Rockies 2018 - Week #4

Jim Reed (jdreed@q.com) Monday, April 30, 2018

Colorado Rockies Statistics Snapshot

Table 1: NL West Standings

Tm	W	L	W-L $%$	GB
Arizona Diamondbacks	19	8	.704	_
Colorado Rockies	15	14	.517	5.0
San Francisco Giants	14	14	.500	5.5
Los Angeles Dodgers	12	15	.444	7.0
San Diego Padres	10	19	.345	10.0

Table 2: Current Rockies Results as of 2018-04-30

Wins	Losses	Win.Pct	Runs	Runs.Ag	Predicted Season Wins
15	14	51.724	113	137	66

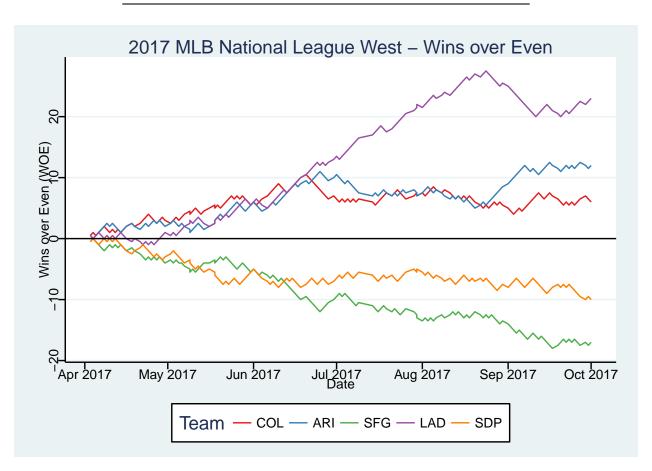




Figure 1: Ted Williams (August 30, 1918 - July 5, 2002) played in the Major Leagues from 1939 until 1960, interrupted by military service for World War II and the Korean War.

Colorado Rockies Weekly Newletter



A man has to have goals — for a day, for a lifetime — and that was mine, to have people say, "There goes Ted Williams, the greatest hitter who ever lived." \sim Ted Williams

Week #4

- Colorado Rockies Dashboard
 - MLB NL West Division WOE for 2017 $\bf re\mbox{-}\bf run$
 - Rockies Win/Loss Graphs for 2018 and 2007
 - Top Twelve Rockies Players as Measured by WAR
 - National and American League Standings
 - Game-by-Game Results
 - Pythagorean Theorem prediction of the number of wins.
 - Batting Statistics (for non-pitchers)
 - Pitching Statistics
 - National League Team Standard Batting
 - Current Injuries **Updated**

Most of the source data for this article can be found at URL http://baseball-reference.com.

A New Statistic WOE Re-run

The astute reader will notice the graph on page one depicting WOE for the NL West teams in 2017. What is WOE and who cares? WOE is Wins Over Even. You've heard the old saw that you have to play over 500 if you intend to advance to the playoffs. Well in the case of the 2017 season, all the teams in NL West that finished over 500 (or, "even") advanced to the playoffs. Colorado and Arizona had a single game playoff to determine who would play the Los Angeles Dodgers for the division title.

If you look carefully at the beginning of the season, you will notice the back and forth among COL, LAD and ARI. In late June, the Rockies and the Diamonbacks fell off and never again gained first place. LAD just kept climbing, finishing over twenty games above 500 (WOE).

In the first several weeks, all the teams in NL West will be sorting out their playing strategy and style. Starting next week, I will post the WOE graph for 2018 and we can watch this over the coming weeks.

Let me know if you think this graph is intersting/informative or a waste of ink!

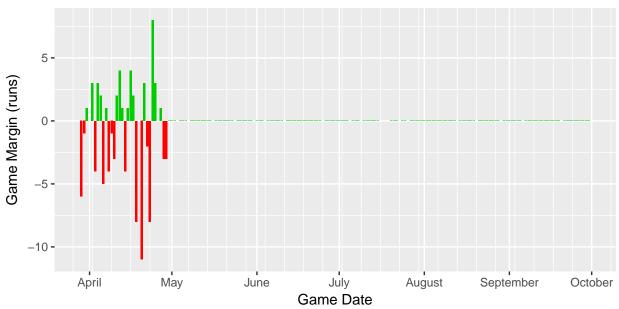
Colorado Rockies Dashboard

Win Loss Margin

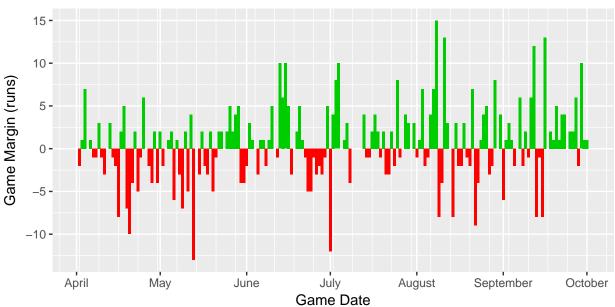
One of the many ways to visualize a teams performance is to show wins and losses as the margin of the win (positive) or loss (negative). In the graphs below, we show the current season performance. For emphasis, wins are displayed in green (above the zero) and losses in red (below).

Following the current season's graph, I have included the Win/Loss margin chart for our benchmark season of 2007 when the Rockies won the National League pennant.

Rockies 2018 Win/Loss Margin



Rockies 2007 Win/Loss Margin



Top Twelve Rockies Players as Measured by WAR

While early in the season, we will pull this data frequently.

Table 3: Rockies Top 12 Players (WAR)

Rank	Name	Age	WAR
1	DJ LeMahieu	29	1.4
2	Chad Bettis	29	1.3
3	Adam Ottavino	32	0.9
4	Nolan Arenado	27	0.8
5	Charlie Blackmon	31	0.8
6	Wade Davis	32	0.5
7	Kyle Freeland	25	0.4
8	Trevor Story	25	0.4
9	Tyler Anderson	28	0.2
10	David Dahl	24	0.1
11	German Marquez	23	0.1
12	Harrison Musgrave	26	0.1

National League Standings

Table 4: NL East Standings

Tm	W	L	W-L%	GB
New York Mets	17	9	.654	_
Atlanta Braves	16	11	.593	1.5
Philadelphia Phillies	16	11	.593	1.5
Washington Nationals	12	16	.429	6.0
Miami Marlins	9	18	.333	8.5

Table 5: NL Central Standings

Tm	W	L	W-L%	GB
Pittsburgh Pirates	17	11	.607	_
Chicago Cubs	15	10	.600	0.5
St. Louis Cardinals	15	12	.556	1.5
Milwaukee Brewers	16	13	.552	1.5
Cincinnati Reds	7	21	.250	10.0

Table 6: NL West Standings

Tm	W	L	W-L%	GB
Arizona Diamondbacks	19	8	.704	_
Colorado Rockies	15	14	.517	5.0
San Francisco Giants	14	14	.500	5.5
Los Angeles Dodgers	12	15	.444	7.0
San Diego Padres	10	19	.345	10.0

American League Standings

Table 7: AL East Standings

Tm	W	L	W-L $%$	GB
Boston Red Sox	20	7	.741	_
New York Yankees	18	9	.667	2.0
Toronto Blue Jays	15	12	.556	5.0
Tampa Bay Rays	12	14	.462	7.5
Baltimore Orioles	8	20	.286	12.5

Table 8: AL Central Standings

$\overline{\mathrm{Tm}}$	W	L	W-L%	GB
Cleveland Indians	14	12	.538	_
Detroit Tigers	11	15	.423	3.0
Minnesota Twins	9	14	.391	3.5
Chicago White Sox	8	18	.308	6.0
Kansas City Royals	7	20	.259	7.5

Table 9: AL West Standings

Tm	W	L	W-L%	GB
Houston Astros	19	10	.655	_
Seattle Mariners	16	11	.593	2.0
Los Angeles Angels	16	12	.571	2.5
Oakland Athletics	14	14	.500	4.5
Texas Rangers	11	18	.379	8.0

Rockies Game-by-Game Schedule/Results

$\mathrm{Gm}\#$	Day	Date	H/A	Opp	W/L	\mathbf{R}	RA	Win	Loss	Save	$\mathrm{D/N}$	Streak
1	Thu	Mar 29	A	ARI	L	2	8	Corbin	Gray		N	_
2	Fri	Mar 30	A	ARI	L	8	9	Ray	Senzatela	Boxberger	N	_
3	Sat	Mar 31	A	ARI	W	2	1	Shaw	Salas	Davis	N	+
4	Mon	Apr 2	\mathbf{A}	SDP	W	7	4	Bettis	Mitchell	Davis	N	++
5	Tue	Apr 3	\mathbf{A}	SDP	L	4	8	Ross	Freeland	Hand	N	-
6	Wed	Apr 4	A	SDP	W	5	2	Gray	Richard	Davis	N	+
7	Thu	Apr 5	\mathbf{A}	SDP	W	3	1	Ottavino	Hand	Davis	D	+++
8	Fri	Apr 6	Η	ATL	L	3	8	McCarthy	Marquez		D	-
9	Sat	Apr 7	Η	ATL	W-wo	3	2	Ottavino	Vizcaino		N	+
10	Sun	Apr 8	Η	ATL	L	0	4	Newcomb	Freeland		D	-
11	Mon	Apr 9	Η	SDP	L	6	7	Richard	Gray	Hand	N	_
12	Tue	Apr 10	Η	SDP	L	2	5	Lucchesi	Shaw	Hand	N	_
13	Wed	Apr 11	Η	SDP	W	6	4	Senzatela	Baumann	Davis	D	+
14	Thu	Apr 12	A	WSN	W	5	1	Bettis	Gonzalez		N	++
15	Fri	Apr 13	A	WSN	W	2	1	Oberg	Roark	Davis	N	+++
16	Sat	Apr 14	A	WSN	L	2	6	Scherzer	Gray		D	-
17	Sun	Apr 15	A	WSN	W	6	5	Ottavino	Doolittle	Davis	D	+
18	Mon	Apr 16	A	PIT	W	6	2	Marquez	Brault		N	++
19	Tue	Apr 17	A	PIT	W	2	0	Bettis	Williams	Davis	N	+++
20	Wed	Apr 18	A	PIT	L	2	10	Kuhl	Freeland		D	-
21	Fri	Apr 20	Η	CHC	L	5	16	Hendricks	Gray		N	_
22	Sat	Apr 21	Η	CHC	W	5	2	Anderson	Darvish	Davis	N	+
23	Sun	Apr 22	Η	CHC	L	7	9	Quintana	Marquez	Morrow	D	-
24	Mon	Apr 23	Η	SDP	L	5	13	Erlin	McGee		N	_
25	Tue	Apr 24	Η	SDP	W	8	0	Freeland	Lauer		N	+
26	Wed	Apr 25	Η	SDP	W	5	2	Gray	Ross		D	++
27	Fri	$\mathrm{Apr}\ 27$	A	MIA	W	1	0	Senzatela	Urena	Davis	N	+++
28	Sat	Apr 28	A	MIA	L	1	4	Chen	Marquez	Barraclough	N	-
29	Sun	Apr 29	A	MIA	\mathbf{L}	0	3	Smith	Bettis	Ziegler	D	_

The Rockies current record is 15 Wins and 14 Losses. So far, the Rockies have scored 113 runs and have had 137 runs scored against them.

Pythagorean Win-Loss Theorem

$$predicted W\% = \frac{R^k}{R^k + RA^k}$$

Using the commonly used values of k, the Rockies predicted wins for the 2017 are shown in the table below. Remember this statistic will vary widely over the course of the season.

Table 11: Predicted Wins for Entire 2017 Season

Wins (k=1.81)	Wins (k=1.83)	Wins (k=2.00)
67	67	66

Batting Statistics (non-pitchers)

Table 12: Rockies Batting Statistics (1 of 2).

Rk	Pos	Name	Age	G	AB	R	Н	2B	3B	HR	RBI	SB	CS	ВВ
1	С	Iannetta	35	20	70	8	15	3	0	2	8	0	0	9
2	1B	Desmond	32	28	96	10	18	4	0	4	13	3	1	5
3	2B	LeMahieu	29	27	107	17	31	8	0	5	12	3	1	13
4	SS	Story	25	29	103	12	25	4	1	6	19	5	0	12
5	3B	Arenado	27	24	83	12	26	4	1	4	12	1	1	15
6	$_{ m LF}$	Parra*	31	24	77	11	18	3	0	1	4	2	1	7
7	CF	Blackmon*	31	24	93	22	26	3	0	9	16	1	1	10
8	RF	Gonzalez*	32	20	68	8	16	2	1	3	11	2	1	3
9	CI	McMahon*	23	27	50	3	9	1	0	0	3	0	0	10
10	$_{ m IF}$	Valaika	25	25	50	0	5	3	0	0	1	0	0	2
11	\mathbf{C}	Wolters*	26	14	36	1	5	0	0	0	5	0	0	5
12	OF	Tauchman*	27	15	23	2	1	0	0	0	0	1	0	3
13	OF	Dahl*	24	7	22	3	6	0	2	0	3	0	1	2
14	RF	Cuevas	26	7	14	1	2	0	0	0	0	0	0	1

Table 13: Rockies Batting Statistics (2 of 2).

Rk	Pos	Name	Age	SO	BA	OBP	SLG	OPS	OPS+	ТВ	GDP	HBP	SH	SF	IBB
1	С	Iannetta	35	21	.214	.304	.343	.647	69	24	5	0	1	0	1
2	1B	Desmond	32	27	.188	.240	.354	.595	53	34	3	2	0	1	0
3	2B	LeMahieu	29	15	.290	.367	.505	.871	125	54	2	0	0	0	0
4	SS	Story	25	37	.243	.331	.476	.806	108	49	2	2	0	1	0
5	3B	Arenado	27	17	.313	.414	.530	.944	145	44	3	0	0	1	3
6	$_{ m LF}$	Parra*	31	12	.234	.298	.312	.609	59	24	1	0	1	0	1
7	CF	Blackmon*	31	23	.280	.356	.602	.958	145	56	1	1	0	0	0
8	RF	Gonzalez*	32	17	.235	.264	.426	.690	77	29	0	0	0	1	0
9	CI	McMahon*	23	22	.180	.317	.200	.517	39	10	0	0	0	0	1
10	$_{ m IF}$	Valaika	25	14	.100	.135	.160	.295	-23	8	2	0	1	0	0
11	\mathbf{C}	Wolters*	26	11	.139	.256	.139	.395	7	5	1	1	0	1	0
12	OF	Tauchman*	27	11	.043	.154	.043	.197	-45	1	0	0	1	0	0
13	OF	Dahl*	24	12	.273	.360	.455	.815	111	10	0	1	0	0	0
14	RF	Cuevas	26	4	.143	.200	.143	.343	-9	2	0	0	0	0	0

^{- * -} bats left-handed, # - bats both, else - bats right, ? - unknown; OPS_lg for OPS+ does not include pitchers.

Pitching Statistics

Table 14: Rockies pitching statistics (1 of 2).

Rk	Pos	Name	Age	W	L	W-L%	ERA	G	GS	GF	$\overline{\text{CG}}$	SHO	SV	IP	Н	R
1	SP	Bettis	29	3	1	.750	2.43	6	6	0	0	0	0	37.0	26	10
2	SP	Gray	26	2	4	.333	5.79	6	6	0	0	0	0	32.2	39	22
3	$_{ m SP}$	Marquez	23	1	3	.250	5.46	6	6	0	0	0	0	28.0	28	19
4	$_{ m SP}$	Freeland*	25	1	3	.250	4.33	5	5	0	0	0	0	27.0	25	13
5	$_{ m SP}$	Anderson*	28	1	0	1.000	4.10	6	6	0	0	0	0	26.1	25	14
6	CL	Davis	32	0	0		2.38	12	0	11	0	0	10	11.1	5	3
7	RP	Senzatela	23	2	1	.667	6.23	10	0	2	0	0	0	17.1	23	13
8	RP	Ottavino	32	3	0	1.000	0.60	14	0	5	0	0	0	15.0	4	1
9	RP	Shaw	30	1	1	.500	6.75	17	0	2	0	0	0	14.2	18	11
10	RP	McGee*	31	0	1	.000	4.76	13	0	1	0	0	0	11.1	7	7
11		Rusin*	31	0	0		4.97	8	0	1	0	0	0	12.2	11	7
12		Oberg	28	1	0	1.000	6.55	10	0	3	0	0	0	11.0	12	8
13		Dunn*	33	0	0		10.57	10	0	2	0	0	0	7.2	11	9
14		Pounders	27	0	0		0.00	2	0	2	0	0	0	2.0	2	0
15		${\rm Musgrave}^*$	26	0	0		0.00	1	0	0	0	0	0	1.0	0	0

Table 15: Rockies pitching statistics (2 of 2).

Rk	Pos	Name	ER	HR	ВВ	IBB	SO	HBP	BK	WP	BF	ERA+	FIP	WHIP
1	SP	Bettis	10	4	13	0	25	1	1	2	144	188	4.37	1.054
2	SP	Gray	21	4	9	1	35	1	0	3	143	79	3.55	1.469
3	SP	Marquez	17	2	16	2	27	2	0	1	130	84	4.11	1.571
4	SP	Freeland*	13	5	11	0	25	0	0	0	115	106	4.96	1.333
5	SP	Anderson*	12	3	15	0	28	0	0	3	115	112	4.25	1.519
6	CL	Davis	3	1	4	0	14	0	0	1	42	195	2.92	0.794
7	RP	Senzatela	12	2	6	0	14	1	0	0	81	74	4.28	1.673
8	RP	Ottavino	1	0	3	0	28	2	0	2	51	770	0.45	0.467
9	RP	Shaw	11	3	8	0	13	0	0	3	68	69	5.71	1.773
10	RP	McGee*	6	2	4	0	11	1	0	0	45	98	4.86	0.971
11		Rusin*	7	2	6	0	11	0	0	1	52	93	4.92	1.342
12		Oberg	8	0	5	0	10	2	0	0	52	71	3.28	1.545
13		Dunn*	9	1	5	0	5	0	0	0	37	45	5.53	2.087
14		Pounders	0	0	0	0	2	0	0	0	7		1.19	1.000
15		Musgrave*	0	0	0	0	1	0	0	0	3		1.19	0.000

^{*} - throws left-handed

National League Team Standard Batting

Table 16: NL Team Batting statistics (1 of 2).

$\overline{\mathrm{Tm}}$	#Bat	BatAge	R/G	G	PA	AB	R	Н	2B	3B	HR	RBI	SB	CS	ВВ	SO
${\text{ATL}}$	37	28.0	5.59	27	1100	969	151	260	66	5	30	142	24	8	101	222
CHC	28	26.8	5.20	25	1008	883	130	$\frac{200}{224}$	50	9	25	120	6	5	87	217
PIT	31	28.3	5.00	28	1089	965	140	251	49	7	28	132	12	7	98	212
NYM	33	29.4	4.88	26	1026	884	127	211	40	5	26	123	12	6	111	234
LAD	32	27.9	4.74	27	1083	955	128	237	56	7	24	120	9	7	104	232
PHI	28	26.3	4.67	27	1030	888	126	206	43	4	24	123	16	8	119	275
STL	33	28.7	4.67	27	1053	918	126	217	42	0	33	121	13	8	104	243
ARI	28	29.0	4.59	27	1017	895	124	206	49	10	30	121	15	6	105	257
WSN	34	28.6	4.39	28	1104	951	123	227	45	3	31	116	31	5	124	237
LgAvg	32	28.2	4.39	27	1062	937	121	224	45	5	28	114	15	6	100	247
CIN	34	27.6	4.00	28	1092	959	112	233	43	2	22	107	13	1	104	235
SDP	34	27.3	3.93	29	1093	986	114	225	46	5	28	106	14	8	87	303
COL	29	28.7	3.90	29	1063	945	113	212	37	5	34	108	18	7	98	268
MIL	33	28.6	3.69	29	1086	971	107	225	43	1	30	98	19	7	93	253
SFG	33	30.6	3.57	28	1044	948	100	226	35	4	30	92	13	6	79	257
MIA	33	27.8	3.26	27	1042	931	88	207	29	2	19	80	7	4	87	253

Table 17: NL Team Batting statistics (2 of 2).

Tm	#Bat	BatAge	R/G	BA	OBP	SLG	OPS	OPS+	ТВ	GDP	HBP	SH	SF	IBB	LOB
ATL	37	28.0	5.59	0.268	0.342	0.440	0.781	117	426	17	11	11	8	11	202
CHC	28	26.8	5.20	0.254	0.336	0.416	0.752	104	367	12	24	10	3	10	197
PIT	31	28.3	5.00	0.260	0.330	0.412	0.743	105	398	14	9	4	12	12	196
NYM	33	29.4	4.88	0.239	0.331	0.383	0.714	100	339	23	15	7	9	10	183
LAD	32	27.9	4.74	0.248	0.326	0.397	0.723	102	379	18	10	6	8	7	202
PHI	28	26.3	4.67	0.232	0.324	0.370	0.695	94	329	23	7	5	10	7	181
STL	33	28.7	4.67	0.236	0.319	0.390	0.709	98	358	16	12	8	11	4	188
ARI	28	29.0	4.59	0.230	0.311	0.408	0.719	90	365	20	4	5	8	4	166
WSN	34	28.6	4.39	0.239	0.331	0.390	0.721	98	371	19	12	6	11	13	216
LgAvg	32	28.2	4.39	0.240	0.318	0.386	0.704	94	361	19	11	7	7	7	193
CIN	34	27.6	4.00	0.243	0.323	0.361	0.684	89	346	23	12	11	6	6	215
SDP	34	27.3	3.93	0.228	0.298	0.370	0.669	89	365	19	13	4	3	3	190
COL	29	28.7	3.90	0.224	0.300	0.382	0.682	77	361	20	7	8	5	6	177
MIL	33	28.6	3.69	0.232	0.302	0.371	0.673	84	360	23	8	7	7	6	199
SFG	33	30.6	3.57	0.238	0.299	0.379	0.678	87	359	18	6	5	6	7	190
MIA	33	27.8	3.26	0.222	0.297	0.319	0.616	77	297	22	14	4	4	4	199

Current Injuries

Table 18: Rockies Current Injur

Name	Updated	Type	Details
Tyler Anderson	April 29 2018	Heart	Anderson left his last outing with a heartbeat issue and it is unclear if he w
Carlos Estevez	April 23 2018	Oblique	Estevez has been shifted to the 60-day disabled list due to a left oblique str
Kyle Freeland	April 25 2018	Heel	Freeland is dealing with soreness in his left heel and it is unknown if he will
Carlos Gonzalez	April 29 2018	Hamstring	Gonzalez is recovering from a right hamstring strain while on the 10-day dis
DJ LeMahieu	April 29 2018	Hamstring	LeMahieu sat out the last game with a hamstring injury and it is unclear if
Zac Rosscup	April 21 2018	Finger	Rosscup is on the 10-day disabled list dealing with warts on his left middle
Chris Rusin	April 23 2018	Ribs	Rusin has landed on the 10-day disabled list due to a right intercostal strain

Run date time: 2018-04-30 09:35:57