

**“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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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	<b>0.87</b>	<b>0.63</b>	<b>0.39</b>	<b>-0.23</b>
1	<b>0.68</b>	<b>0.44</b>	<b>0.22</b>	<b>-0.16</b>
2	<b>0.29</b>	<b>0.23</b>	<b>0.12</b>	<b>-0.10</b>

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				-0.22			-0.23		-0.23	4	-0.84	-0.210			
Dyson		-0.10			-0.23		-0.16		-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	-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	-0.01		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	-0.71	-0.237	37	-7.05	-0.191
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		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	-0.49	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	-0.49	9.00	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				-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	-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	-0.49	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	0.086
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	-0.49	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	-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				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	-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	Pitcher	+IP	+SUV	+Avg
Seager	144	12.73	0.088	Rzepczynski	6.00	-3.29	-0.548
Cruz	138	9.95	0.072	Marshall	1.00	-0.49	-0.490
Gamel	117	8.09	0.069	Curtis	1.00	-0.49	-0.490
Segura	113	2.19	0.019	Cloyd	1.00	-0.49	-0.490
Cano	138	2.27	0.016	Zych	11.00	-4.72	-0.429
Motter	72	0.64	0.009	Iwakuma	11.67	-4.37	-0.375
Valencia	126	1.09	0.009	Pagan	5.00	-1.45	-0.290
Dyson	107	0.13	0.001	Vincent	14.00	-3.80	-0.271
Smith	11	-0.12	-0.011	Bergman	22.67	-6.05	-0.267
Haniger	85	-2.46	-0.029	Scribner	5.33	-1.04	-0.195
Heredia	89	-3.92	-0.044	Diaz	14.00	-2.61	-0.186
Powell	17	-0.77	-0.045	Cishek	4.33	-1.30	-0.300
Martin, L	24	-2.20	-0.092	Lawrence	6.33	-0.98	-0.155
Vogelbach	9	-0.88	-0.098	Paxton	35.00	-3.84	-0.110
Zunino	89	-9.39	-0.106	Altavilla	10.00	-0.90	-0.090
Ruiz	35	-4.12	-0.118	Hernandez	23.67	-2.09	-0.088
Freeman	13	-2.67	-0.205	Miranda	39.00	0.82	0.021
Gosewisch	8	-2.19	-0.274	Gaviglio	26.00	0.80	0.031
Pitcher (NL)	5	-1.45	-0.290	Phelps	3.67	0.27	0.074
SUV	1340	6.92	0.005	Gallardo	21.00	3.23	0.154
Error/PB/CI		13.22	20.14	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		Lawrence	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	-0.94	-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	0.51	-0.49	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	-0.490			
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 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	-6.68	-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
<b>Pitcher</b>															
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	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
<b>Pitcher</b>															
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	
<b>Pitcher</b>																
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
<b>Pitcher</b>															
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		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
<b>Pitcher</b>															
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





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:

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

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	0.929	0.955	0.867	0.967	0.907	0.851	0.964	0.982	0.951	0.922
2	Cano	0.712	0.818	0.905	0.865	0.376	0.743	0.757	0.576	0.583	0.785
3	Segura	0.639	0.834	0.845	0.265	0.766	0.952	0.156	0.776	0.429	0.729
4	Haniger	0.573	0.315	0.226	0.287	0.834	0.767	0.459	0.819	0.782	0.666
5	Seager	0.507	0.671	0.719	0.789	0.213	0.160	0.671	0.280	0.566	0.493
6	Zunino	0.471	0.190	0.162	0.501	0.395	0.180	0.767	0.432	0.853	0.758
7	Gamel	0.418	0.571	0.672	0.435	0.379	0.644	0.362	0.263	0.348	0.087
8	Valencia	0.301	0.227	0.350	0.528	0.148	0.256	0.626	0.147	0.337	0.087
9	Dyson	0.295	0.269	0.093	0.130	0.890	0.191	0.161	0.298	0.091	0.529
10	Heredia	0.103	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	WHBIP	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	WHBIP	1-WAR
1	Vincent	0.214	0.282	0.202	0.179	0.118	0.186	0.318
2	Diaz	0.300	0.139	0.214	0.567	0.133	0.264	0.486
3	Ramirez	0.302	0.236	0.252	0.221	0.328	0.221	0.556
4	Paxton	0.368	0.807	0.530	0.661	0.078	0.128	0.005
5	Moore	0.431	0.263	0.367	0.132	0.845	0.205	0.775
6	Gaviglio	0.503	0.291	0.322	0.336	0.609	0.745	0.719
7	Bergman	0.529	0.272	0.293	0.251	0.748	0.894	0.719
8	Hernandez	0.543	0.541	0.480	0.508	0.504	0.702	0.521
9	Miranda	0.789	0.949	0.976	0.964	0.785	0.538	0.521
10	Gallardo	0.921	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.



Finally, while Reference 1 analyzes two games in detail for both teams to illustrate how the SUV is calculated and used, it should be helpful to do so here for three selected games from the list of 54. The games chosen represent (1) one with several “unearned” SUVs (Game 131, August 27, Seattle-1 @ N.Y. Yankees-10); (2) one where the Mariners “batted around” (10 men in one inning - Game 059, June 6, Minnesota-3 @ Seattle-12); and (3) a ninth-inning walk-off (Game 038, May 14, Seattle-2 @ Toronto-3). For each of these, the complete play-by-play from Reference 2 is provided. Innings of especial interest are described in detail, with the remainder left to the reader to calculate as desired given the complete play-by-play.

### 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

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

Inn	Score	Out	Rob	PH(cnt)	R/O	@Bat	Batter	Pitcher	wWPA	wWE	Play Description
<b>Top of the 1st, Mariners Batting, Tied 0-0, Yankees' Masahiro Tanaka facing 1-2-3</b>											
11	0-0	0	---	4,(2-1)	O	SEA	Jean Segura	Masahiro Tanaka	2%	52%	Lineout: RF (Deep RF)
11	0-0	1	---	3,(1-1)	O	SEA	Yonder Alonso	Masahiro Tanaka	-4%	48%	Single to LF (Line Drive to Deep LF-CF); Alonso to 2B/Adv on E7
11	0-0	1	-2	2,(0-1)	O	SEA	Robinson Cano	Masahiro Tanaka	-5%	44%	Single to LF (Line Drive to LF-CF); Alonso to 3B
11	0-0	1	1-3	2,(1-0)	R	SEA	Nelson Cruz	Masahiro Tanaka	-11%	33%	Double to LF (Line Drive to Deep LF); Alonso Scores; Cano to 3B
11	1-0	1	-23	4,(1-2)	O	SEA	Kyle Seager	Masahiro Tanaka	7%	40%	Strikeout Swinging
11	1-0	2	-23	6,(2-2)	O	SEA	Mitch Haniger	Masahiro Tanaka	5%	45%	Flyball: CF (CF-RF)
1 run, 3 hits, 1 error, 2 LOB. Mariners 1, Yankees 0.											
<b>Bottom of the 1st, Yankees Batting, Behind 0-1, Mariners' Andrew Albers facing 1-2-3</b>											
01	0-1	0	---	4,(1-2)	O	NY	Aron Hicks	Andrew Albers	-2%	43%	Popfly: SS (Deep SS-3B Hole)
01	0-1	1	---	2,(0-1)	O	NY	Starlin Castro	Andrew Albers	4%	47%	Double to RF (Line Drive to Deep RF)
01	0-1	1	-2	2,(1-0)	R	NY	Gary Sanchez	Andrew Albers	10%	57%	Single to LF (Line Drive to LF-CF); Castro Scores; Sanchez to 2B/Adv on E7
01	1-1	1	-2	5,(3-1)	O	NY	Aaron Judge	Andrew Albers	2%	59%	Walk
01	1-1	1	12	1,(0-0)	O	NY	Didi Gregorius	Andrew Albers	6%	64%	Reached on E5 (Pop Fly to Short LF-CF); Sanchez to 3B; Judge to 2B
01	1-1	1	123	6,(0-2)	R	NY	Chase Headley	Andrew Albers	8%	72%	Reached on E5/attempted forcout (Ground Ball to SS-3B Hole); Sanchez Scores/unER; Judge to 3B; Gregorius to 2B
01	2-1	1	123	5,(1-0)	O	NY	Todd Frazier	Andrew Albers	-6%	66%	Strikeout Swinging
01	2-1	2	123	1,(0-0)	RRR	NY	Jacoby Ellsbury	Andrew Albers	19%	85%	Double to LF (Line Drive to Deep LF-CF); Judge Scores/unER; Gregorius Scores/unER; Headley Scores/Adv on E6/unER/No RBI; Ellsbury to 3B/Adv on E5 (throw)
01	5-1	2	-3	4,(0-2)	R	NY	Ronald Torreyes	Andrew Albers	4%	89%	Single to 3B (Ground Ball); Ellsbury Scores/unER
01	6-1	2	1-	2,(0-1)	O	NY	Aron Hicks	Andrew Albers	-1%	88%	Flyball: CF
6 runs, 4 hits, 5 errors, 1 LOB. Mariners 1, Yankees 6.											
<b>Top of the 2nd, Mariners Batting, Behind 1-6, Yankees' Masahiro Tanaka facing 7-8-9</b>											
12	1-6	0	---	4,(1-2)	O	SEA	Ben Gamel	Masahiro Tanaka	1%	90%	Strikeout Swinging
12	1-6	1	---	4,(1-2)	O	SEA	Mike Zunino	Masahiro Tanaka	1%	91%	Strikeout Swinging
12	1-6	2	---	2,(1-0)	O	SEA	Guillermo Heredia	Masahiro Tanaka	1%	91%	Groundout: SS-1B
0 runs, 0 hits, 0 errors, 0 LOB. Mariners 1, Yankees 6.											
<b>Bottom of the 2nd, Yankees Batting, Ahead 6-1, Mariners' Andrew Albers facing 2-3-4</b>											
02	6-1	0	---	4,(1-2)	O	NY	Starlin Castro	Andrew Albers	1%	92%	Single to 3B (Ground Ball)
02	6-1	0	1-	3,(0-2)	O	NY	Gary Sanchez	Andrew Albers	1%	94%	Single to RF (Fly Ball to Short CF-RF); Castro to 2B
02	6-1	0	12	3,(0-2)	O	NY	Aaron Judge	Andrew Albers	-1%	92%	Strikeout Looking
02	6-1	1	12	4,(1-2)	O	NY	Didi Gregorius	Andrew Albers	-1%	91%	Groundout: P-SS/Forceout at 2B (Front of Home); Castro to 3B
02	6-1	2	1-3	1,(0-0)	O	NY	Chase Headley	Andrew Albers	-1%	90%	Groundout: 2B-1B
0 runs, 2 hits, 0 errors, 2 LOB. Mariners 1, Yankees 6.											
<b>Top of the 3rd, Mariners Batting, Behind 1-6, Yankees' Masahiro Tanaka facing 1-2-3</b>											
13	1-6	0	---	4,(1-2)	O	SEA	Jean Segura	Masahiro Tanaka	-2%	87%	Single to 3B (Ground Ball to Weak 3B)
13	1-6	0	1-	3,(1-1)	O	SEA	Yonder Alonso	Masahiro Tanaka	2%	90%	Flyball: CF (Deep CF)
13	1-6	1	1-	1,(0-0)	O	SEA	Robinson Cano	Masahiro Tanaka	2%	91%	Groundout: 1B-SS/Forceout at 2B (Weak 2B-1B)
13	1-6	2	1-	4,(1-2)	O	SEA	Nelson Cruz	Masahiro Tanaka	1%	93%	Strikeout Looking
0 runs, 1 hit, 0 errors, 1 LOB. Mariners 1, Yankees 6.											

Bottom of the 3rd, Yankees Batting, Ahead 6-1, Mariners' Andrew Albers facing 7-8-9										
03	8-1	0	---	4,(1-2)	O	NY	Todd Frazier	Andrew Albers	-1%	92%; Strikeout Looking
03	8-1	1	---	4,(1-2)	O	NY	Jacoby Ellsbury	Andrew Albers	0%	92%; Groundout: 2B-1B
03	8-1	2	---	2,(0-1)	O	NY	Ronald Torreyes	Andrew Albers	0%	92%; Single to CF (Ground Ball thru SS-2B)
03	8-1	2	1-	3,(1-1)	O	NY	Aaron Hicks	Andrew Albers	0%	92%; Single to RF (Ground Ball thru 2B-1B); Torreyes to 2B
<b>03</b>	<b>6-1</b>	<b>2</b>	<b>1-2</b>	<b>6,(1-2)</b>	<b>R</b>	<b>NY</b>	<b>Starlin Castro</b>	<b>Andrew Albers</b>	<b>3%</b>	<b>95%; Single to CF (Fly Ball to Short CF); Torreyes Scores; Hicks to 3B</b>
03	7-1	2	1-3	4,(1-2)	O	NY	Gary Sanchez	Andrew Albers	-1%	95%; Groundout: SS-2B/Forceout at 2B
1 run, 3 hits, 0 errors, 2 LOB. Mariners 2, Yankees 7.										
Top of the 4th, Mariners Batting, Behind 1-7, Yankees' Masahiro Tanaka facing 5-6-7										
04	1-7	0	---	5,(3-1)	SEA	Kyle Seager	Masahiro Tanaka	-2%	93%; Walk	
04	1-7	0	1-	5,(2-2)	O	SEA	Mich Hanger	Masahiro Tanaka	2%	94%; Strikeout Swinging
04	1-7	1	1-	5,(2-2)	OO	SEA	Ben Gamel	Masahiro Tanaka	2%	97%; Ground Ball Double Play: SS-1B (SS-2B)
0 runs, 0 hits, 0 errors, 0 LOB. Mariners 1, Yankees 7.										
Bottom of the 4th, Yankees Batting, Ahead 7-1, Mariners' Andrew Albers facing 4-5-6										
04	7-1	0	---	2,(1-0)	O	NY	Aaron Judge	Andrew Albers	1%	97%; Double to LF (Line Drive to LF Line)
04	7-1	0	-2-	2,(0-1)	O	NY	Didi Gregorius	Andrew Albers	-1%	97%; Groundout: P-1B (Front of Home)
04	7-1	1	-2-	5,(3-1)	O	NY	Chase Headley	Andrew Albers	0%	96%; Lineout: LF (Deep LF)
04	7-1	2	-2-	5,(2-2)	O	NY	Todd Frazier	Andrew Albers	0%	96%; Flyball: CF (Deep CF-RF)
0 runs, 1 hit, 0 errors, 1 LOB. Mariners 1, Yankees 7.										
Top of the 5th, Mariners Batting, Behind 1-7, Yankees' Masahiro Tanaka facing 8-9-1										
05	1-7	0	---	2,(0-1)	SEA	Mike Zunino	Masahiro Tanaka	-2%	94%; Single to SS (Ground Ball to SS-3B Hole)	
05	1-7	0	1-	1,(0-0)	SEA	Guillermo Heredia	Masahiro Tanaka	-3%	92%; Single to CF (Ground Ball thru SS-2B); Zunino to 2B	
05	1-7	0	1-2	6,(3-2)	O	SEA	Jean Segura	Masahiro Tanaka	3%	94%; Strikeout Swinging
05	1-7	1	1-2	1,(0-0)	O	SEA	Yonder Alonso	Masahiro Tanaka	1%	96%; Groundout: 1B-P; Zunino to 3B; Heredia to 2B
05	1-7	2	-23	2,(0-1)	O	SEA	Robinson Cano	Masahiro Tanaka	2%	98%; Groundout: 2B-1B (Deep 2B-1B)
0 runs, 2 hits, 0 errors, 2 LOB. Mariners 1, Yankees 7.										
Bottom of the 5th, Yankees Batting, Ahead 7-1, Mariners' Andrew Albers facing 8-9-1										
05	7-1	0	---	6,(1-2)	O	NY	Jacoby Ellsbury	Andrew Albers	0%	97%; Strikeout Looking
05	7-1	1	---	3,(1-1)	O	NY	Ronald Torreyes	Andrew Albers	0%	97%; Groundout: SS-1B
05	7-1	2	---	1,(0-0)	O	NY	Aaron Hicks	Andrew Albers	0%	97%; Popfly: SS (Deep 3B)
0 runs, 0 hits, 0 errors, 0 LOB. Mariners 1, Yankees 7.										
Top of the 6th, Mariners Batting, Behind 1-7, Yankees' Masahiro Tanaka facing 4-5-6										
06	1-7	0	---	3,(2-0)	SEA	Nelson Cruz	Masahiro Tanaka	-1%	96%; Reached on E5 (Ground Ball)	
06	1-7	0	1-	6,(3-2)	O	SEA	Kyle Seager	Masahiro Tanaka	1%	97%; Strikeout Swinging
06	1-7	1	1-	6,(3-2)	O	SEA	Mich Hanger	Masahiro Tanaka	1%	98%; Strikeout Swinging
06	1-7	2	---	5,(2-2)	O	SEA	Ben Gamel	Masahiro Tanaka	1%	98%; Groundout: 1B unassisted (2B-1B)
0 runs, 0 hits, 1 error, 1 LOB. Mariners 1, Yankees 7.										
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 LF-CF)	
06	7-1	0	1-	6,(3-2)	NY	Gary Sanchez	Andrew Albers	0%	99%; Walk; Castro to 3B	
Dan Altavilla replaces Andrew Albers pitching.										
06	7-1	0	1-2-	2,(1-0)	O	NY	Aaron Judge	Dan Altavilla	0%	99%; Wild Pitch; Castro to 3B; Sanchez to 2B
06	7-1	0	-23	4,(3-0)	O	NY	Aaron Judge	Dan Altavilla	0%	99%; Walk
06	7-1	0	1-23	5,(2-2)	O	NY	Didi Gregorius	Dan Altavilla	0%	99%; Strikeout Swinging
<b>06</b>	<b>7-1</b>	<b>1</b>	<b>123</b>	<b>1,(0-0)</b>	<b>ROO</b>	<b>NY</b>	<b>Chase Headley</b>	<b>Dan Altavilla</b>	<b>0%</b>	<b>99%; Double Play: Flyball: CF/Sacrifice Fly (Deep CF); Castro Scores; Sanchez out at 3B</b>
1 run, 1 hit, 0 errors, 1 LOB. Mariners 1, Yankees 8.										
Top of the 7th, Mariners Batting, Behind 1-8, Yankees' Masahiro Tanaka facing 8-9-1										
07	1-8	0	---	3,(0-2)	O	SEA	Mike Zunino	Masahiro Tanaka	0%	99%; Strikeout Swinging
07	1-8	1	---	3,(0-2)	O	SEA	Guillermo Heredia	Masahiro Tanaka	0%	100%; Strikeout Swinging
07	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 1, Yankees 8.										
Bottom of the 7th, Yankees Batting, Ahead 8-1, Mariners' Dan Altavilla facing 7-8-9										
Taylor Matter replaces Robinson Cano playing 2B batting 3rd.										
07	8-1	0	---	5,(3-1)	NY	Todd Frazier	Dan Altavilla	0%	100%; Walk	
07	8-1	0	1-	1,(0-0)	NY	Jacoby Ellsbury	Dan Altavilla	0%	100%; Single to RF (Ground Ball thru 2B-1B); Frazier to 2B	
07	8-1	0	1-2-	1,(0-0)	NY	Ronald Torreyes	Dan Altavilla	0%	100%; Single to LF (Line Drive to Short LF); Frazier to 3B; Ellsbury to 2B	
07	8-1	0	1-23	5,(2-2)	O	NY	Aaron Hicks	Dan Altavilla	0%	100%; Popfly: SS (Deep SS-2B)
Greg Bird pinch hits for Starlin Castro (DH) batting 2nd.										
<b>07</b>	<b>8-1</b>	<b>1</b>	<b>123</b>	<b>3,(1-1)</b>	<b>RR</b>	<b>NY</b>	<b>Greg Bird</b>	<b>Dan Altavilla</b>	<b>0%</b>	<b>100%; Single to RF (Ground Ball thru 2B-1B); Frazier Scores; Ellsbury Scores; Torreyes to 3B</b>
07	10-1	1	1-3	3,(0-2)	O	NY	Gary Sanchez	Dan Altavilla	0%	100%; Strikeout Swinging
07	10-1	2	1-3	6,(3-2)	O	NY	Aaron Judge	Dan Altavilla	0%	100%; Strikeout Looking
2 runs, 3 hits, 0 errors, 2 LOB. Mariners 1, Yankees 10.										
Top of the 8th, Mariners Batting, Behind 1-10, Yankees' Caleb Smith facing 2-3-4										
Caleb Smith replaces Masahiro Tanaka pitching.										
08	1-10	0	---	3,(2-0)	O	SEA	Yonder Alonso	Caleb Smith	0%	100%; Flyball: CF (Deep LF-CF)
08	1-10	1	---	4,(0-2)	O	SEA	Taylor Matter	Caleb Smith	0%	100%; Flyball: RF (Deep RF)
08	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 1, Yankees 10.										
Bottom of the 8th, Yankees Batting, Ahead 10-1, Mariners' Dan Altavilla facing 5-6-7										
08	10-1	0	---	4,(2-1)	NY	Didi Gregorius	Dan Altavilla	0%	100%; Single to RF (Ground Ball)	
Austin Romine pinch hits for Chase Headley (1B) batting 6th.										
08	10-1	0	1-	3,(1-1)	O	NY	Austin Romine	Dan Altavilla	0%	100%; Groundout: P-1B (Front of Home); Gregorius to 2B
08	10-1	1	-2-	3,(0-2)	O	NY	Todd Frazier	Dan Altavilla	0%	100%; Strikeout Swinging
08	10-1	2	-2-	1,(0-0)	O	NY	Jacoby Ellsbury	Dan Altavilla	0%	100%; Groundout: 2B-1B (2B-1B)
0 runs, 2 hit, 0 errors, 2 LOB. Mariners 2, Yankees 10.										
Top of the 9th, Mariners Batting, Behind 1-10, Yankees' Caleb Smith facing 5-6-7										
Austin Romine moves from PH to 2B.										
09	1-10	0	---	4,(1-2)	O	SEA	Kyle Seager	Caleb Smith	0%	100%; Strikeout Looking
09	1-10	1	---	5,(2-2)	O	SEA	Mich Hanger	Caleb Smith	0%	100%; Groundout: 3B-1B
Danny Valencia pinch hits for Ben Gamel (LF) batting 7th.										
09	1-10	2	---	1,(0-0)	O	SEA	Danny Valencia	Caleb Smith	0%	100%; Flyball: RF (Deep RF)
0 runs, 0 hits, 0 errors, 0 LOB. Mariners 1, Yankees 10.										

#### Play-by-Play Explanation

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

**RoB-** This gives the baserunner (Runners on Base) configuration 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.

**Pl-** 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.

**R/O-** This has a "O" for every out on the play and an "R" for every run that 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](#)

**eWPA-** Expecting 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 the 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
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

**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
b1	0-0	0	12-	4,(1-2)	RRR	SEA	Robinson Cano	Hector Santiago	17%	81%	Home Run (Line Drive to Deep RF); Heredia Scores; Valencia Scores
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 3-0, 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
b3	3-0	1	12-	3,(1-1)	R	SEA	Kyle Seager	Hector Santiago	7%	92%	Double to RF (Line Drive to Deep RF Line); Cano Scores; Cruz to 3B
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
t4	1-5	1	1-3	2,(0-1)	RO	MIN	Max Kepler	James Paxton	1%	84%	Groundout: 2B-SS/Forceout at 2B (2B-1B); Sano Scores
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%	85%	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
b4	5-2	0	123	8,(3-2)	RRR	SEA	Danny Valencia	Randy Rosario	5%	98%	Double to CF (Line Drive to Deep LF-CF); Zunino Scores; Dyson Scores; Heredia Scores
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											
b4	8-2	0	1-3	4,(1-2)	R	SEA	Nelson Cruz	Alex Wimmers	0%	99%	Single to LF (Line Drive to Short LF-CF); Valencia Scores; Cano to 2B
Boog Powell pinch runs for Nelson Cruz (DH) batting 4th											
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,(0-0)	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	---	5,(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
t5	2-12	1	12-	3,(0-2)	R	MIN	Joe Mauer	James Paxton	-1%	99%	Single to CF (Line Drive to Deep CF); Buxton Scores; Dozier to 3B
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)
b5	12-3	2	1--	6,(3-2)		SEA	Robinson Cano	Alex Wimmers	0%	100%	Walk; Heredia to 2B
Craig Breslow replaces Alex Wimmers pitching											
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											
<i>Tony Zych replaces James Paxton pitching</i>											
16	3-12	0	---	2,(0-1)	MIN	Max Kepler	Tony Zych	0%	99%	Single to LF (Line Drive to Short LF)	
16	3-12	0	1--	5,(1-2)	O	MIN	Eduardo Escobar	Tony Zych	0%	100% Groundout: 1B-SS/Forceout at 2B (2B-1B)	
16	3-12	1	1--	8,(3-2)	MIN	Chris Gimenez	Tony Zych	0%	99%	Walk; Escobar to 2B	
16	3-12	1	12-	6,(2-2)	O	MIN	Ehire Adrianza	Tony Zych	0%	100% Strikeout Looking	
16	3-12	2	12-	8,(1-2)	O	MIN	Byron Buxton	Tony Zych	0%	100% Strikeout Looking	
<i>0 runs, 1 hit, 0 errors, 2 LOB. Twins 3, Mariners 12.</i>											
Bottom of the 6th, Mariners Batting, Ahead 12-3, Twins' Craig Breslow facing 5-6-7											
16	12-3	0	---	6,(3-2)	O	SEA	Kyle Seager	Craig Breslow	0%	100% Lineout: LF (Deep LF)	
16	12-3	1	---	2,(0-1)	SEA	Taylor Motter	Craig Breslow	0%	100%	Single to CF (Ground Ball thru SS-2B)	
16	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	
16	12-3	1	12-	4,(1-2)	O	SEA	Mike Zunino	Craig Breslow	0%	100% Strikeout Swinging	
16	12-3	2	12-	3,(1-1)	O	SEA	Jarrod Dyson	Craig Breslow	0%	100% Lineout: CF (Deep CF)	
<i>0 runs, 2 hits, 0 errors, 2 LOB. Twins 3, Mariners 12.</i>											
Top of the 7th, Twins Batting, Behind 3-12, Mariners' Dan Altavilla facing 1-2-3											
<i>Dan Altavilla replaces Tony Zych pitching</i>											
17	3-12	0	---	4,(2-1)	O	MIN	Brian Dozier	Dan Altavilla	0%	100% Popfly: 3B (SS-3B Hole)	
17	3-12	1	---	6,(3-2)	O	MIN	Joe Mauer	Dan Altavilla	0%	100% Lineout: LF (Deep LF Line)	
17	3-12	2	---	4,(2-1)	MIN	Miguel Sano	Dan Altavilla	0%	100%	Single to CF (Ground Ball)	
17	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	
17	3-12	2	-23	2,(0-1)	O	MIN	Max Kepler	Dan Altavilla	0%	100%	Popfly: SS (Deep SS)
<i>0 runs, 2 hits, 0 errors, 2 LOB. Twins 3, Mariners 12.</i>											
Bottom of the 7th, Mariners Batting, Ahead 12-3, Twins' Buddy Boshers facing 1-2-3											
<i>Buddy Boshers replaces Craig Breslow pitching</i>											
17	12-3	0	---	3,(0-2)	O	SEA	Guillermo Heredia	Buddy Boshers	0%	100% Popfly: 1B (Weak 2B-1B)	
<i>Tyler Smith pinch hits for Danny Valencia (1B) batting 2nd</i>											
17	12-3	1	---	4,(1-2)	O	SEA	Tyler Smith	Buddy Boshers	0%	100%	Strikeout Swinging (C-1B)
17	12-3	2	---	5,(1-2)	O	SEA	Robinson Cano	Buddy Boshers	0%	100%	Groundout: 2B-1B
<i>0 runs, 0 hits, 0 errors, 0 LOB. Twins 3, Mariners 12.</i>											
Top of the 8th, Twins Batting, Behind 3-12, Mariners' Dan Altavilla facing 6-7-8											
<i>Taylor Motter moves from SS to 1B</i>											
<i>Tyler Smith moves from PH to SS</i>											
18	3-12	0	---	1,(0-0)	MIN	Eduardo Escobar	Dan Altavilla	0%	100%	Single to RF (Ground Ball)	
18	3-12	0	1--	6,(1-2)	O	MIN	Chris Gimenez	Dan Altavilla	0%	100%	Popfly: 3B (Deep 3B)
18	3-12	1	1--	2,(0-1)	O	MIN	Ehire Adrianza	Dan Altavilla	0%	100%	Flyball: CF (Deep LF-CF)
18	3-12	2	1--	1,(0-0)	MIN	Byron Buxton	Dan Altavilla	0%	100%	Double to LF (Ground Ball); Escobar to 3B	
18	3-12	2	-23	7,(3-2)	O	MIN	Brian Dozier	Dan Altavilla	0%	100%	Strikeout Swinging
<i>0 runs, 2 hits, 0 errors, 2 LOB. Twins 3, Mariners 12.</i>											
Bottom of the 8th, Mariners Batting, Ahead 12-3, Twins' Chris Gimenez facing 4-5-6											
<i>Chris Gimenez moves from C to P</i>											
<i>Eduardo Escobar moves from DH to C (team loses DH)</i>											
18	12-3	0	---	2,(1-0)	O	SEA	Boog Powell	Chris Gimenez	0%	100%	Groundout: 1B unassisted
18	12-3	1	---	2,(0-1)	O	SEA	Kyle Seager	Chris Gimenez	0%	100%	Flyball: CF (Deep LF-CF)
18	12-3	2	---	5,(3-1)	O	SEA	Taylor Motter	Chris Gimenez	0%	100%	Foul Popfly: 3B (3B into Foul Terr.)
<i>0 runs, 0 hits, 0 errors, 0 LOB. Twins 3, Mariners 12.</i>											
Top of the 9th, Twins Batting, Behind 3-12, Mariners' Nick Vincent facing 2-3-4											
<i>Nick Vincent replaces Dan Altavilla pitching</i>											
19	3-12	0	---	4,(1-2)	MIN	Joe Mauer	Nick Vincent	0%	100%	Single to LF (Line Drive to Short LF-CF)	
19	3-12	0	1--	3,(0-2)	O	MIN	Miguel Sano	Nick Vincent	0%	100%	Popfly: 1B (Weak 2B-1B)
19	3-12	1	1--	6,(2-2)	O	MIN	Robbie Grossman	Nick Vincent	0%	100%	Groundout: 2B-3B/Forceout at 2B (2B-1B)
19	3-12	2	1--	2,(0-1)	O	MIN	Max Kepler	Nick Vincent	0%	100%	Lineout: CF (Deep CF)
<i>0 runs, 1 hit, 0 errors, 1 LOB. Twins 3, Mariners 12.</i>											

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  $SUV$ s 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  $1 - 0.49 = 0.51$ .

Inn	Score	Out	RoB	Pit(cnt)	R/O	@Bat	Batter	Pitcher	wWPA	wWE	Play Description
<b>Top of the 1st, Mariners Batting, Tied 0-0, Blue Jays' Aaron Sanchez facing 1-2-3</b>											
t1	0-0	0	---	2,(0-1)	O	SEA	Jean Segura	Aaron Sanchez	-3%	47%	Single to 2B (Ground Ball to SS-2B)
t1	0-0	0	1--	1,(0-0)	O	SEA	Ben Gamel	Aaron Sanchez	6%	52%	Segura Caught Stealing 2B (C-SS)
t1	0-0	1	---	9,(2-2)	O	SEA	Ben Gamel	Aaron Sanchez	2%	54%	Strikeout Swinging
t1	0-0	2	---	4,(3-0)	SEA	Nelson Cruz	Aaron Sanchez	-1%	53%	Walk	
t1	0-0	2	1--	2,(0-1)	O	SEA	Kyle Seager	Aaron Sanchez	2%	55%	Flyball: LF (Deep LF Line)
0 runs, 1 hit, 0 errors, 1 LOB. Mariners 0, Blue Jays 0.											
<b>Bottom of the 1st, Blue Jays Batting, Tied 0-0, Mariners' Ariel Miranda facing 1-2-3</b>											
b1	0-0	0	---	5,(0-2)	O	TOR	Kevin Pillar	Ariel Miranda	-2%	53%	Popfly: 2B (Deep 2B)
b1	0-0	1	---	8,(3-2)	O	TOR	Darwin Barney	Ariel Miranda	-2%	51%	Flyball: RF
b1	0-0	2	---	6,(3-2)	O	TOR	Jose Bautista	Ariel Miranda	-1%	50%	Strikeout Swinging
0 runs, 0 hits, 0 errors, 0 LOB. Mariners 0, Blue Jays 0.											
<b>Top of the 2nd, Mariners Batting, Tied 0-0, Blue Jays' Aaron Sanchez facing 5-6-7</b>											
t2	0-0	0	---	5,(2-2)	SEA	Danny Valencia	Aaron Sanchez	-4%	46%	Single to SS (Ground Ball)	
t2	0-0	0	1--	5,(2-2)	O	SEA	Taylor Motter	Aaron Sanchez	4%	50%	Strikeout Looking
t2	0-0	1	1--	5,(2-2)	O	SEA	Guillermo Heredia	Aaron Sanchez	2%	52%	Groundout: SS-1B; Valencia to 2B
t2	0-0	2	-2-	5,(3-1)	O	SEA	Jarrod Dyson	Aaron Sanchez	3%	55%	Lineout: 1B (2B-1B)
0 runs, 1 hit, 0 errors, 1 LOB. Mariners 0, Blue Jays 0.											
<b>Bottom of the 2nd, Blue Jays Batting, Tied 0-0, Mariners' Ariel Miranda facing 4-5-6</b>											
b2	0-0	0	---	6,(3-2)	O	TOR	Kendrys Morales	Ariel Miranda	-2%	53%	Lineout: CF (Deep CF)
b2	0-0	1	---	4,(1-2)	TOR	Justin Smoak	Ariel Miranda	3%	55%	Single to CF (Ground Ball thru SS-2B)	
b2	0-0	1	1--	3,(1-1)	TOR	Steve Pearce	Ariel Miranda	8%	64%	Double to CF (Line Drive to CF-RF); Smoak to 3B	
Ezequiel Carrera pinch runs for Steve Pearce (LF) batting 6th											
b2	0-0	1	-23	4,(1-2)	O	TOR	Devon Travis	Ariel Miranda	-8%	56%	Strikeout Swinging (C-1B)
b2	0-0	2	-23	5,(2-2)	O	TOR	Ryan Goins	Ariel Miranda	-6%	50%	Strikeout Swinging
0 runs, 2 hits, 0 errors, 2 LOB. Mariners 0, Blue Jays 0.											
<b>Top of the 3rd, Mariners Batting, Tied 0-0, Blue Jays' Aaron Sanchez facing 9-1-2</b>											
Ezequiel Carrera moves from PR to LF											
t3	0-0	0	---	1,(0-0)	O	SEA	Carlos Ruiz	Aaron Sanchez	3%	53%	Flyball: RF (Deep RF)
t3	0-0	1	---	3,(2-0)	O	SEA	Jean Segura	Aaron Sanchez	2%	54%	Groundout: 2B-1B
t3	0-0	2	---	4,(0-2)	O	SEA	Ben Gamel	Aaron Sanchez	1%	56%	Strikeout Swinging
0 runs, 0 hits, 0 errors, 0 LOB. Mariners 0, Blue Jays 0.											
<b>Bottom of the 3rd, Blue Jays Batting, Tied 0-0, Mariners' Ariel Miranda facing 9-1-2</b>											
b3	0-0	0	---	3,(0-2)	O	TOR	Luke Maile	Ariel Miranda	-3%	53%	Strikeout Swinging
b3	0-0	1	---	9,(3-2)	O	TOR	Kevin Pillar	Ariel Miranda	-2%	51%	Strikeout Swinging
b3	0-0	2	---	3,(0-2)	O	TOR	Darwin Barney	Ariel Miranda	-1%	50%	Strikeout Swinging
0 runs, 0 hits, 0 errors, 0 LOB. Mariners 0, Blue Jays 0.											
<b>Top of the 4th, Mariners Batting, Tied 0-0, Blue Jays' Aaron Sanchez facing 3-4-5</b>											
t4	0-0	0	---	4,(3-0)	SEA	Nelson Cruz	Aaron Sanchez	-4%	46%	Walk	
t4	0-0	0	1--	2,(1-0)	SEA	Kyle Seager	Aaron Sanchez	-6%	39%	Single to CF (Line Drive to Deep CF); Cruz to 2B	
t4	0-0	0	12-	3,(0-2)	O	SEA	Danny Valencia	Aaron Sanchez	6%	46%	Lineout: CF (Deep CF)
t4	0-0	1	12-	4,(1-2)	O	SEA	Taylor Motter	Aaron Sanchez	5%	51%	Popfly: SS
t4	0-0	2	12-	5,(3-1)	O	SEA	Guillermo Heredia	Aaron Sanchez	5%	56%	Groundout: 3B-2B/Forceout at 2B
0 runs, 1 hit, 0 errors, 2 LOB. Mariners 0, Blue Jays 0.											

<b>Bottom of the 4th, Blue Jays Batting, Tied 0-0, Mariners' Ariel Miranda facing 3-4-5</b>											
b4	0-0	0	---	6,(3-2)	TOR	Jose Bautista	Ariel Miranda	4%	60%	Walk	
b4	0-0	0	1--	4,(1-2)	O	TOR	Kendrys Morales	Ariel Miranda	-4%	56%	Flyball: CF (Deep LF-CF)
b4	0-0	1	1--	7,(3-2)	O	TOR	Justin Smoak	Ariel Miranda	-4%	53%	Flyball: CF (CF-RF)
b4	0-0	2	1--	7,(3-2)	O	TOR	Ezequiel Carrera	Ariel Miranda	-3%	50%	Strikeout Swinging
0 runs, 0 hits, 0 errors, 1 LOB. Mariners 0, Blue Jays 0.											
<b>Top of the 5th, Mariners Batting, Tied 0-0, Blue Jays' Aaron Sanchez facing 8-9-1</b>											
t5	0-0	0	---	1,(0-0)	O	SEA	Jarrod Dyson	Aaron Sanchez	3%	53%	Groundout: P-1B (Short 1B Line)
t5	0-0	1	---	3,(1-1)	SEA	Carlos Ruiz	Aaron Sanchez	-3%	50%	Single to 3B (Ground Ball to SS-3B Hole)	
t5	0-0	1	-2	2,(0-1)	R	SEA	Jean Segura	Aaron Sanchez	-18%	32%	Double to RF (Ground Ball); Ruiz Scores/unER/Adv on E9 (throw); Segura to 3B
t5	1-0	1	-3	7,(3-2)	O	SEA	Ben Gamel	Aaron Sanchez	7%	38%	Strikeout Looking
t5	1-0	2	-3	2,(1-0)	O	SEA	Nelson Cruz	Aaron Sanchez	4%	43%	Groundout: SS-1B
1 run, 2 hits, 1 error, 1 LOB. Mariners 1, Blue Jays 0.											
<b>Bottom of the 5th, Blue Jays Batting, Behind 0-1, Mariners' Ariel Miranda facing 7-8-9</b>											
b5	0-1	0	---	1,(0-0)	TOR	Devon Travis	Ariel Miranda	9%	51%	Double to RF (Ground Ball)	
b5	0-1	0	-2-	4,(1-2)	O	TOR	Ryan Goins	Ariel Miranda	-2%	49%	Bunt Groundout: P-1B/Sacrifice (Short 1B Line); Travis to 3B
b5	0-1	1	-3	1,(0-0)	O	TOR	Luke Maile	Ariel Miranda	-9%	40%	Popfly: SS
b5	0-1	2	-3	4,(3-0)	TOR	Kevin Pillar	Ariel Miranda	2%	42%	Walk	
b5	0-1	2	-3	5,(1-2)	O	TOR	Darwin Barney	Ariel Miranda	-8%	35%	Strikeout Swinging
0 runs, 1 hit, 0 errors, 2 LOB. Mariners 1, Blue Jays 0.											
<b>Top of the 6th, Mariners Batting, Ahead 1-0, Blue Jays' Dominic Leone facing 4-5-6</b>											
Dominic Leone replaces Aaron Sanchez pitching											
t6	1-0	0	---	5,(2-2)	O	SEA	Kyle Seager	Dominic Leone	3%	38%	Strikeout Swinging
t6	1-0	1	---	6,(3-2)	O	SEA	Danny Valencia	Dominic Leone	2%	39%	Flyball: LF (Deep LF-CF)
t6	1-0	2	---	5,(3-1)	SEA	Taylor Motter	Dominic Leone	-1%	38%	Walk	
t6	1-0	2	1-	2,(0-1)	O	SEA	Guillermo Heredia	Dominic Leone	3%	41%	Popfly: SS (Weak SS)
0 runs, 0 hits, 0 errors, 1 LOB. Mariners 1, Blue Jays 0.											
<b>Bottom of the 6th, Blue Jays Batting, Behind 0-1, Mariners' Ariel Miranda facing 3-4-5</b>											
b6	0-1	0	---	5,(3-1)	TOR	Jose Bautista	Ariel Miranda	6%	47%	Walk	
James Pazos replaces Ariel Miranda pitching											
b6	0-1	0	1--	9,(2-2)	O	TOR	Kendrys Morales	James Pazos	-6%	41%	Strikeout Swinging
b6	0-1	1	1--	4,(1-2)	RR	TOR	Justin Smoak	James Pazos	30%	71%	Home Run (Line Drive to Deep LF-CF); Bautista Scores
b6	2-1	1	---	5,(3-1)	TOR	Ezequiel Carrera	James Pazos	2%	74%	Walk	
b6	2-1	1	1--	2,(1-1)	O	TOR	Devon Travis	James Pazos	-4%	69%	Baserunner Out Advancing; Carrera out at 2B/C-2B
b6	2-1	2	---	3,(1-1)	TOR	Devon Travis	James Pazos	2%	72%	Double to RF (Line Drive to Deep CF-RF)	
b6	2-1	2	-2-	5,(1-2)	O	TOR	Ryan Goins	James Pazos	-4%	68%	Groundout: P-1B (Short 1B Line)
2 runs, 2 hits, 0 errors, 1 LOB. Mariners 1, Blue Jays 2.											
<b>Top of the 7th, Mariners Batting, Behind 1-2, Blue Jays' Dominic Leone facing 8-9-1</b>											
t7	1-2	0	---	2,(0-1)	R	SEA	Jarrod Dyson	Dominic Leone	-18%	50%	Home Run (Fly Ball to Deep RF)
t7	2-2	0	---	1,(0-0)	O	SEA	Carlos Ruiz	Dominic Leone	4%	54%	Flyball: LF
t7	2-2	1	---	6,(3-2)	O	SEA	Jean Segura	Dominic Leone	3%	57%	Strikeout Looking
Ryan Tepera replaces Dominic Leone pitching											
t7	2-2	2	---	3,(1-1)	O	SEA	Ben Gamel	Ryan Tepera	2%	59%	Flyball: LF (Deep LF)
1 run, 1 hit, 0 errors, 0 LOB. Mariners 2, Blue Jays 2.											



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)		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	46%	100%	Home Run (Line Drive to Deep LF)
<i>1 run, 1 hit, 0 errors, 0 LOB. Mariners 2, Blue Jays 3.</i>											

## References

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2. “Baseball Reference,” <https://www.baseball-reference.com/>.
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## SITUATIONAL UNDERLYING VALUE (SUV) STATISTIC FOR PROFESSIONAL FOOTBALL (NFL) – PROOF OF PRINCIPLE

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In Reference 1, the SUV concept from baseball was extended to professional football, i.e., the National Football League (NFL). Extrapolating from the statistic of “run expectancy,” a point value, also termed Situational Underlying Value (SUV) was assigned to each field position based on the down and number of yards needed for a first down (or touchdown, if “down and goal”). Borrowing from the work of others, cited in Reference 1, each field position with first, second, third or fourth down and up through 20 yards needed for a first down (anything above 20 yards was treated the same as 20 yards) was assigned an SUV, reproduced in the tables immediately following this section. (Note that the tables for second and third down and 10+ yards to go were inadvertently omitted from the Lambert Academic Publishing version of Reference 1 [they are present in the [www.vixra.org](http://www.vixra.org) version] – they are included here.) For example, first and 10 at a team’s own 25-yard line has an SUV = 0.59, since they are 75 yards from the opponent’s end zone. Gaining five yards to yield second and 5 at their 30 (now only 70 yards away) would increase the SUV to 0.89, a gain of  $0.89 - 0.59 = 0.30$ . Losing three yards back to their 27 (now 73 yards away) for third and 8 would drop the SUV to -0.09, a drop of  $0.89 - (-0.09) = 0.98$ . Gaining back seven yards to yield fourth and 1 from their own 34 (still 66 yards away) drops the SUV to -0.61, a further reduction of  $-0.09 - (-0.61) = 0.52$ . Punting to give the opponent possession at, e.g., the opponent’s 20-yard line, which has an SUV = 0.28 for the opponent but -0.28 for the punting team results in a gain from -0.61 to -0.28, i.e.,  $-0.28 - (-0.61) = 0.33$ . So, overall for the drive, the team started with an SUV = 0.59 and finished with -0.28, a net loss of  $0.59 - (-0.28) = 0.87$  (which equals the sum of four SUV changes:  $0.30 - 0.98 - 0.52 + 0.33 = -0.87$ ).

As with major league baseball, the goal here is again “Proof of Principle” by tracking the performance of an individual team (offense only) over a substantial portion of an entire season (16 games). One-third of the 2017 season, i.e., five games, have been selected for the Seattle Seahawks, starting with Game 02 and tracking every third game up through Game 14. The SUVs are based on the play-by-play descriptions provided in “NFL Football Scores – NFL Scoreboard – ESPN,” <http://www.espn.com/nfl/scoreboard>. [3] The complete play-by-play for the Seahawks’ offensive possessions are provided for the following five games: (1) Game 02, San Francisco 49ers [9] @ Seattle [12], 09/17/2017; (2) Game 05, Seattle [16] @ Los Angeles Rams [10], 10/08/2017; (3) Game 08, Washington Redskins [17] @ Seattle [14], 11/02/2017; Game 11, Seattle [24] @ San Francisco 49ers [13], 11/23/2017; and (5) Los Angeles Rams [42] @ Seattle [7], 12/14/2017.

For each play, the starting and finishing SUV are provided, with the difference allocated to the appropriate player(s). Special treatments other than the following are highlighted in *bold purple italics* with the play (e.g., see 2<sup>nd</sup> and 10 from the Sea 36 during Drive 01 in Game 02). Plays involving penalties are highlighted in yellow. The following are not automatically highlighted but should be noted as they are standard practice throughout:

1. Completed passes have the change in SUV split 50/50 between the quarterback and receiver. Incomplete passes have the change in SUV assigned exclusively to the

quarterback. The overall result is that quarterbacks tend to have negative SUVs, so cannot be compared against other players on their team.

2. When Seattle obtains possession via a turnover, the starting SUV is the negative of the opponent's SUV where the turnover occurs. The finishing SUV is that where Seattle starts its drive. For example, Drive 03 for Seattle vs. San Francisco in Game 02 began with an interception at the SFr 43 (SUV = -1.67 for Sea), returned to the SFr 36 (SUV = 2.94), representing an SUV gain of  $2.94 - (-1.67) = 4.61$ . When Seattle yields possession via a turnover, the starting SUV is that for where Seattle began its play. The finishing SUV is the negative of the opponent's SUV where they start their drive. For example, Drive 04 in Game 08 ended when Wilson was intercepted on 3<sup>rd</sup> and 4 from the Was 49 (starting SUV = 1.66), with Washington taking over at their own 43 (finishing SUV = -1.67), representing an SUV loss of  $1.66 - (-1.67) = 3.33$ .
3. On kick returns, the starting SUV is that where the kick is first fielded (assumed to be 0.59, corresponding to 1<sup>st</sup> and 10 at the Sea 25 if a kickoff is fielded in the end zone where a touchback could be chosen) and the finish where the play ends. On kickoff returns, this often results in an SUV loss if the kick is fielded in the end zone but not returned to at least the Sea 25 (e.g., see start of Drive 11 in Game 02).
4. As highlighted in ***bold purple italics***, touchdowns are assumed to have an SUV = 7.00. Six-sevenths of the difference between 7.00 and the starting SUV is assigned to the player(s) scoring the touchdown. If an extra point is converted, the kicker receives the remaining one-seventh (or the player[s] scoring on a successful two-point conversion earns this plus an additional 1.00). A missed conversion costs a kicker this one-seventh (or a player[s] this one-seventh + 1.00 if a two-point conversion fails). A special category, "No XP," is reserved strictly for touchdowns in overtime when no extra point is attempted.

Football offers more variations than baseball, so anticipating every possible SUV outcome is difficult. Analysis of these five games presented some unique challenges in addition to the above, and these are highlighted in ***bold purple italics*** with the play. Seattle both scored (Game 08, Drive 02) and yielded safeties (Game 14, Drive 13), and their treatments are described with the plays.

All players' SUVs were tracked cumulatively through the five games, and the results are shown immediately following Game 14. Quarterbacks, kickers (punters and place kickers), and kick returners accrue SUVs quite differently from the other offensive players (runners and receivers) and are not readily comparable with them. Similarly, SUVs acquired by defensive players via turnovers are infrequent and usually very positive so as not to be comparable with offensive players. Penalties are their own unique category. Therefore, while all of these are tracked, for comparison purposes within the Seattle offense itself, only runners and receivers are considered. Over the span of the five games analyzed, only the following eight runners and receivers had enough plays (at least 14) to merit comparison: P. Richardson, Baldwin, Graham, Lockett (excluding kick returns), McKissic, Carson, Rawls and Lacy. The season statistics for these eight players were tabulated as well from the 2017 Full Season Statistics (Offense) provided for the Seahawks in Reference 3. (Mike Davis was included with the players selected for the full season statistics, but excluded from the comparison since he did not have enough plays in the five games analyzed for SUV [only eight plays].) As before for baseball, the statistics for the various categories were normalized, then these normalized values were averaged. For the SUV comparison, two statistics were considered: Cumulative SUV and SUV per Play, as with baseball,

corresponding to both longevity and “per Opportunity (Play),” respectively. For the full season statistics comparison, five statistics were considered: for longevity, Total Points, Total Yards, and Total Rushing Attempts + Receptions; for “per Play,” Average Yards per Rushing Attempt and Average Yards per Reception. The results from the comparison of the normalized statistics are presented below.

Player	Cumulative SUV	SUV per Play		Player	Avg-Rush	Avg-Rec	Total Pts	Total Yds	Att+Rec	
P Richardson	7.144	0.510		Doug Baldwin		13.2	50	983	77	
Baldwin	6.683	0.334		Paul Richardson		16.0	36	703	44	
Graham	5.039	0.315		Tyler Lockett		12.3	18	613	55	
Lockett*	3.705	0.247		Jimmy Graham		9.1	62	520	57	
McKissic	5.005	0.185		J.D. McKissic	4.1	7.8	18	453	80	
Carson	1.565	0.078		Mike Davis	3.5		0	371	83	
Rawls	1.540	0.057		Chris Carson	4.2		6	267	56	
Lacy	-1.385	-0.037		Thomas Rawls	2.7		0	251	67	
Mean	3.662	0.211		Eddie Lacy	2.6		0	226	75	
Std Dev	2.911	0.178		Mean	3.42	11.68	21.1	487.4	66.0	
				StdDev	0.75	3.27	23.2	249.1	13.6	
Normalized	Cumulative	per	Both	Normalized	Avg-Rush	Avg-Rec	Total Pts	Total Yds	Att+Rec	Both
P Richardson	0.884	0.954	0.919	Doug Baldwin		0.679	0.893	0.977	0.791	0.835
Baldwin	0.850	0.756	0.803	Paul Richardson		0.906	0.739	0.807	0.053	0.626
Graham	0.682	0.721	0.701	J.D. McKissic	0.817	0.118	0.447	0.445	0.849	0.535
McKissic	0.678	0.442	0.560	Jimmy Graham		0.216	0.961	0.552	0.254	0.496
Lockett*	0.506	0.580	0.543	Mike Davis	0.542		0.182	0.320	0.895	0.485
Carson	0.236	0.227	0.231	Tyler Lockett		0.576	0.447	0.693	0.209	0.481
Rawls	0.233	0.193	0.213	Chris Carson	0.850		0.258	0.188	0.231	0.382
Lacy	0.041	0.081	0.061	Eddie Lacy	0.138		0.182	0.147	0.746	0.303
*Excludes Returns				Thomas Rawls	0.169		0.182	0.171	0.529	0.263

The comparison is quite revealing, in that no player differs in rank between the SUV and full season comparison by more than one position (excluding Mike Davis, so only eight ranks are considered for the full season). P. Richardson and Baldwin occupy the top two position; Graham and McKissic the next two; Lockett and Carson positions five and six; and Rawls and Lacy the bottom pair. The SUV ranks are a bit more widespread (0.919 down to 0.061 vs. 0.835 down to 0.263), most likely because the sample size is smaller (only five of 16 games). Nonetheless, it is quite insightful to find this much consistency between the two sets of results, suggesting the simple SUV can be a useful surrogate vs. the larger set of diverse statistics that are presently being tracked.

yd	pt (1/10-)	pt (2/10)	pt (2/9)	pt (2/8)	pt (2/7)	pt (2/6)	pt (2/5-)	pt (3/10)	pt (3/9)	pt (3/8)	pt (3/7)	pt (3/6)	pt (3/5-)
1	6.50	6.00	6.10	6.20	6.30	6.40	6.50	5.50	5.60	5.70	5.80	5.90	6.00
2	6.20	5.70	5.80	5.90	6.00	6.10	6.20	5.20	5.30	5.40	5.50	5.60	5.70
3	5.90	5.40	5.50	5.60	5.70	5.80	5.90	4.90	5.00	5.10	5.20	5.30	5.40
4	5.60	5.10	5.20	5.30	5.40	5.50	5.60	4.60	4.70	4.80	4.90	5.00	5.10
5	5.50	5.00	5.10	5.20	5.30	5.40	5.50	4.50	4.60	4.70	4.80	4.90	5.00
6	5.40	4.90	5.00	5.10	5.20	5.30	5.40	4.40	4.50	4.60	4.70	4.80	4.90
7	5.30	4.80	4.90	5.00	5.10	5.20	5.30	4.30	4.40	4.50	4.60	4.70	4.80
8	5.20	4.70	4.80	4.90	5.00	5.10	5.20	4.20	4.30	4.40	4.50	4.60	4.70
9	5.10	4.60	4.70	4.80	4.90	5.00	5.10	4.10	4.20	4.30	4.40	4.50	4.60
10	5.00	4.50	4.60	4.70	4.80	4.90	5.00	4.00	4.10	4.20	4.30	4.40	4.50
11	4.92	4.42	4.52	4.62	4.72	4.82	4.92	3.92	4.02	4.12	4.22	4.32	4.42
12	4.84	4.34	4.44	4.54	4.64	4.74	4.84	3.84	3.94	4.04	4.14	4.24	4.34
13	4.76	4.26	4.36	4.46	4.56	4.66	4.76	3.76	3.86	3.96	4.06	4.16	4.26
14	4.68	4.18	4.28	4.38	4.48	4.58	4.68	3.68	3.78	3.88	3.98	4.08	4.18
15	4.60	4.10	4.20	4.30	4.40	4.50	4.60	3.60	3.70	3.80	3.90	4.00	4.10
16	4.52	4.02	4.12	4.22	4.32	4.42	4.52	3.52	3.62	3.72	3.82	3.92	4.02
17	4.44	3.94	4.04	4.14	4.24	4.34	4.44	3.44	3.54	3.64	3.74	3.84	3.94
18	4.36	3.86	3.96	4.06	4.16	4.26	4.36	3.36	3.46	3.56	3.66	3.76	3.86
19	4.28	3.78	3.88	3.98	4.08	4.18	4.28	3.28	3.38	3.48	3.58	3.68	3.78
20	4.20	3.70	3.80	3.90	4.00	4.10	4.20	3.20	3.30	3.40	3.50	3.60	3.70
21	4.12	3.62	3.72	3.82	3.92	4.02	4.12	3.12	3.22	3.32	3.42	3.52	3.62
22	4.04	3.54	3.64	3.74	3.84	3.94	4.04	3.04	3.14	3.24	3.34	3.44	3.54
23	3.96	3.46	3.56	3.66	3.76	3.86	3.96	2.96	3.06	3.16	3.26	3.36	3.46
24	3.88	3.38	3.48	3.58	3.68	3.78	3.88	2.88	2.98	3.08	3.18	3.28	3.38
25	3.80	3.30	3.40	3.50	3.60	3.70	3.80	2.80	2.90	3.00	3.10	3.20	3.30
26	3.72	3.22	3.32	3.42	3.52	3.62	3.72	2.72	2.82	2.92	3.02	3.12	3.22
27	3.64	3.14	3.24	3.34	3.44	3.54	3.64	2.64	2.74	2.84	2.94	3.04	3.14
28	3.56	3.06	3.16	3.26	3.36	3.46	3.56	2.56	2.66	2.76	2.86	2.96	3.06
29	3.48	2.98	3.08	3.18	3.28	3.38	3.48	2.48	2.58	2.68	2.78	2.88	2.98
30	3.40	2.90	3.00	3.10	3.20	3.30	3.40	2.40	2.50	2.60	2.70	2.80	2.90
31	3.32	2.82	2.92	3.02	3.12	3.22	3.32	2.32	2.42	2.52	2.62	2.72	2.82
32	3.24	2.74	2.84	2.94	3.04	3.14	3.24	2.24	2.34	2.44	2.54	2.64	2.74
33	3.16	2.66	2.76	2.86	2.96	3.06	3.16	2.16	2.26	2.36	2.46	2.56	2.66

yd	pt (1/10-)	pt (2/10)	pt (2/9)	pt (2/8)	pt (2/7)	pt (2/6)	pt (2/5-)	pt (3/10)	pt (3/9)	pt (3/8)	pt (3/7)	pt (3/6)	pt (3/5-)
34	3.08	2.58	2.68	2.78	2.88	2.98	3.08	2.08	2.18	2.28	2.38	2.48	2.58
35	3.00	2.50	2.60	2.70	2.80	2.90	3.00	2.00	2.10	2.20	2.30	2.40	2.50
36	2.94	2.44	2.54	2.64	2.74	2.84	2.94	1.94	2.04	2.14	2.24	2.34	2.44
37	2.88	2.38	2.48	2.58	2.68	2.78	2.88	1.88	1.98	2.08	2.18	2.28	2.38
38	2.82	2.32	2.42	2.52	2.62	2.72	2.82	1.82	1.92	2.02	2.12	2.22	2.32
39	2.76	2.26	2.36	2.46	2.56	2.66	2.76	1.76	1.86	1.96	2.06	2.16	2.26
40	2.70	2.20	2.30	2.40	2.50	2.60	2.70	1.70	1.80	1.90	2.00	2.10	2.20
41	2.64	2.14	2.24	2.34	2.44	2.54	2.64	1.64	1.74	1.84	1.94	2.04	2.14
42	2.58	2.08	2.18	2.28	2.38	2.48	2.58	1.58	1.68	1.78	1.88	1.98	2.08
43	2.52	2.02	2.12	2.22	2.32	2.42	2.52	1.52	1.62	1.72	1.82	1.92	2.02
44	2.46	1.96	2.06	2.16	2.26	2.36	2.46	1.46	1.56	1.66	1.76	1.86	1.96
45	2.40	1.90	2.00	2.10	2.20	2.30	2.40	1.40	1.50	1.60	1.70	1.80	1.90
46	2.34	1.84	1.94	2.04	2.14	2.24	2.34	1.34	1.44	1.54	1.64	1.74	1.84
47	2.28	1.78	1.88	1.98	2.08	2.18	2.28	1.28	1.38	1.48	1.58	1.68	1.78
48	2.22	1.72	1.82	1.92	2.02	2.12	2.22	1.22	1.32	1.42	1.52	1.62	1.72
49	2.16	1.66	1.76	1.86	1.96	2.06	2.16	1.16	1.26	1.36	1.46	1.56	1.66
50	2.09	1.59	1.69	1.79	1.89	1.99	2.09	1.09	1.19	1.29	1.39	1.49	1.59
51	2.03	1.53	1.63	1.73	1.83	1.93	2.03	1.03	1.13	1.23	1.33	1.43	1.53
52	1.97	1.47	1.57	1.67	1.77	1.87	1.97	0.97	1.07	1.17	1.27	1.37	1.47
53	1.91	1.41	1.51	1.61	1.71	1.81	1.91	0.91	1.01	1.11	1.21	1.31	1.41
54	1.85	1.35	1.45	1.55	1.65	1.75	1.85	0.85	0.95	1.05	1.15	1.25	1.35
55	1.79	1.29	1.39	1.49	1.59	1.69	1.79	0.79	0.89	0.99	1.09	1.19	1.29
56	1.73	1.23	1.33	1.43	1.53	1.63	1.73	0.73	0.83	0.93	1.03	1.13	1.23
57	1.67	1.17	1.27	1.37	1.47	1.57	1.67	0.67	0.77	0.87	0.97	1.07	1.17
58	1.61	1.11	1.21	1.31	1.41	1.51	1.61	0.61	0.71	0.81	0.91	1.01	1.11
59	1.55	1.05	1.15	1.25	1.35	1.45	1.55	0.55	0.65	0.75	0.85	0.95	1.05
60	1.49	0.99	1.09	1.19	1.29	1.39	1.49	0.49	0.59	0.69	0.79	0.89	0.99
61	1.43	0.93	1.03	1.13	1.23	1.33	1.43	0.43	0.53	0.63	0.73	0.83	0.93
62	1.37	0.87	0.97	1.07	1.17	1.27	1.37	0.37	0.47	0.57	0.67	0.77	0.87
63	1.31	0.81	0.91	1.01	1.11	1.21	1.31	0.31	0.41	0.51	0.61	0.71	0.81
64	1.25	0.75	0.85	0.95	1.05	1.15	1.25	0.25	0.35	0.45	0.55	0.65	0.75
65	1.19	0.69	0.79	0.89	0.99	1.09	1.19	0.19	0.29	0.39	0.49	0.59	0.69
66	1.13	0.63	0.73	0.83	0.93	1.03	1.13	0.13	0.23	0.33	0.43	0.53	0.63

yd	pt (1/10-)	pt (2/10)	pt (2/9)	pt (2/8)	pt (2/7)	pt (2/6)	pt (2/5-)	pt (3/10)	pt (3/9)	pt (3/8)	pt (3/7)	pt (3/6)	pt (3/5-)
67	1.07	0.57	0.67	0.77	0.87	0.97	1.07	0.07	0.17	0.27	0.37	0.47	0.57
68	1.01	0.51	0.61	0.71	0.81	0.91	1.01	0.01	0.11	0.21	0.31	0.41	0.51
69	0.95	0.45	0.55	0.65	0.75	0.85	0.95	-0.05	0.05	0.15	0.25	0.35	0.45
70	0.89	0.39	0.49	0.59	0.69	0.79	0.89	-0.11	-0.01	0.09	0.19	0.29	0.39
71	0.83	0.33	0.43	0.53	0.63	0.73	0.83	-0.17	-0.07	0.03	0.13	0.23	0.33
72	0.77	0.27	0.37	0.47	0.57	0.67	0.77	-0.23	-0.13	-0.03	0.07	0.17	0.27
73	0.71	0.21	0.31	0.41	0.51	0.61	0.71	-0.29	-0.19	-0.09	0.01	0.11	0.21
74	0.65	0.15	0.25	0.35	0.45	0.55	0.65	-0.35	-0.25	-0.15	-0.05	0.05	0.15
75	0.59	0.09	0.19	0.29	0.39	0.49	0.59	-0.41	-0.31	-0.21	-0.11	-0.01	0.09
76	0.53	0.03	0.13	0.23	0.33	0.43	0.53	-0.47	-0.37	-0.27	-0.17	-0.07	0.03
77	0.47	-0.03	0.07	0.17	0.27	0.37	0.47	-0.53	-0.43	-0.33	-0.23	-0.13	-0.03
78	0.41	-0.09	0.01	0.11	0.21	0.31	0.41	-0.59	-0.49	-0.39	-0.29	-0.19	-0.09
79	0.34	-0.16	-0.06	0.04	0.14	0.24	0.34	-0.66	-0.56	-0.46	-0.36	-0.26	-0.16
80	0.28	-0.22	-0.12	-0.02	0.08	0.18	0.28	-0.72	-0.62	-0.52	-0.42	-0.32	-0.22
81	0.22	-0.28	-0.18	-0.08	0.02	0.12	0.22	-0.78	-0.68	-0.58	-0.48	-0.38	-0.28
82	0.16	-0.34	-0.24	-0.14	-0.04	0.06	0.16	-0.84	-0.74	-0.64	-0.54	-0.44	-0.34
83	0.10	-0.40	-0.30	-0.20	-0.10	0.00	0.10	-0.90	-0.80	-0.70	-0.60	-0.50	-0.40
84	0.04	-0.46	-0.36	-0.26	-0.16	-0.06	0.04	-0.96	-0.86	-0.76	-0.66	-0.56	-0.46
85	-0.02	-0.52	-0.42	-0.32	-0.22	-0.12	-0.02	-1.02	-0.92	-0.82	-0.72	-0.62	-0.52
86	-0.08	-0.58	-0.48	-0.38	-0.28	-0.18	-0.08	-1.08	-0.98	-0.88	-0.78	-0.68	-0.58
87	-0.14	-0.64	-0.54	-0.44	-0.34	-0.24	-0.14	-1.14	-1.04	-0.94	-0.84	-0.74	-0.64
88	-0.20	-0.70	-0.60	-0.50	-0.40	-0.30	-0.20	-1.20	-1.10	-1.00	-0.90	-0.80	-0.70
89	-0.26	-0.76	-0.66	-0.56	-0.46	-0.36	-0.26	-1.26	-1.16	-1.06	-0.96	-0.86	-0.76
90	-0.32	-0.82	-0.72	-0.62	-0.52	-0.42	-0.32	-1.32	-1.22	-1.12	-1.02	-0.92	-0.82
91	-0.38	-0.88	-0.78	-0.68	-0.58	-0.48	-0.38	-1.38	-1.28	-1.18	-1.08	-0.98	-0.88
92	-0.44	-0.94	-0.84	-0.74	-0.64	-0.54	-0.44	-1.44	-1.34	-1.24	-1.14	-1.04	-0.94
93	-0.50	-1.00	-0.90	-0.80	-0.70	-0.60	-0.50	-1.50	-1.40	-1.30	-1.20	-1.10	-1.00
94	-0.60	-1.10	-1.00	-0.90	-0.80	-0.70	-0.60	-1.60	-1.50	-1.40	-1.30	-1.20	-1.10
95	-0.70	-1.20	-1.10	-1.00	-0.90	-0.80	-0.70	-1.70	-1.60	-1.50	-1.40	-1.30	-1.20
96	-0.80	-1.30	-1.20	-1.10	-1.00	-0.90	-0.80	-1.80	-1.70	-1.60	-1.50	-1.40	-1.30
97	-0.90	-1.40	-1.30	-1.20	-1.10	-1.00	-0.90	-1.90	-1.80	-1.70	-1.60	-1.50	-1.40
98	-1.00	-1.50	-1.40	-1.30	-1.20	-1.10	-1.00	-2.00	-1.90	-1.80	-1.70	-1.60	-1.50
99	-1.40	-1.90	-1.80	-1.70	-1.60	-1.50	-1.40	-2.40	-2.30	-2.20	-2.10	-2.00	-1.90



yd	pt (1/10-)	pt (1/11)	pt (1/12)	pt (1/13)	pt (1/14)	pt (1/15)	pt (1/16)	pt (1/17)	pt (1/18)	pt (1/19)	pt (1/20+)
1	6.50	6.40	6.30	6.20	6.10	6.00	5.90	5.80	5.70	5.60	5.50
2	6.20	6.10	6.00	5.90	5.80	5.70	5.60	5.50	5.40	5.30	5.20
3	5.90	5.80	5.70	5.60	5.50	5.40	5.30	5.20	5.10	5.00	4.90
4	5.60	5.50	5.40	5.30	5.20	5.10	5.00	4.90	4.80	4.70	4.60
5	5.50	5.40	5.30	5.20	5.10	5.00	4.90	4.80	4.70	4.60	4.50
6	5.40	5.30	5.20	5.10	5.00	4.90	4.80	4.70	4.60	4.50	4.40
7	5.30	5.20	5.10	5.00	4.90	4.80	4.70	4.60	4.50	4.40	4.30
8	5.20	5.10	5.00	4.90	4.80	4.70	4.60	4.50	4.40	4.30	4.20
9	5.10	5.00	4.90	4.80	4.70	4.60	4.50	4.40	4.30	4.20	4.10
10	5.00	4.90	4.80	4.70	4.60	4.50	4.40	4.30	4.20	4.10	4.00
11	4.92	4.82	4.72	4.62	4.52	4.42	4.32	4.22	4.12	4.02	3.92
12	4.84	4.74	4.64	4.54	4.44	4.34	4.24	4.14	4.04	3.94	3.84
13	4.76	4.66	4.56	4.46	4.36	4.26	4.16	4.06	3.96	3.86	3.76
14	4.68	4.58	4.48	4.38	4.28	4.18	4.08	3.98	3.88	3.78	3.68
15	4.60	4.50	4.40	4.30	4.20	4.10	4.00	3.90	3.80	3.70	3.60
16	4.52	4.42	4.32	4.22	4.12	4.02	3.92	3.82	3.72	3.62	3.52
17	4.44	4.34	4.24	4.14	4.04	3.94	3.84	3.74	3.64	3.54	3.44
18	4.36	4.26	4.16	4.06	3.96	3.86	3.76	3.66	3.56	3.46	3.36
19	4.28	4.18	4.08	3.98	3.88	3.78	3.68	3.58	3.48	3.38	3.28
20	4.20	4.10	4.00	3.90	3.80	3.70	3.60	3.50	3.40	3.30	3.20
21	4.12	4.02	3.92	3.82	3.72	3.62	3.52	3.42	3.32	3.22	3.12
22	4.04	3.94	3.84	3.74	3.64	3.54	3.44	3.34	3.24	3.14	3.04
23	3.96	3.86	3.76	3.66	3.56	3.46	3.36	3.26	3.16	3.06	2.96
24	3.88	3.78	3.68	3.58	3.48	3.38	3.28	3.18	3.08	2.98	2.88
25	3.80	3.70	3.60	3.50	3.40	3.30	3.20	3.10	3.00	2.90	2.80
26	3.72	3.62	3.52	3.42	3.32	3.22	3.12	3.02	2.92	2.82	2.72
27	3.64	3.54	3.44	3.34	3.24	3.14	3.04	2.94	2.84	2.74	2.64
28	3.56	3.46	3.36	3.26	3.16	3.06	2.96	2.86	2.76	2.66	2.56
29	3.48	3.38	3.28	3.18	3.08	2.98	2.88	2.78	2.68	2.58	2.48
30	3.40	3.30	3.20	3.10	3.00	2.90	2.80	2.70	2.60	2.50	2.40
31	3.32	3.22	3.12	3.02	2.92	2.82	2.72	2.62	2.52	2.42	2.32
32	3.24	3.14	3.04	2.94	2.84	2.74	2.64	2.54	2.44	2.34	2.24
33	3.16	3.06	2.96	2.86	2.76	2.66	2.56	2.46	2.36	2.26	2.16

yd	pt (1/10-)	pt (1/11)	pt (1/12)	pt (1/13)	pt (1/14)	pt (1/15)	pt (1/16)	pt (1/17)	pt (1/18)	pt (1/19)	pt (1/20+)
34	3.08	2.98	2.88	2.78	2.68	2.58	2.48	2.38	2.28	2.18	2.08
35	3.00	2.90	2.80	2.70	2.60	2.50	2.40	2.30	2.20	2.10	2.00
36	2.94	2.84	2.74	2.64	2.54	2.44	2.34	2.24	2.14	2.04	1.94
37	2.88	2.78	2.68	2.58	2.48	2.38	2.28	2.18	2.08	1.98	1.88
38	2.82	2.72	2.62	2.52	2.42	2.32	2.22	2.12	2.02	1.92	1.82
39	2.76	2.66	2.56	2.46	2.36	2.26	2.16	2.06	1.96	1.86	1.76
40	2.70	2.60	2.50	2.40	2.30	2.20	2.10	2.00	1.90	1.80	1.70
41	2.64	2.54	2.44	2.34	2.24	2.14	2.04	1.94	1.84	1.74	1.64
42	2.58	2.48	2.38	2.28	2.18	2.08	1.98	1.88	1.78	1.68	1.58
43	2.52	2.42	2.32	2.22	2.12	2.02	1.92	1.82	1.72	1.62	1.52
44	2.46	2.36	2.26	2.16	2.06	1.96	1.86	1.76	1.66	1.56	1.46
45	2.40	2.30	2.20	2.10	2.00	1.90	1.80	1.70	1.60	1.50	1.40
46	2.34	2.24	2.14	2.04	1.94	1.84	1.74	1.64	1.54	1.44	1.34
47	2.28	2.18	2.08	1.98	1.88	1.78	1.68	1.58	1.48	1.38	1.28
48	2.22	2.12	2.02	1.92	1.82	1.72	1.62	1.52	1.42	1.32	1.22
49	2.16	2.06	1.96	1.86	1.76	1.66	1.56	1.46	1.36	1.26	1.16
50	2.09	1.99	1.89	1.79	1.69	1.59	1.49	1.39	1.29	1.19	1.09
51	2.03	1.93	1.83	1.73	1.63	1.53	1.43	1.33	1.23	1.13	1.03
52	1.97	1.87	1.77	1.67	1.57	1.47	1.37	1.27	1.17	1.07	0.97
53	1.91	1.81	1.71	1.61	1.51	1.41	1.31	1.21	1.11	1.01	0.91
54	1.85	1.75	1.65	1.55	1.45	1.35	1.25	1.15	1.05	0.95	0.85
55	1.79	1.69	1.59	1.49	1.39	1.29	1.19	1.09	0.99	0.89	0.79
56	1.73	1.63	1.53	1.43	1.33	1.23	1.13	1.03	0.93	0.83	0.73
57	1.67	1.57	1.47	1.37	1.27	1.17	1.07	0.97	0.87	0.77	0.67
58	1.61	1.51	1.41	1.31	1.21	1.11	1.01	0.91	0.81	0.71	0.61
59	1.55	1.45	1.35	1.25	1.15	1.05	0.95	0.85	0.75	0.65	0.55
60	1.49	1.39	1.29	1.19	1.09	0.99	0.89	0.79	0.69	0.59	0.49
61	1.43	1.33	1.23	1.13	1.03	0.93	0.83	0.73	0.63	0.53	0.43
62	1.37	1.27	1.17	1.07	0.97	0.87	0.77	0.67	0.57	0.47	0.37
63	1.31	1.21	1.11	1.01	0.91	0.81	0.71	0.61	0.51	0.41	0.31
64	1.25	1.15	1.05	0.95	0.85	0.75	0.65	0.55	0.45	0.35	0.25
65	1.19	1.09	0.99	0.89	0.79	0.69	0.59	0.49	0.39	0.29	0.19
66	1.13	1.03	0.93	0.83	0.73	0.63	0.53	0.43	0.33	0.23	0.13

yd	pt (1/10-)	pt (1/11)	pt (1/12)	pt (1/13)	pt (1/14)	pt (1/15)	pt (1/16)	pt (1/17)	pt (1/18)	pt (1/19)	pt (1/20+)
67	1.07	0.97	0.87	0.77	0.67	0.57	0.47	0.37	0.27	0.17	0.07
68	1.01	0.91	0.81	0.71	0.61	0.51	0.41	0.31	0.21	0.11	0.01
69	0.95	0.85	0.75	0.65	0.55	0.45	0.35	0.25	0.15	0.05	-0.05
70	0.89	0.79	0.69	0.59	0.49	0.39	0.29	0.19	0.09	-0.01	-0.11
71	0.83	0.73	0.63	0.53	0.43	0.33	0.23	0.13	0.03	-0.07	-0.17
72	0.77	0.67	0.57	0.47	0.37	0.27	0.17	0.07	-0.03	-0.13	-0.23
73	0.71	0.61	0.51	0.41	0.31	0.21	0.11	0.01	-0.09	-0.19	-0.29
74	0.65	0.55	0.45	0.35	0.25	0.15	0.05	-0.05	-0.15	-0.25	-0.35
75	0.59	0.49	0.39	0.29	0.19	0.09	-0.01	-0.11	-0.21	-0.31	-0.41
76	0.53	0.43	0.33	0.23	0.13	0.03	-0.07	-0.17	-0.27	-0.37	-0.47
77	0.47	0.37	0.27	0.17	0.07	-0.03	-0.13	-0.23	-0.33	-0.43	-0.53
78	0.41	0.31	0.21	0.11	0.01	-0.09	-0.19	-0.29	-0.39	-0.49	-0.59
79	0.34	0.24	0.14	0.04	-0.06	-0.16	-0.26	-0.36	-0.46	-0.56	-0.66
80	0.28	0.18	0.08	-0.02	-0.12	-0.22	-0.32	-0.42	-0.52	-0.62	-0.72
81	0.22	0.12	0.02	-0.08	-0.18	-0.28	-0.38	-0.48	-0.58	-0.68	-0.78
82	0.16	0.06	-0.04	-0.14	-0.24	-0.34	-0.44	-0.54	-0.64	-0.74	-0.84
83	0.10	0.00	-0.10	-0.20	-0.30	-0.40	-0.50	-0.60	-0.70	-0.80	-0.90
84	0.04	-0.06	-0.16	-0.26	-0.36	-0.46	-0.56	-0.66	-0.76	-0.86	-0.96
85	-0.02	-0.12	-0.22	-0.32	-0.42	-0.52	-0.62	-0.72	-0.82	-0.92	-1.02
86	-0.08	-0.18	-0.28	-0.38	-0.48	-0.58	-0.68	-0.78	-0.88	-0.98	-1.08
87	-0.14	-0.24	-0.34	-0.44	-0.54	-0.64	-0.74	-0.84	-0.94	-1.04	-1.14
88	-0.20	-0.30	-0.40	-0.50	-0.60	-0.70	-0.80	-0.90	-1.00	-1.10	-1.20
89	-0.26	-0.36	-0.46	-0.56	-0.66	-0.76	-0.86	-0.96	-1.06	-1.16	-1.26
90	-0.32	-0.42	-0.52	-0.62	-0.72	-0.82	-0.92	-1.02	-1.12	-1.22	-1.32
91	-0.38	-0.48	-0.58	-0.68	-0.78	-0.88	-0.98	-1.08	-1.18	-1.28	-1.38
92	-0.44	-0.54	-0.64	-0.74	-0.84	-0.94	-1.04	-1.14	-1.24	-1.34	-1.44
93	-0.50	-0.60	-0.70	-0.80	-0.90	-1.00	-1.10	-1.20	-1.30	-1.40	-1.50
94	-0.60	-0.70	-0.80	-0.90	-1.00	-1.10	-1.20	-1.30	-1.40	-1.50	-1.60
95	-0.70	-0.80	-0.90	-1.00	-1.10	-1.20	-1.30	-1.40	-1.50	-1.60	-1.70
96	-0.80	-0.90	-1.00	-1.10	-1.20	-1.30	-1.40	-1.50	-1.60	-1.70	-1.80
97	-0.90	-1.00	-1.10	-1.20	-1.30	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90
98	-1.00	-1.10	-1.20	-1.30	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90	-2.00
99	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90	-2.00	-2.10	-2.20	-2.30	-2.40

yd	pt (2/10)	pt (2/11)	pt (2/12)	pt (2/13)	pt (2/14)	pt (2/15)	pt (2/16)	pt (2/17)	pt (2/18)	pt (2/19)	pt (2/20+)
1	6.00	5.90	5.80	5.70	5.60	5.50	5.40	5.30	5.20	5.10	5.00
2	5.70	5.60	5.50	5.40	5.30	5.20	5.10	5.00	4.90	4.80	4.70
3	5.40	5.30	5.20	5.10	5.00	4.90	4.80	4.70	4.60	4.50	4.40
4	5.10	5.00	4.90	4.80	4.70	4.60	4.50	4.40	4.30	4.20	4.10
5	5.00	4.90	4.80	4.70	4.60	4.50	4.40	4.30	4.20	4.10	4.00
6	4.90	4.80	4.70	4.60	4.50	4.40	4.30	4.20	4.10	4.00	3.90
7	4.80	4.70	4.60	4.50	4.40	4.30	4.20	4.10	4.00	3.90	3.80
8	4.70	4.60	4.50	4.40	4.30	4.20	4.10	4.00	3.90	3.80	3.70
9	4.60	4.50	4.40	4.30	4.20	4.10	4.00	3.90	3.80	3.70	3.60
10	4.50	4.40	4.30	4.20	4.10	4.00	3.90	3.80	3.70	3.60	3.50
11	4.42	4.32	4.22	4.12	4.02	3.92	3.82	3.72	3.62	3.52	3.42
12	4.34	4.24	4.14	4.04	3.94	3.84	3.74	3.64	3.54	3.44	3.34
13	4.26	4.16	4.06	3.96	3.86	3.76	3.66	3.56	3.46	3.36	3.26
14	4.18	4.08	3.98	3.88	3.78	3.68	3.58	3.48	3.38	3.28	3.18
15	4.10	4.00	3.90	3.80	3.70	3.60	3.50	3.40	3.30	3.20	3.10
16	4.02	3.92	3.82	3.72	3.62	3.52	3.42	3.32	3.22	3.12	3.02
17	3.94	3.84	3.74	3.64	3.54	3.44	3.34	3.24	3.14	3.04	2.94
18	3.86	3.76	3.66	3.56	3.46	3.36	3.26	3.16	3.06	2.96	2.86
19	3.78	3.68	3.58	3.48	3.38	3.28	3.18	3.08	2.98	2.88	2.78
20	3.70	3.60	3.50	3.40	3.30	3.20	3.10	3.00	2.90	2.80	2.70
21	3.62	3.52	3.42	3.32	3.22	3.12	3.02	2.92	2.82	2.72	2.62
22	3.54	3.44	3.34	3.24	3.14	3.04	2.94	2.84	2.74	2.64	2.54
23	3.46	3.36	3.26	3.16	3.06	2.96	2.86	2.76	2.66	2.56	2.46
24	3.38	3.28	3.18	3.08	2.98	2.88	2.78	2.68	2.58	2.48	2.38
25	3.30	3.20	3.10	3.00	2.90	2.80	2.70	2.60	2.50	2.40	2.30
26	3.22	3.12	3.02	2.92	2.82	2.72	2.62	2.52	2.42	2.32	2.22
27	3.14	3.04	2.94	2.84	2.74	2.64	2.54	2.44	2.34	2.24	2.14
28	3.06	2.96	2.86	2.76	2.66	2.56	2.46	2.36	2.26	2.16	2.06
29	2.98	2.88	2.78	2.68	2.58	2.48	2.38	2.28	2.18	2.08	1.98
30	2.90	2.80	2.70	2.60	2.50	2.40	2.30	2.20	2.10	2.00	1.90
31	2.82	2.72	2.62	2.52	2.42	2.32	2.22	2.12	2.02	1.92	1.82
32	2.74	2.64	2.54	2.44	2.34	2.24	2.14	2.04	1.94	1.84	1.74
33	2.66	2.56	2.46	2.36	2.26	2.16	2.06	1.96	1.86	1.76	1.66

yd	pt (2/10)	pt (2/11)	pt (2/12)	pt (2/13)	pt (2/14)	pt (2/15)	pt (2/16)	pt (2/17)	pt (2/18)	pt (2/19)	pt (2/20+)
34	2.58	2.48	2.38	2.28	2.18	2.08	1.98	1.88	1.78	1.68	1.58
35	2.50	2.40	2.30	2.20	2.10	2.00	1.90	1.80	1.70	1.60	1.50
36	2.44	2.34	2.24	2.14	2.04	1.94	1.84	1.74	1.64	1.54	1.44
37	2.38	2.28	2.18	2.08	1.98	1.88	1.78	1.68	1.58	1.48	1.38
38	2.32	2.22	2.12	2.02	1.92	1.82	1.72	1.62	1.52	1.42	1.32
39	2.26	2.16	2.06	1.96	1.86	1.76	1.66	1.56	1.46	1.36	1.26
40	2.20	2.10	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20
41	2.14	2.04	1.94	1.84	1.74	1.64	1.54	1.44	1.34	1.24	1.14
42	2.08	1.98	1.88	1.78	1.68	1.58	1.48	1.38	1.28	1.18	1.08
43	2.02	1.92	1.82	1.72	1.62	1.52	1.42	1.32	1.22	1.12	1.02
44	1.96	1.86	1.76	1.66	1.56	1.46	1.36	1.26	1.16	1.06	0.96
45	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	0.90
46	1.84	1.74	1.64	1.54	1.44	1.34	1.24	1.14	1.04	0.94	0.84
47	1.78	1.68	1.58	1.48	1.38	1.28	1.18	1.08	0.98	0.88	0.78
48	1.72	1.62	1.52	1.42	1.32	1.22	1.12	1.02	0.92	0.82	0.72
49	1.66	1.56	1.46	1.36	1.26	1.16	1.06	0.96	0.86	0.76	0.66
50	1.59	1.49	1.39	1.29	1.19	1.09	0.99	0.89	0.79	0.69	0.59
51	1.53	1.43	1.33	1.23	1.13	1.03	0.93	0.83	0.73	0.63	0.53
52	1.47	1.37	1.27	1.17	1.07	0.97	0.87	0.77	0.67	0.57	0.47
53	1.41	1.31	1.21	1.11	1.01	0.91	0.81	0.71	0.61	0.51	0.41
54	1.35	1.25	1.15	1.05	0.95	0.85	0.75	0.65	0.55	0.45	0.35
55	1.29	1.19	1.09	0.99	0.89	0.79	0.69	0.59	0.49	0.39	0.29
56	1.23	1.13	1.03	0.93	0.83	0.73	0.63	0.53	0.43	0.33	0.23
57	1.17	1.07	0.97	0.87	0.77	0.67	0.57	0.47	0.37	0.27	0.17
58	1.11	1.01	0.91	0.81	0.71	0.61	0.51	0.41	0.31	0.21	0.11
59	1.05	0.95	0.85	0.75	0.65	0.55	0.45	0.35	0.25	0.15	0.05
60	0.99	0.89	0.79	0.69	0.59	0.49	0.39	0.29	0.19	0.09	-0.01
61	0.93	0.83	0.73	0.63	0.53	0.43	0.33	0.23	0.13	0.03	-0.07
62	0.87	0.77	0.67	0.57	0.47	0.37	0.27	0.17	0.07	-0.03	-0.13
63	0.81	0.71	0.61	0.51	0.41	0.31	0.21	0.11	0.01	-0.09	-0.19
64	0.75	0.65	0.55	0.45	0.35	0.25	0.15	0.05	-0.05	-0.15	-0.25
65	0.69	0.59	0.49	0.39	0.29	0.19	0.09	-0.01	-0.11	-0.21	-0.31
66	0.63	0.53	0.43	0.33	0.23	0.13	0.03	-0.07	-0.17	-0.27	-0.37

yd	pt (2/10)	pt (2/11)	pt (2/12)	pt (2/13)	pt (2/14)	pt (2/15)	pt (2/16)	pt (2/17)	pt (2/18)	pt (2/19)	pt (2/20+)
67	0.57	0.47	0.37	0.27	0.17	0.07	-0.03	-0.13	-0.23	-0.33	-0.43
68	0.51	0.41	0.31	0.21	0.11	0.01	-0.09	-0.19	-0.29	-0.39	-0.49
69	0.45	0.35	0.25	0.15	0.05	-0.05	-0.15	-0.25	-0.35	-0.45	-0.55
70	0.39	0.29	0.19	0.09	-0.01	-0.11	-0.21	-0.31	-0.41	-0.51	-0.61
71	0.33	0.23	0.13	0.03	-0.07	-0.17	-0.27	-0.37	-0.47	-0.57	-0.67
72	0.27	0.17	0.07	-0.03	-0.13	-0.23	-0.33	-0.43	-0.53	-0.63	-0.73
73	0.21	0.11	0.01	-0.09	-0.19	-0.29	-0.39	-0.49	-0.59	-0.69	-0.79
74	0.15	0.05	-0.05	-0.15	-0.25	-0.35	-0.45	-0.55	-0.65	-0.75	-0.85
75	0.09	-0.01	-0.11	-0.21	-0.31	-0.41	-0.51	-0.61	-0.71	-0.81	-0.91
76	0.03	-0.07	-0.17	-0.27	-0.37	-0.47	-0.57	-0.67	-0.77	-0.87	-0.97
77	-0.03	-0.13	-0.23	-0.33	-0.43	-0.53	-0.63	-0.73	-0.83	-0.93	-1.03
78	-0.09	-0.19	-0.29	-0.39	-0.49	-0.59	-0.69	-0.79	-0.89	-0.99	-1.09
79	-0.16	-0.26	-0.36	-0.46	-0.56	-0.66	-0.76	-0.86	-0.96	-1.06	-1.16
80	-0.22	-0.32	-0.42	-0.52	-0.62	-0.72	-0.82	-0.92	-1.02	-1.12	-1.22
81	-0.28	-0.38	-0.48	-0.58	-0.68	-0.78	-0.88	-0.98	-1.08	-1.18	-1.28
82	-0.34	-0.44	-0.54	-0.64	-0.74	-0.84	-0.94	-1.04	-1.14	-1.24	-1.34
83	-0.40	-0.50	-0.60	-0.70	-0.80	-0.90	-1.00	-1.10	-1.20	-1.30	-1.40
84	-0.46	-0.56	-0.66	-0.76	-0.86	-0.96	-1.06	-1.16	-1.26	-1.36	-1.46
85	-0.52	-0.62	-0.72	-0.82	-0.92	-1.02	-1.12	-1.22	-1.32	-1.42	-1.52
86	-0.58	-0.68	-0.78	-0.88	-0.98	-1.08	-1.18	-1.28	-1.38	-1.48	-1.58
87	-0.64	-0.74	-0.84	-0.94	-1.04	-1.14	-1.24	-1.34	-1.44	-1.54	-1.64
88	-0.70	-0.80	-0.90	-1.00	-1.10	-1.20	-1.30	-1.40	-1.50	-1.60	-1.70
89	-0.76	-0.86	-0.96	-1.06	-1.16	-1.26	-1.36	-1.46	-1.56	-1.66	-1.76
90	-0.82	-0.92	-1.02	-1.12	-1.22	-1.32	-1.42	-1.52	-1.62	-1.72	-1.82
91	-0.88	-0.98	-1.08	-1.18	-1.28	-1.38	-1.48	-1.58	-1.68	-1.78	-1.88
92	-0.94	-1.04	-1.14	-1.24	-1.34	-1.44	-1.54	-1.64	-1.74	-1.84	-1.94
93	-1.00	-1.10	-1.20	-1.30	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90	-2.00
94	-1.10	-1.20	-1.30	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90	-2.00	-2.10
95	-1.20	-1.30	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90	-2.00	-2.10	-2.20
96	-1.30	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90	-2.00	-2.10	-2.20	-2.30
97	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90	-2.00	-2.10	-2.20	-2.30	-2.40
98	-1.50	-1.60	-1.70	-1.80	-1.90	-2.00	-2.10	-2.20	-2.30	-2.40	-2.50
99	-1.90	-2.00	-2.10	-2.20	-2.30	-2.40	-2.50	-2.60	-2.70	-2.80	-2.90

yd	pt (3/10)	pt (3/11)	pt (3/12)	pt (3/13)	pt (3/14)	pt (3/15)	pt (3/16)	pt (3/17)	pt (3/18)	pt (3/19)	pt (3/20+)
1	5.50	5.40	5.30	5.20	5.10	5.00	4.90	4.80	4.70	4.60	4.50
2	5.20	5.10	5.00	4.90	4.80	4.70	4.60	4.50	4.40	4.30	4.20
3	4.90	4.80	4.70	4.60	4.50	4.40	4.30	4.20	4.10	4.00	3.90
4	4.60	4.50	4.40	4.30	4.20	4.10	4.00	3.90	3.80	3.70	3.60
5	4.50	4.40	4.30	4.20	4.10	4.00	3.90	3.80	3.70	3.60	3.50
6	4.40	4.30	4.20	4.10	4.00	3.90	3.80	3.70	3.60	3.50	3.40
7	4.30	4.20	4.10	4.00	3.90	3.80	3.70	3.60	3.50	3.40	3.30
8	4.20	4.10	4.00	3.90	3.80	3.70	3.60	3.50	3.40	3.30	3.20
9	4.10	4.00	3.90	3.80	3.70	3.60	3.50	3.40	3.30	3.20	3.10
10	4.00	3.90	3.80	3.70	3.60	3.50	3.40	3.30	3.20	3.10	3.00
11	3.92	3.82	3.72	3.62	3.52	3.42	3.32	3.22	3.12	3.02	2.92
12	3.84	3.74	3.64	3.54	3.44	3.34	3.24	3.14	3.04	2.94	2.84
13	3.76	3.66	3.56	3.46	3.36	3.26	3.16	3.06	2.96	2.86	2.76
14	3.68	3.58	3.48	3.38	3.28	3.18	3.08	2.98	2.88	2.78	2.68
15	3.60	3.50	3.40	3.30	3.20	3.10	3.00	2.90	2.80	2.70	2.60
16	3.52	3.42	3.32	3.22	3.12	3.02	2.92	2.82	2.72	2.62	2.52
17	3.44	3.34	3.24	3.14	3.04	2.94	2.84	2.74	2.64	2.54	2.44
18	3.36	3.26	3.16	3.06	2.96	2.86	2.76	2.66	2.56	2.46	2.36
19	3.28	3.18	3.08	2.98	2.88	2.78	2.68	2.58	2.48	2.38	2.28
20	3.20	3.10	3.00	2.90	2.80	2.70	2.60	2.50	2.40	2.30	2.20
21	3.12	3.02	2.92	2.82	2.72	2.62	2.52	2.42	2.32	2.22	2.12
22	3.04	2.94	2.84	2.74	2.64	2.54	2.44	2.34	2.24	2.14	2.04
23	2.96	2.86	2.76	2.66	2.56	2.46	2.36	2.26	2.16	2.06	1.96
24	2.88	2.78	2.68	2.58	2.48	2.38	2.28	2.18	2.08	1.98	1.88
25	2.80	2.70	2.60	2.50	2.40	2.30	2.20	2.10	2.00	1.90	1.80
26	2.72	2.62	2.52	2.42	2.32	2.22	2.12	2.02	1.92	1.82	1.72
27	2.64	2.54	2.44	2.34	2.24	2.14	2.04	1.94	1.84	1.74	1.64
28	2.56	2.46	2.36	2.26	2.16	2.06	1.96	1.86	1.76	1.66	1.56
29	2.48	2.38	2.28	2.18	2.08	1.98	1.88	1.78	1.68	1.58	1.48
30	2.40	2.30	2.20	2.10	2.00	1.90	1.80	1.70	1.60	1.50	1.40
31	2.32	2.22	2.12	2.02	1.92	1.82	1.72	1.62	1.52	1.42	1.32
32	2.24	2.14	2.04	1.94	1.84	1.74	1.64	1.54	1.44	1.34	1.24
33	2.16	2.06	1.96	1.86	1.76	1.66	1.56	1.46	1.36	1.26	1.16

yd	pt (3/10)	pt (3/11)	pt (3/12)	pt (3/13)	pt (3/14)	pt (3/15)	pt (3/16)	pt (3/17)	pt (3/18)	pt (3/19)	pt (3/20+)
34	2.08	1.98	1.88	1.78	1.68	1.58	1.48	1.38	1.28	1.18	1.08
35	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00
36	1.94	1.84	1.74	1.64	1.54	1.44	1.34	1.24	1.14	1.04	0.94
37	1.88	1.78	1.68	1.58	1.48	1.38	1.28	1.18	1.08	0.98	0.88
38	1.82	1.72	1.62	1.52	1.42	1.32	1.22	1.12	1.02	0.92	0.82
39	1.76	1.66	1.56	1.46	1.36	1.26	1.16	1.06	0.96	0.86	0.76
40	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	0.90	0.80	0.70
41	1.64	1.54	1.44	1.34	1.24	1.14	1.04	0.94	0.84	0.74	0.64
42	1.58	1.48	1.38	1.28	1.18	1.08	0.98	0.88	0.78	0.68	0.58
43	1.52	1.42	1.32	1.22	1.12	1.02	0.92	0.82	0.72	0.62	0.52
44	1.46	1.36	1.26	1.16	1.06	0.96	0.86	0.76	0.66	0.56	0.46
45	1.40	1.30	1.20	1.10	1.00	0.90	0.80	0.70	0.60	0.50	0.40
46	1.34	1.24	1.14	1.04	0.94	0.84	0.74	0.64	0.54	0.44	0.34
47	1.28	1.18	1.08	0.98	0.88	0.78	0.68	0.58	0.48	0.38	0.28
48	1.22	1.12	1.02	0.92	0.82	0.72	0.62	0.52	0.42	0.32	0.22
49	1.16	1.06	0.96	0.86	0.76	0.66	0.56	0.46	0.36	0.26	0.16
50	1.09	0.99	0.89	0.79	0.69	0.59	0.49	0.39	0.29	0.19	0.09
51	1.03	0.93	0.83	0.73	0.63	0.53	0.43	0.33	0.23	0.13	0.03
52	0.97	0.87	0.77	0.67	0.57	0.47	0.37	0.27	0.17	0.07	-0.03
53	0.91	0.81	0.71	0.61	0.51	0.41	0.31	0.21	0.11	0.01	-0.09
54	0.85	0.75	0.65	0.55	0.45	0.35	0.25	0.15	0.05	-0.05	-0.15
55	0.79	0.69	0.59	0.49	0.39	0.29	0.19	0.09	-0.01	-0.11	-0.21
56	0.73	0.63	0.53	0.43	0.33	0.23	0.13	0.03	-0.07	-0.17	-0.27
57	0.67	0.57	0.47	0.37	0.27	0.17	0.07	-0.03	-0.13	-0.23	-0.33
58	0.61	0.51	0.41	0.31	0.21	0.11	0.01	-0.09	-0.19	-0.29	-0.39
59	0.55	0.45	0.35	0.25	0.15	0.05	-0.05	-0.15	-0.25	-0.35	-0.45
60	0.49	0.39	0.29	0.19	0.09	-0.01	-0.11	-0.21	-0.31	-0.41	-0.51
61	0.43	0.33	0.23	0.13	0.03	-0.07	-0.17	-0.27	-0.37	-0.47	-0.57
62	0.37	0.27	0.17	0.07	-0.03	-0.13	-0.23	-0.33	-0.43	-0.53	-0.63
63	0.31	0.21	0.11	0.01	-0.09	-0.19	-0.29	-0.39	-0.49	-0.59	-0.69
64	0.25	0.15	0.05	-0.05	-0.15	-0.25	-0.35	-0.45	-0.55	-0.65	-0.75
65	0.19	0.09	-0.01	-0.11	-0.21	-0.31	-0.41	-0.51	-0.61	-0.71	-0.81
66	0.13	0.03	-0.07	-0.17	-0.27	-0.37	-0.47	-0.57	-0.67	-0.77	-0.87



yd	pt (3/10)	pt (3/11)	pt (3/12)	pt (3/13)	pt (3/14)	pt (3/15)	pt (3/16)	pt (3/17)	pt (3/18)	pt (3/19)	pt (3/20+)
67	0.07	-0.03	-0.13	-0.23	-0.33	-0.43	-0.53	-0.63	-0.73	-0.83	-0.93
68	0.01	-0.09	-0.19	-0.29	-0.39	-0.49	-0.59	-0.69	-0.79	-0.89	-0.99
69	-0.05	-0.15	-0.25	-0.35	-0.45	-0.55	-0.65	-0.75	-0.85	-0.95	-1.05
70	-0.11	-0.21	-0.31	-0.41	-0.51	-0.61	-0.71	-0.81	-0.91	-1.01	-1.11
71	-0.17	-0.27	-0.37	-0.47	-0.57	-0.67	-0.77	-0.87	-0.97	-1.07	-1.17
72	-0.23	-0.33	-0.43	-0.53	-0.63	-0.73	-0.83	-0.93	-1.03	-1.13	-1.23
73	-0.29	-0.39	-0.49	-0.59	-0.69	-0.79	-0.89	-0.99	-1.09	-1.19	-1.29
74	-0.35	-0.45	-0.55	-0.65	-0.75	-0.85	-0.95	-1.05	-1.15	-1.25	-1.35
75	-0.41	-0.51	-0.61	-0.71	-0.81	-0.91	-1.01	-1.11	-1.21	-1.31	-1.41
76	-0.47	-0.57	-0.67	-0.77	-0.87	-0.97	-1.07	-1.17	-1.27	-1.37	-1.47
77	-0.53	-0.63	-0.73	-0.83	-0.93	-1.03	-1.13	-1.23	-1.33	-1.43	-1.53
78	-0.59	-0.69	-0.79	-0.89	-0.99	-1.09	-1.19	-1.29	-1.39	-1.49	-1.59
79	-0.66	-0.76	-0.86	-0.96	-1.06	-1.16	-1.26	-1.36	-1.46	-1.56	-1.66
80	-0.72	-0.82	-0.92	-1.02	-1.12	-1.22	-1.32	-1.42	-1.52	-1.62	-1.72
81	-0.78	-0.88	-0.98	-1.08	-1.18	-1.28	-1.38	-1.48	-1.58	-1.68	-1.78
82	-0.84	-0.94	-1.04	-1.14	-1.24	-1.34	-1.44	-1.54	-1.64	-1.74	-1.84
83	-0.90	-1.00	-1.10	-1.20	-1.30	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90
84	-0.96	-1.06	-1.16	-1.26	-1.36	-1.46	-1.56	-1.66	-1.76	-1.86	-1.96
85	-1.02	-1.12	-1.22	-1.32	-1.42	-1.52	-1.62	-1.72	-1.82	-1.92	-2.02
86	-1.08	-1.18	-1.28	-1.38	-1.48	-1.58	-1.68	-1.78	-1.88	-1.98	-2.08
87	-1.14	-1.24	-1.34	-1.44	-1.54	-1.64	-1.74	-1.84	-1.94	-2.04	-2.14
88	-1.20	-1.30	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90	-2.00	-2.10	-2.20
89	-1.26	-1.36	-1.46	-1.56	-1.66	-1.76	-1.86	-1.96	-2.06	-2.16	-2.26
90	-1.32	-1.42	-1.52	-1.62	-1.72	-1.82	-1.92	-2.02	-2.12	-2.22	-2.32
91	-1.38	-1.48	-1.58	-1.68	-1.78	-1.88	-1.98	-2.08	-2.18	-2.28	-2.38
92	-1.44	-1.54	-1.64	-1.74	-1.84	-1.94	-2.04	-2.14	-2.24	-2.34	-2.44
93	-1.50	-1.60	-1.70	-1.80	-1.90	-2.00	-2.10	-2.20	-2.30	-2.40	-2.50
94	-1.60	-1.70	-1.80	-1.90	-2.00	-2.10	-2.20	-2.30	-2.40	-2.50	-2.60
95	-1.70	-1.80	-1.90	-2.00	-2.10	-2.20	-2.30	-2.40	-2.50	-2.60	-2.70
96	-1.80	-1.90	-2.00	-2.10	-2.20	-2.30	-2.40	-2.50	-2.60	-2.70	-2.80
97	-1.90	-2.00	-2.10	-2.20	-2.30	-2.40	-2.50	-2.60	-2.70	-2.80	-2.90
98	-2.00	-2.10	-2.20	-2.30	-2.40	-2.50	-2.60	-2.70	-2.80	-2.90	-3.00
99	-2.40	-2.50	-2.60	-2.70	-2.80	-2.90	-3.00	-3.10	-3.20	-3.30	-3.40

yd	pt (4/1)	pt (4/2)	pt (4/3)	pt (4/4)	pt (4/5)	pt (4/6)	pt (4/7)	pt (4/8)	pt (4/9)	pt (4/10)	pt (4/11)	pt (4/12)	pt (4/13)	pt (4/14)	pt (4/15)	pt (4/16)	pt (4/17)	pt (4/18)	pt (4/19)	pt (4/20+)
1	3.53	3.53	3.53	3.53	3.04	2.54	2.10	1.71	1.36	1.04	0.77	0.52	0.30	0.11	-0.06	-0.21	-0.35	-0.47	-0.58	-0.67
2	3.47	3.47	3.47	3.47	3.02	2.56	2.16	1.80	1.48	1.20	0.95	0.72	0.52	0.35	0.19	0.05	-0.07	-0.18	-0.27	-0.36
3	3.30	3.30	3.30	3.30	2.88	2.45	2.06	1.72	1.42	1.15	0.92	0.71	0.52	0.36	0.21	0.08	-0.04	-0.14	-0.23	-0.31
4	3.13	3.13	3.13	3.13	2.74	2.33	1.97	1.65	1.37	1.11	0.89	0.69	0.52	0.36	0.23	0.10	0.00	-0.10	-0.18	-0.26
5	3.10	3.10	3.10	3.10	2.72	2.32	1.97	1.66	1.39	1.14	0.93	0.73	0.57	0.42	0.28	0.17	0.06	-0.03	-0.11	-0.18
6	3.07	3.07	3.07	3.07	2.70	2.32	1.98	1.67	1.41	1.17	0.96	0.78	0.61	0.47	0.34	0.23	0.13	0.04	-0.04	-0.11
7	3.03	3.03	3.03	3.03	2.68	2.31	1.98	1.69	1.43	1.20	1.00	0.82	0.66	0.52	0.40	0.29	0.19	0.11	0.04	-0.03
8	2.99	2.99	2.99	2.99	2.64	2.28	1.96	1.68	1.43	1.20	1.01	0.83	0.68	0.55	0.43	0.32	0.23	0.15	0.07	0.01
9	2.94	2.94	2.94	2.61	2.31	1.99	1.71	1.46	1.24	1.05	0.88	0.73	0.59	0.47	0.37	0.28	0.20	0.13	0.06	0.01
10	2.89	2.89	2.89	2.57	2.28	1.97	1.70	1.46	1.25	1.06	0.89	0.74	0.62	0.50	0.40	0.31	0.23	0.16	0.10	0.05
11	2.86	2.86	2.86	2.55	2.27	1.97	1.70	1.47	1.26	1.07	0.91	0.77	0.64	0.53	0.43	0.35	0.27	0.21	0.15	0.09
12	2.83	2.83	2.83	2.52	2.25	1.96	1.70	1.47	1.27	1.09	0.93	0.79	0.67	0.56	0.47	0.38	0.31	0.25	0.19	0.14
13	2.79	2.79	2.79	2.50	2.24	1.95	1.70	1.48	1.28	1.10	0.95	0.82	0.70	0.59	0.50	0.42	0.35	0.29	0.23	0.18
14	2.76	2.76	2.76	2.48	2.22	1.94	1.70	1.48	1.29	1.12	0.97	0.84	0.73	0.62	0.54	0.46	0.39	0.33	0.28	0.23
15	2.73	2.73	2.73	2.45	2.21	1.94	1.70	1.49	1.30	1.14	0.99	0.87	0.75	0.66	0.57	0.49	0.43	0.37	0.32	0.27
16	2.67	2.67	2.67	2.39	2.15	1.88	1.65	1.44	1.25	1.09	0.95	0.83	0.72	0.62	0.53	0.46	0.39	0.34	0.29	0.24
17	2.59	2.59	2.59	2.32	2.08	1.81	1.58	1.37	1.19	1.03	0.88	0.76	0.65	0.55	0.47	0.40	0.33	0.27	0.22	0.18
18	2.52	2.52	2.52	2.25	2.01	1.74	1.51	1.30	1.12	0.96	0.82	0.69	0.59	0.49	0.41	0.33	0.27	0.21	0.16	0.12
19	2.45	2.45	2.45	2.18	1.94	1.67	1.44	1.23	1.05	0.89	0.75	0.63	0.52	0.43	0.34	0.27	0.20	0.15	0.10	0.05
20	2.37	2.37	2.37	2.11	1.87	1.60	1.37	1.17	0.99	0.83	0.69	0.56	0.46	0.36	0.28	0.20	0.14	0.08	0.03	-0.01
21	2.30	2.30	2.30	2.03	1.80	1.53	1.30	1.10	0.92	0.76	0.62	0.50	0.39	0.30	0.21	0.14	0.08	0.02	-0.03	-0.07
22	2.22	2.22	2.22	1.96	1.73	1.46	1.23	1.03	0.85	0.69	0.55	0.43	0.33	0.23	0.15	0.08	0.01	-0.04	-0.09	-0.13
23	2.15	2.15	2.15	2.15	1.89	1.60	1.35	1.12	0.92	0.75	0.59	0.46	0.34	0.24	0.15	0.07	0.00	-0.07	-0.12	-0.17
24	2.08	2.08	2.08	2.08	1.82	1.53	1.28	1.05	0.85	0.68	0.53	0.39	0.28	0.17	0.08	0.00	-0.07	-0.13	-0.18	-0.23
25	2.00	2.00	2.00	2.00	1.75	1.46	1.21	0.98	0.79	0.61	0.46	0.33	0.21	0.11	0.02	-0.06	-0.13	-0.19	-0.24	-0.29
26	1.93	1.93	1.93	1.93	1.93	1.61	1.33	1.09	0.87	0.68	0.51	0.36	0.23	0.12	0.02	-0.07	-0.14	-0.21	-0.27	-0.32
27	1.86	1.86	1.86	1.86	1.86	1.54	1.26	1.02	0.80	0.61	0.44	0.30	0.17	0.05	-0.05	-0.13	-0.21	-0.28	-0.33	-0.38
28	1.78	1.78	1.78	1.78	1.78	1.72	1.41	1.14	0.90	0.69	0.50	0.34	0.20	0.07	-0.04	-0.13	-0.22	-0.29	-0.36	-0.41
29	1.71	1.71	1.71	1.71	1.71	1.64	1.34	1.07	0.83	0.62	0.44	0.27	0.13	0.01	-0.10	-0.20	-0.28	-0.36	-0.42	-0.48
30	1.64	1.64	1.64	1.64	1.64	1.57	1.26	1.00	0.76	0.55	0.37	0.21	0.06	-0.06	-0.17	-0.26	-0.35	-0.42	-0.48	-0.54
31	1.56	1.56	1.56	1.56	1.56	1.50	1.43	1.13	0.87	0.64	0.44	0.26	0.10	-0.03	-0.15	-0.26	-0.35	-0.43	-0.50	-0.56
32	1.49	1.49	1.49	1.49	1.49	1.42	1.36	1.06	0.80	0.57	0.37	0.19	0.04	-0.10	-0.22	-0.32	-0.42	-0.50	-0.57	-0.63
33	1.42	1.42	1.42	1.42	1.42	1.35	1.28	1.22	0.93	0.67	0.45	0.26	0.08	-0.07	-0.20	-0.31	-0.42	-0.50	-0.58	-0.65

yd	pt (4/1)	pt (4/2)	pt (4/3)	pt (4/4)	pt (4/5)	pt (4/6)	pt (4/7)	pt (4/8)	pt (4/9)	pt (4/10)	pt (4/11)	pt (4/12)	pt (4/13)	pt (4/14)	pt (4/15)	pt (4/16)	pt (4/17)	pt (4/18)	pt (4/19)	pt (4/20+)
34	1.34	1.34	1.34	1.34	1.34	1.28	1.21	1.14	0.86	0.60	0.38	0.19	0.02	-0.13	-0.27	-0.38	-0.48	-0.57	-0.65	-0.71
35	1.27	1.27	1.27	1.27	1.27	1.20	1.14	1.07	1.00	0.72	0.48	0.26	0.07	-0.09	-0.24	-0.36	-0.48	-0.57	-0.66	-0.73
36	1.21	1.21	1.21	1.21	1.21	1.14	1.08	1.01	0.94	0.66	0.42	0.20	0.01	-0.15	-0.30	-0.42	-0.54	-0.63	-0.72	-0.79
37	1.15	1.15	1.15	1.15	1.15	1.08	1.02	0.95	0.88	0.82	0.54	0.30	0.09	-0.09	-0.25	-0.39	-0.52	-0.62	-0.72	-0.80
38	1.09	1.09	1.09	1.09	1.09	1.02	0.96	0.89	0.82	0.76	0.69	0.42	0.19	-0.01	-0.19	-0.35	-0.49	-0.61	-0.71	-0.81
39	1.03	1.03	1.03	1.03	1.03	0.96	0.90	0.83	0.76	0.70	0.42	0.18	-0.03	-0.21	-0.37	-0.51	-0.64	-0.75	-0.84	-0.92
40	0.97	0.97	0.97	0.97	0.97	0.90	0.84	0.77	0.70	0.64	0.36	0.12	-0.09	-0.27	-0.43	-0.57	-0.70	-0.81	-0.90	-0.98
41	0.91	0.91	0.91	0.91	0.91	0.84	0.77	0.71	0.64	0.57	0.30	0.06	-0.15	-0.33	-0.49	-0.63	-0.76	-0.87	-0.96	-1.04
42	0.85	0.85	0.85	0.85	0.85	0.78	0.71	0.65	0.58	0.30	0.06	-0.16	-0.35	-0.51	-0.66	-0.79	-0.90	-0.99	-1.08	-1.15
43	0.79	0.79	0.79	0.79	0.79	0.72	0.65	0.59	0.52	0.24	0.00	-0.22	-0.41	-0.57	-0.72	-0.85	-0.96	-1.06	-1.14	-1.21
44	0.73	0.73	0.73	0.73	0.73	0.66	0.59	0.53	0.46	0.18	-0.06	-0.28	-0.47	-0.63	-0.78	-0.91	-1.02	-1.12	-1.20	-1.27
45	0.67	0.67	0.67	0.67	0.67	0.60	0.53	0.47	0.40	0.12	-0.12	-0.34	-0.53	-0.69	-0.84	-0.97	-1.08	-1.18	-1.26	-1.34
46	0.61	0.61	0.61	0.61	0.61	0.54	0.47	0.41	0.12	-0.13	-0.35	-0.55	-0.72	-0.87	-1.00	-1.11	-1.21	-1.30	-1.37	-1.44
47	0.55	0.55	0.55	0.55	0.55	0.48	0.41	0.35	0.06	-0.19	-0.41	-0.61	-0.78	-0.93	-1.06	-1.17	-1.27	-1.36	-1.43	-1.50
48	0.49	0.49	0.49	0.49	0.49	0.42	0.35	0.29	0.00	-0.25	-0.47	-0.67	-0.84	-0.99	-1.12	-1.23	-1.33	-1.42	-1.50	-1.56
49	0.43	0.43	0.43	0.43	0.43	0.36	0.29	0.00	-0.26	-0.48	-0.68	-0.86	-1.01	-1.14	-1.26	-1.37	-1.46	-1.53	-1.60	-1.66
50	0.36	0.36	0.36	0.36	0.36	0.30	0.23	-0.06	-0.32	-0.54	-0.74	-0.92	-1.07	-1.21	-1.32	-1.43	-1.52	-1.59	-1.66	-1.72
51	0.30	0.30	0.30	0.30	0.30	0.24	0.17	-0.12	-0.38	-0.61	-0.80	-0.98	-1.13	-1.27	-1.38	-1.49	-1.58	-1.66	-1.72	-1.78
52	0.24	0.24	0.24	0.24	0.24	0.18	0.11	-0.18	-0.44	-0.67	-0.86	-1.04	-1.19	-1.33	-1.44	-1.55	-1.64	-1.72	-1.78	-1.84
53	0.18	0.18	0.18	0.18	0.18	0.12	-0.18	-0.45	-0.68	-0.88	-1.06	-1.22	-1.35	-1.48	-1.58	-1.67	-1.76	-1.83	-1.89	-1.94
54	0.12	0.12	0.12	0.12	0.12	0.06	-0.24	-0.51	-0.74	-0.94	-1.12	-1.28	-1.41	-1.54	-1.64	-1.73	-1.82	-1.89	-1.95	-2.00
55	0.06	0.06	0.06	0.06	0.06	0.00	-0.30	-0.57	-0.80	-1.00	-1.18	-1.34	-1.48	-1.60	-1.70	-1.79	-1.88	-1.95	-2.01	-2.06
56	0.00	0.00	0.00	0.00	0.00	-0.30	-0.57	-0.81	-1.02	-1.20	-1.36	-1.50	-1.63	-1.74	-1.83	-1.92	-1.99	-2.05	-2.11	-2.16
57	-0.06	-0.06	-0.06	-0.06	-0.06	-0.36	-0.63	-0.87	-1.08	-1.26	-1.42	-1.56	-1.69	-1.80	-1.89	-1.98	-2.05	-2.11	-2.17	-2.22
58	-0.12	-0.12	-0.12	-0.12	-0.12	-0.42	-0.69	-0.93	-1.14	-1.32	-1.48	-1.62	-1.75	-1.86	-1.95	-2.04	-2.11	-2.17	-2.23	-2.28
59	-0.18	-0.18	-0.18	-0.18	-0.18	-0.48	-0.75	-0.99	-1.20	-1.38	-1.54	-1.68	-1.81	-1.92	-2.01	-2.10	-2.17	-2.23	-2.29	-2.34
60	-0.24	-0.24	-0.24	-0.24	-0.48	-0.76	-1.00	-1.22	-1.40	-1.57	-1.71	-1.84	-1.95	-2.05	-2.14	-2.21	-2.28	-2.33	-2.38	-2.43
61	-0.30	-0.30	-0.30	-0.30	-0.54	-0.82	-1.06	-1.28	-1.46	-1.63	-1.77	-1.90	-2.01	-2.11	-2.20	-2.27	-2.34	-2.39	-2.44	-2.49
62	-0.36	-0.36	-0.36	-0.36	-0.61	-0.88	-1.12	-1.34	-1.52	-1.69	-1.83	-1.96	-2.07	-2.17	-2.26	-2.33	-2.40	-2.45	-2.50	-2.55
63	-0.42	-0.42	-0.42	-0.42	-0.67	-0.94	-1.18	-1.40	-1.58	-1.75	-1.89	-2.02	-2.13	-2.23	-2.32	-2.39	-2.46	-2.51	-2.57	-2.61
64	-0.48	-0.48	-0.48	-0.48	-0.73	-1.00	-1.24	-1.46	-1.64	-1.81	-1.95	-2.08	-2.19	-2.29	-2.38	-2.45	-2.52	-2.58	-2.63	-2.67
65	-0.54	-0.54	-0.54	-0.79	-1.01	-1.26	-1.47	-1.67	-1.83	-1.98	-2.11	-2.23	-2.33	-2.42	-2.49	-2.56	-2.62	-2.67	-2.72	-2.76
66	-0.61	-0.61	-0.61	-0.85	-1.08	-1.33	-1.55	-1.74	-1.91	-2.06	-2.19	-2.30	-2.40	-2.49	-2.57	-2.64	-2.70	-2.75	-2.79	-2.83

yd	pt (4/1)	pt (4/2)	pt (4/3)	pt (4/4)	pt (4/5)	pt (4/6)	pt (4/7)	pt (4/8)	pt (4/9)	pt (4/10)	pt (4/11)	pt (4/12)	pt (4/13)	pt (4/14)	pt (4/15)	pt (4/16)	pt (4/17)	pt (4/18)	pt (4/19)	pt (4/20+)
67	-0.67	-0.67	-0.67	-0.92	-1.15	-1.40	-1.62	-1.81	-1.98	-2.13	-2.26	-2.38	-2.48	-2.57	-2.65	-2.71	-2.77	-2.83	-2.87	-2.91
68	-0.74	-0.74	-0.74	-0.99	-1.22	-1.47	-1.69	-1.88	-2.05	-2.20	-2.34	-2.45	-2.55	-2.64	-2.72	-2.79	-2.85	-2.90	-2.95	-2.99
69	-0.81	-0.81	-0.81	-1.06	-1.29	-1.54	-1.76	-1.95	-2.13	-2.28	-2.41	-2.53	-2.63	-2.72	-2.80	-2.87	-2.93	-2.98	-3.03	-3.07
70	-0.87	-0.87	-0.87	-1.13	-1.35	-1.61	-1.83	-2.03	-2.20	-2.35	-2.49	-2.60	-2.71	-2.80	-2.88	-2.94	-3.01	-3.06	-3.11	-3.15
71	-0.94	-0.94	-0.94	-1.20	-1.42	-1.68	-1.90	-2.10	-2.27	-2.43	-2.56	-2.68	-2.78	-2.87	-2.95	-3.02	-3.08	-3.14	-3.18	-3.22
72	-1.01	-1.01	-1.01	-1.26	-1.49	-1.75	-1.97	-2.17	-2.35	-2.50	-2.63	-2.75	-2.86	-2.95	-3.03	-3.10	-3.16	-3.21	-3.26	-3.30
73	-1.08	-1.08	-1.33	-1.56	-1.77	-2.00	-2.20	-2.38	-2.54	-2.68	-2.80	-2.91	-3.00	-3.09	-3.16	-3.22	-3.28	-3.33	-3.37	-3.41
74	-1.14	-1.14	-1.40	-1.63	-1.84	-2.07	-2.28	-2.46	-2.61	-2.75	-2.88	-2.98	-3.08	-3.16	-3.23	-3.30	-3.35	-3.40	-3.45	-3.48
75	-1.21	-1.21	-1.47	-1.70	-1.91	-2.14	-2.35	-2.53	-2.69	-2.83	-2.95	-3.06	-3.15	-3.24	-3.31	-3.38	-3.43	-3.48	-3.52	-3.56
76	-1.28	-1.28	-1.54	-1.77	-1.98	-2.22	-2.42	-2.60	-2.76	-2.90	-3.03	-3.13	-3.23	-3.31	-3.39	-3.45	-3.51	-3.56	-3.60	-3.64
77	-1.34	-1.34	-1.60	-1.84	-2.05	-2.29	-2.49	-2.68	-2.84	-2.98	-3.10	-3.21	-3.31	-3.39	-3.46	-3.53	-3.59	-3.64	-3.68	-3.72
78	-1.41	-1.41	-1.67	-1.91	-2.12	-2.36	-2.57	-2.75	-2.91	-3.05	-3.18	-3.29	-3.38	-3.47	-3.54	-3.61	-3.66	-3.71	-3.76	-3.80
79	-1.48	-1.48	-1.74	-1.98	-2.19	-2.43	-2.64	-2.82	-2.98	-3.13	-3.25	-3.36	-3.46	-3.54	-3.62	-3.68	-3.74	-3.79	-3.83	-3.87
80	-1.54	-1.54	-1.81	-2.05	-2.26	-2.50	-2.71	-2.89	-3.06	-3.20	-3.33	-3.44	-3.53	-3.62	-3.69	-3.76	-3.82	-3.87	-3.91	-3.95
81	-1.61	-1.61	-1.88	-2.12	-2.33	-2.57	-2.78	-2.97	-3.13	-3.27	-3.40	-3.51	-3.61	-3.70	-3.77	-3.84	-3.90	-3.95	-3.99	-4.03
82	-1.68	-1.68	-1.95	-2.19	-2.40	-2.64	-2.85	-3.04	-3.20	-3.35	-3.48	-3.59	-3.69	-3.77	-3.85	-3.91	-3.97	-4.02	-4.07	-4.11
83	-1.74	-1.74	-2.01	-2.26	-2.47	-2.72	-2.93	-3.11	-3.28	-3.42	-3.55	-3.66	-3.76	-3.85	-3.92	-3.99	-4.05	-4.10	-4.15	-4.19
84	-1.81	-1.81	-2.08	-2.33	-2.55	-2.79	-3.00	-3.19	-3.35	-3.50	-3.63	-3.74	-3.84	-3.92	-4.00	-4.07	-4.13	-4.18	-4.22	-4.26
85	-1.88	-1.88	-2.15	-2.40	-2.62	-2.86	-3.07	-3.26	-3.43	-3.57	-3.70	-3.81	-3.91	-4.00	-4.08	-4.15	-4.20	-4.26	-4.30	-4.34
86	-1.95	-1.95	-2.22	-2.46	-2.69	-2.93	-3.14	-3.33	-3.50	-3.65	-3.78	-3.89	-3.99	-4.08	-4.15	-4.22	-4.28	-4.33	-4.38	-4.42
87	-2.01	-2.01	-2.29	-2.53	-2.76	-3.00	-3.22	-3.41	-3.57	-3.72	-3.85	-3.96	-4.06	-4.15	-4.23	-4.30	-4.36	-4.41	-4.46	-4.50
88	-2.08	-2.08	-2.35	-2.60	-2.83	-3.07	-3.29	-3.48	-3.65	-3.79	-3.93	-4.04	-4.14	-4.23	-4.31	-4.38	-4.44	-4.49	-4.54	-4.58
89	-2.15	-2.15	-2.42	-2.67	-2.90	-3.14	-3.36	-3.55	-3.72	-3.87	-4.00	-4.12	-4.22	-4.31	-4.38	-4.45	-4.51	-4.57	-4.61	-4.65
90	-2.21	-2.21	-2.49	-2.74	-2.97	-3.21	-3.43	-3.62	-3.79	-3.94	-4.08	-4.19	-4.29	-4.38	-4.46	-4.53	-4.59	-4.64	-4.69	-4.73
91	-2.29	-2.29	-2.57	-2.82	-3.05	-3.30	-3.52	-3.71	-3.88	-4.03	-4.16	-4.28	-4.38	-4.47	-4.55	-4.62	-4.69	-4.74	-4.79	-4.83
92	-2.36	-2.36	-2.64	-2.90	-3.13	-3.38	-3.60	-3.80	-3.97	-4.12	-4.25	-4.37	-4.48	-4.57	-4.65	-4.72	-4.78	-4.83	-4.88	-4.92
93	-2.43	-2.43	-2.72	-2.98	-3.21	-3.46	-3.69	-3.88	-4.06	-4.21	-4.34	-4.46	-4.57	-4.66	-4.74	-4.81	-4.87	-4.93	-4.98	-5.02
94	-2.53	-2.53	-2.82	-3.08	-3.31	-3.56	-3.79	-3.98	-4.16	-4.31	-4.44	-4.56	-4.67	-4.76	-4.84	-4.91	-4.97	-5.03	-5.08	-5.12
95	-2.63	-2.63	-2.92	-3.18	-3.41	-3.66	-3.89	-4.08	-4.26	-4.41	-4.54	-4.66	-4.77	-4.86	-4.94	-5.01	-5.07	-5.13	-5.18	-5.22
96	-2.73	-2.73	-3.02	-3.28	-3.51	-3.76	-3.99	-4.18	-4.36	-4.51	-4.64	-4.76	-4.87	-4.96	-5.04	-5.11	-5.17	-5.23	-5.28	-5.32
97	-2.90	-2.90	-3.20	-3.47	-3.71	-3.98	-4.21	-4.41	-4.59	-4.75	-4.89	-5.02	-5.13	-5.22	-5.31	-5.38	-5.45	-5.50	-5.56	-5.60
98	-3.07	-3.07	-3.38	-3.66	-3.92	-4.19	-4.43	-4.64	-4.83	-4.99	-5.14	-5.27	-5.38	-5.48	-5.57	-5.65	-5.72	-5.78	-5.83	-5.88
99	-3.43	-3.43	-3.74	-4.02	-4.26	-4.53	-4.77	-4.98	-5.16	-5.32	-5.47	-5.59	-5.71	-5.80	-5.89	-5.97	-6.03	-6.09	-6.14	-6.19





o 4th and Goal at SF 9	1.24																		
(0:49 - 1st) Blair Walsh 27 Yd Field Goal		3.00																	1.760
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-4.67</b>	<b>4.67</b>	<b>0.000</b>	<b>0.000</b>	<b>-2.790</b>	<b>-0.860</b>	<b>0.000</b>	<b>-0.060</b>	<b>4.610</b>	<b>0.000</b>	<b>0.000</b>	<b>0.840</b>	<b>0.000</b>	<b>1.170</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>1.760</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>5.55</b>	<b>5.55</b>	<b>0.800</b>	<b>0.000</b>	<b>-7.400</b>	<b>-0.760</b>	<b>0.670</b>	<b>0.455</b>	<b>4.610</b>	<b>0.000</b>	<b>-0.395</b>	<b>1.850</b>	<b>0.000</b>	<b>1.170</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>1.770</b>	<b>2.780</b>
<b>DRIVE 04 (SFr-9 @ Sea-12, 09-17-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>No XP</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Prosise</b>	<b>Baldwin</b>	<b>Wagner</b>	<b>Sherman</b>	<b>Carson</b>	<b>Lockett</b>	<b>Willson</b>	<b>Darboh</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	
(13:40 - 2nd) B.Pinion punts 47 yards to SEA 3, Center-K.Nelson, downed by SP-A.Jackson.		-0.90																	
o 1st and 10 at SEA 3		-0.90																	
(13:31 - 2nd) C.Carson right guard to SEA 4 for 1 yard (E.Mitchell).		-1.20									-0.300								
o 2nd and 9 at SEA 4		-1.20																	
(12:58 - 2nd) C.Carson right guard to SEA 7 for 3 yards (N.Bowman).		-1.10									0.100								
o 3rd and 6 at SEA 7		-1.10																	
(12:15 - 2nd) (Shotgun) R.Wilson pass short left to T.Lockett ran ob at SEA 16 for 9 yards (R.Robinson) [A.Lynch].		0.04			0.570							0.570							
o 1st and 10 at SEA 16		0.04																	
(11:53 - 2nd) C.Carson right guard to SEA 23 for 7 yards (D.Jones; J.Tartt). PENALTY on SEA-L.Willson, Offensive Holding, 10 yards, enforced at SEA 23.		-0.44	-0.480																
o 1st and 13 at SEA 13		-0.44																	
(11:36 - 2nd) (Shotgun) R.Wilson pass short right to T.Lockett pushed ob at SEA 27 for 14 yards (E.Reid).		0.71			0.575							0.575							
o 1st and 10 at SEA 27		0.71																	
(11:15 - 2nd) C.Carson right end to SEA 27 for no gain (E.Reid). SEA-J.Graham was injured during the play.		0.21									-0.500								
o 2nd and 10 at SEA 27		0.21																	
(10:41 - 2nd) (Shotgun) R.Wilson pass short right to L.Willson pushed ob at SEA 29 for 2 yards (D.Johnson).		0.03			-0.090								-0.090						
o 3rd and 8 at SEA 29		0.03																	
(10:04 - 2nd) (Shotgun) R.Wilson pass incomplete deep left to C.Prosise (K.Williams).		-2.10			-2.130														
o 4th and 8 at SEA 29		-2.10																	
(9:58 - 2nd) J.Ryan punts 57 yards to SF 14, Center-T.Ott. T.Taylor to SF 35 for 21 yards (B.McDougald).		-1.19																	0.910
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-0.29</b>	<b>-0.29</b>	<b>-0.480</b>	<b>0.000</b>	<b>-1.075</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.700</b>	<b>1.145</b>	<b>-0.090</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.910</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>5.26</b>	<b>5.26</b>	<b>0.320</b>	<b>0.000</b>	<b>-8.475</b>	<b>-0.760</b>	<b>0.670</b>	<b>0.455</b>	<b>4.610</b>	<b>0.000</b>	<b>-1.095</b>	<b>2.995</b>	<b>-0.090</b>	<b>1.170</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>2.680</b>	<b>2.780</b>
<b>DRIVE 05 (SFr-9 @ Sea-12, 09-17-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>No XP</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Prosise</b>	<b>Baldwin</b>	<b>Wagner</b>	<b>Sherman</b>	<b>Carson</b>	<b>Lockett</b>	<b>Willson</b>	<b>Darboh</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	
(7:55 - 2nd) B.Pinion punts 29 yards to SEA 19, Center-K.Nelson, fair catch by T.Lockett.	0.22	0.22										0.000							
o 1st and 10 at SEA 19		0.22																	
(7:46 - 2nd) R.Wilson pass short right to D.Baldwin to SEA 22 for 3 yards (K.Williams).		0.21			-0.005			-0.005											
o 2nd and 7 at SEA 22		0.21																	
(7:15 - 2nd) C.Carson right tackle to SEA 30 for 8 yards (T.Carradine).		0.89									0.680								
o 1st and 10 at SEA 30		0.89																	
(6:36 - 2nd) R.Wilson pass short right to L.Willson to SEA 49 for 19 yards (D.Jones) [T.Carradine].		2.03			0.570								0.570						
o 1st and 10 at SEA 49		2.03																	
(5:59 - 2nd) C.Carson right tackle to SEA 48 for -1 yards (S.Thomas).		1.37									-0.660								
o 2nd and 11 at SEA 48		1.37																	
(5:25 - 2nd) (Shotgun) R.Wilson pass short left to L.Willson to SF 48 for 4 yards (R.Armstrong; E.Reid).		1.52			0.075								0.075						











o 1st and 10 at SEA 20	0.28																			
(9:16 - 1st) (Shotgun) T.Rawls left guard to SEA 22 for 2 yards (M.Brockers).	0.11				-0.170															
o 2nd and 8 at SEA 22	0.11																			
(8:45 - 1st) (Shotgun) R.Wilson pass incomplete deep middle to J.McKissic.	-0.39			-0.500																
o 3rd and 8 at SEA 22	-0.39																			
(8:39 - 1st) (Shotgun) R.Wilson pass incomplete deep left to D.Baldwin [A.Ogletree]. PENALTY on LA-Co.Davis, Defensive Holding, 5 yards, enforced at SEA 22 - No Play.	0.71	1.100																		
o 1st and 10 at SEA 27	0.71																			
(8:32 - 1st) L.Joeckel and M.Tobin reported in as eligible. R.Wilson pass incomplete deep left to P.Richardson.	0.21			-0.500																
o 2nd and 10 at SEA 27	0.21																			
(8:29 - 1st) T.Rawls up the middle to SEA 30 for 3 yards (M.Fox).	0.19				-0.020															
o 3rd and 7 at SEA 30	0.19																			
(7:49 - 1st) (Shotgun) R.Wilson pass short left to T.Lockett to SEA 42 for 12 yards (M.Barron).	1.61		0.710				0.710													
o 1st and 10 at SEA 42	1.61																			
(7:14 - 1st) J.McKissic right end to SEA 39 for -3 yards (A.Donald, M.Longacre).	0.63																-0.980			
o 2nd and 13 at SEA 39	0.63																			
(6:33 - 1st) (Shotgun) R.Wilson pass short right to T.Rawls to SEA 40 for 1 yard (Co.Davis) [M.Barron].	0.29			-0.170	-0.170															
o 3rd and 12 at SEA 40	0.29																			
(5:51 - 1st) (Shotgun) R.Wilson scrambles up the middle to SEA 49 for 9 yards (N.Robey).	-0.30			-0.590																
o 4th and 3 at SEA 49	-0.30																			
(5:51 - 1st) J.Ryan punts 44 yards to LA 7, Center-T.Ott, fair catch by C.Kupp.	0.50									0.800										
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>7.00</b>	<b>7.00</b>	<b>1.100</b>	<b>-1.050</b>	<b>-0.360</b>	<b>0.000</b>	<b>0.710</b>	<b>0.000</b>	<b>0.000</b>	<b>0.800</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.980</b>	<b>0.000</b>	<b>6.780</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>5.04</b>	<b>5.04</b>	<b>1.100</b>	<b>-4.560</b>	<b>-0.360</b>	<b>0.000</b>	<b>0.710</b>	<b>0.000</b>	<b>0.000</b>	<b>2.650</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.980</b>	<b>0.000</b>	<b>6.780</b>	<b>-0.300</b>
<b>DRIVE 03 (Sea-16 @ LAR-10, 10-08-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>Vannet</b>	<b>Thorpe</b>	<b>Pocic</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>S Richardson</b>	<b>Thomas</b>	<b>Lacy</b>	
(3:33 - 1st) J.Hekker punts 62 yards to SEA 22, Center-J.McQuaide. T.Lockett to SEA 32 for 10 yards (B.Countess).	0.41	1.01					0.600													
o 1st and 10 at SEA 32	1.01																			
(3:21 - 1st) T.McEvoy pass deep right intended for J.McKissic INTERCEPTED by Co.Davis at LA 36. Co.Davis ran ob at LA 36 for no gain. PENALTY on LA-M.Brockers, Unsportsmanlike Conduct, 15 yards, enforced at LA 36. [Interception at LAR 36 is turnover at -1.25, charge to McEvoy. Penalty regains 15 yds to LAR 21 at -0.34.]	-0.34	0.910													-2.260					
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-0.75</b>	<b>-0.75</b>	<b>0.910</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.600</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-2.260</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>4.29</b>	<b>4.29</b>	<b>2.010</b>	<b>-4.560</b>	<b>-0.360</b>	<b>0.000</b>	<b>1.310</b>	<b>0.000</b>	<b>0.000</b>	<b>2.650</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-2.260</b>	<b>-0.980</b>	<b>0.000</b>	<b>6.780</b>	<b>-0.300</b>	
<b>DRIVE 04 (Sea-16 @ LAR-10, 10-08-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>Vannet</b>	<b>Thorpe</b>	<b>Pocic</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>S Richardson</b>	<b>Thomas</b>	<b>Lacy</b>	
o (14:13 - 2nd) G.Zuerlein kicks 52 yards from LA 35 to SEA 13. E.Pocic to SEA 26 for 13 yards (S.Ebukam).	-0.14	0.65											0.790							
o 1st and 10 at SEA 26	0.65																			
(14:08 - 2nd) E.Lacy up the middle to SEA 28 for 2 yards (K.Webster; R.Quinn).		0.47																	-0.180	
o 2nd and 8 at SEA 28	0.47																			
(13:28 - 2nd) E.Lacy right guard to SEA 29 for 1 yard (R.Quinn).		0.13																	-0.340	
o 3rd and 7 at SEA 29	0.13																			
(12:46 - 2nd) (Shotgun) R.Wilson pass incomplete short right to T.Rawls.	-1.90			-2.030																
o 4th and 7 at SEA 29	-1.90																			
(12:36 - 2nd) J.Ryan punts 42 yards to LA 29, Center-T.Ott. T.Austin MUFFS catch, RECOVERED by SEA-N.Thorpe at LA 30. N.Thorpe to LA 30 for no gain (D.Hatfield). [Ryan punts to LAR 30 for -0.89. Punt is fumbled and Thorpe recovers at LAR 30, reversing -0.89 to 3.40 as Seattle regains possession.]		3.40								1.010			4.290							





o 1st and 10 at LAR 40	2.70																		
(6:59 - 3rd) R.Wilson pass incomplete deep right to T.Lockett [M.Longacre].		2.20		-0.500															
o 2nd and 10 at LAR 40	2.20																		
(6:52 - 3rd) (Shotgun) R.Wilson right end ran ob at LA 40 for no gain (M.Barron).		1.70		-0.500															
o 3rd and 10 at LAR 40	1.70																		
(6:25 - 3rd) (Shotgun) R.Wilson pass short left to J.Graham to LA 31 for 9 yards (M.Barron).		1.56		-0.070				-0.070											
o 4th and 1 at LAR 31	1.56																		
(5:41 - 3rd) Blair Walsh 49 Yd Field Goal		3.00									1.440								
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>2.35</b>	<b>2.35</b>	<b>0.000</b>	<b>-0.565</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.070</b>	<b>0.000</b>	<b>0.000</b>	<b>1.440</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.730</b>	<b>0.000</b>	<b>0.000</b>	<b>0.815</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>11.32</b>	<b>11.32</b>	<b>1.200</b>	<b>-14.210</b>	<b>0.665</b>	<b>1.580</b>	<b>2.580</b>	<b>1.345</b>	<b>1.055</b>	<b>3.660</b>	<b>2.930</b>	<b>-0.060</b>	<b>4.290</b>	<b>0.790</b>	<b>-2.260</b>	<b>0.780</b>	<b>0.000</b>	<b>6.780</b>	<b>0.195</b>
<b>DRIVE 08 (Sea-16 @ LAR-10, 10-08-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>Vannet</b>	<b>Thorpe</b>	<b>Pocic</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>S Richardson</b>	<b>Thomas</b>	<b>Lacy</b>
(0:56 - 3rd) (Shotgun) J.Goff pass short left intended for T.Gurley INTERCEPTED by S.Richardson at SEA 24. S.Richardson to SEA 29 for 5 yards (C.Kupp).	0.53	0.83															0.300		
o 1st and 10 at SEA 29	0.83																		
(0:48 - 3rd) (Shotgun) J.McKissic left end ran ob at SEA 32 for 3 yards (M.Longacre).		0.81														-0.020			
o 2nd and 7 at SEA 32	0.81																		
(0:00 - 3rd) (Shotgun) R.Wilson pass short left to J.McKissic to SEA 32 for no gain (T.Hill). PENALTY on SEA-T.McEvoy, Offensive Pass Interference, 10 yards, enforced at SEA 32 - No Play.		-0.79	-1.600																
o 2nd and 17 at SEA 22	-0.79																		
(15:00 - 4th) (Shotgun) R.Wilson pass short right to N.Vannet to SEA 22 for no gain (N.Robey) [C.Barwin].		-1.29		-0.250								-0.250							
o 3rd and 17 at SEA 22	-1.29																		
(14:14 - 4th) (Shotgun) R.Wilson scrambles left end to SEA 27 for 5 yards (A.Donald).		-2.91		-1.620															
o 4th and 12 at SEA 27	-2.91																		
(13:35 - 4th) J.Ryan punts 44 yards to LA 29, Center-T.Ott, fair catch by C.Kupp.		-0.83								2.080									
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-1.36</b>	<b>-1.36</b>	<b>-1.600</b>	<b>-1.870</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>2.080</b>	<b>0.000</b>	<b>-0.250</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.020</b>	<b>0.300</b>	<b>0.000</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>9.96</b>	<b>9.96</b>	<b>-0.400</b>	<b>-16.080</b>	<b>0.665</b>	<b>1.580</b>	<b>2.580</b>	<b>1.345</b>	<b>1.055</b>	<b>5.740</b>	<b>2.930</b>	<b>-0.310</b>	<b>4.290</b>	<b>0.790</b>	<b>-2.260</b>	<b>0.760</b>	<b>0.300</b>	<b>6.780</b>	<b>0.195</b>
<b>DRIVE 09 (Sea-16 @ LAR-10, 10-08-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>Vannet</b>	<b>Thorpe</b>	<b>Pocic</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>S Richardson</b>	<b>Thomas</b>	<b>Lacy</b>
(11:58 - 4th) J.Hekker punts 40 yards to SEA 26, Center-J.McQuaide, fair catch by T.Lockett.	0.65	0.65					0.000												
o 1st and 10 at SEA 26	0.65																		
(11:51 - 4th) (Shotgun) R.Wilson pass incomplete short middle to D.Baldwin.		0.15		-0.500															
o 2nd and 10 at SEA 26	0.15																		
(11:46 - 4th) (Shotgun) T.Rawls up the middle to SEA 29 for 3 yards (M.Fox).		0.13			-0.020														
o 3rd and 7 at SEA 29	0.13																		
(11:02 - 4th) (Shotgun) R.Wilson pass incomplete short left to D.Baldwin.		-1.90		-2.030															
o 4th and 7 at SEA 29	-1.90																		
(10:57 - 4th) J.Ryan punts 38 yards to LA 33, Center-T.Ott, downed by SEA-T.Ott. PENALTY on LA-D.Hatfield, Offensive Holding, 10 yards, enforced at LA 33. [Ryan accrues net between start and LA 33 (-1.07). Additional accrual due to penalty to LA 23 (-0.47).]		-0.47	0.600							0.830									
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-1.12</b>	<b>-1.12</b>	<b>0.600</b>	<b>-2.530</b>	<b>-0.020</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.830</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>8.84</b>	<b>8.84</b>	<b>0.200</b>	<b>-18.610</b>	<b>0.645</b>	<b>1.580</b>	<b>2.580</b>	<b>1.345</b>	<b>1.055</b>	<b>6.570</b>	<b>2.930</b>	<b>-0.310</b>	<b>4.290</b>	<b>0.790</b>	<b>-2.260</b>	<b>0.760</b>	<b>0.300</b>	<b>6.780</b>	<b>0.195</b>
<b>DRIVE 10 (Sea-16 @ LAR-10, 10-08-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>Vannet</b>	<b>Thorpe</b>	<b>Pocic</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>S Richardson</b>	<b>Thomas</b>	<b>Lacy</b>
(6:17 - 4th) (Shotgun) J.Goff pass short middle intended for T.Higbee INTERCEPTED by E.Thomas at SEA 35. E.Thomas to LA 46 for 19 yards (C.Kupp). [Thomas intercepts at Sea 35 (-3.00) and returns to LAR 46 (2.34).]	-3.00	2.34																5.340	







(6:48 - 1st) Kirk Cousins sacked in the end zone by Bobby Wagner for a Safety <i>[Included with Drive 02 since Safety occurred on first play after punt.]</i>		2.00															
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>3.61</b>	<b>3.61</b>	<b>0.000</b>	<b>-1.160</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.300</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.520</b>	<b>4.190</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>2.07</b>	<b>2.07</b>	<b>-1.600</b>	<b>-4.240</b>	<b>0.000</b>	<b>0.390</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>2.450</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.520</b>	<b>4.190</b>
<b>DRIVE 03 (Was-17 @ Sea-14, 11-02-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	<b>Jones</b>	
o (6:48 - 1st) T.Way kicks 61 yards from WAS 20 to SEA 19. T.Lockett to SEA 31 for 12 yards (F.Moreau; B.Quick).	0.22	0.95					0.730										
o 1st and 10 at SEA 31	0.95																
(6:42 - 1st) E.Lacy right tackle to SEA 34 for 3 yards (Z.Brown; R.Kerrigan).		0.93														-0.020	
o 2nd and 7 at SEA 34	0.93																
(6:06 - 1st) R.Wilson pass short right to E.Lacy to SEA 48 for 14 yards (W.Compton) [P.Smith].		1.97		0.520												0.520	
o 1st and 10 at SEA 48	1.97																
(5:22 - 1st) R.Wilson pass deep left to D.Baldwin to WAS 29 for 23 yards (Q.Dunbar).		3.48		0.755		0.755											
o 1st and 10 at WSH 29	3.48																
(4:42 - 1st) (Shotgun) R.Wilson pass incomplete deep right to T.Lockett (J.Norman).		2.98		-0.500													
o 2nd and 10 at WSH 29	2.98																
(4:37 - 1st) (Shotgun) E.Lacy up the middle to WAS 26 for 3 yards (S.McGee).		3.02														0.040	
o 4th and 7 at WSH 26	1.33																
(3:50 - 1st) B.Walsh 44 yard field goal is No Good, Wide Left, Center-T.Ott, Holder-J.Ryan. <i>[Was starts at own 34, assigned to Walsh.]</i>		-1.13										-2.460					
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-1.35</b>	<b>-1.35</b>	<b>0.000</b>	<b>-0.915</b>	<b>0.000</b>	<b>0.755</b>	<b>0.730</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-2.460</b>	<b>0.000</b>	<b>0.000</b>	<b>0.540</b>	<b>0.000</b>	
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>0.72</b>	<b>0.72</b>	<b>-1.600</b>	<b>-5.155</b>	<b>0.000</b>	<b>1.145</b>	<b>0.730</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>2.450</b>	<b>-2.460</b>	<b>0.000</b>	<b>0.000</b>	<b>0.020</b>	<b>4.190</b>	
<b>DRIVE 04 (Was-17 @ Sea-14, 11-02-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	<b>Jones</b>	
(2:06 - 1st) T.Way punts 53 yards to SEA 24, Center-N.Sundberg. T.Lockett to SEA 45 for 21 yards (C.Carter).	0.53	2.40					1.870										
o 1st and 10 at SEA 45	2.40																
(1:54 - 1st) E.Lacy left tackle to WAS 47 for 8 yards (D.Swearingen).		2.28														-0.120	
o 2nd and 2 at WSH 47	2.28																
(1:54 - 1st) M.Tobin reported in as eligible. PENALTY on SEA, Illegal Substitution, 5 yards, enforced at WAS 47 - No Play.		1.77	-0.510														
o 2nd and 7 at SEA 48	1.77																
(1:13 - 1st) (Shotgun) E.Lacy up the middle to WAS 49 for 3 yards (W.Compton).		1.66														-0.110	
o 3rd and 4 at WSH 49	1.66																
(0:29 - 1st) (Shotgun) R.Wilson pass short middle intended for D.Baldwin INTERCEPTED by K.Fuller at WAS 43. K.Fuller to SEA 33 for 24 yards (D.Brown). The Replay Official reviewed the runner was not down by contact ruling, and the play was REVERSED. (Shotgun) R.Wilson pass short middle intended for D.Baldwin INTERCEPTED by K.Fuller at WAS 43. K.Fuller to WAS 43 for no gain (D.Baldwin).		-1.67		-3.330													
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-2.20</b>	<b>-2.20</b>	<b>-0.510</b>	<b>-3.330</b>	<b>0.000</b>	<b>0.000</b>	<b>1.870</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.230</b>	<b>0.000</b>	
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-1.48</b>	<b>-1.48</b>	<b>-2.110</b>	<b>-8.485</b>	<b>0.000</b>	<b>1.145</b>	<b>2.600</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>2.450</b>	<b>-2.460</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.210</b>	<b>4.190</b>	
<b>DRIVE 05 (Was-17 @ Sea-14, 11-02-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	<b>Jones</b>	



o 1st and 10 at SEA 25	0.59																
(2:52 - 2nd) (Shotgun) R.Wilson scrambles right end ran ob at SEA 31 for 6 yards (S.McGee).		0.95		0.360													
o 2nd and 4 at SEA 31	0.95																
(2:29 - 2nd) (Shotgun) R.Wilson pass deep right to D.Baldwin to WAS 22 for 47 yards (D.Swearinger). PENALTY on SEA-G.Ifedi, Offensive Holding, 10 yards, enforced at SEA 31 - No Play.		-0.56	-1.510														
o 2nd and 14 at SEA 21	-0.56																
(2:03 - 2nd) (Shotgun) R.Wilson pass short left to T.Lockett to SEA 25 for 4 yards (K.Fuller).		-0.41		0.075			0.075										
o 3rd and 10 at SEA 25	-0.41																
(1:54 - 2nd) (Shotgun) PENALTY on SEA-E.Pocic, False Start, 5 yards, enforced at SEA 25 - No Play.		-1.22	-0.810														
o 3rd and 15 at SEA 20	-1.22																
(1:54 - 2nd) (Shotgun) R.Wilson scrambles right tackle to SEA 35 for 15 yards (R.Kerrigan). The Replay Official reviewed the first down ruling, and the play was REVERSED. (Shotgun) R.Wilson scrambles right tackle to SEA 33 for 13 yards (R.Kerrigan). WAS-J.Norman was injured during the play. His return is Probable.		-0.06		1.160													
o 4th and 2 at SEA 33	-0.06																
(1:30 - 2nd) J.Ryan punts 38 yards to WAS 29, Center-T.Ott, out of bounds.		-0.83									-0.770						
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-1.42</b>	<b>-1.42</b>	<b>-2.320</b>	<b>1.595</b>	<b>0.000</b>	<b>0.000</b>	<b>0.075</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.770</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-4.56</b>	<b>-4.56</b>	<b>-4.710</b>	<b>-8.460</b>	<b>1.530</b>	<b>0.445</b>	<b>2.675</b>	<b>0.000</b>	<b>0.180</b>	<b>-0.050</b>	<b>1.680</b>	<b>-3.370</b>	<b>0.000</b>	<b>0.140</b>	<b>-0.210</b>	<b>4.190</b>	
<b>DRIVE 07 (Was-17 @ Sea-14, 11-02-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	<b>Jones</b>	
o 1st and 10 at SEA 33	1.07																
(0:45 - 2nd) (Shotgun) PENALTY on SEA-J.Graham, False Start, 5 yards, enforced at SEA 33 - No Play.		0.27	-0.800														
o 1st and 15 at SEA 28	0.27																
(0:45 - 2nd) (Shotgun) R.Wilson pass incomplete deep middle to D.Baldwin (D.Swearinger).		-0.23		-0.500													
o 2nd and 15 at SEA 28	-0.23																
(0:39 - 2nd) (Shotgun) R.Wilson pass deep left to D.Baldwin ran ob at SEA 48 for 20 yards.		1.97		1.100		1.100											
o 1st and 10 at SEA 48	1.97																
(0:33 - 2nd) (No Huddle, Shotgun) R.Wilson pass incomplete short right [Z.Brown].		1.47		-0.500													
o 2nd and 10 at SEA 48	1.47																
(0:28 - 2nd) (Shotgun) R.Wilson scrambles up the middle to WAS 41 for 11 yards (D.Hall).		2.64		1.170													
o 1st and 10 at WSH 41	2.64																
(0:21 - 2nd) (Shotgun) R.Wilson pass incomplete deep left [R.Anderson].		2.14		-0.500													
o 2nd and 10 at WSH 41	2.14																
(0:16 - 2nd) (Shotgun) R.Wilson pass short middle to T.McEvoy to WAS 31 for 10 yards (Z.Brown).		3.32		0.590									0.590				
o 1st and 10 at WSH 31	3.32																
(0:16 - 2nd) R.Wilson spiked the ball to stop the clock.		2.82		-0.500													
o 2nd and 10 at WSH 31	2.82																
(0:02 - 2nd) B.Walsh 49 yard field goal is No Good, Wide Left, Center-T.Ott, Holder-J.Ryan. <i>[Since half ended after play, no assumption that Was would take over on offense.]</i>		0.00										-2.820					

<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-0.28</b>	<b>-0.28</b>	<b>-0.800</b>	<b>0.860</b>	<b>0.000</b>	<b>1.100</b>	<b>0.790</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-2.820</b>	<b>0.590</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-4.84</b>	<b>-4.84</b>	<b>-5.510</b>	<b>-7.600</b>	<b>1.530</b>	<b>1.545</b>	<b>3.465</b>	<b>0.000</b>	<b>0.180</b>	<b>-0.050</b>	<b>1.680</b>	<b>-6.190</b>	<b>0.590</b>	<b>0.140</b>	<b>-0.210</b>	<b>4.190</b>
<b>Number pf Plays, with Penalties and XPs (First Half)</b>	<b>53.00</b>	<b>53.00</b>	<b>9</b>	<b>24</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>1</b>
<b>DRIVE 08 (Was-17 @ Sea-14, 11-02-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	<b>Jones</b>
o (15:00 - 3rd) N.Rose kicks 65 yards from WAS 35 to end zone, Touchback.		0.59														
o <b>1st and 10 at SEA 25</b>	0.59															
(15:00 - 3rd) T.Rawls up the middle to SEA 30 for 5 yards (T.McClain).		0.89			0.300											
o <b>2nd and 5 at SEA 30</b>	0.89															
(14:25 - 3rd) T.Rawls left tackle to SEA 32 for 2 yards (W.Compton).		0.51			-0.380											
o <b>3rd and 3 at SEA 32</b>	0.51															
(13:44 - 3rd) (Shotgun) R.Wilson pass incomplete deep left to L.Willson (D.Hall) [P.Smith].		-0.74		-1.250												
o <b>4th and 3 at SEA 32</b>	-0.74															
(13:36 - 3rd) J.Ryan punts 42 yards to WAS 26, Center-T.Ott. D.Hall pushed ob at WAS 33 for 7 yards (J.Coleman).		-1.07									-0.330					
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-1.66</b>	<b>-1.66</b>	<b>0.000</b>	<b>-1.250</b>	<b>-0.080</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.330</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-6.50</b>	<b>-6.50</b>	<b>-5.510</b>	<b>-8.850</b>	<b>1.450</b>	<b>1.545</b>	<b>3.465</b>	<b>0.000</b>	<b>0.180</b>	<b>-0.050</b>	<b>1.350</b>	<b>-6.190</b>	<b>0.590</b>	<b>0.140</b>	<b>-0.210</b>	<b>4.190</b>
<b>DRIVE 09 (Was-17 @ Sea-14, 11-02-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	<b>Jones</b>
o (10:19 - 3rd) N.Rose kicks 68 yards from WAS 35 to SEA -3, T.Lockett to SEA 18 for 21 yards (M.Spaight).	0.59	0.16					-0.430									
o <b>1st and 10 at SEA 18</b>	0.16															
(10:14 - 3rd) (Shotgun) R.Wilson sacked at SEA 18 for 0 yards (Z.Brown).		-0.34		-0.500												
o <b>2nd and 10 at SEA 18</b>	-0.34															
(9:58 - 3rd) (Shotgun) R.Wilson right tackle to SEA 21 for 3 yards (J.Norman).		-0.36		-0.020												
o <b>3rd and 7 at SEA 21</b>	-0.36															
(9:18 - 3rd) (Shotgun) R.Wilson pass short middle to J.Graham to SEA 32 for 11 yards (D.Hall).		1.01		0.685					0.685							
o <b>1st and 10 at SEA 32</b>	1.01															
(8:41 - 3rd) R.Wilson pass short right to T.Rawls to SEA 41 for 9 yards (T.McClain).		1.55		0.270	0.270											
o <b>2nd and 1 at SEA 41</b>	1.55															
(7:58 - 3rd) T.Rawls right tackle to SEA 41 for no gain (W.Compton; R.Anderson).		1.05			-0.500											
o <b>3rd and 1 at SEA 41</b>	1.05															
(7:21 - 3rd) (Shotgun) M.Tobin reported in as eligible. T.Rawls up the middle to SEA 46 for 5 yards (Z.Brown).		1.85			0.800											
o <b>1st and 10 at SEA 46</b>	1.85															
(6:38 - 3rd) (Shotgun) R.Wilson scrambles right end to SEA 49 for 3 yards (W.Compton).		1.83		-0.020												
o <b>2nd and 7 at SEA 49</b>	1.83															
(5:56 - 3rd) R.Wilson pass short left intended for D.Baldwin INTERCEPTED by W.Compton at WAS 44. W.Compton to WAS 46 for 2 yards (T.Rawls).		-1.85		-3.680												
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-2.44</b>	<b>-2.44</b>	<b>0.000</b>	<b>-3.265</b>	<b>0.570</b>	<b>0.000</b>	<b>-0.430</b>	<b>0.000</b>	<b>0.685</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-8.94</b>	<b>-8.94</b>	<b>-5.510</b>	<b>-12.115</b>	<b>2.020</b>	<b>1.545</b>	<b>3.035</b>	<b>0.000</b>	<b>0.865</b>	<b>-0.050</b>	<b>1.350</b>	<b>-6.190</b>	<b>0.590</b>	<b>0.140</b>	<b>-0.210</b>	<b>4.190</b>
<b>DRIVE 10 (Was-17 @ Sea-14, 11-02-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	<b>Jones</b>



o 2nd and 4 at SEA 40	1.49																
(14:06 - 4th) (Shotgun) R.Wilson pass short left to T.Rawls ran ob at WAS 38 for 22 yards (W.Compton).		2.82		0.665	0.665												
o 1st and 10 at WSH 38	2.82																
(13:40 - 4th) (Shotgun) T.Rawls left tackle to WAS 31 for 7 yards (T.McClain). WAS-A.Jones was injured during the play. His return is Questionable.		3.32			0.500												
o 2nd and 3 at WSH 31	3.32																
(13:10 - 4th) (Shotgun) R.Wilson pass short middle to J.Graham to WAS 16 for 15 yards (D.Swearinger).		4.52		0.600				0.600									
o 1st and 10 at WSH 16	4.52																
(12:35 - 4th) M.Tobin reported in as eligible. J.McKissic right tackle to WAS 10 for 6 yards (Z.Brown).		5.00											0.480				
o 2nd and 4 at WSH 10	5.00																
(11:48 - 4th) Luke Willson Pass From Russell Wilson for 10 Yrds <i>[TD assumed to be worth 7.00, with 6/7 accrued to scorer(s) and 1/7 to XP.]</i>		7.00		0.857				0.857									
TWO-POINT ATTEMPT. R.Wilson pass to J.McKissic is incomplete. ATTEMPT FAILS. D.Swearinger intercepted the try attempt. ATTEMPT FAILS. <i>[XP credit deducted at Finish.]</i>	7.00	6.71		0.000													
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>4.98</b>	<b>4.98</b>	<b>-0.600</b>	<b>2.482</b>	<b>1.165</b>	<b>0.000</b>	<b>0.000</b>	<b>0.857</b>	<b>0.600</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.480</b>	<b>0.000</b>	<b>0.000</b>	
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-4.35</b>	<b>-4.35</b>	<b>-10.080</b>	<b>-9.633</b>	<b>3.185</b>	<b>2.160</b>	<b>3.035</b>	<b>0.857</b>	<b>1.645</b>	<b>0.505</b>	<b>3.580</b>	<b>-6.190</b>	<b>0.590</b>	<b>0.620</b>	<b>-0.210</b>	<b>4.190</b>	
<b>DRIVE 12 (Was-17 @ Sea-14, 11-02-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	<b>Jones</b>	
(10:14 - 4th) T.Way punts 52 yards to SEA 44, Center-N.Sundberg. T.Lockett to SEA 47 for 3 yards (M.Spaight; J.Harvey-Clemons). WAS-J.Harvey-Clemons was injured during the play. His return is Questionable. PENALTY on SEA-T.Thompson, Illegal Blindside Block, 15 yards, enforced at SEA 47. <i>[Lockett credited with advance to Sea 47 (1.91). Penalty takes back to Sea 32 (1.01).]</i>	1.73	1.01	-0.900				0.180										
o 1st and 10 at SEA 32	1.01																
(10:03 - 4th) R.Wilson pass short right to D.Baldwin to SEA 39 for 7 yards (J.Norman).		1.43		0.420													
o 2nd and 3 at SEA 39	1.43																
(9:20 - 4th) (Shotgun) J.McKissic left end to SEA 41 for 2 yards (E.Hood).		1.05												-0.380			
o 3rd and 1 at SEA 41	1.05																
(8:34 - 4th) T.Rawls right end to SEA 41 for no gain (J.Norman).		-0.18			-1.230												
o 4th and 1 at SEA 41	-0.18																
(7:55 - 4th) J.Ryan punts 59 yards to end zone, Center-T.Ott, Touchback. <i>[Was starts at own 20 (-0.28).]</i>		-0.28									-0.100						
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-2.01</b>	<b>-2.01</b>	<b>-0.900</b>	<b>0.420</b>	<b>-1.230</b>	<b>0.000</b>	<b>0.180</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.100</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.380</b>	<b>0.000</b>	<b>0.000</b>	
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-6.36</b>	<b>-6.36</b>	<b>-10.980</b>	<b>-9.213</b>	<b>1.955</b>	<b>2.160</b>	<b>3.215</b>	<b>0.857</b>	<b>1.645</b>	<b>0.505</b>	<b>3.480</b>	<b>-6.190</b>	<b>0.590</b>	<b>0.240</b>	<b>-0.210</b>	<b>4.190</b>	
<b>DRIVE 13 (Was-17 @ Sea-14, 11-02-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	<b>Jones</b>	
(2:31 - 4th) T.Way punts 29 yards to SEA 21, Center-N.Sundberg. T.Lockett to SEA 29 for 8 yards (D.Everett).	0.34	0.83					0.490										
o 1st and 10 at SEA 29	0.83																
(2:22 - 4th) (Shotgun) R.Wilson pass short left to J.McKissic to SEA 38 for 9 yards (B.Breeland; D.Swearinger).		1.37		0.270										0.270			

o 2nd and 1 at SEA 38	1.37																
(2:00 - 4th) (Shotgun) R.Wilson pass short right to J.Graham pushed ob at WAS 41 for 21 yards (J.Norman).	2.64		0.635						0.635								
o 1st and 10 at WSH 41	2.64																
(1:52 - 4th) (Shotgun) R.Wilson pass incomplete short right.	2.14		-0.500														
o 2nd and 10 at WSH 41	2.14																
(1:46 - 4th) (Shotgun) R.Wilson scrambles right end ran ob at WAS 30 for 11 yards (K.Fuller).	3.40		1.260														
o 1st and 10 at WSH 30	3.40																
(1:34 - 4th) Doug Baldwin Pass From Russell Wilson for 30 Yrds <i>[TD assumed to be worth 7.00, with 6/7 accrued to scorer(s) and 1/7 to XP.]</i>	7.00		1.543			1.543											
TWO-POINT CONVERSION ATTEMPT. R.Wilson pass to J.Graham is incomplete. ATTEMPT FAILS. <i>[XP credit deducted at Finish.]</i>	7.00	6.49	0.000														
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>6.15</b>	<b>6.15</b>	<b>0.000</b>	<b>3.208</b>	<b>0.000</b>	<b>1.543</b>	<b>0.490</b>	<b>0.000</b>	<b>0.635</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.270</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-0.21</b>	<b>-0.21</b>	<b>-10.980</b>	<b>-6.005</b>	<b>1.955</b>	<b>3.703</b>	<b>3.705</b>	<b>0.857</b>	<b>2.280</b>	<b>0.505</b>	<b>3.480</b>	<b>-6.190</b>	<b>0.590</b>	<b>0.510</b>	<b>-0.210</b>	<b>4.190</b>	<b>0.000</b>
<b>DRIVE 14 (Was-17 @ Sea-14, 11-02-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Rawls</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	<b>Jones</b>	
o (0:59 - 4th) N.Rose kicks 65 yards from WAS 35 to end zone, Touchback.	0.59																
o 1st and 10 at SEA 25	0.59																
(0:59 - 4th) (Shotgun) R.Wilson pass short right to J.McKissic ran ob at SEA 30 for 5 yards.	0.89		0.150											0.150			
o 2nd and 5 at SEA 30	0.89																
(0:53 - 4th) (Shotgun) R.Wilson pass short left to T.Lockett pushed ob at SEA 36 for 6 yards (B.Breeland).	1.25		0.180				0.180										
o 1st and 10 at SEA 36	1.25																
(0:45 - 4th) (No Huddle, Shotgun) R.Wilson pass incomplete deep left to T.Lockett (Q.Dunbar).	0.75		-0.500														
o 2nd and 10 at SEA 36	0.75																
(0:40 - 4th) (Shotgun) R.Wilson pass incomplete deep middle to J.Graham.	0.25		-0.500														
o 3rd and 10 at SEA 36	0.25																
(0:35 - 4th) (Shotgun) R.Wilson pass short middle to P.Richardson to WAS 38 for 26 yards (Z.Brown).	2.82		1.285							1.285							
o 1st and 10 at WSH 38	2.82																
(0:15 - 4th) (No Huddle, Shotgun) R.Wilson sacked at WAS 46 for -8 yards (T.McClain). The Replay Official reviewed the runner was down by contact ruling, and the play was Upheld. The ruling on the field was confirmed.	1.04		-1.780														
o 2nd and 18 at WSH 46	1.04																
(0:04 - 4th) (Shotgun) R.Wilson pass incomplete deep left to T.McEvoy (D.Hall). <i>[Since game ended after play, Finish = 0.00.]</i>	0.00		-1.040														
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-0.59</b>	<b>-0.59</b>	<b>0.000</b>	<b>-2.205</b>	<b>0.000</b>	<b>0.000</b>	<b>0.180</b>	<b>0.000</b>	<b>0.000</b>	<b>1.285</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.150</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-0.80</b>	<b>-0.80</b>	<b>-10.980</b>	<b>-8.210</b>	<b>1.955</b>	<b>3.703</b>	<b>3.885</b>	<b>0.857</b>	<b>2.280</b>	<b>1.790</b>	<b>3.480</b>	<b>-6.190</b>	<b>0.590</b>	<b>0.660</b>	<b>-0.210</b>	<b>4.190</b>	<b>0.000</b>
<b>Number pf Plays, with Penalties and XPs (Second Half)</b>	<b>53</b>	<b>53</b>	<b>5</b>	<b>35</b>	<b>8</b>	<b>2</b>	<b>6</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	
<b>Number pf Plays, with Penalties and XPs (Game)</b>	<b>106</b>	<b>106</b>	<b>14</b>	<b>59</b>	<b>11</b>	<b>6</b>	<b>10</b>	<b>1</b>	<b>5</b>	<b>3</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>5</b>	<b>7</b>	<b>1</b>	
<b>SUV per Play (Game Averages)</b>	<b>-0.008</b>	<b>-0.008</b>	<b>-0.784</b>	<b>-0.139</b>	<b>0.178</b>	<b>0.617</b>	<b>0.389</b>	<b>0.857</b>	<b>0.456</b>	<b>0.597</b>	<b>0.580</b>	<b>-2.063</b>	<b>0.590</b>	<b>0.132</b>	<b>-0.030</b>	<b>4.190</b>	





o 1st and 10 at SEA 27	0.71															
(4:34 - 1st) (Shotgun) R.Wilson FUMBLES (Aborted) at SEA 21, and recovers at SEA 21. R.Wilson pass short right to N.Vannett to SEA 39 for 12 yards (E.Reid) [R.Foster]. Caught at SEA 39. 0-YAC		1.43		0.360							0.360					
o 1st and 10 at SEA 39	1.43															
(3:40 - 1st) E.Lacy up the middle to 50 for 11 yards (R.Blair, A.Exum).		2.09														0.660
o 1st and 10 at 50	2.09															
(3:13 - 1st) E.Lacy right guard to SF 46 for 4 yards (B.Coyle; R.Blair).		2.24														0.150
o 2nd and 6 at SF 46	2.24															
(2:35 - 1st) (Shotgun) R.Wilson pass incomplete deep right to P.Richardson (A.Witherspoon). PENALTY on SF-E.Reid, Unnecessary Roughness, 15 yards, enforced at SF 46 - No Play.		3.32	1.080													
o 1st and 10 at SF 31	3.32															
(2:31 - 1st) M.Tobin reported in as eligible. R.Wilson pass short left to P.Richardson to SF 23 for 8 yards (D.Johnson). Caught at SF 23, 2-YAC PENALTY on SEA-E.Pocic, False Start, 5 yards, enforced at SF 31 - No Play.		2.44	-0.880													
o 1st and 15 at SF 36	2.44															
(2:25 - 1st) (Shotgun) R.Wilson pass incomplete short left to J.McKissic [D.Buckner].		1.94		-0.500												
o 2nd and 15 at SF 36	1.94															
(2:22 - 1st) (Shotgun) R.Wilson pass incomplete short right to N.Vannett.		1.44		-0.500												
o 3rd and 15 at SF 36	1.44															
(2:15 - 1st) (No Huddle, Shotgun) R.Wilson pass incomplete deep right to T.Lockett (A.Witherspoon).		-0.30		-1.740												
o 4th and 15 at SF 36	-0.30															
(2:08 - 1st) J.Ryan punts 36 yards to end zone, Center-T.Ott, Touchback. [SFr takes over on own 20.]		-0.28								0.020						
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-0.32</b>	<b>-0.32</b>	<b>0.200</b>	<b>-1.510</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.180</b>	<b>0.000</b>	<b>0.000</b>	<b>0.020</b>	<b>0.000</b>	<b>0.360</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.790</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-4.53</b>	<b>-4.53</b>	<b>0.200</b>	<b>-4.345</b>	<b>-1.390</b>	<b>0.000</b>	<b>0.310</b>	<b>0.000</b>	<b>1.815</b>	<b>0.020</b>	<b>-2.630</b>	<b>0.360</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>1.130</b>
<b>DRIVE 04 (Sea-24 @ SFR-13, 11-23-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Wagner</b>	<b>Lockett</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>Vannet</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	
(0:02 - 1st) B.Pinion punts 49 yards to SEA 41, Center-K.Nelson. T.Lockett to SEA 40 for -1 yards (R.Mostert).	1.55	1.49					-0.060									
o 1st and 10 at SEA 40	1.49															
(0:00 - 1st) E.Lacy right tackle to SEA 42 for 2 yards (B.Coyle).		1.31														-0.180
o 2nd and 8 at SEA 42	1.31															
(14:52 - 2nd) J.McKissic right tackle to SEA 47 for 5 yards (S.Day).		1.41													0.100	
o 3rd and 3 at SEA 47	1.41															
(14:17 - 2nd) (Shotgun) E.Lacy up the middle to SEA 46 for -1 yards (E.Dumervil; B.Coyle). Penalty on SEA, Illegal Shift, declined.		0.12														-1.290
o 4th and 4 at SEA 46	0.12															
(14:10 - 2nd) J.Ryan punts 54 yards to end zone, Center-T.Ott, Touchback. [SFr takes over on own 20.]		-0.28								-0.400						
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-1.83</b>	<b>-1.83</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.060</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.400</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.100</b>	<b>0.100</b>	<b>-1.470</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-6.36</b>	<b>-6.36</b>	<b>0.200</b>	<b>-4.345</b>	<b>-1.390</b>	<b>0.000</b>	<b>0.250</b>	<b>0.000</b>	<b>1.815</b>	<b>-0.380</b>	<b>-2.630</b>	<b>0.360</b>	<b>0.000</b>	<b>0.100</b>	<b>0.100</b>	<b>-0.340</b>
<b>DRIVE 05 (Sea-24 @ SFR-13, 11-23-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Wagner</b>	<b>Lockett</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>Vannet</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	





o 2nd and 4 at SF 17	4.44															
(6:33 - 3rd) Nick Vannett Pass From Russell Wilson for 17 Yrds <i>[TD assumed to be worth 7.00, with 6/7 accrued to scorer(s) and 1/7 to XP.]</i>		7.00		1.097								1.097				
B. Walsh extra point is GOOD, Center-T.Ott, Holder-J.Ryan.	7.00	7.00									0.366					
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>7.90</b>	<b>7.90</b>	<b>0.000</b>	<b>2.582</b>	<b>1.145</b>	<b>0.000</b>	<b>1.730</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.366</b>	<b>1.097</b>	<b>0.840</b>	<b>0.000</b>	<b>0.140</b>	
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>6.10</b>	<b>6.10</b>	<b>-0.800</b>	<b>-7.707</b>	<b>-0.245</b>	<b>4.560</b>	<b>1.980</b>	<b>0.000</b>	<b>2.400</b>	<b>4.440</b>	<b>-2.150</b>	<b>1.457</b>	<b>0.840</b>	<b>2.115</b>	<b>-0.790</b>	
<b>DRIVE 11 (Sea-24 @ SFr-13, 11-23-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Wagner</b>	<b>Lockett</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>Vannet</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	
(5:34 - 3rd) B.Pinion punts 35 yards to SEA 37, Center-K.Nelson, fair catch by T.Lockett.	1.31	1.31					0.000									
o 1st and 10 at SEA 37	1.31															
(5:30 - 3rd) (Shotgun) R.Wilson pass incomplete short left to N.Vannett (D.Johnson).		0.81		-0.500												
o 2nd and 10 at SEA 37	0.81															
(5:25 - 3rd) (Shotgun) R.Wilson pass short left to E.Lacy pushed ob at SEA 40 for 3 yards (E.Reid). Caught at SEA 35. 5-YAC		0.79		-0.010												-0.010
o 3rd and 7 at SEA 40	0.79															
(4:35 - 3rd) (Shotgun) R.Wilson pass short right to J.Graham to SEA 48 for 8 yards (D.Johnson) [E.Dumervil]. Caught at SEA 48. 0-YAC		1.97		0.590				0.590								
o 1st and 10 at SEA 48	1.97															
(4:10 - 3rd) M.Tobin reported in as eligible. J.McKissic left end pushed ob at SF 45 for 7 yards (C.Marsh).		2.40													0.430	
o 2nd and 3 at SF 45	2.40															
(3:10 - 3rd) (Shotgun) R.Wilson pass short right to J.McKissic to SF 33 for 12 yards (E.Reid). Caught at SEA 47. 20-YAC		3.16		0.380											0.380	
o 1st and 10 at SF 33	3.16															
(2:47 - 3rd) (Shotgun) R.Wilson pass incomplete short right to J.McKissic [R.Foster].		2.66		-0.500												
o 2nd and 10 at SF 33	2.66															
(2:35 - 3rd) R.Wilson right end to SF 22 for 11 yards (C.Carradine). SF-A. Witherspoon was injured during the play.		4.04		1.380												
o 1st and 10 at SF 22	4.04															
(2:05 - 3rd) M.Tobin reported in as eligible. E.Lacy up the middle to SF 16 for 6 yards (S.Thomas).		4.52														0.480
o 2nd and 4 at SF 16	4.52															
(1:13 - 3rd) J.McKissic left tackle to SF 20 for -4 yards (R.Blair).		3.40														-1.120
o 3rd and 8 at SF 20	3.40															
(0:32 - 3rd) (Shotgun) R.Wilson pass incomplete deep right to D.Baldwin. PENALTY on SF-D.Johnson, Defensive Pass Interference, 19 yards, enforced at SF 20 - No Play.		6.50	3.100													
o 1st and Goal at SF 1	6.50															
(0:22 - 3rd) E.Lacy up the middle to SF 1 for no gain (S.Thomas).		6.50														0.000
o 2nd and Goal at SF 1	6.50															
(14:57 - 4th) Jimmy Graham Pass From Russell Wilson for 1 Yard <i>[TD assumed to be worth 7.00, with 6/7 accrued to scorer(s) and 1/7 to XP.]</i>		7.00		0.214				0.214								
B. Walsh extra point is GOOD, Center-T.Ott, Holder-J.Ryan.	7.00	7.00									0.071					
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>5.69</b>	<b>5.69</b>	<b>3.100</b>	<b>1.554</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.804</b>	<b>0.000</b>	<b>0.000</b>	<b>0.071</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.310</b>	<b>0.470</b>	
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>11.79</b>	<b>11.79</b>	<b>2.300</b>	<b>-6.153</b>	<b>-0.245</b>	<b>4.560</b>	<b>1.980</b>	<b>0.804</b>	<b>2.400</b>	<b>4.440</b>	<b>-2.079</b>	<b>1.457</b>	<b>0.840</b>	<b>1.805</b>	<b>-0.320</b>	
<b>DRIVE 12 (Sea-24 @ SFr-13, 11-23-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Wagner</b>	<b>Lockett</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>Vannet</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	

(11:47 - 4th) B.Pinion punts 42 yards to SEA 10, Center-K.Nelson, fair catch by T.Lockett.	-0.32	-0.32						0.000								
o 1st and 10 at SEA 10	-0.32															
(11:41 - 4th) E.Lacy up the middle to SEA 15 for 5 yards (R.Foster).		-0.02														0.300
o 2nd and 5 at SEA 15	-0.02															
(11:06 - 4th) (Shotgun) E.Lacy up the middle to SEA 15 for no gain (B.Coyle).		-0.52														-0.500
o 3rd and 5 at SEA 15	-0.52															
(10:31 - 4th) (Shotgun) R.Wilson pass short right to T.McEvoy to SEA 22 for 7 yards (E.Reid). Caught at SEA 22. 0-YAC		0.41		0.465								0.465				
o 1st and 10 at SEA 22	0.41															
(9:30 - 4th) R.Wilson pass deep left to P.Richardson ran ob at SEA 43 for 21 yards. Caught at SEA 43. 0-YAC		1.67		0.630					0.630							
o 1st and 10 at SEA 43	1.67															
(9:03 - 4th) R.Wilson scrambles right end ran ob at SEA 46 for 3 yards (C.Carradine).		1.65		-0.020												
o 2nd and 7 at SEA 46	1.65															
(8:28 - 4th) E.Lacy right guard to SEA 49 for 3 yards (R.Blair).		1.53														-0.120
o 3rd and 4 at SEA 49	1.53															
(7:37 - 4th) (Shotgun) R.Wilson pass short left to J.McKissic to 50 for 1 yard (D.Johnson). Caught at SEA 49. 1-YAC		0.36		-0.585												-0.585
<b>DRIVE 13 (Sea-24 @ SFr-13, 11-23-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Wagner</b>	<b>Lockett</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>Vannet</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Lacy</b>	
(5:01 - 4th) B.Pinion punts 38 yards to SF 45, Center-K.Nelson, downed by SF-A.Robinson.		2.40														
o 1st and 10 at SF 45	2.40															
(5:00 - 4th) E.Lacy up the middle to SF 44 for 1 yard (R.Blair).		2.06														-0.340
o 2nd and 9 at SF 44	2.06															
(4:22 - 4th) (Shotgun) R.Wilson pass deep left to J.Graham to SF 19 for 25 yards (A.Exum). Caught at SF 27. 8-YAC		4.28		1.110				1.110								
o 1st and 10 at SF 19	4.28															
(3:46 - 4th) M.Tobin reported in as eligible. E.Lacy left tackle to SF 20 for -1 yards (E.Harold).		3.60														-0.680
o 2nd and 11 at SF 20	3.60															
(3:40 - 4th) (Shotgun) R.Wilson pass short middle to E.Lacy to SF 14 for 6 yards (K.Williams). Caught at SF 20. 6-YAC		4.18		0.290												0.290
o 3rd and 5 at SF 14	4.18															
(3:30 - 4th) (Shotgun) R.Wilson scrambles left end to SF 11 for 3 yards (E.Reid).		2.86		-1.320												
o 4th and 2 at SF 11	2.86															
(3:29 - 4th) B.Walsh 29 yard field goal is GOOD, NULLIFIED by Penalty, Center-T.Ott, Holder-J.Ryan. PENALTY on SEA-L.Joeckel, False Start, 5 yards, enforced at SF 11 - No Play.		1.65	-1.210													
o 4th and 7 at SF 16	1.65															
(3:27 - 4th) B.Walsh 34 yard field goal is GOOD, Center-T.Ott, Holder-J.Ryan.		3.00									1.350					
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>0.60</b>	<b>0.60</b>	<b>-1.210</b>	<b>0.080</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>1.110</b>	<b>0.000</b>	<b>0.000</b>	<b>1.350</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.730</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>13.03</b>	<b>13.03</b>	<b>1.090</b>	<b>-5.583</b>	<b>-0.245</b>	<b>4.560</b>	<b>1.980</b>	<b>1.914</b>	<b>3.030</b>	<b>4.400</b>	<b>-0.729</b>	<b>1.457</b>	<b>1.305</b>	<b>1.220</b>	<b>-1.370</b>	







o 2nd and 10 at SEA 13	-0.64																
(10:59 - 2nd) (Shotgun) PENALTY on SEA-G.Ifedi, False Start, 5 yards, enforced at SEA 13 - No Play.		-1.44	-0.800														
o 2nd and 15 at SEA 8	-1.44																
(10:44 - 2nd) (Shotgun) R.Wilson pass incomplete deep middle to D.Baldwin.		-1.94		-0.500													
o 3rd and 15 at SEA 8	-1.94																
(10:39 - 2nd) (Shotgun) R.Wilson pass incomplete deep middle to P.Richardson (T.Hill) [A.Donald].		-4.65		-2.710													
o 4th and 15 at SEA 8	-4.65																
(10:31 - 2nd) J.Ryan punts 54 yards to LA 38, Center-T.Ott. P.Cooper pushed ob at SEA 36 for 26 yards (N.Vannett).		-2.94									1.710						
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>1.82</b>	<b>-2.30</b>	<b>-0.800</b>	<b>-3.210</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>1.710</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>4.620</b>	<b>-0.500</b>	
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-6.73</b>	<b>-10.60</b>	<b>-2.400</b>	<b>-10.460</b>	<b>0.000</b>	<b>2.245</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.330</b>	<b>0.000</b>	<b>1.970</b>	<b>0.000</b>	<b>-2.245</b>	<b>0.620</b>	<b>4.620</b>	<b>-0.750</b>	
<b>DRIVE 06 (LAR-42 @ Sea-7, 12-14-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Darboh</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Wilhoite</b>	<b>Davis</b>	
o (8:13 - 2nd) G.Zuerlein kicks 61 yards from LA 35 to SEA 4, out of bounds.		1.49															
o 1st and 10 at SEA 40	1.49																
(8:13 - 2nd) R.Wilson pass short left to M.Davis to LA 49 for 11 yards (T.Johnson; A.Ogletree).		2.16		0.335													0.335
o 1st and 10 at LAR 49	2.16																
(7:35 - 2nd) R.Wilson sacked at SEA 38 for -13 yards (R.Quinn). FUMBLES (R.Quinn), RECOVERED by LA-M.Fox at SEA 39. M.Fox to SEA 39 for no gain (L.Joeckel).		-1.43		-3.590													
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-2.92</b>	<b>-2.92</b>	<b>0.000</b>	<b>-3.255</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.335</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-9.65</b>	<b>-9.65</b>	<b>-2.400</b>	<b>-13.715</b>	<b>0.000</b>	<b>2.245</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.330</b>	<b>0.000</b>	<b>1.970</b>	<b>0.000</b>	<b>-2.245</b>	<b>0.620</b>	<b>4.620</b>	<b>-0.415</b>	
<b>DRIVE 07 (LAR-42 @ Sea-7, 12-14-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Darboh</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Wilhoite</b>	<b>Davis</b>	
o (3:26 - 2nd) G.Zuerlein kicks 67 yards from LA 35 to SEA -2. T.Lockett to SEA 20 for 22 yards (S.Ebukam; M.Christian).	0.59	0.28				-0.310											
o 1st and 10 at SEA 20	0.28																
(3:21 - 2nd) (Shotgun) R.Wilson pass incomplete short right to T.Lockett (T.Johnson).		-0.22		-0.500													
o 2nd and 10 at SEA 20	-0.22																
(3:18 - 2nd) (Shotgun) R.Wilson pass deep left to J.McKissic to SEA 46 for 26 yards (L.Joyner).		0.89		0.555										0.555			
o 1st and 10 at SEA 30	0.89																
(2:56 - 2nd) (No Huddle, Shotgun) R.Wilson sacked at SEA 30 for -16 yards (A.Donald). FUMBLES (A.Donald) [A.Donald], ball out of bounds at SEA 23.		-1.03		-1.920													
o 2nd and 33 at SEA 23	-1.03																
(2:29 - 2nd) (Shotgun) R.Wilson pass short right to A.Darboh to SEA 31 for 8 yards (N.Robey).		-1.05		-0.010				-0.010									
o 3rd and 25 at SEA 31	-1.05																
(1:42 - 2nd) (Shotgun) R.Wilson scrambles left end to SEA 32 for 1 yard. R.Wilson pass deep right to T.McEvoy pushed ob at LA 44 for 24 yards (T.Johnson). PENALTY on SEA-R.Wilson, Illegal Forward Pass, 5 yards, enforced at SEA 32. Penalty on SEA-T.McEvoy, Illegal Touch Pass, declined.		-3.41	-2.360														
o 4th and 29 at SEA 27	-3.41																
(1:33 - 2nd) J.Ryan punts 46 yards to LA 27, Center-T.Ott. P.Cooper to SEA 47 for 26 yards (L.Willson).		-2.28									1.130						
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-2.87</b>	<b>-2.87</b>	<b>-2.360</b>	<b>-1.875</b>	<b>0.000</b>	<b>-0.310</b>	<b>0.000</b>	<b>-0.010</b>	<b>0.000</b>	<b>0.000</b>	<b>1.130</b>	<b>0.000</b>	<b>0.000</b>	<b>0.555</b>	<b>0.000</b>	<b>0.000</b>	
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-12.52</b>	<b>-12.52</b>	<b>-4.760</b>	<b>-15.590</b>	<b>0.000</b>	<b>1.935</b>	<b>0.000</b>	<b>-0.010</b>	<b>-0.330</b>	<b>0.000</b>	<b>3.100</b>	<b>0.000</b>	<b>-2.245</b>	<b>1.175</b>	<b>4.620</b>	<b>-0.415</b>	

<b>DRIVE 08 (LAR-42 @ Sea-7, 12-14-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Darboh</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Wilhoite</b>	<b>Davis</b>
o (0:28 - 2nd) G.Zuerlein kicks 66 yards from LA 35 to SEA -1. T.Lockett to SEA 17 for 18 yards (M.Christian).	0.59	0.10				-0.490										
o 1st and 10 at SEA 17	0.10															
(0:24 - 2nd) (Shotgun) R.Wilson pass short middle to M.Davis to SEA 26 for 9 yards (L.Joyner; A.Ogletree).		0.65		0.275												0.275
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>0.06</b>	<b>0.06</b>	<b>0.000</b>	<b>0.275</b>	<b>0.000</b>	<b>-0.490</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.275</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-12.46</b>	<b>-12.46</b>	<b>-4.760</b>	<b>-15.315</b>	<b>0.000</b>	<b>1.445</b>	<b>0.000</b>	<b>-0.010</b>	<b>-0.330</b>	<b>0.000</b>	<b>3.100</b>	<b>0.000</b>	<b>-2.245</b>	<b>1.175</b>	<b>4.620</b>	<b>-0.140</b>
<b>Number pf Plays, with Penalties and XPs (First Half)</b>	<b>40</b>	<b>40</b>	<b>3</b>	<b>20</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>8</b>
<b>DRIVE 09 (LAR-42 @ Sea-7, 12-14-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Darboh</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Wilhoite</b>	<b>Davis</b>
(13:25 - 3rd) J.Hekker punts 45 yards to SEA 21, Center-J.McQuaide, fair catch by T.Lockett.	0.34	0.34				0.000										
o 1st and 10 at SEA 21	0.34															
(13:18 - 3rd) (Shotgun) R.Wilson scrambles right tackle to SEA 31 for 10 yards (C.Barwin).		0.95		0.610												
o 1st and 10 at SEA 31	0.95															
(12:49 - 3rd) (Shotgun) R.Wilson sacked at SEA 25 for -6 yards (A.Donald).		-0.51		-1.460												
o 2nd and 16 at SEA 25	-0.51															
(12:22 - 3rd) (Shotgun) R.Wilson sacked at SEA 15 for -10 yards (R.Quinn).		-2.02		-1.510												
o 3rd and 26 at SEA 15	-2.02															
(11:40 - 3rd) (Shotgun) R.Wilson pass short middle to P.Richardson to SEA 26 for 11 yards (N.Robey).		-3.23		-0.605						-0.605						
o 4th and 15 at SEA 26	-3.23															
(11:05 - 3rd) J.Ryan punts 41 yards to LA 33, Center-T.Ott. P.Cooper to LA 39 for 6 yards (P.Dawson). PENALTY on SEA-D.Hill, Disqualification, 15 yards, enforced at LA 39. [Ryan punts to LAR 33, returned to LAR 39 (-1.43), but penalty moves LAR to Sea 46 (-2.34)].		-2.34	-0.910								1.800					
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-2.68</b>	<b>-2.68</b>	<b>-0.910</b>	<b>-2.965</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.605</b>	<b>1.800</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-15.14</b>	<b>-15.14</b>	<b>-5.670</b>	<b>-18.280</b>	<b>0.000</b>	<b>1.445</b>	<b>0.000</b>	<b>-0.010</b>	<b>-0.330</b>	<b>-0.605</b>	<b>4.900</b>	<b>0.000</b>	<b>-2.245</b>	<b>1.175</b>	<b>4.620</b>	<b>-0.140</b>
<b>DRIVE 10 (LAR-42 @ Sea-7, 12-14-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Darboh</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Wilhoite</b>	<b>Davis</b>
o (7:04 - 3rd) G.Zuerlein kicks 63 yards from LA 35 to SEA 2. T.Lockett pushed ob at SEA 34 for 32 yards (N.Robey). Penalty on LA-N.Robey, Unnecessary Roughness, offsetting. Penalty on SEA-D.Alexander, Unnecessary Roughness, offsetting.	-1.00	1.13				2.130										
o 1st and 10 at SEA 34	1.13															
(6:57 - 3rd) (Shotgun) J.McKissic right tackle to SEA 34 for no gain (N.Robey; J.Johnson).		0.63												-0.500		
o 2nd and 10 at SEA 34	0.63															
(6:29 - 3rd) (No Huddle, Shotgun) R.Wilson sacked at SEA 26 for -8 yards (C.Barwin).		-1.15		-1.780												
o 3rd and 18 at SEA 26	-1.15															
(5:45 - 3rd) (Shotgun) R.Wilson pass incomplete deep left to P.Richardson.		-3.40		-2.250												
o 4th and 18 at SEA 26	-3.40															
(5:45 - 3rd) J.Ryan punts 61 yards to LA 13, Center-T.Ott. P.Cooper to LA 22 for 9 yards (B.McDougald; D.Alexander).		-0.41									2.990					
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>0.59</b>	<b>0.59</b>	<b>0.000</b>	<b>-4.030</b>	<b>0.000</b>	<b>2.130</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>2.990</b>	<b>0.000</b>	<b>0.000</b>	<b>-0.500</b>	<b>0.000</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-14.55</b>	<b>-14.55</b>	<b>-5.670</b>	<b>-22.310</b>	<b>0.000</b>	<b>3.575</b>	<b>0.000</b>	<b>-0.010</b>	<b>-0.330</b>	<b>-0.605</b>	<b>7.890</b>	<b>0.000</b>	<b>-2.245</b>	<b>0.675</b>	<b>4.620</b>	<b>-0.140</b>

<b>DRIVE 11 (LAR-42 @ Sea-7, 12-14-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Darboh</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Wilhoite</b>	<b>Davis</b>
(3:22 - 3rd) J.Hekker punts 46 yards to SEA 23, Center-J.McQuaide, downed by LA-S.Ebukam.		0.47														
o 1st and 10 at SEA 23	0.47															
(3:11 - 3rd) (Shotgun) R.Wilson pass short right to D.Baldwin to SEA 29 for 6 yards (C.Littleton; J.Johnson).		0.83		0.180	0.180											
o 2nd and 4 at SEA 29	0.83															
(2:47 - 3rd) (No Huddle, Shotgun) R.Wilson pass incomplete short right [C.Barwin].		0.33		-0.500												
o 3rd and 4 at SEA 29	0.33															
(2:47 - 3rd) (Shotgun) R.Wilson scrambles left tackle to SEA 44 for 15 yards (J.Johnson).		1.73		1.400												
o 1st and 10 at SEA 44	1.73															
(2:21 - 3rd) (No Huddle, Shotgun) R.Wilson pass short right to J.McKissic to SEA 47 for 3 yards (J.Johnson). PENALTY on LA-R.Quinn, Unsportsmanlike Conduct, 15 yards, enforced at SEA 47. [Wilson and McKissic are credited with advancing to Sea 47 for 2nd and 7 (1.21). Penalty moves Sea to LAR 38 (2.82).]		2.82	1.110	-0.010										-0.010		
o 1st and 10 at LAR 38	2.82															
(2:11 - 3rd) (Shotgun) R.Wilson pass incomplete deep left.		2.32		-0.500												
o 2nd and 10 at LAR 38	2.32															
(2:03 - 3rd) (Shotgun) R.Wilson scrambles left end to LA 26 for 12 yards (T.Johnson).		3.72		1.400												
o 1st and 10 at LAR 26	3.72															
(1:23 - 3rd) Luke Willson Pass From Russell Wilson for 26 Yrds [TD assumed to be worth 7.00, with 6/7 accrued to scorer(s) and 1/7 to XP.]		7.00		1.406			1.406									
B.Walsh extra point is GOOD, Center-T.Ott, Holder-J.Ryan.	7.00	7.00										0.469				
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>6.53</b>	<b>6.53</b>	<b>1.110</b>	<b>3.376</b>	<b>0.180</b>	<b>0.000</b>	<b>1.406</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.469</b>	<b>0.000</b>	<b>-0.010</b>	<b>0.000</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-8.02</b>	<b>-8.02</b>	<b>-4.560</b>	<b>-18.934</b>	<b>0.180</b>	<b>3.575</b>	<b>1.406</b>	<b>-0.010</b>	<b>-0.330</b>	<b>-0.605</b>	<b>7.890</b>	<b>0.469</b>	<b>-2.245</b>	<b>0.665</b>	<b>4.620</b>	<b>-0.140</b>
<b>DRIVE 12 (LAR-42 @ Sea-7, 12-14-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Darboh</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Wilhoite</b>	<b>Davis</b>
(13:34 - 4th) J.Hekker punts 31 yards to SEA 10, Center-J.McQuaide. T.Lockett to SEA 10 for no gain (C.Littleton).	-0.32	-0.32				0.000										
o 1st and 10 at SEA 10	-0.32															
(13:25 - 4th) (Shotgun) PENALTY on SEA-G.Ifedri, False Start, 5 yards, enforced at SEA 10 - No Play.		-1.20	-0.880													
o 1st and 15 at SEA 5	-1.20															
(13:25 - 4th) (Shotgun) R.Wilson pass short left to T.Lockett to SEA 9 for 4 yards (T.Hill).		-0.98		0.110		0.110										
o 2nd and 11 at SEA 9	-0.98															
(13:04 - 4th) (No Huddle, Shotgun) R.Wilson pass incomplete short right to P.Richardson.		-1.48		-0.500												
o 3rd and 11 at SEA 9	-1.48															
(12:55 - 4th) (Shotgun) R.Wilson pass short left to P.Richardson pushed ob at SEA 21 for 12 yards (T.Hill). Los Angeles Rams challenged the pass completion ruling, and the play was REVERSED. (Shotgun) R.Wilson pass incomplete short left to P.Richardson (T.Hill).		-4.16		-2.680												
o 4th and 11 at SEA 9	-4.16															
(12:50 - 4th) J.Ryan punts 55 yards to LA 36, Center-T.Ott. P.Cooper pushed ob at LA 40 for 4 yards (T.Ott).		-1.49									2.670					
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-1.17</b>	<b>-1.17</b>	<b>-0.880</b>	<b>-3.070</b>	<b>0.000</b>	<b>0.110</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>2.670</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-9.19</b>	<b>-9.19</b>	<b>-5.440</b>	<b>-22.004</b>	<b>0.180</b>	<b>3.685</b>	<b>1.406</b>	<b>-0.010</b>	<b>-0.330</b>	<b>-0.605</b>	<b>10.560</b>	<b>0.469</b>	<b>-2.245</b>	<b>0.665</b>	<b>4.620</b>	<b>-0.140</b>
<b>DRIVE 13 (LAR-42 @ Sea-7, 12-14-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Darboh</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Wilhoite</b>	<b>Davis</b>

(10:30 - 4th) J.Hekker punts 49 yards to SEA 5, Center-J.McQuaide, downed by LA-S.Ebukam.		-0.70														
o 1st and 10 at SEA 5	-0.70															
(10:14 - 4th) Penalty on Russell Wilson enforced in end zone for Safety. J.Ryan kicks 59 yards from SEA 20 to LA 21. P.Cooper pushed ob at SEA 49 for 30 yards (J.Coleman). [Safety (-2.00) is added onto change in possession to LAR at Sea 49 (-2.16).]		-4.16	-3.460													
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-3.46</b>	<b>-3.46</b>	<b>-3.460</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-12.65</b>	<b>-12.65</b>	<b>-8.900</b>	<b>-22.004</b>	<b>0.180</b>	<b>3.685</b>	<b>1.406</b>	<b>-0.010</b>	<b>-0.330</b>	<b>-0.605</b>	<b>10.560</b>	<b>0.469</b>	<b>-2.245</b>	<b>0.665</b>	<b>4.620</b>	<b>-0.140</b>
<b>DRIVE 14 (LAR-42 @ Sea-7, 12-14-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Darboh</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Wilhoite</b>	<b>Davis</b>
(5:45 - 4th) (Shotgun) S.Mannion pass short right to D.Carrier to SEA 27 for 5 yards (B.McDougald). Seattle challenged the first down ruling, and the play was REVERSED. (Shotgun) S.Mannion pass short right to D.Carrier to SEA 28 for 4 yards (B.McDougald). [Sea gains possession on downs at own 28 (0.77).]		0.77														
o 1st and 10 at SEA 28	0.77															
(5:42 - 4th) (Shotgun) R.Wilson pass short right to P.Richardson to SEA 35 for 7 yards (K.Peterson).		1.19		0.210						0.210						
o 2nd and 3 at SEA 35	1.19															
(5:16 - 4th) (No Huddle, Shotgun) R.Wilson pass incomplete short right to J.McKissic (K.Peterson).		0.69		-0.500												
o 3rd and 3 at SEA 35	0.69															
(5:10 - 4th) (Shotgun) J.McKissic up the middle to SEA 40 for 5 yards (M.Fox; T.Walker).		1.49												0.800		
o 1st and 10 at SEA 40	1.49															
(4:50 - 4th) (No Huddle, Shotgun) R.Wilson pass incomplete deep middle to J.Graham.		0.99		-0.500												
o 2nd and 10 at SEA 40	0.99															
(4:45 - 4th) J.McKissic left tackle to SEA 45 for 5 yards (T.Smart).		1.29												0.300		
o 3rd and 5 at SEA 45	1.29															
(4:22 - 4th) (Shotgun) R.Wilson pass incomplete short middle to D.Baldwin.		0.06		-1.230												
o 4th and 5 at SEA 45	0.06															
(4:15 - 4th) (Punt formation) PENALTY on SEA-J.Ryan, Delay of Game, 5 yards, enforced at SEA 45 - No Play.		-1.57	-1.630													
o 4th and 10 at SEA 40	-1.57															
(4:15 - 4th) J.Ryan punts 37 yards to LA 23, Center-T.Ott, fair catch by P.Cooper.		-0.47									1.100					
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-1.24</b>	<b>-1.24</b>	<b>-1.630</b>	<b>-2.020</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.210</b>	<b>1.100</b>	<b>0.000</b>	<b>0.000</b>	<b>1.100</b>	<b>0.000</b>	<b>0.000</b>
<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-13.89</b>	<b>-13.89</b>	<b>-10.530</b>	<b>-24.024</b>	<b>0.180</b>	<b>3.685</b>	<b>1.406</b>	<b>-0.010</b>	<b>-0.330</b>	<b>-0.395</b>	<b>11.660</b>	<b>0.469</b>	<b>-2.245</b>	<b>1.765</b>	<b>4.620</b>	<b>-0.140</b>
<b>DRIVE 15 (LAR-42 @ Sea-7, 12-14-2017)</b>	<b>Start</b>	<b>Finish</b>	<b>Penalty</b>	<b>Wilson</b>	<b>Baldwin</b>	<b>Lockett</b>	<b>Willson</b>	<b>Darboh</b>	<b>Graham</b>	<b>P Richardson</b>	<b>Ryan</b>	<b>Walsh</b>	<b>McEvoy</b>	<b>McKissic</b>	<b>Wilhoite</b>	<b>Davis</b>
(2:00 - 4th) J.Hekker punts 42 yards to SEA 37, Center-J.McQuaide. T.Lockett pushed ob at LA 45 for 18 yards (J.Hekker; S.Ebukam).	1.31	2.40				1.090										
o 1st and 10 at LAR 45	2.40															
(1:50 - 4th) #6 Davis in at QB. J.McKissic right guard to LA 40 for 5 yards (K.Peterson).		2.70												0.300		
o 2nd and 5 at LAR 40	2.70															
(1:17 - 4th) (Shotgun) J.McKissic right end to LA 37 for 3 yards (M.Christian).		2.38												-0.320		
o 3rd and 2 at LAR 37	2.38															
(0:39 - 4th) (Shotgun) J.McKissic left guard to LA 35 for 2 yards (B.Hager; M.Fox). [Game ends after achieving 1st and 10 at LAR 35 (3.00).]		3.00												0.620		
<b>DRIVE NET (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>1.69</b>	<b>1.69</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>1.090</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.600</b>	<b>0.000</b>	<b>0.000</b>

<b>CUMULATIVES (SUV: Finish minus Start &amp; Sum of Players)</b>	<b>-12.20</b>	<b>-12.20</b>	<b>-10.530</b>	<b>-24.024</b>	<b>0.180</b>	<b>4.775</b>	<b>1.406</b>	<b>-0.010</b>	<b>-0.330</b>	<b>-0.395</b>	<b>11.660</b>	<b>0.469</b>	<b>-2.245</b>	<b>2.365</b>	<b>4.620</b>	<b>-0.140</b>
Number pf Plays, with Penalties and XPs (Second Half)	38	38	5	20	1	5	1	0	0	2	4	1	0	7	0	0
Number pf Plays, with Penalties and XPs (Game)	78	78	8	40	1	11	1	1	1	2	9	1	1	9	1	8
<b>SUV per Play (Game Averages)</b>	<b>-0.156</b>	<b>-0.156</b>	<b>-1.316</b>	<b>-0.601</b>	<b>0.180</b>	<b>0.434</b>	<b>1.406</b>	<b>-0.010</b>	<b>-0.330</b>	<b>-0.198</b>	<b>1.296</b>	<b>0.469</b>	<b>-2.245</b>	<b>0.263</b>	<b>4.620</b>	<b>-0.018</b>

### Cumulative Results through Each of Five Games

Player	Cumulative SUV (Through 1 Game)	Number of Plays, with Penalties and XPs	SUV per Play	Player	Cumulative SUV (Through 2 Games)	Number of Plays, with Penalties and XPs	SUV per Play	Player	Cumulative SUV (Through 3 Games)	Number of Plays, with Penalties and XPs	SUV per Play
Seahawks	8.37	98	0.085	Seahawks	25.20	184	0.137	Seahawks	24.40	290	0.084
Walsh	2.780	3	0.927	Walsh	7.130	7	1.019	Ryan	13.150	19	0.692
P Richardson	1.664	2	0.832	Ryan	9.670	13	0.744	P Richardson	4.509	8	0.564
Ryan	3.690	7	0.527	P Richardson	2.719	5	0.544	Baldwin	6.748	16	0.422
Prosise	0.815	3	0.272	Baldwin	3.045	10	0.305	Lockett	8.460	29	0.292
Baldwin	1.465	6	0.244	Lockett	4.575	19	0.241	Graham	3.455	12	0.288
Lockett	2.540	13	0.195	Graham	1.175	7	0.168	McKissic	1.420	10	0.142
Willson	0.555	3	0.185	McKissic	0.760	5	0.152	Walsh	0.940	10	0.094
Penalty	1.050	9	0.117	Carson	1.565	20	0.078	Carson	1.565	20	0.078
Carson	1.565	20	0.078	Lacy	0.195	10	0.020	Rawls	1.540	27	0.057
Rawls	-0.760	6	-0.127	Penalty	0.000	15	0.000	Lacy	-0.015	17	-0.001
Wilson	-12.606	50	-0.252	Rawls	-0.415	16	-0.026	Wilson	-41.201	153	-0.269
Wagner	4.610	1	4.610	Wilson	-32.991	94	-0.351	Penalty	-10.980	29	-0.379
Darboh	1.170	1	1.170	Thomas	12.120	2	6.060	Thomas	12.120	2	6.060
Sherman	0.000	1	0.000	Wagner	4.610	1	4.610	Thorpe	4.290	1	4.290
Graham	-0.170	1	-0.170	Thorpe	4.290	1	4.290	Jones	4.190	1	4.190
No XP				S Richardson	5.990	2	2.995	Wagner	6.010	2	3.005
				Darboh	1.170	1	1.170	S Richardson	5.990	2	2.995
				Pocic	0.790	1	0.790	Darboh	1.170	1	1.170
				Prosise	0.815	3	0.272	Pocic	0.790	1	0.790
				Willson	0.555	3	0.185	Willson	1.412	4	0.353
				Sherman	0	1	0.000	Prosise	0.815	3	0.272
				Vannet	-0.310	2	-0.155	Sherman	0.000	1	0.000
				McEvoy	-2.260	1	-2.260	Vannet	-0.310	2	-0.155
				No XP				McEvoy	-1.670	2	-0.835
								No XP			

Player	Cumulative SUV (Through 4 Games)	Number of Plays, with Penalties and XPs	SUV per Play	Player	Cumulative SUV (Through 5 Games)	Number of Plays, with Penalties and XPs	SUV per Play	Player	Cumulative SUV (Through 5 Games)	Number of Plays, with Penalties and XPs	SUV per Play
Seahawks	37.43	379	0.099	Seahawks	25.23	457	0.055	Seahawks	25.23	457	0.055
Ryan	17.550	25	0.702	Ryan	29.210	34	0.859	Ryan	29.210	34	0.859
P Richardson	7.539	12	0.628	P Richardson	7.144	14	0.510	P Richardson	7.144	14	0.510
Graham	5.369	15	0.358	Baldwin	6.683	20	0.334	Baldwin	6.683	20	0.334
Baldwin	6.503	19	0.342	Graham	5.039	16	0.315	Graham	5.039	16	0.315
Lockett	10.440	38	0.275	Lockett	15.215	49	0.311	Lockett*	3.705	15	0.247
McKissic	2.640	18	0.147	McKissic	5.005	27	0.185	McKissic	5.005	27	0.185
Carson	1.565	20	0.078	Carson	1.565	20	0.078	Carson	1.565	20	0.078
Rawls	1.540	27	0.057	Rawls	1.540	27	0.057	Rawls	1.540	27	0.057
Walsh	0.211	15	0.014	Walsh	0.680	16	0.043	Walsh	0.680	16	0.043
Lacy	-1.385	37	-0.037	Lacy	-1.385	37	-0.037	Lacy	-1.385	37	-0.037
Wilson	-46.784	193	-0.242	Wilson	-70.808	233	-0.304	Wilson	-70.808	233	-0.304
Penalty	-9.890	35	-0.283	Penalty	-20.420	43	-0.475	Penalty	-20.420	43	-0.475
Thomas	12.120	2	6.060	Thomas	12.120	2	6.060	Thomas	12.120	2	6.060
Thorpe	4.290	1	4.290	Wilhoite	4.620	1	4.620	Wilhoite	4.620	1	4.620
Jones	4.190	1	4.190	Thorpe	4.290	1	4.290	Thorpe	4.290	1	4.290
Wagner	10.570	3	3.523	Jones	4.190	1	4.190	Jones	4.190	1	4.190
S Richardson	5.990	2	2.995	Wagner	10.570	3	3.523	Wagner	10.570	3	3.523
Darboh	1.170	1	1.170	S Richardson	5.990	2	2.995	S Richardson	5.990	2	2.995
Pocic	0.790	1	0.790	Pocic	0.790	1	0.790	Pocic	0.790	1	0.790
Willson	1.412	4	0.353	Darboh	1.160	2	0.580	Darboh	1.160	2	0.580
Prosise	0.815	3	0.272	Willson	2.818	5	0.564	Willson	2.818	5	0.564
Sherman	0.000	1	0.000	Prosise	0.815	3	0.272	Prosise	0.815	3	0.272
McEvoy	-0.365	4	-0.091	Sherman	0.000	1	0.000	Sherman	0.000	1	0.000
Vannet	1.147	5	-0.155	Davis	-0.140	8	-0.018	Davis	-0.140	8	-0.018
No XP				Vannet	1.147	5	-0.155	Vannet	1.147	5	-0.155
				McEvoy	-2.610	5	-0.522	McEvoy	-2.610	5	-0.522
				No XP				No XP			

Lockett\* excludes all kickoff and punt returns

**2017 Full Season Statistics (Offense)**

<b>PASSING</b>	<b>ATT</b>	<b>COMP</b>	<b>PCT</b>	<b>YDS</b>	<b>AVG</b>	<b>LONG</b>	<b>TD</b>	<b>TD%</b>	<b>INT</b>	<b>INT%</b>	<b>SACK</b>	<b>YDSL</b>	<b>RATE</b>
<b>Russell Wilson</b>	553	339	61.3	3983	7.2	74	34	6.1	11	2.0	43	322	95.4
<b>Tanner McEvoy</b>	1	0	0.0	0	0.0	0	0	0.0	1	100.0	0	0	0
<b>Jon Ryan</b>	1	1	100.0	-4	-4.0	-4	0	0.0	0	0.0	0	0	79.2
<b>Totals</b>	<b>555</b>	<b>340</b>	<b>61.3</b>	<b>3979</b>	<b>7.2</b>	<b>74</b>	<b>34</b>	<b>6.1</b>	<b>12</b>	<b>2.2</b>	<b>43</b>	<b>322</b>	<b>94.4</b>

<b>RUSHING</b>	<b>ATT</b>	<b>YDS</b>	<b>AVG</b>	<b>LONG</b>	<b>20+</b>	<b>TD</b>	<b>FUM</b>	<b>FUML</b>	<b>1DN</b>
<b>Russell Wilson</b>	95	586	6.2	31	4	3	6	0	35
<b>Chris Carson</b>	49	208	4.2	30	1	0	0	0	11
<b>J.D. McKissic</b>	46	187	4.1	30	1	1	0	0	8
<b>Mike Davis</b>	68	240	3.5	33	3	0	0	0	12
<b>Thomas Rawls</b>	58	157	2.7	23	1	0	1	1	6
<b>Eddie Lacy</b>	69	179	2.6	19	0	0	0	0	7
<b>Tyler Lockett</b>	10	58	5.8	22	1	0	0	0	4
<b>C.J. Proise</b>	11	23	2.1	8	0	0	0	0	1
<b>Austin Davis</b>	1	-1	-1.0	-1	0	0	0	0	0
<b>Doug Baldwin</b>	2	-8	-4.0	-3	0	0	0	0	0
<b>Totals</b>	<b>409</b>	<b>1629</b>	<b>4.0</b>	<b>33</b>	<b>12</b>	<b>4</b>	<b>7</b>	<b>1</b>	<b>85</b>

<b>RECEIVING</b>	<b>REC</b>	<b>TAR</b>	<b>YDS</b>	<b>AVG</b>	<b>TD</b>	<b>LONG</b>	<b>20+</b>	<b>FUM</b>	<b>FUML</b>	<b>YAC</b>	<b>1DN</b>
<b>Paul Richardson</b>	44	80	703	16.0	6	61	13	0	0	138	33
<b>Doug Baldwin</b>	75	117	991	13.2	8	54	18	0	0	262	44
<b>Tyler Lockett</b>	45	69	555	12.3	2	74	5	0	0	189	23
<b>Jimmy Graham</b>	57	98	520	9.1	10	33	8	0	0	190	32
<b>J.D. McKissic</b>	34	45	266	7.8	2	27	3	0	0	166	12

<b>Tre Madden</b>	2	2	65	32.5	0	66	1	0	0	52	1
<b>Tanner McEvoy</b>	5	9	113	22.6	0	53	2	1	1	20	4
<b>C.J. Prosis</b>	6	11	87	14.5	0	46	1	0	0	51	3
<b>Thomas Rawls</b>	9	13	94	10.4	0	22	1	0	0	62	4
<b>Nick Vannett</b>	12	15	124	10.3	1	21	1	0	0	49	6
<b>Luke Willson</b>	15	22	153	10.2	4	27	2	0	0	94	8
<b>Amara Darboh</b>	8	13	71	8.9	0	16	0	0	0	10	2
<b>Mike Davis</b>	15	18	131	8.7	0	23	3	0	0	158	6
<b>Chris Carson</b>	7	8	59	8.4	1	10	0	0	0	47	3
<b>Eddie Lacy</b>	6	6	47	7.8	0	14	0	0	0	54	2
<b>Totals</b>	<b>340</b>	<b>555</b>	<b>3979</b>	<b>11.7</b>	<b>34</b>	<b>74</b>	<b>58</b>	<b>1</b>	<b>1</b>	<b>1542</b>	<b>183</b>

<b>SCORING</b>	<b>TDs</b>				<b>PTs</b>			
	<b>RUSH</b>	<b>REC</b>	<b>RET</b>	<b>TD</b>	<b>FG</b>	<b>XP</b>	<b>2PT</b>	<b>PTS</b>
<b>Blair Walsh</b>	0	0	0	0	21	37	0	100
<b>Jimmy Graham</b>	0	10	0	10	0	0	1	62
<b>Doug Baldwin</b>	0	8	0	8	0	0	1	50
<b>Paul Richardson</b>	0	6	0	6	0	0	0	36
<b>Luke Willson</b>	0	4	0	4	0	0	0	24
<b>Russell Wilson</b>	3	0	0	3	0	0	0	18
<b>J.D. McKissic</b>	1	2	0	3	0	0	0	18
<b>Tyler Lockett</b>	0	2	1	3	0	0	0	18
<b>Justin Coleman</b>	0	0	2	2	0	0	0	12
<b>Bobby Wagner</b>	0	0	1	1	0	0	0	8
<b>Earl Thomas</b>	0	0	1	1	0	0	0	6
<b>Nick Vannett</b>	0	1	0	1	0	0	0	6
<b>Chris Carson</b>	0	1	0	1	0	0	0	6
<b>Kam Chancellor</b>	0	0	0	0	0	0	0	2
<b>Totals</b>	<b>4</b>	<b>34</b>	<b>5</b>	<b>43</b>	<b>21</b>	<b>37</b>	<b>2</b>	<b>366</b>



KICKING	FGM	FGA	PCT	LONG	1-19	20-29	30-39	40-49	50+	XPM	XPA	PCT
Blair Walsh	21	29	72.4	49	0-0	6-6	7-10	8-12	0-1	37	38	97.4

PUNTING												
NAME	PUNTS	YDS	LONG	AVG	NET	BP	IN20	TB	FC	RET	RETY	AVG
Jon Ryan	92	4141	74	45.0	38.8	0	29	6	19	45	452	10.0

RETURNING	KOFFs					PUNTS					
	ATT	YDS	AVG	LONG	TD	RET	RETY	AVG	LONG	TD	FC
Tyler Lockett	37	949	25.6	99	1	36	237	6.6	27	0	21
Luke Willson	3	42	14.0	17	0	0	0	0.0	0	0	0
Ethan Pocic	1	13	13.0	13	0	0	0	0.0	0	0	0
Nick Vannett	1	0	0.0	0	0	0	0	0.0	0	0	0
Mark Glowinski	1	0	0.0	0	0	0	0	0.0	0	0	0
<b>Totals</b>	<b>43</b>	<b>1004</b>	<b>23.3</b>	<b>99</b>	<b>1</b>	<b>36</b>	<b>237</b>	<b>6.6</b>	<b>27</b>	<b>0</b>	<b>21</b>

TOTAL YDS (from Scrimmage)	
Russell Wilson	4569
Doug Baldwin	983
Paul Richardson	703
Tyler Lockett*	613
Jimmy Graham	520
J.D. McKissic	453
Mike Davis	371
Chris Carson	267
Thomas Rawls	251
Eddie Lacy	226

\*Excludes Returns

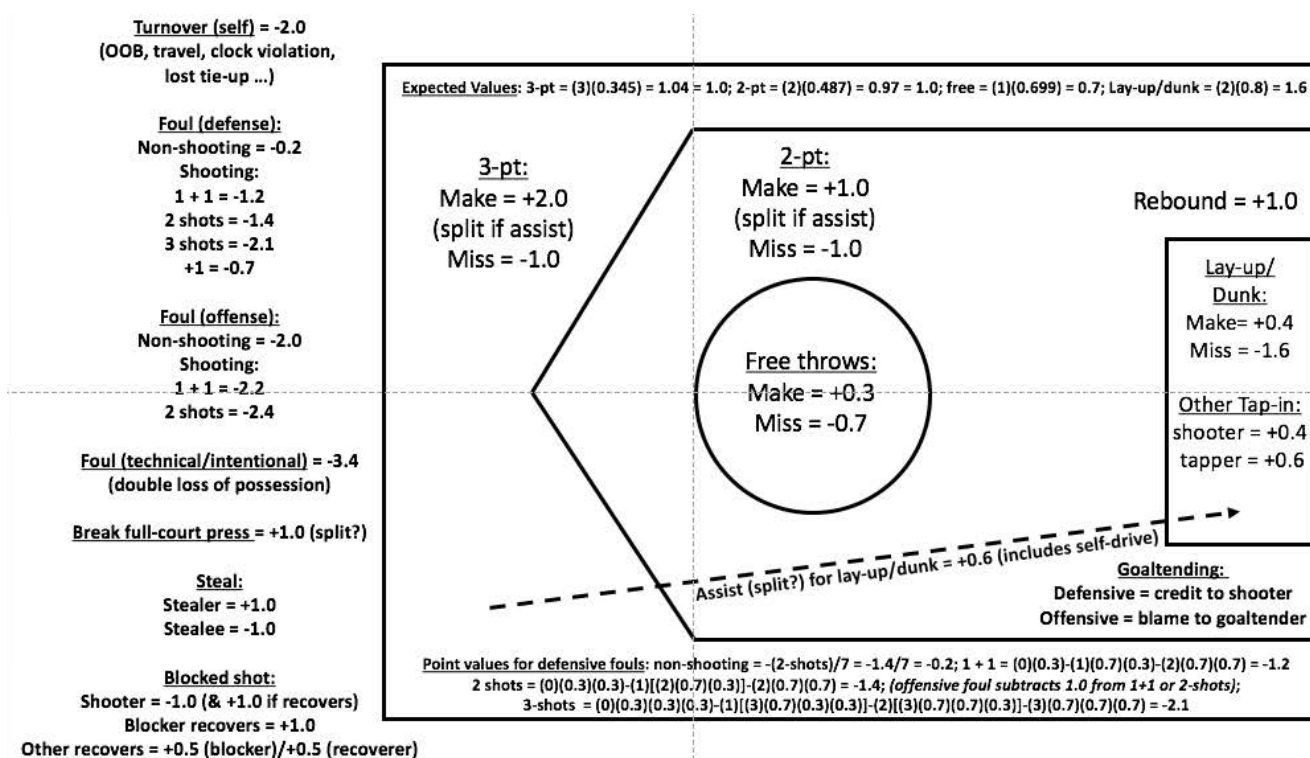
ATT (Rush) + REC (Receive)	
Russell Wilson	648
Mike Davis	83
J.D. McKissic	80
Doug Baldwin	77
Eddie Lacy	75
Thomas Rawls	67
Jimmy Graham	57
Chris Carson	56
Tyler Lockett*	55
Paul Richardson	44

\*Excludes Returns

## SITUATIONAL UNDERLYING VALUE (SUV) STATISTIC FOR NCAA MEN'S COLLEGE BASKETBALL – PROOF OF PRINCIPLE

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In Reference 1, the SUV concept from baseball was extended to professional football, i.e., the National Football League (NFL), and finally to NCAA Men's Basketball. Extrapolating from the Situational Underlying Value (SUV) concept developed for baseball and football, a similar SUV statistic for basketball was developed based on the concept of worth, in points, of a possession where there is an attempted score. From the 2015-16 NCAA Men's Basketball season, shooting percentages for all 351 teams were converted into SUV statistics summarized pictorially by the figure below.



The bases for the various point assignments are discussed in detail in Reference 1, and are not repeated here. Similarly, two example games are analyzed there for both teams. As with the “Proof of Principle” for baseball and football, the goal here is to track the performance of an individual team. However, rather than select a substantial portion of an entire season (typically around 30 games, excluding any post-season participation), here the five-game run of the Loyola of Chicago Ramblers through the 2018 NCAA Division I Men's Basketball Tournament is tracked, as it represents a complete microcosm for which the SUV results can be compared to the traditional overall statistics. Over those five games, Loyola won four to reach the Final Four as a Number 11 seed, defeating the following: (1) Miami of Florida 64-62 on March 15, 2018; (2) Tennessee 63-62 on March 17, 2018; (3) Nevada 69-68 on March 22, 2018; and (4) Kansas State 78-62 on March 24, 2018. Their run ended on March 31, 2018, with a loss to Michigan, 69-57. The play-by-play for Loyola for each of these games is reproduced here to show the assignment of the SUV statistics to the individual players, based on Reference 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>. (Note there is a similar website for each of the five games.)

An interesting and illustrative series for Loyola at the start of the second half of Game 2 vs. Tennessee (below) shows the assignment of the SUVs.

Game 2, Loyola-Chi (63) vs. Tennessee (62), 03-17-2018		Custer	Ingram	Jackson	Krutwig	Negron	Richardson	Satterwhite	Skokna	Townes	Williamson	Unassigned	Team
Cameron Krutwig misses two point layup <i>(Unassigned assist credited)</i>	19:31				-1.6							0.6	-1.0
Cameron Krutwig misses regular free throw 1 of 2	18:57				-0.7								-0.7
Cameron Krutwig makes regular free throw 2 of 2	18:57				0.3								0.3
Cameron Krutwig defensive rebound after block	18:39				1.0								1.0
Marques Townes misses three point jump shot	18:26									-1.0			-1.0
Donte Ingram defensive rebound	18:01		1.0										1.0
Marques Townes makes two point reverse layup	17:52									1.0			1.0
Clayton Custer makes three point jump shot <i>(Donte Ingram assists)</i>	17:20	1.0	1.0										2.0
Donte Ingram makes three point pullup jump shot	16:56		2.0										2.0
Clayton Custer shooting foul (Jordan Bowden draws the foul) - 2 shots	16:39	-1.4											-1.4
Ben Richardson defensive rebound	16:39						1.0						1.0
Cameron Krutwig offensive foul (Grant Williams draws the foul)	16:15				-2.0								-2.0
Donte Ingram misses three point jump shot	15:35		-1.0										-1.0
Ben Richardson makes two point jump shot <i>(Clayton Custer assists)</i>	14:45	0.5					0.5						1.0

Cameron Krutwig is key to the first four plays. First, he misses a layup, an SUV of -1.6. However, since a layup is always scored either from an assist by another player or by the scorer himself driving to the basket (self-assist), an additional SUV of +0.6 is always associated with it. Since there is no indication in the play-by-play whether Krutwig’s attempt was the result of another’s assist or his own drive, the +0.6 is placed in the category “Unassigned,” necessary since the missed shot must have a total SUV = -1.0 (as shown in the “Team” column). (Had Krutwig converted the layup, he would have received an SUV of +0.4 and the assister an SUV of +0.6 which, if Krutwig himself, e.g., on a drive, would have given him the full SUV of +1.0.) Krutwig subsequently misses (SUV = -0.7) then converts a free throw (SUV = +0.3), and later pulls down a defensive rebound (SUV = +1.0). Next, Marques Townes misses a three-point shot (SUV = -1.0) then, after a Donte Ingram defensive rebound (SUV = +1.0), converts a layup, assumed to be self-assisted since no other player is credited, as is typical for the play-by-play format when there is an assist. Thus, Townes receives both the layup scorer’s SUV of +0.4 and that of the assister, +0.6, for the full total of +1.0.

Clayton Custer is key to the next three plays. First, he scores three points off an assist from Donte Ingram, splitting the SUV of +2.0 equally between both. He follows with an unassisted three-pointer, for full credit of +2.0. However, next he fouls, resulting in two shots for the opponent and an SUV of -1.4. The opponent missed the second free throw, and Ben Richardson pulled down the defensive rebound (SUV = +1.0). Krutwig subsequently committed an offensive foul, equivalent to a turnover, for an SUV = -2.0. Ingram next misses a three-pointer (SUV = -1.0). Finally, Richardson converts a two-pointer with an assist from Custer, splitting the SUV of +1.0 equally between them. Hopefully, the assignment of SUVs is fairly straightforward. Any anomalies are explained in *bold purple italics* with the play.

All players’ SUVs were tracked cumulatively through the five games, and the results are shown immediately following Game 5. To provide insights relative to the traditional statistics, the SUVs for the seven players with the most minutes over the five games (highlighted in yellow) are compared against their cumulative “traditional” statistics, compiled below. The statistics selected for comparison are shown

in red, a total of nine in all, again representing both “longevity” (“MIN” = Minutes; “SUM+” = total of rebounds [“REB”], assists [“AS”], steals [“ST”] and blocks [“BLK”]; “Sum-“ = total of turnovers [“TO”] and personal fouls [“PF”]; and total points scored [“PTS”]) and “per Opportunity” (field goal percentage [FG-%], free throw percentage [FT-%], “SUM+” per Minute [“+PM” or “+M”], “SUM-“ per Minute [“-PM” or “-M”] and points per Minute [“PPM” or “Pt/M”]). As before for both baseball and football, the statistics for the various categories were normalized, then these normalized values were averaged (“Comp” column). For the SUV comparison, two statistics were considered: Cumulative SUV and SUV per Opportunity, again corresponding to both longevity and “per Opportunity,” respectively, and averaged (“Comp” column). The results from the comparison of the normalized statistics are presented below.

### Total Statistics through All Five NCAA Games<sup>c</sup>

NAME	POS	MIN	FG(Made-Attempts-%)	3P(Made-Attempts-%)	FT(Made-Attempts-%)	OREB	REB	AST	ST	BLK	SUM+	+PM	TO	PF	SUM-	-PM	PTS	PPM
Cameron Krutwig	C	109	22 38 0.58	0 0	8 11 0.73	6	24	9	3	2	38	0.35	12	6	18	0.06	52	0.48
Carson Shanks	C	1	0 0	0 0	0 0	0	0	0	0	0	0	0.00	0	0	0	0.00	0	0.00
Christian Negron	F	1	0 0	0 0	0 0	1	1	0	0	0	1	1.00	1	0	1	0.00	0	0.00
Niek DiNardi	F	1	0 0	0 0	0 0	0	0	0	0	0	0	0.00	0	0	0	0.00	0	0.00
Aundre Jackson	F	89	23 40 0.58	1 4 0.25	12 12 1.00	5	12	2	1	1	16	0.18	6	10	16	0.11	59	0.66
Cameron Satterwhite	G	16	0 0	0 0	1 4 0.25	0	3	0	0	1	4	0.25	3	1	4	0.06	1	0.06
Clayton Custer	G	179	23 41 0.56	9 17 0.53	6 8 0.75	1	8	16	7	0	31	0.17	12	8	20	0.04	61	0.34
Lucas Williamson	G	117	8 20 0.40	4 12 0.33	3 7 0.43	4	19	5	1	1	26	0.22	4	9	13	0.08	23	0.20
Ben Richardson	G	168	15 28 0.54	7 17 0.41	4 5 0.80	0	20	19	4	1	44	0.26	6	13	19	0.08	41	0.24
Bruno Skokna	G	25	2 6 0.33	1 3 0.33	0 0	0	2	1	1	0	4	0.16	2	5	7	0.20	5	0.20
Marques Townes	G	147	20 41 0.49	2 8 0.25	12 13 0.92	1	22	14	5	0	41	0.28	12	9	21	0.06	54	0.37
Donte Ingram	G-F	147	13 35 0.37	7 21 0.33	2 5 0.40	2	29	8	0	2	39	0.27	8	11	19	0.07	35	0.24
TOTAL		1000	126 249 0.51	31 82 0.38	48 65 0.74	20	140	74	22	8	244	0.24	66	72	138	0.07	331	0.33

### Composites per Selected Player Based on Nine Total NCAA Statistics

### Composites Based on SUVs

NAME	Min	FG%	FT%	Sum+	+/M	Sum-	-/M	Pts	Pt/M		Loyola Player	Cumu	SUV/Op	
Cameron Krutwig	109	0.58	0.73	38	0.35	-18	-0.06	52	0.48		Ben Richardson	9.3	0.10	
Aundre Jackson	89	0.58	1.00	16	0.18	-16	-0.11	59	0.66		Lucas Williamson	2.0	0.03	
Clayton Custer	179	0.56	0.75	31	0.17	-20	-0.04	61	0.34		Donte Ingram	0.6	0.01	
Lucas Williamson	117	0.40	0.43	26	0.22	-13	-0.08	23	0.20		Cameron Krutwig	-1.4	-0.01	
Ben Richardson	168	0.54	0.80	44	0.26	-19	-0.08	41	0.24		Clayton Custer	-6.7	-0.07	
Marques Townes	147	0.49	0.92	41	0.28	-21	-0.06	54	0.37		Marques Townes	-8.9	-0.08	
Donte Ingram	147	0.37	0.40	39	0.27	-19	-0.07	35	0.24		Aundre Jackson	-10.7	-0.13	
Mean	136.6	0.50	0.72	33.6	0.25	-18.0	-0.07	46.4	0.36		Mean	-2.3	-0.022	
Std Dev	32.7	0.09	0.23	9.9	0.06	2.7	0.02	14.0	0.16		Std Dev	7.0	0.08	
Normalized									Comp		Normalized		Comp	
Cameron Krutwig	0.20	0.82	0.52	0.67	0.95	0.50	0.78	0.66	0.76	0.65	Ben Richardson	0.95	0.94	0.95
Marques Townes	0.63	0.44	0.81	0.77	0.70	0.13	0.69	0.71	0.52	0.60	Lucas Williamson	0.73	0.76	0.74
Clayton Custer	0.90	0.76	0.55	0.40	0.11	0.23	0.89	0.85	0.45	0.57	Donte Ingram	0.66	0.64	0.65
Ben Richardson	0.83	0.66	0.64	0.85	0.60	0.36	0.40	0.35	0.24	0.55	Cameron Krutwig	0.55	0.54	0.55
Aundre Jackson	0.07	0.81	0.89	0.04	0.14	0.77	0.03	0.82	0.97	0.50	Clayton Custer	0.26	0.26	0.26
Donte Ingram	0.63	0.06	0.08	0.71	0.62	0.36	0.44	0.21	0.23	0.37	Marques Townes	0.17	0.23	0.20
Lucas Williamson	0.27	0.12	0.10	0.22	0.34	0.97	0.41	0.05	0.16	0.29	Aundre Jackson	0.11	0.08	0.10

The results show some significant differences in the rankings, particularly for Townes and Williamson. Townes ranks second using traditional statistics, but sixth using SUV. Williamson is the reverse, second using SUV but seventh for traditional. Richardson also stands out as quite a positive performer using the

<sup>c</sup> Players highlighted in yellow are retained for comparison below based on nine sets of statistics highlighted in red. “Sum+” is an aggregate of “positive” non-scoring statistics, i.e., rebounds (both offensive and defensive), assists, steals and blocks. “Sum-“ is similar, but for “negative” statistics (hence the minus signs), i.e., turnovers and personal fouls. “+/M” and “-/M” are “Sum+” and “Sum-“ per Minute played, respectively.

SUV. To examine these differences, a pair of sensitivity analyses were performed, focusing on the SUV statistics suspected of playing the primary role in these differences. First, not all missed shots are the same. Missed two-pointers and three-pointers receive an SUV of -1.0. However, missed lay-ups, unless self-assisted, receive an SUV of -1.6, i.e., there is more “negativity” assigned to missing a layup, supposedly the easiest of shots. Second, turnovers, including offensive fouls, are severely penalized, receiving an SUV of -2.0. Third, personal fouls resulting in shots for the opponent also receive more negative SUVs than missed shots (other than self-assisted layups): ranging from -1.2 to -2.1. Finally, missing one free throw (SUV = -0.7) offsets converting a pair (+0.6, or +0.3 each). These “negatives” are not necessarily reflected strongly in traditional statistics, unlike the SUV.

The sensitivity analysis addressed the first two categories: SUV = -1.6 for other than self-assisted missed layup and turnovers. For the first analysis, ALL missed layups were assumed to be self-assisted, reducing the negativity of the SUV from -1.6 to -1.0. The results are shown in the first table. Note that Townes now trades ranks with Custer, with a significantly reduced negative SUV (now only -2.9 vs. previous -8.9). The effect on Williamson is minor. The second analysis further reduces the negativity of a turnover from -2.0 to -1.0 (assigning the remaining -1.0 to “Unassigned”), with the results in the second table. While Custer and Townes switch positions again, note that Townes now acquires a very positive SUV of +8.1. Williamson’s SUV also increases, although the net result since all players experience increases is a drop from second to fourth. Interestingly, both sensitivity analyses preserve Richardson at the top and Jackson at the bottom. Therefore, while aggregation of the traditional statistics appears to suggest all but Ingram and Williamson of being fairly equally positive contributors (Composite normalized statistics in a fairly tight range from 0.50 to 0.65), the SUV Composites show Richardson as a stand-out top performer, with Williamson, Ingram and Krutwig next (range from 0.74 to 0.55), followed by Custer, Townes and Jackson. The differences in ranks are most likely the result of SUV assigning relatively significant “negatives” to detrimental plays, both offensively (missed layups and turnovers) and defensively (fouls that result in opponent free throws).

Loyola Player	Cumu	SUV/Op	All missed layups now -1.0 instead of split of -1.6/+0.6	Loyola Player	Cumu	SUV/Op	All missed layups now -1.0 instead of split of -1.6/+0.6 AND turnovers/offensive fouls now split of -1.0/-1.0 instead of -2.0
Ben Richardson	9.9	0.11		Ben Richardson	15.9	0.17	
Lucas Williamson	2.6	0.04		Cameron Krutwig	14.2	0.14	
Cameron Krutwig	2.2	0.02		Lucas Williamson	6.6	0.10	
Donte Ingram	0.6	0.01		Donte Ingram	8.6	0.09	
Marques Townes	-2.9	-0.03		Clayton Custer	7.7	0.08	
Clayton Custer	-4.3	-0.05		Marques Townes	8.1	0.07	
Aundre Jackson	-4.1	-0.05		Aundre Jackson	1.9	0.02	
Mean	0.6	0.01		Mean	9.0	0.10	
Std Dev	5.0	0.06		Std Dev	4.7	0.05	
Normalized				Comp	Normalized		
Ben Richardson	0.97	0.96	0.97	Ben Richardson	0.93	0.94	0.93
Lucas Williamson	0.66	0.72	0.69	Cameron Krutwig	0.86	0.82	0.84
Cameron Krutwig	0.63	0.60	0.61	Donte Ingram	0.47	0.43	0.45
Donte Ingram	0.50	0.49	0.50	Lucas Williamson	0.31	0.54	0.43
Marques Townes	0.24	0.27	0.26	Clayton Custer	0.39	0.37	0.38
Clayton Custer	0.166	0.167	0.167	Marques Townes	0.42	0.30	0.36
Aundre Jackson	0.176	0.151	0.164	Aundre Jackson	0.07	0.06	0.06

<b>Game 1, Lovola-Chi (64) vs. Miami-FL (62), 03-15-2018</b>		<b>Custer</b>	<b>Ingram</b>	<b>Jackson</b>	<b>Krutwig</b>	<b>Negron</b>	<b>Richardson</b>	<b>Satterwhite</b>	<b>Skokna</b>	<b>Townes</b>	<b>Williamson</b>	<b>Unassigned</b>	<b>Team</b>
Donte Ingram defensive rebound	19:33		1.0										1.0
Marques Townes misses three point jump shot	19:14									-1.0			-1.0
<b>Cameron Krutwig makes two point driving layup</b>	18:23				1.0								1.0
<b>Cameron Krutwig makes two point layup</b>	17:40				1.0								1.0
Ben Richardson defensive rebound	17:05						1.0						1.0
Ben Richardson turnover (lost ball) (Chris Lykes steals)	17:00						-2.0						-2.0
<b>Clayton Custer makes three point jump shot (Ben Richardson assists)</b>	16:40	1.0					1.0						2.0
Ben Richardson defensive rebound	16:18						1.0						1.0
<b>Donte Ingram makes three point jump shot (Ben Richardson assists)</b>	16:14		1.0				1.0						2.0
Donte Ingram defensive rebound	15:41		1.0										1.0
Donte Ingram turnover (Anthony Lawrence Jr. steals)	15:36		-2.0										-2.0
Ben Richardson shooting foul (Chris Lykes draws the foul) - 2 shots	15:31						-1.4						-1.4
Marques Townes offensive foul (Chris Lykes draws the foul) - no shot	15:11									-2.0			-2.0
<b>Aundre Jackson makes two point layup (Clayton Custer assists)</b>	14:34	0.6		0.4									1.0
<b>Donte Ingram makes two point pullup jump shot</b>	14:02		1.0										1.0
Donte Ingram misses two point jump shot	13:05		-1.0										-1.0
Marques Townes shooting foul (Ebuka Izundu draws the foul) - 2 shots	12:40									-1.4			-1.4
Lucas Williamson defensive rebound	12:40										1.0		1.0
Donte Ingram misses three point jump shot	12:14		-1.0										-1.0
<b>Cameron Krutwig makes two point layup (Clayton Custer assists)</b>	11:19	0.6			0.4								1.0
Cameron Krutwig turnover (lost ball) (Sam Waardenburg steals)	10:32				-2.0								-2.0
Cameron Satterwhite turnover (bad pass) (Ebuka Izundu steals)	9:58							-2.0					-2.0
Cameron Krutwig defensive rebound	9:42				1.0								1.0
Sam Waardenburg blocks Cameron Krutwig's two point layup ( <i>Unassigned assist credited</i> )	9:33				-1.6							0.6	-1.0
<b>Aundre Jackson makes two point layup (Ben Richardson assists)</b>	9:18			0.4			0.6						1.0
Dewan Huell blocks Aundre Jackson's two point layup ( <i>Unassigned assist credited</i> )	8:40			-1.6								0.6	-1.0

Game 1, Lovola-Chi (64) vs. Miami-FL (62), 03-15-2018		Custer	Ingram	Jackson	Krutwig	Negron	Richardson	Satterwhite	Skokna	Townes	Williamson	Unassigned	Team
Clayton Custer misses two point jump shot	8:12	-1.0											-1.0
Donte Ingram defensive rebound	7:46		1.0										1.0
<b>Aundre Jackson makes two point layup (Clayton Custer assists)</b>	7:33	0.6		0.4									1.0
Clayton Custer misses two point jump shot	6:54	-1.0											-1.0
Ben Richardson shooting foul (Ja'Quan Newton draws the foul) - +1 shot after score	6:37						-0.7						-0.7
Donte Ingram misses two point pullup jump shot	6:21		-1.0										-1.0
Lucas Williamson defensive rebound	5:52										1.0		1.0
Lucas Williamson misses regular free throw 1 of 2	5:45										-0.7		-0.7
Lucas Williamson misses regular free throw 2 of 2	5:45										-0.7		-0.7
Aundre Jackson offensive rebound	5:45			1.0									1.0
Dewan Huell blocks Donte Ingram's two point jump shot	5:24		-1.0										-1.0
Donte Ingram offensive rebound	5:22		1.0										1.0
Lucas Williamson turnover (bad pass)	5:10										-2.0		-2.0
Cameron Satterwhite defensive rebound	4:54							1.0					1.0
Cameron Satterwhite turnover (lost ball) (Ja'Quan Newton steals)	4:47							-2.0					-2.0
<b>Cameron Krutwig makes two point layup (Clayton Custer assists)</b>	4:07	0.6			0.4								1.0
Marques Townes defensive rebound	3:43									1.0			1.0
<b>Marques Townes makes two point driving layup</b>	3:36									1.0			1.0
Donte Ingram misses three point jump shot	2:49		-1.0										-1.0
Clayton Custer personal foul (Dejan Vasiljevic draws the foul) - no shot	2:40	-0.2											-0.2
<b>Bruno Skokna makes two point driving layup (Cameron Krutwig assists)</b>	2:16				0.6				0.4				1.0
Bruno Skokna shooting foul (Dewan Huell draws the foul) - 1 and 1	1:41								-1.2				-1.2
Donte Ingram defensive rebound	1:41		1.0										1.0
Aundre Jackson misses three point jump shot	1:15			-1.0									-1.0
Donte Ingram personal foul (Chris Lykes draws the foul) - 2 shots	0:52		-1.4										-1.4
Aundre Jackson misses three point jump shot	0:42			-1.0									-1.0
Lucas Williamson offensive rebound	0:40										1.0		1.0
<b>Lucas Williamson makes two point putback layup</b>	0:37										1.0		1.0
<b>Cumulatives (Half)</b>		1.2	-1.4	-1.4	0.8	0.0	0.5	-3.0	-0.8	-2.4	0.6	1.2	-4.7
<b>Number of Opportunities (Half)</b>		8	14	7	8	0	8	3	2	5	7	2	54

Game 1, Lovola-Chi (64) vs. Miami-FL (62), 03-15-2018		Custer	Ingram	Jackson	Krutwig	Negron	Richardson	Satterwhite	Skokna	Townes	Williamson	Unassigned	Team
Donte Ingram misses three point jump shot	19:38		-1.0										-1.0
Clayton Custer misses two point driving layup ( <i>Self-assist credited</i> )	18:49	-1.0											-1.0
Cameron Krutwig defensive rebound	18:38				1.0								1.0
Clayton Custer misses three point jump shot	18:37	-1.0											-1.0
Cameron Krutwig offensive rebound	18:35				1.0								1.0
Cameron Krutwig makes regular free throw 1 of 2	18:31				0.3								0.3
Cameron Krutwig misses regular free throw 2 of 2	18:31				-0.7								-0.7
Clayton Custer makes three point jump shot (Donte Ingram assists)	17:40	1.0	1.0										2.0
Donte Ingram misses three point jump shot	16:55		-1.0										-1.0
Clayton Custer personal foul (Lonnie Walker draws the foul) - no shot	16:41	-0.2											-0.2
Ben Richardson misses three point jump shot	16:04						-1.0						-1.0
Aundre Jackson misses two point layup ( <i>Unassigned assist credited</i> )	15:26			-1.6								0.6	-1.0
Marques Townes makes two point layup (Ben Richardson assists)	15:12						0.6			0.4			1.0
Aundre Jackson makes two point reverse layup (Ben Richardson assists)	14:23			0.4			0.6						1.0
Marques Townes makes two point reverse layup (Ben Richardson assists)	13:31						0.6			0.4			1.0
Ben Richardson defensive rebound	13:05						1.0						1.0
Lucas Williamson offensive foul (Dewan Huell draws the foul) - no shot	12:57										-2.0		-2.0
Aundre Jackson personal foul - no shot	12:43			-0.2									-0.2
Clayton Custer defensive rebound	12:28	1.0											1.0
Aundre Jackson makes two point layup (Lucas Williamson assists)	12:21			0.4							0.6		1.0
Lucas Williamson shooting foul (Ebuka Izundu draws the foul) - 2 shots	11:56										-1.4		-1.4
Lucas Williamson makes three point jump shot (Donte Ingram assists)	11:41		1.0								1.0		2.0
Ebuka Izundu blocks Lucas Williamson's two point driving layup ( <i>Self-assist credited</i> )	11:02										-1.0		-1.0
Clayton Custer makes two point driving layup	10:50	1.0											1.0
Donte Ingram defensive rebound	10:31		1.0										1.0
Cameron Krutwig turnover (Chris Lykes steals)	10:05				-2.0								-2.0
Lucas Williamson defensive rebound	9:46										1.0		1.0



Game 1, Lovola-Chi (64) vs. Miami-FL (62), 03-15-2018		Custer	Ingram	Jackson	Krutwig	Negron	Richardson	Satterwhite	Skokna	Townes	Williamson	Unassigned	Team
Lucas Williamson misses three point jump shot	9:34										-1.0		-1.0
Donte Ingram makes three point jump shot (Ben Richardson assists)	8:33		1.0				1.0						2.0
Clayton Custer makes three point jump shot (Lucas Williamson assists)	7:51	1.0									1.0		2.0
Donte Ingram makes two point jump shot (Marques Townes assists)	7:01		0.5							0.5			1.0
Lonnie Walker blocks Marques Townes's two point layup (Unassigned assist credited)	6:32									-1.6		0.6	-1.0
Ramblers offensive rebound	6:30											1.0	1.0
Ja'Quan Newton blocks Aundre Jackson's two point layup (Unassigned assist credited)	6:14			-1.6								0.6	-1.0
Ramblers offensive rebound	6:12											1.0	1.0
Clayton Custer misses three point jump shot	6:07	-1.0											-1.0
Dewan Huell blocks Aundre Jackson's two point driving layup (Unassigned assist credited)	5:39			-1.6								0.6	-1.0
Ben Richardson defensive rebound	5:31						1.0						1.0
Donte Ingram misses three point jump shot	5:09		-1.0										-1.0
Ramblers offensive rebound	5:07											1.0	1.0
Marques Townes turnover (Anthony Lawrence Jr. steals)	4:55									-2.0			-2.0
Aundre Jackson makes two point turnaround jump shot	4:24			1.0									1.0
Donte Ingram misses two point pullup jump shot	3:47		-1.0										-1.0
Aundre Jackson shooting foul (Dewan Huell draws the foul) - 2 shots	3:28			-1.4									-1.4
Donte Ingram defensive rebound	3:28		1.0										1.0
Marques Townes misses three point jump shot	3:14									-1.0			-1.0
Cameron Krutwig makes regular free throw 1 of 2	2:29				0.3								0.3
Cameron Krutwig makes regular free throw 2 of 2	2:29				0.3								0.3
Donte Ingram misses regular free throw 1 of 1	1:50		-0.7										-0.7
Marques Townes personal foul (Chris Lykes draws the foul) - no shot	1:49									-0.2			-0.2
Clayton Custer makes three point jump shot (Ben Richardson assists)	1:13	1.0					1.0						2.0
Marques Townes misses regular free throw 1 of 2	0:26									-0.7			-0.7
Marques Townes makes regular free throw 2 of 2	0:26									0.3			0.3
Marques Townes misses two point layup (Unassigned assist credited)	0:15									-1.6		0.6	-1.0





Game 2, Lovola-Chi (63) vs. Tennessee (62), 03-17-2018		Custer	Ingram	Jackson	Krutwig	Negron	Richardson	Satterwhite	Skokna	Townes	Williamson	Unassigned	Team
Aundre Jackson defensive rebound	2:27			1.0									1.0
Aundre Jackson misses three point jump shot	2:01			-1.0									-1.0
Aundre Jackson offensive rebound	1:59			1.0									1.0
Aundre Jackson makes regular free throw 1 of 2	1:49			0.3									0.3
Aundre Jackson makes regular free throw 2 of 2	1:49			0.3									0.3
Ben Richardson personal foul (Grant Williams draws the foul) - 1 and 1	1:31						-1.2						-1.2
Marques Townes defensive rebound	1:31									1.0			1.0
Grant Williams blocks Donte Ingram's two point jump shot	1:02		-1.0										-1.0
Donte Ingram misses three point jump shot	0:02		-1.0										-1.0
<b>Cumulatives (Half)</b>		-1.4	-3.7	1.6	0.5	0.0	-1.4	0.0	-0.4	1.8	2.6	2.0	1.6
<b>Number of Opportunities (Half)</b>		8	9	14	7	0	8	0	2	9	5	2	54
Cameron Krutwig misses two point layup <i>(Unassigned assist credited)</i>	19:31				-1.6							0.6	-1.0
Cameron Krutwig misses regular free throw 1 of 2	18:57				-0.7								-0.7
Cameron Krutwig makes regular free throw 2 of 2	18:57				0.3								0.3
Cameron Krutwig defensive rebound after block	18:39				1.0								1.0
Marques Townes misses three point jump shot	18:26									-1.0			-1.0
Donte Ingram defensive rebound	18:01		1.0										1.0
Marques Townes makes two point reverse layup	17:52									1.0			1.0
Clayton Custer makes three point jump shot <i>(Donte Ingram assists)</i>	17:20	1.0	1.0										2.0
Donte Ingram makes three point pullup jump shot	16:56		2.0										2.0
Clayton Custer shooting foul (Jordan Bowden draws the foul) - 2 shots	16:39	-1.4											-1.4
Ben Richardson defensive rebound	16:39						1.0						1.0
Cameron Krutwig offensive foul (Grant Williams draws the foul)	16:15				-2.0								-2.0
Donte Ingram misses three point jump shot	15:35		-1.0										-1.0
Ben Richardson makes two point jump shot <i>(Clayton Custer assists)</i>	14:45	0.5					0.5						1.0
Ramblers turnover (shot clock violation)	13:48											-2.0	-2.0
Aundre Jackson personal foul (Derrick Walker draws the foul) - no shot	13:36			-0.2									-0.2
Cameron Krutwig personal foul (Derrick Walker draws the foul) - no shot	13:26				-0.2								-0.2
Lucas Williamson makes three point jump shot <i>(Cameron Krutwig assists)</i>	12:26				1.0						1.0		2.0

Game 2, Lovola-Chi (63) vs. Tennessee (62), 03-17-2018		Custer	Ingram	Jackson	Krutwig	Negron	Richardson	Satterwhite	Skokna	Townes	Williamson	Unassigned	Team
Ramblers defensive rebound	12:04											1.0	1.0
<b>Aundre Jackson makes two point layup (Cameron Krutwig assists)</b>	11:42			0.4	0.6								1.0
Aundre Jackson misses two point layup <i>(Unassigned assist credited)</i>	11:01			-1.6								0.6	-1.0
Lucas Williamson defensive rebound	10:48										1.0		1.0
<b>Cameron Krutwig makes two point jump shot</b>	10:36				1.0								1.0
Marques Townes defensive rebound	10:10									1.0			1.0
<b>Bruno Skokna makes three point jump shot (Marques Townes assists)</b>	10:03								1.0	1.0			2.0
Aundre Jackson personal foul (Grant Williams draws the foul) - no shot	9:43			-0.2									-0.2
Cameron Krutwig misses two point layup <i>(Unassigned assist credited)</i>	9:03				-1.6							0.6	-1.0
Ben Richardson misses three point jump shot	8:15						-1.0						-1.0
Clayton Custer defensive rebound	7:51	1.0											1.0
<b>Donte Ingram makes three point jump shot (Ben Richardson assists)</b>	7:31		1.0				1.0						2.0
Cameron Krutwig misses two point layup <i>(Unassigned assist credited)</i>	6:55				-1.6							0.6	-1.0
Ramblers offensive rebound	6:54											1.0	1.0
Donte Ingram misses regular free throw 1 of 2	6:47		-0.7										-0.7
Donte Ingram misses regular free throw 2 of 2	6:47		-0.7										-0.7
Donte Ingram misses two point jump shot	5:56		-1.0										-1.0
Lucas Williamson offensive rebound	5:54										1.0		1.0
Lucas Williamson misses two point layup <i>(Williamson assumed to self-assist)</i>	5:48										-1.0		-1.0
Marques Townes defensive rebound	5:03									1.0			1.0
<b>Lucas Williamson makes regular free throw 1 of 2</b>	4:44										0.3		0.3
Lucas Williamson misses regular free throw 2 of 2	4:44										-0.7		-0.7
Marques Townes offensive rebound	4:44									1.0			1.0
<b>Aundre Jackson makes regular free throw 1 of 2</b>	4:26			0.3									0.3
<b>Aundre Jackson makes regular free throw 2 of 2</b>	4:26			0.3									0.3
Aundre Jackson defensive rebound	4:10			1.0									1.0
<b>Aundre Jackson makes two point layup (Ben Richardson assists)</b>	4:03			0.4			0.6						1.0
Marques Townes makes regular free throw 1 of 2	3:25									0.3			0.3
Marques Townes makes regular free throw 2 of 2	3:25									0.3			0.3

<b>Game 2, Lovola-Chi (63) vs. Tennessee (62), 03-17-2018</b>		Custer	Ingram	Jackson	Krutwig	Negron	Richardson	Satterwhite	Skokna	Townes	Williamson	Unassigned	Team
Ben Richardson misses regular free throw 1 of 2	2:46						-0.7						-0.7
<b>Ben Richardson makes regular free throw 2 of 2</b>	2:46						0.3						0.3
Aundre Jackson turnover (lost ball) (Lamonte Turner steals)	2:01			-2.0									-2.0
Grant Williams blocks Marques Townes's two point jump shot	1:22									-1.0			-1.0
Marques Townes defensive rebound	1:02									1.0			1.0
Aundre Jackson turnover (bad pass) (Jordan Bowden steals)	0:34			-2.0									-2.0
Aundre Jackson shooting foul (Grant Williams draws the foul) - +1 shot after score	0:20			-0.7									-0.7
Clayton Custer makes two point pullup jump shot	0:05	1.0											1.0
<b>Cumulatives (Half)</b>		2.1	1.6	-4.3	-3.8	0.0	1.7	0.0	1.0	4.6	1.6	2.4	6.9
<b>Number of Opportunities (Half)</b>		5	8	11	11	0	7	0	1	10	6	7	55
<b>Cumulatives (Game)</b>		0.7	-2.1	-2.7	-3.3	0.0	0.3	0.0	0.6	6.4	4.2	4.4	8.5
<b>Number of Opportunities (Game)</b>		13	17	25	18	0	15	0	3	19	11	9	109
<b>SUV per Opportunity (Game)</b>		0.05	-0.12	-0.11	-0.18		0.02		0.20	0.34	0.38	0.49	0.08
<b>Cumulatives (Game 1)</b>		3.0	0.4	-6.0	1.0	0.0	6.3	-3.0	-0.8	-8.1	-1.2	7.2	-1.2
<b>Number of Opportunities (Game 1)</b>		17	26	15	17	0	17	3	2	17	15	10	113
<b>Cumulatives (Thru 2 Games)</b>		3.7	-1.7	-8.7	-2.3	0.0	6.6	-3.0	-0.2	-1.7	3.0	11.6	7.3
<b>Number of Opportunities (Thru 2 Games)</b>		30	43	40	35	0	32	3	5	36	26	19	222
<b>SUV per Opportunity (Thru 2 Games)</b>		0.12	-0.04	-0.22	-0.07		0.21	-1.00	-0.04	-0.05	0.12	0.61	0.03
<b>Game 3, Lovola-Chi (69) vs. Nevada (68), 03-22-2018</b>		Custer	Ingram	Jackson	Krutwig	Negron	Richardson	Satterwhite	Skokna	Townes	Williamson	Unassigned	Team
Cameron Krutwig makes two point layup (Donte Ingram assists)	19:10		0.6		0.4								1.0
Cameron Krutwig makes two point layup (Ben Richardson assists)	18:25				0.4		0.6						1.0
Marques Townes misses two point layup (Unassigned assist credited)	17:48									-1.6		0.6	-1.0
Clayton Custer defensive rebound	17:40	1.0											1.0
Donte Ingram misses three point jump shot	17:32		-1.0										-1.0
Cameron Krutwig defensive rebound	17:18				1.0								1.0
Cameron Krutwig misses two point layup (Unassigned assist credited)	17:04				-1.6							0.6	-1.0
Cameron Krutwig shooting foul (Jordan Caroline draws the foul) - 2 shots	16:33				-1.4								-1.4
Jordan Caroline blocks Aundre Jackson's two point layup (Unassigned assist credited)	16:16			-1.6								0.6	-1.0
Ben Richardson misses three point jump shot	15:46						-1.0						-1.0

Game 3, Lovola-Chi (69) vs. Nevada (68), 03-22-2018		Custer	Ingram	Jackson	Krutwig	Negron	Richardson	Satterwhite	Skokna	Townes	Williamson	Unassigned	Team
Caleb Martin blocks Aundre Jackson's two point layup ( <i>Unassigned assist credited</i> )	15:18			-1.6								0.6	-1.0
Aundre Jackson offensive rebound	15:16			1.0									1.0
<b>Aundre Jackson makes two point layup</b>	15:07			1.0									1.0
<b>Clayton Custer makes two point layup</b>	14:28	1.0											1.0
Ben Richardson shooting foul (Jordan Caroline draws the foul) - 2 shots	14:08						-1.4						-1.4
Jump ball. (Ramblers gains possession)	13:55											1.0	1.0
Clayton Custer misses regular free throw 1 of 2	13:54	-0.7											-0.7
Clayton Custer misses regular free throw 2 of 2	13:54	-0.7											-0.7
Caleb Martin blocks Lucas Williamson's two point layup ( <i>Unassigned assist credited</i> )	13:17										-1.6	0.6	-1.0
<b>Cameron Krutwig makes two point layup</b>	12:45				1.0								1.0
Marques Townes defensive rebound	12:23									1.0			1.0
<b>Marques Townes makes regular free throw 1 of 2</b>	12:11									0.3			0.3
<b>Marques Townes makes regular free throw 2 of 2</b>	12:11									0.3			0.3
Cameron Krutwig misses two point hook shot	11:31				-1.0								-1.0
Marques Townes defensive rebound	11:16									1.0			1.0
<b>Marques Townes makes two point layup</b>	10:58									1.0			1.0
Marques Townes turnover (bad pass) (Caleb Martin steals)	10:08									-2.0			-2.0
Bruno Skokna defensive rebound	9:56								1.0				1.0
Marques Townes misses two point layup ( <i>Unassigned assist credited</i> )	9:56									-1.6		0.6	-1.0
Bruno Skokna misses two point layup ( <i>Unassigned assist credited</i> )	9:40								-1.6			0.6	-1.0
Cameron Krutwig offensive rebound	9:38				1.0								1.0
<b>Cameron Krutwig makes two point tip shot</b> ( <i>Unassigned shooter credited</i> )	9:35				0.6							0.4	1.0
Ben Richardson defensive rebound	9:16						1.0						1.0
Bruno Skokna misses three point jump shot	9:08								-1.0				-1.0
Cameron Satterwhite defensive rebound	8:50							1.0					1.0
Bruno Skokna turnover (bad pass) (Josh Hall steals)	8:43								-2.0				-2.0
Bruno Skokna personal foul (Josh Hall draws the foul) - no shot	8:43								-0.2				-0.2
Cameron Krutwig defensive rebound	8:07				1.0								1.0
Ben Richardson turnover (bad pass) (Hallice Cooke steals)	8:00						-2.0						-2.0

Game 3, Lovola-Chi (69) vs. Nevada (68), 03-22-2018		Custer	Ingram	Jackson	Krutwig	Negron	Richardson	Satterwhite	Skokna	Townes	Williamson	Unassigned	Team
Clayton Custer makes three point jump shot (Cameron Krutwig assists)	7:33	1.0			1.0								2.0
Cameron Satterwhite defensive rebound	6:48							1.0					1.0
Aundre Jackson misses two point layup (Unassigned assist credited)	6:44			-1.6								0.6	-1.0
Aundre Jackson defensive rebound	6:34			1.0									1.0
Cameron Krutwig offensive foul	6:26				-2.0								-2.0
Clayton Custer misses three point jump shot	5:50	-1.0											-1.0
Donte Ingram defensive rebound	5:29		1.0										1.0
Clayton Custer turnover (bad pass) (Jordan Caroline steals)	5:20	-2.0											-2.0
Caleb Martin blocks Aundre Jackson's two point layup (Unassigned assist credited)	5:01			-1.6								0.6	-1.0
Ramblers offensive rebound	4:57											1.0	1.0
Donte Ingram misses two point jump shot	4:52		-1.0										-1.0
Clayton Custer defensive rebound	4:32	1.0											1.0
Cody Martin blocks Aundre Jackson's two point layup (Unassigned assist credited)	4:23			-1.6								0.6	-1.0
Ramblers offensive rebound	4:23											1.0	1.0
Clayton Custer makes two point layup	4:11	1.0											1.0
Lucas Williamson personal foul (Caleb Martin draws the foul) - no shot	3:49										-0.2		-0.2
Clayton Custer turnover (out of bounds)	3:15	-2.0											-2.0
Clayton Custer makes two point layup	2:57	1.0											1.0
Lucas Williamson defensive rebound	2:40										1.0		1.0
Marques Townes makes regular free throw 1 of 2	2:16									0.3			0.3
Marques Townes makes regular free throw 2 of 2	2:16									0.3			0.3
Marques Townes misses two point layup (Unassigned assist credited)	1:40									-1.6		0.6	-1.0
Ramblers defensive rebound	1:10											1.0	1.0
Marques Townes makes three point jump shot (Clayton Custer assists)	0:42	1.0								1.0			2.0
Lucas Williamson personal foul (Cody Martin draws the foul) - no shot	0:11										-0.2		-0.2
Donte Ingram defensive rebound	0:01		1.0										1.0
<b>Cumulatives (Half)</b>		<b>0.6</b>	<b>0.6</b>	<b>-5.0</b>	<b>0.4</b>	<b>0.0</b>	<b>-2.8</b>	<b>2.0</b>	<b>-3.8</b>	<b>-1.6</b>	<b>-1.0</b>	<b>11.0</b>	<b>0.4</b>
<b>Number of Opportunities (Half)</b>		<b>12</b>	<b>5</b>	<b>8</b>	<b>12</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>5</b>	<b>12</b>	<b>4</b>	<b>16</b>	<b>65</b>
Marques Townes makes two point layup	19:19									1.0			1.0





<b>Game 3, Lovola-Chi (69) vs. Nevada (68), 03-22-2018</b>		<b>Custer</b>	<b>Ingram</b>	<b>Jackson</b>	<b>Krutwig</b>	<b>Negron</b>	<b>Richardson</b>	<b>Satterwhite</b>	<b>Skokna</b>	<b>Townes</b>	<b>Williamson</b>	<b>Unassigned</b>	<b>Team</b>
Ben Richardson misses three point jump shot	9:11						-1.0						-1.0
Ramblers turnover (shot clock violation)	8:21											-2.0	-2.0
Lucas Williamson defensive rebound	8:06										1.0		1.0
<b>Clayton Custer makes two point layup</b>	7:46	1.0											1.0
Marques Townes turnover (lost ball) (Jordan Caroline steals)	7:09									-2.0			-2.0
Lucas Williamson misses three point jump shot	6:29										-1.0		-1.0
Ben Richardson shooting foul (Cody Martin draws the foul) - 2 shots	6:19						-1.4						-1.4
Clayton Custer turnover (bad pass) (Cody Martin steals)	6:08	-2.0											-2.0
Lucas Williamson misses three point jump shot	5:31										-1.0		-1.0
Aundre Jackson offensive rebound	5:29			1.0									1.0
Aundre Jackson turnover (lost ball) (Cody Martin steals)	5:18			-2.0									-2.0
<b>Ben Richardson makes two point layup</b>	4:54						1.0						1.0
Clayton Custer misses two point layup ( <i>Unassigned assist credited</i> )	4:11	-1.6										0.6	-1.0
Ben Richardson misses three point jump shot	3:37						-1.0						-1.0
Ramblers defensive rebound	3:18											1.0	1.0
<b>Aundre Jackson makes three point jump shot (Clayton Custer assists)</b>	2:59	1.0		1.0									2.0
Donte Ingram shooting foul (Jordan Caroline draws the foul) - 2 shots	2:38		-1.4										-1.4
Marques Townes misses two point layup ( <i>Unassigned assist credited</i> )	2:11									-1.6		0.6	-1.0
Ramblers offensive rebound	2:10											1.0	1.0
<b>Aundre Jackson makes two point layup (Ben Richardson assists)</b>	1:46			0.4			0.6						1.0
Clayton Custer turnover (lost ball) (Cody Martin steals)	1:03	-2.0											-2.0
Marques Townes defensive rebound	0:47									1.0			1.0
<b>Aundre Jackson makes regular free throw 1 of 2</b>	0:41			0.3									0.3
<b>Aundre Jackson makes regular free throw 2 of 2</b>	0:41			0.3									0.3
Ben Richardson personal foul (Cody Martin draws the foul) - 2 shots	0:36						-1.4						-1.4
<b>Marques Townes makes three point jump shot (Clayton Custer assists)</b>	0:06	1.0								1.0			2.0
<b>Cumulatives (Half)</b>		0.3	-4.4	4.4	0.6	0.0	0.6	0.0	-1.4	1.1	-1.0	1.2	1.4

<b>Game 3, Lovola-Chi (69) vs. Nevada (68), 03-22-2018</b>		<b>Custer</b>	<b>Ingram</b>	<b>Jackson</b>	<b>Krutwig</b>	<b>Negron</b>	<b>Richardson</b>	<b>Satterwhite</b>	<b>Skokna</b>	<b>Townes</b>	<b>Williamson</b>	<b>Unassigned</b>	<b>Team</b>
<b>Number of Opportunities (Half)</b>		11	4	10	3	0	12	0	2	15	6	5	55
<b>Cumulatives (Game)</b>		0.9	-3.8	-0.6	1.0	0.0	-2.2	2.0	-5.2	-0.5	-2.0	12.2	1.8
<b>Number of Opportunities (Game)</b>		23	9	18	15	0	17	2	7	27	10	21	120
<b>SUV per Opportunity (Game)</b>		0.04	-0.42	-0.03	0.07		-0.13	1.00	-0.74	-0.02	-0.20	0.58	0.02
<b>Cumulatives (Thru 2 Games)</b>		3.7	-1.7	-8.7	-2.3	0.0	6.6	-3.0	-0.2	-1.7	3.0	11.6	7.3
<b>Number of Opportunities (Thru 2 Games)</b>		30	43	40	35	0	32	3	5	36	26	19	222
<b>Cumulatives (Thru 3 Games)</b>		4.6	-5.5	-9.3	-1.3	0.0	4.4	-1.0	-5.4	-2.2	1.0	23.8	9.1
<b>Number of Opportunities (Thru 3 Games)</b>		53	52	58	50	0	49	5	12	63	36	40	342
<b>SUV per Opportunity (Thru 3 Games)</b>		0.09	-0.11	-0.16	-0.03		0.09	-0.20	-0.45	-0.03	0.03	0.60	0.03

<b>Game 4, Lovola-Chi (78) vs. KS St. (62), 03-24-2018</b>		<b>Custer</b>	<b>Ingram</b>	<b>Jackson</b>	<b>Krutwig</b>	<b>Negron</b>	<b>Richardson</b>	<b>Satterwhite</b>	<b>Skokna</b>	<b>Townes</b>	<b>Williamson</b>	<b>Unassigned</b>	<b>Team</b>
Marques Townes defensive rebound	19:04									1.0			1.0
Clayton Custer misses two point jump shot	18:55	-1.0											-1.0
Ben Richardson defensive rebound	18:33						1.0						1.0
Cameron Krutwig misses two point hook shot	18:24				-1.0								-1.0
Donte Ingram defensive rebound	17:59		1.0										1.0
Marques Townes turnover (lost ball)	17:53									-2.0			-2.0
Clayton Custer makes two point layup	17:21	1.0											1.0
Ben Richardson makes three point jump shot (Donte Ingram assists)	16:30		1.0				1.0						2.0
Cameron Krutwig defensive rebound	16:05				1.0								1.0
Marques Townes makes two point jump shot	15:48									1.0			1.0
Cameron Krutwig defensive rebound	15:26				1.0								1.0
Donte Ingram makes three point jump shot (Marques Townes assists)	15:10		1.0							1.0			2.0
Clayton Custer defensive rebound	14:36	1.0											1.0
Ben Richardson makes three point jump shot (Lucas Williamson assists)	14:27						1.0				1.0		2.0
Clayton Custer turnover (bad pass) (Barry Brown steals)	13:58	-2.0											-2.0
Ben Richardson makes two point layup	13:09						1.0						1.0
Donte Ingram defensive rebound	12:37		1.0										1.0
Aundre Jackson makes two point layup	12:16			1.0									1.0
Cameron Satterwhite turnover (bad pass) (Makol Mawien steals)	11:38							-2.0					-2.0
Marques Townes makes two point layup (Cameron Krutwig assists)	11:01				0.6					0.4			1.0

Game 4, Lovola-Chi (78) vs. KS St. (62), 03-24-2018		Custer	Ingram	Jackson	Krutwig	Negron	Richardson	Satterwhite	Skokna	Townes	Williamson	Unassigned	Team
Cameron Krutwig defensive rebound	10:40				1.0								1.0
Cameron Krutwig turnover (traveling)	10:23				-2.0								-2.0
<b>Lucas Williamson makes two point layup</b>	9:44										1.0		1.0
Donte Ingram defensive rebound	9:17		1.0										1.0
Lucas Williamson misses three point jump shot	8:58										-1.0		-1.0
Cameron Krutwig offensive rebound	8:56				1.0								1.0
<b>Cameron Krutwig makes two point hook shot</b>	8:54				1.0								1.0
Clayton Custer personal foul (Barry Brown draws the foul) - no shot	8:40	-0.2											-0.2
Donte Ingram misses three point jump shot	8:11		-1.0										-1.0
Aundre Jackson turnover (bad pass)	7:36			-2.0									-2.0
Marques Townes misses two point jump shot	6:58									-1.0			-1.0
Marques Townes shooting foul (Levi Stockard III draws the foul) - 2 shots	6:38									-1.4			-1.4
Aundre Jackson defensive rebound	6:38			1.0									1.0
<b>Aundre Jackson makes two point layup</b>	6:17			1.0									1.0
Aundre Jackson shooting foul (Barry Brown draws the foul) - +1 shot after score	5:55			-0.7									-0.7
Lucas Williamson misses three point jump shot	5:38										-1.0		-1.0
Clayton Custer offensive rebound	5:36	1.0											1.0
Marques Townes misses two point layup <i>(Unassigned assist credited)</i>	5:31									-1.6		0.6	-1.0
Aundre Jackson personal foul (Barry Brown draws the foul) - no shot	5:17			-0.2									-0.2
Lucas Williamson defensive rebound	5:00										1.0		1.0
<b>Lucas Williamson makes two point layup (Clayton Custer assists)</b>	4:31	0.6									0.4		1.0
<b>Lucas Williamson makes regular free throw 1 of 1</b>	4:31										0.3		0.3
Cameron Satterwhite personal foul (Barry Brown draws the foul) - no shot	4:19							-0.2					-0.2
Cameron Krutwig defensive rebound	3:59				1.0								1.0
Cameron Krutwig misses two point hook shot	3:40				-1.0								-1.0
Ben Richardson misses three point jump shot	3:18						-1.0						-1.0
Ben Richardson personal foul (Barry Brown draws the foul) - no shot	2:53						-0.2						-0.2
Ben Richardson defensive rebound	2:43						1.0						1.0
<b>Cameron Krutwig makes two point layup (Ben Richardson assists)</b>	2:19				0.4		0.6						1.0



Game 4, Lovola-Chi (78) vs. KS St. (62), 03-24-2018		Custer	Ingram	Jackson	Krutwig	Negron	Richardson	Satterwhite	Skokna	Townes	Williamson	Unassigned	Team
Audre Jackson makes two point layup (Ben Richardson assists)	13:23			0.4			0.6						1.0
Marques Townes defensive rebound	12:59									1.0			1.0
Donte Ingram turnover (bad pass) (Makol Mawien steals)	12:38		-2.0										-2.0
Clayton Custer turnover (bad pass)	12:14	-2.0											-2.0
Marques Townes turnover (bad pass)	11:49									-2.0			-2.0
Lucas Williamson shooting foul (Mike McGuirl draws the foul) - +1 shot after score	11:31										-0.7		-0.7
Ben Richardson makes three point jump shot (Marques Townes assists)	11:15						1.0			1.0			2.0
Marques Townes makes two point layup (Ben Richardson assists)	10:55						0.6			0.4			1.0
Cameron Krutwig defensive rebound	10:42				1.0								1.0
Cameron Krutwig misses two point jump shot	10:16				-1.0								-1.0
Marques Townes defensive rebound	10:05									1.0			1.0
Lucas Williamson makes two point layup	9:36										1.0		1.0
Ben Richardson defensive rebound	9:22						1.0						1.0
Marques Townes turnover (lost ball)	9:14									-2.0			-2.0
Audre Jackson defensive rebound	9:02			1.0									1.0
Ben Richardson misses two point layup (Unassigned assist credited)	8:57						-1.6					0.6	-1.0
Clayton Custer misses two point layup (Unassigned assist credited)	8:24	-1.6										0.6	-1.0
Ben Richardson defensive rebound	8:09						1.0						1.0
Donte Ingram misses three point jump shot	7:48		-1.0										-1.0
Lucas Williamson personal foul (Cartier Diarra draws the foul) - no shot	7:39										-0.2		-0.2
Lucas Williamson defensive rebound	7:30										1.0		1.0
Clayton Custer turnover (bad pass) (Amaad Wainright steals)	7:02	-2.0											-2.0
Lucas Williamson misses three point jump shot	6:24										-1.0		-1.0
Lucas Williamson personal foul (Barry Brown draws the foul) - no shot	6:13										-0.2		-0.2
Xavier Sneed blocks Clayton Custer's two point layup (Unassigned assist credited)	5:51	-1.6										0.6	-1.0
Donte Ingram defensive rebound	5:42		1.0										1.0
Donte Ingram turnover (traveling)	5:19		-2.0										-2.0
Ben Richardson makes three point jump shot (Clayton Custer assists)	4:54	1.0					1.0						2.0

<b>Game 4, Lovola-Chi (78) vs. KS St. (62), 03-24-2018</b>		<b>Custer</b>	<b>Ingram</b>	<b>Jackson</b>	<b>Krutwig</b>	<b>Negron</b>	<b>Richardson</b>	<b>Satterwhite</b>	<b>Skokna</b>	<b>Townes</b>	<b>Williamson</b>	<b>Unassigned</b>	<b>Team</b>
Marques Townes personal foul (Kamau Stokes draws the foul) - 2 shots	4:40									-1.4			-1.4
Ben Richardson turnover (bad pass) (Amaad Wainright steals)	4:30						-2.0						-2.0
Clayton Custer misses three point jump shot	3:34	-1.0											-1.0
Lucas Williamson defensive rebound	3:12										1.0		1.0
Marques Townes makes regular free throw 1 of 2	2:58									0.3			0.3
Marques Townes makes regular free throw 2 of 2	2:58									0.3			0.3
Marques Townes defensive rebound	2:43									1.0			1.0
Marques Townes makes two point layup (Lucas Williamson assists)	2:33									0.4	0.6		1.0
Marques Townes makes regular free throw 1 of 1	2:33									0.3			0.3
Lucas Williamson personal foul (Kamau Stokes draws the foul) - 2 shots	2:32										-1.4		-1.4
Donte Ingram turnover (lost ball) (Barry Brown steals)	2:12		-2.0										-2.0
Donte Ingram personal foul (Barry Brown draws the foul) - 2 shots	2:07		-1.4										-1.4
Lucas Williamson defensive rebound	2:07										1.0		1.0
Ben Richardson makes regular free throw 1 of 2	2:03						0.3						0.3
Ben Richardson makes regular free throw 2 of 2	2:03						0.3						0.3
Marques Townes makes regular free throw 1 of 2	1:42									0.3			0.3
Marques Townes makes regular free throw 2 of 2	1:42									0.3			0.3
Cameron Satterwhite misses regular free throw 1 of 2	1:16							-0.7					-0.7
Cameron Satterwhite misses regular free throw 2 of 2	1:16							-0.7					-0.7
Lucas Williamson misses regular free throw 1 of 2	1:00										-0.7		-0.7
Lucas Williamson makes regular free throw 2 of 2	1:00										0.3		0.3
Clayton Custer makes regular free throw 1 of 2	0:44	0.3											0.3
Clayton Custer makes regular free throw 2 of 2	0:44	0.3											0.3
Donte Ingram defensive rebound	0:37		1.0										1.0
Donte Ingram makes regular free throw 1 of 2	0:35		0.3										0.3
Donte Ingram makes regular free throw 2 of 2	0:35		0.3										0.3
Bruno Skokna defensive rebound	0:24								1.0				1.0











Game 5, Lovola-Chi (57) vs. Michigan (69), 03-31-2018		Custer	Ingram	Jackson	Krutwig	Negron	Richardson	Satterwhite	Skokna	Townes	Williamson	Unassigned	Team
Donte Ingram turnover (lost ball)	5:07		-2.0										-2.0
Donte Ingram shooting foul (Moritz Wagner draws the foul) - +1 shot after score	4:59		-0.7										-0.7
<b>Cameron Krutwig makes two point hook shot</b>	4:43				1.0								1.0
Ben Richardson defensive rebound	4:19						1.0						1.0
Bruno Skokna misses three point jump shot	4:08								-1.0				-1.0
Ramblers offensive rebound	4:06											1.0	1.0
Cameron Krutwig misses two point hook shot	4:03				-1.0								-1.0
Ben Richardson personal foul (Zavier Simpson draws the foul) - no shot	4:01						-0.2						-0.2
<b>Ben Richardson makes two point pullup jump shot</b>	3:22						1.0						1.0
Cameron Krutwig turnover (bad pass) (Muhammad-Ali Abdur-Rahkman steals)	2:40				-2.0								-2.0
<b>Clayton Custer makes two point step back jump shot</b>	1:46	1.0											1.0
Clayton Custer personal foul (Muhammad-Ali Abdur-Rahkman draws the foul) - no shot	1:39	-0.2											-0.2
<b>Clayton Custer makes two point driving layup</b>	1:14	1.0											1.0
Ben Richardson personal foul (Muhammad-Ali Abdur-Rahkman draws the foul) - 2 shots	1:02						-1.4						-1.4
Clayton Custer misses two point reverse layup ( <i>Unassigned assist credited</i> )	0:50	-1.6										0.6	-1.0
Cameron Krutwig offensive rebound	0:48				1.0								1.0
<b>Cameron Krutwig makes two point putback layup</b>	0:48				1.0								1.0
Marques Townes personal foul (Muhammad-Ali Abdur-Rahkman draws the foul) - 2 shots	0:46									-1.4			-1.4
Cameron Krutwig defensive rebound	0:46				1.0								1.0
Marques Townes misses two point layup ( <i>Unassigned assist credited</i> )	0:30									-1.6		0.6	-1.0
Donte Ingram personal foul (Duncan Robinson draws the foul) - 2 shots	0:28		-1.4										-1.4
Marques Townes misses three point jump shot	0:21									-1.0			-1.0
Clayton Custer personal foul (Duncan Robinson draws the foul) - 2 shots	0:13	-1.4											-1.4
C.J. Baird blocks Bruno Skokna's two point layup ( <i>Unassigned assist credited</i> )	0:05								-1.6			0.6	-1.0
Christian Negron offensive rebound	0:03					1.0							1.0
Christian Negron turnover (lost ball) (Jordan Poole steals)	0:01					-2.0							-2.0
<b>Cumulatives (Half)</b>		-2.1	-5.3	0.5	-2.0	-1.0	-4.4	0.0	-2.6	-4.6	-1.4	3.4	-19.5

Game 5, Lovola-Chi (57) vs. Michigan (69), 03-31-2018	Custer	Ingram	Jackson	Krutwig	Negron	Richardson	Satterwhite	Skokna	Townes	Williamson	Unassigned	Team
Number of Opportunities (Half)	12	10	3	19	2	12	0	2	7	1	5	66
Cumulatives (Game)	-6.5	2.1	-2.9	-4.6	-1.0	-4.6	-0.4	-2.8	-3.6	-0.4	4.6	-20.1
Number of Opportunities (Game)	18	21	16	29	2	16	2	3	23	6	7	131
SUV per Opportunity (Game)	-0.36	0.10	-0.18	-0.16	-0.50	-0.29	-0.20	-0.93	-0.16	-0.07	0.66	-0.15
Cumulatives (Thru 4 Games)	-0.2	-1.5	-7.8	3.2	0.0	13.9	-4.6	-4.4	-5.3	2.4	27.8	23.5
Number of Opportunities (Thru 4 Games)	75	74	66	69	0	75	9	13	87	57	46	473
Cumulatives (Thru 5 Games)	-6.7	0.6	-10.7	-1.4	-1.0	9.3	-5.0	-7.2	-8.9	2.0	32.4	3.4
Number of Opportunities (Thru 5 Games)	93	95	82	98	2	91	11	16	110	63	53	604
SUV per Opportunity (Thru 5 Games)	-0.07	0.01	-0.13	-0.01	-0.50	0.10	-0.45	-0.45	-0.08	0.03	0.61	0.01
<b>Lovola Player</b>	<b>Richardson</b>	<b>Williamson</b>	<b>Ingram</b>	<b>Krutwig</b>	<b>Custer</b>	<b>Townes</b>	<b>Jackson</b>	<b>Skokna</b>	<b>Satterwhite</b>	<b>Negron</b>	<b>Unassigned</b>	<b>Team</b>
Cumulatives (Thru 5 Games)	9.3	2.0	0.6	-1.4	-6.7	-8.9	-10.7	-7.2	-5.0	-1.0	32.4	3.4
Number of Opportunities (Thru 5 Games)	91	63	95	98	93	110	82	16	11	2	53	604
SUV per Opportunity (Thru 5 Games)	0.10	0.03	0.01	-0.01	-0.07	-0.08	-0.13	-0.45	-0.45	-0.50	0.61	0.01

## References

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