-CF)
t8 3-12	2 1--	1,(0-0) O	MIN Byron Buxton	Dan Altavilla	0%	100% Double to LF (Ground Ball); Escobar to 3B
t8 3-12	2 -23	7,(3-2) O	MIN Brian Dozier	Dan Altavilla	0%	100% Strikeout Swinging
0 runs, 2 hits, 0 errors, 2 LOB. Twins 3, Mariners 12.						
Bottom of the 8th, Mariners Batting, Ahead 12-3, Twins' Chris Gimenez facing 4-5-6						
Chris Gimenez moves from C to P Eduardo Escobar moves from DH to C (team loses DH)						
b8 12-3	0 ---	2,(1-0) O	SEA Boog Powell	Chris Gimenez	0%	100% Groundout: 1B unassisted
b8 12-3	1 ---	2,(0-1) O	SEA Kyle Seager	Chris Gimenez	0%	100% Flyball: CF (Deep LF-CF)
b8 12-3	2 ---	5,(3-1) O	SEA Taylor Motter	Chris Gimenez	0%	100% Foul Popfly: 3B (3B into Foul Terr.)
0 runs, 0 hits, 0 errors, 0 LOB. Twins 3, Mariners 12.						
Top of the 9th, Twins Batting, Behind 3-12, Mariners' Nick Vincent facing 2-3-4						
Nick Vincent replaces Dan Altavilla pitching						
t9 3-12	0 ---	4,(1-2) O	MIN Joe Mauer	Nick Vincent	0%	100% Single to LF (Line Drive to Short LF-CF)
t9 3-12	0 1--	3,(0-2) O	MIN Miguel Sano	Nick Vincent	0%	100% Popfly: 1B (Weak 2B-1B)
t9 3-12	1 1--	6,(2-2) O	MIN Robbie Grossman	Nick Vincent	0%	100% Groundout: 2B-3B/Forceout at 2B (2B-1B)
t9 3-12	2 1--	2,(0-1) O	MIN Max Kepler	Nick Vincent	0%	100% Lineout: CF (Deep CF)
0 runs, 1 hit, 0 errors, 1 LOB. Twins 3, Mariners 12.						

From this game, it is the Mariners' fourth inning that is of interest, with them having "batted around" to score seven runs. Zunino led off with a single (SUV = 0.39). Dyson was hit by a pitch (SUV = 0.39), advancing Zunino to second (SUV = 0.63 – 0.39 = 0.24), giving Dyson a total SUV of 0.63. Next, Heredia singled (SUV = 0.39), advancing each runner one base (SUV = 0.87 – 0.63 + 0.63 – 0.39 = 0.48), giving Heredia a total SUV of 0.87. Valencia followed with a double (SUV = 0.63), scoring all three runners (SUV = 3 – 0.87 – 0.63 – 0.39 = 1.11), giving Valencia a total SUV of 1.74. Cano singled (SUV = 0.39), advancing Valencia to third (SUV = 0.87 – 0.63 = 0.24), giving Cano a total SUV of 0.63. After a pitching change, Cruz singled (SUV = 0.39), scoring Valencia (SUV = 1 – 0.87 = 0.13) and advancing Cano to second (SUV = 0.63 – 0.39 = 0.24), giving Cruz a total SUV of 0.76. Powell came in to pinch run for Cruz; however, as he subsequently did not directly advance on his own or make an out on his own, he was not tracked in this inning (but tracked in later innings since he remained in the game and subsequently batted). Seager next scored everyone with a home run (SUV = 1 + 2 – 0.63 – 0.39 = 1.98). Finally, the next three batters made outs (Motter's SUV = -0.23, Gamel's SUV = -0.16, Zunino's SUV = -0.10). Since Zunino batted twice in the inning, he had two opportunities and a net SUV = 0.39 – 0.10 = 0.29. This is indicated by the bolded outline around his entry in the fourth inning. The Mariners' total SUV for the inning is the expected  $7 - 0.49 = 6.51$ , as shown by the sum of the individual SUVs for the inning. Seattle's total game SUV =  $12 - (8)(0.49) = 8.08$  (Seattle was home), while the Twins' total was  $3 - (9)(0.49) = -1.41$ .

**GAME 038, MAY 14, SEATTLE-2 @ TORONTO-3 (WALK-OFF HOME RUN, 2 OUTS)**

Mariner	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Ops	SUV	Avg	+Ops	+SUV	+Avg
Segura	-0.23		-0.16		0.90		-0.16			4	0.35	0.088	37	0.58	0.016
Gamel	-0.16		-0.10		-0.55		-0.10			4	-0.91	-0.228	24	1.85	0.077
Cruz	0.12			0.39	-0.39			-0.23		4	-0.11	-0.028	54	7.67	0.142
Seager	-0.22			0.63		-0.23		-0.16		4	0.02	0.005	49	2.62	0.053
Valencia		0.39		-0.59		-0.16		-0.10		4	-0.46	-0.115	38	3.73	0.098
Motter		-0.40		-0.47		0.12			-0.23	4	-0.98	-0.245	38	0.43	0.011
Heredia		-0.15		-0.45		-0.22			-0.16	4	-0.98	-0.245	33	-2.97	-0.090
Dyson		-0.33			-0.23		1.00		-0.10	4	0.34	0.085	43	0.86	0.020
Ruiz			-0.23		0.22		-0.23			3	-0.24	-0.080	11	-2.93	-0.266
SUV	-0.49	-0.49	-0.49	-0.49	0.51	-0.49	0.51	-0.49	-0.49	35	-2.97	-0.085	480	-0.55	-0.001
Error/PB/CI					0.56						0.56	-2.41		3.67	3.12
Pitcher	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	IP	SUV	Avg	+IP	+SUV	+Avg
Miranda	-0.49	-0.49	-0.49	-0.49	-0.49	0.39				5.00	-2.06	-0.412	19.00	-6.98	-0.367
Pazos						1.12				1.00	1.12	1.120			
Vincent							-0.49			1.00	-0.49	-0.490	2.67	-1.14	-0.428
Rzepczynski								-0.04		0.67	-0.04	-0.060	3.67	-2.12	-0.578
Zych								-0.45		0.33	-0.45	-1.350	3.67	-0.85	-0.232
Diaz									0.61	0.67	0.61	0.915	3.67	-0.86	-0.235
SUV	-0.49	-0.49	-0.49	-0.49	-0.49	1.51	-0.49	-0.49	0.61	8.67	-1.31	-0.151	111.67	-10.87	-0.097
Error/PB/CI											0.00	-1.31		4.09	-6.78

The interesting aspect of this final game is Toronto's walk-off victory in the bottom of the ninth. After the first two batters made outs ( $SUV = -0.23 - 0.16 = -0.39$ ), Pillar homers to win the game ( $SUV = 1.00$ ), giving Diaz an  $SUV = -0.39 + 1.00 = 0.61$  for the inning, which exceeds the usual  $1 - 0.49 = 0.51$  typical for an inning with one run and three outs. Toronto's game total SUV is thus  $3 - (9)(0.49) - 0.10 = -1.31$  instead of the expected  $-1.41$  because the final out, with an  $SUV = -0.10$ , never occurs. Seattle's run in the fifth is also of interest, since it involved an error. After Dyson made the first out ( $SUV = -0.23$ ), Ruiz singled ( $SUV = 0.22$ ), followed by Segura's double ( $SUV = 0.44$ ), which advanced Ruiz to third ( $SUV = 0.68 - 0.22 = 0.46$ ), who scored on an error (unearned  $SUV = 1 - 0.68 = 0.32$ ), with Segura advancing to third on the same error (unearned  $SUV = 0.68 - 0.44 = 0.24$ ). Therefore, Segura's total SUV =  $0.44 + 0.46 = 0.90$  and the total unearned SUV =  $0.32 + 0.24 = 0.56$ . Gamel and Cruz made the next two outs without advancing Segura, for SUVs of  $0.29 - 0.68 - 0.16 = -0.55$  and  $-0.29 - 0.10 = -0.39$ , respectively. The inning's total SUV, with the unearned portion included, is the expected  $1 - 0.49 = 0.51$ .



Bottom of the 7th, Blue Jays Batting, Tied 2-2, Mariners' Nick Vincent facing 9-1-2							
<i>Nick Vincent replaces James Pazos pitching</i>							
b7	2-2	0 ---	2,(0-1)	O TOR	Luke Maile	Nick Vincent	-4% 55% Lineout: CF (CF-RF)
b7	2-2	1 ---	3,(1-1)	O TOR	Kevin Pillar	Nick Vincent	-3% 52% Lineout: RF (Deep RF)
b7	2-2	2 ---	1,(0-0)	O TOR	Darwin Barney	Nick Vincent	-2% 50% Groundout: 3B-1B
<i>0 runs, 0 hits, 0 errors, 0 LOB. Mariners 2, Blue Jays 2.</i>							
Top of the 8th, Mariners Batting, Tied 2-2, Blue Jays' Ryan Tepera facing 3-4-5							
t8	2-2	0 ---	1,(0-0)	O SEA	Nelson Cruz	Ryan Tepera	5% 55% Groundout: SS-1B
t8	2-2	1 ---	1,(0-0)	O SEA	Kyle Seager	Ryan Tepera	4% 59% Groundout: SS-1B
t8	2-2	2 ---	5,(2-2)	O SEA	Danny Valencia	Ryan Tepera	3% 61% Strikeout Swinging
<i>0 runs, 0 hits, 0 errors, 0 LOB. Mariners 2, Blue Jays 2.</i>							
Bottom of the 8th, Blue Jays Batting, Tied 2-2, Mariners' Marc Rzepczynski facing 3-4-5							
<i>Marc Rzepczynski replaces Nick Vincent pitching</i>							
b8	2-2	0 ---	7,(3-2)	O TOR	Jose Bautista	Marc Rzepczynski	-5% 57% Groundout: SS-1B
b8	2-2	1 ---	3,(2-0)	O TOR	Kendrys Morales	Marc Rzepczynski	5% 61% Single to CF (Ground Ball thru SS-2B)
<i>Chris Coghlan pinch runs for Kendrys Morales (DH) batting 4th</i>							
b8	2-2	1 1--	6,(3-2)	TOR	Justin Smoak	Marc Rzepczynski	6% 67% Walk; Coghlan to 2B
b8	2-2	1 12-	5,(2-2)	O TOR	Ezequiel Carrera	Marc Rzepczynski	-8% 59% Strikeout Looking
<i>Tony Zych replaces Marc Rzepczynski pitching</i>							
b8	2-2	2 12-	3,(1-1)	O TOR	Devon Travis	Tony Zych	-9% 50% Flyball: LF
<i>0 runs, 1 hit, 0 errors, 2 LOB. Mariners 2, Blue Jays 2.</i>							
Top of the 9th, Mariners Batting, Tied 2-2, Blue Jays' Ryan Tepera facing 6-7-8							
t9	2-2	0 ---	4,(1-2)	O SEA	Taylor Motter	Ryan Tepera	6% 56% Strikeout Swinging
t9	2-2	1 ---	3,(1-1)	O SEA	Guillermo Heredia	Ryan Tepera	5% 61% Groundout: SS-1B
t9	2-2	2 ---	6,(3-2)	O SEA	Jarrod Dyson	Ryan Tepera	4% 65% Groundout: 3B-1B (SS-3B Hole)
<i>0 runs, 0 hits, 0 errors, 0 LOB. Mariners 2, Blue Jays 2.</i>							
Bottom of the 9th, Blue Jays Batting, Tied 2-2, Mariners' Edwin Diaz facing 8-9-1							
<i>Edwin Diaz replaces Tony Zych pitching</i>							
b9	2-2	0 ---	3,(1-1)	O TOR	Ryan Goins	Edwin Diaz	-6% 59% Groundout: 2B-1B
b9	2-2	1 ---	2,(0-1)	O TOR	Luke Maile	Edwin Diaz	-5% 54% Groundout: SS-1B
b9	2-2	2 ---	3,(1-1)	R TOR	Kevin Pillar	Edwin Diaz	<b>46% 100% Home Run (Line Drive to Deep LF)</b>
<i>1 run, 1 hit, 0 errors, 0 LOB. Mariners 2, Blue Jays 3.</i>							

## References

1. Gallucci, R. 2017. Situational Underlying Value for Baseball, Football and Basketball – A Statistic (SUV) to Measure Individual Performance in Team Sports, Lambert Academic Publishing, Saarbrücken, Germany (ISBN 978-3-330-06583-3); also: <http://vixra.org/pdf/1703.0203.pdf>.
2. “Baseball Reference,” <https://www.baseball-reference.com/>.
3. “NFL Football Scores – NFL Scoreboard – ESPN,” <http://www.espn.com/nfl/scoreboard>.
4. “NCAA Division 1 Men’s Basketball Game Center,” <https://www.ncaa.com/game/basketball-men/d1/2018/03/15/loyola-il-miami-fl/play-by-play>.



