

# Rockies 2017 - Week #10

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Figure 1: Charles “Charlie” Cobb Blackmon (born July1, 1986 in Dallas, Texas): Centerfield, Colorado Rockies.

“One of the beautiful things about baseball is that every once in a while you come into a situation where you want to, and where you have to, reach down and prove something.” – Nolan Ryan

Table 1: NL West Standings

Tm	W	L	W-L%	GB
Colorado Rockies	41	24	.631	–
Los Angeles Dodgers	39	25	.609	1.5
Arizona Diamondbacks	39	26	.600	2.0
San Francisco Giants	26	39	.400	15.0
San Diego Padres	24	40	.375	16.5

Table 2: Current Rockies Results as of 2017-06-12

Wins	Losses	Win.Pct	Runs	Runs.Ag	Predicted Season Wins
41	24	63.077	342	272	99



## Week #10

Our Rockies are on a tear this week, winning seven in a row. The winning streak was broken on Sunday with a loss to the Cubs. The Featured Article this week shows how many games in past seasons (Covfefe) it took to win as many games as the current number of wins.

Some real great back and forth on email this past week. Thanks to all of those for participating. I trust all of you enjoyed the banter. All in good fun. I will try to bring some controversial topics to you from time to time. Maybe we can get more opinions being expressed if I show the statistics of, for example, Pete Rose and make the case for why or why not he should be admitted to Cooperstown?

Here is a synopsis of what is included this week.

- **Featured Article**
  - 2017 Rockies Win-Pace Better Than Any Previous Season
- Colorado Rockies Dashboards
  - Rockies Win/Loss Graphs for 2017 and 2007
  - 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 **New**
  - Current Injuries **Updated**
- Topics for Future Articles
- Glossary
  - Batting Statistics
  - Pitching Statistics
  - Fielding Statistics

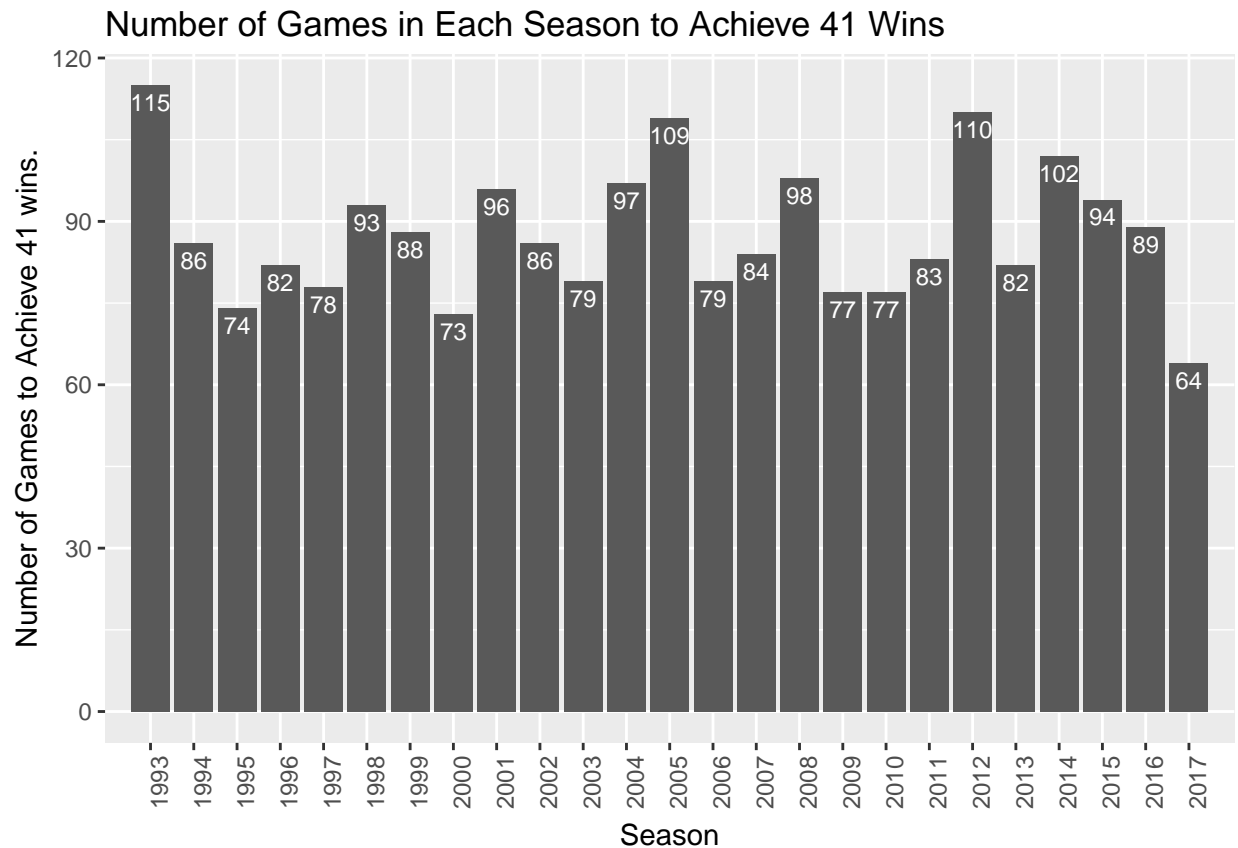
Most of the source data for this article can be found at URL <http://baseball-reference.com>.

Let me know what other special interest statistics you might like to see. Remember to refer to the Glossaries at the end of the document if unfamiliar with one or more of the statistic abbreviations in the tables.

## Featured Article

### 2017 Rockies Win-Pace Better Than Any Previous Season

The 2017 Rockies have reached **41 wins in just 64 games**. This is better than in any previous season. In the bar chart below, remember that **smaller is better**. The current season is depicted in the far-right bar. The 2007 Rockies, **NL Champions**, took eighty-four games to reach 41 wins. Are the Colorado Rockies on pace to another NL title and perhaps their first World Series win? Well, we shall see. It's hard not to develop just a little World Series fever.



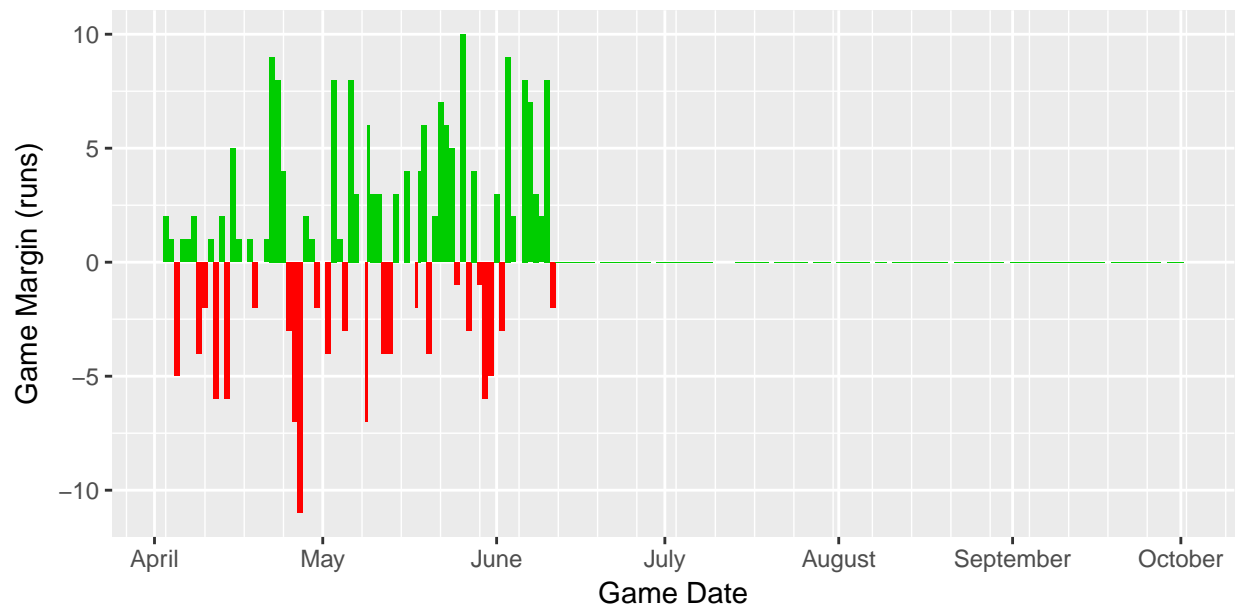
# Rockies Dashboard

## Win Loss Margin

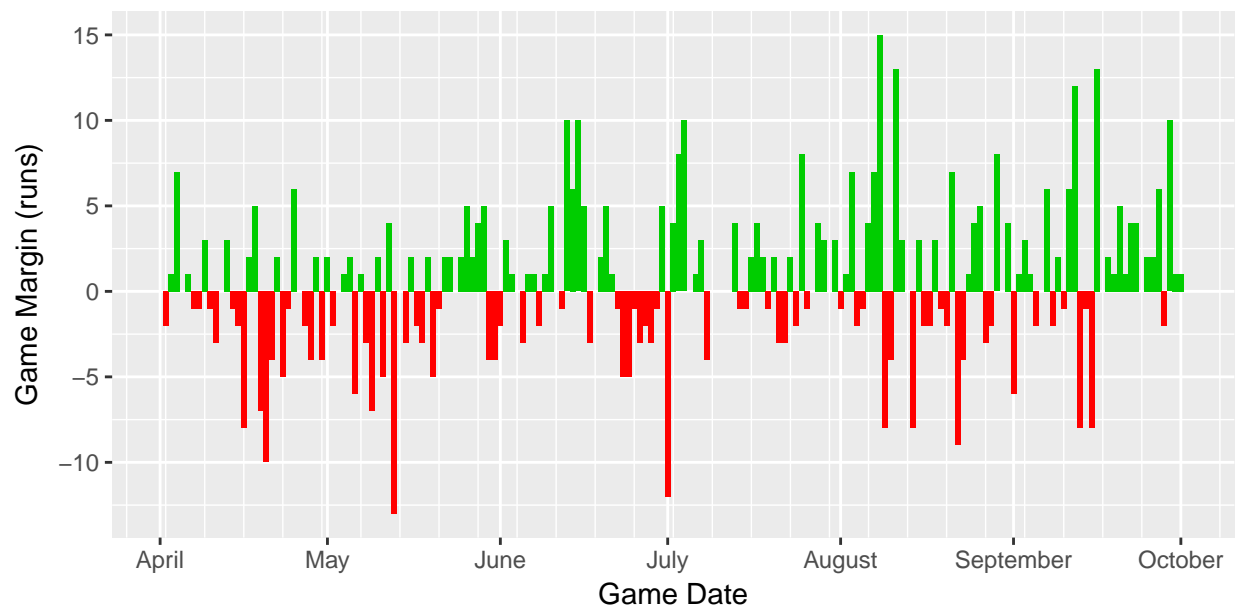
One of the many ways to visualize a teams performance is to show wins and losses as the margin of the win (positive) or loss (negative). In the graphs below, we show the current season performance. For emphasis, wins are displayed as green (above the zero) and losses as red (below the zero).

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 2017 Win/Loss Margin



Rockies 2007 Win/Loss Margin



## National League Standings

Table 3: NL East Standings

Tm	W	L	W-L%	GB
Washington Nationals	38	24	.613	–
New York Mets	28	33	.459	9.5
Atlanta Braves	27	35	.435	11.0
Miami Marlins	27	35	.435	11.0
Philadelphia Phillies	21	40	.344	16.5

Table 4: NL Central Standings

Tm	W	L	W-L%	GB
Milwaukee Brewers	33	31	.516	–
Chicago Cubs	31	31	.500	1.0
St. Louis Cardinals	29	32	.475	2.5
Cincinnati Reds	29	33	.468	3.0
Pittsburgh Pirates	28	35	.444	4.5

Table 5: NL West Standings

Tm	W	L	W-L%	GB
Colorado Rockies	41	24	.631	–
Los Angeles Dodgers	39	25	.609	1.5
Arizona Diamondbacks	39	26	.600	2.0
San Francisco Giants	26	39	.400	15.0
San Diego Padres	24	40	.375	16.5

## American League Standings

Table 6: AL East Standings

Tm	W	L	W-L%	GB
New York Yankees	37	23	.617	–
Boston Red Sox	34	28	.548	4.0
Tampa Bay Rays	34	32	.515	6.0
Baltimore Orioles	31	30	.508	6.5
Toronto Blue Jays	31	32	.492	7.5

Table 7: AL Central Standings

Tm	W	L	W-L%	GB
Minnesota Twins	32	27	.542	–
Cleveland Indians	31	29	.517	1.5
Detroit Tigers	30	32	.484	3.5
Kansas City Royals	28	34	.452	5.5
Chicago White Sox	26	35	.426	7.0

Table 8: AL West Standings

Tm	W	L	W-L%	GB
Houston Astros	44	20	.688	–
Los Angeles Angels of Anaheim	33	33	.500	12.0
Seattle Mariners	31	33	.484	13.0
Texas Rangers	30	32	.484	13.0
Oakland Athletics	27	36	.429	16.5

## Rockies Game-by-Game Schedule/Results

Gm#	Day	Date	H/A	Opp	W/L	R	RA	Win	Loss	Save	D/N	Streak
1	Mon	Apr 3	A	MIL	W	7	5	Estevez	Marinez	Holland	D	+
2	Tue	Apr 4	A	MIL	W	6	5	Anderson	Davies	Holland	N	++
3	Wed	Apr 5	A	MIL	L	1	6	Peralta	Chatwood	Feliz	N	-
4	Thu	Apr 6	A	MIL	W	2	1	Dunn	Feliz	Holland	D	+
5	Fri	Apr 7	H	LAD	W	2	1	Freeland	Ryu	McGee	D	++
6	Sat	Apr 8	H	LAD	W	4	2	Dunn	Kershaw	Holland	N	+++
7	Sun	Apr 9	H	LAD	L	6	10	Maeda	Anderson		D	-
8	Mon	Apr 10	H	SDP	L	3	5	Diaz	Chatwood		N	-
9	Tue	Apr 11	H	SDP	W	3	2	Senzatela	Diaz	Holland	N	+
10	Wed	Apr 12	H	SDP	L	0	6	Lee	Freeland		D	-
11	Thu	Apr 13	A	SFG	W	3	1	Rusin	Bumgarner	Holland	N	+
12	Fri	Apr 14	A	SFG	L	2	8	Cueto	Anderson		N	-
13	Sat	Apr 15	A	SFG	W	5	0	Chatwood	Moore		D	+
14	Sun	Apr 16	A	SFG	W	4	3	Senzatela	Samardzija	Holland	D	++
15	Tue	Apr 18	A	LAD	W	4	3	Rusin	Ryu	Holland	N	+++
16	Wed	Apr 19	A	LAD	L	2	4	Kershaw	Anderson	Jansen	N	-
17	Fri	Apr 21	H	SFG	W	6	5	Chatwood	Cueto	Holland	N	+
18	Sat	Apr 22	H	SFG	W	12	3	Senzatela	Moore		N	++
19	Sun	Apr 23	H	SFG	W	8	0	Freeland	Samardzija		D	+++
20	Mon	Apr 24	H	WSN	W	8	4	Estevez	Romero		N	++++
21	Tue	Apr 25	H	WSN	L	12	15	Romero	Marquez		N	-
22	Wed	Apr 26	H	WSN	L	4	11	Roark	Chatwood		N	-
23	Thu	Apr 27	H	WSN	L	5	16	Gonzalez	Senzatela		D	—
24	Fri	Apr 28	A	ARI	W	3	1	Freeland	Ray	Holland	N	+
25	Sat	Apr 29	A	ARI	W	7	6	Estevez	Rodney	Holland	N	++
26	Sun	Apr 30	A	ARI	L-wo	0	2	Delgado	Lyles		D	-
27	Tue	May 2	A	SDP	L	2	6	Cahill	Chatwood		N	-
28	Wed	May 3	A	SDP	W	11	3	Senzatela	Weaver		N	+
29	Thu	May 4	A	SDP	W	3	2	Qualls	Hand	Holland	D	++
30	Fri	May 5	H	ARI	L	3	6	Greinke	Marquez	Rodney	N	-
31	Sat	May 6	H	ARI	W	9	1	Anderson	Corbin	Rusin	N	+
32	Sun	May 7	H	ARI	W	5	2	Chatwood	Walker	Holland	D	++
33	Tue	May 9 (1)	H	CHC	W	10	4	Senzatela	Arrieta		D	+++
34	Tue	May 9 (2)	H	CHC	L	1	8	Lackey	Freeland		N	-
35	Wed	May 10	H	CHC	W	3	0	Marquez	Hendricks	Holland	D	+
36	Thu	May 11	H	LAD	W	10	7	Hoffman	Ryu	Holland	N	++
37	Fri	May 12	H	LAD	L	2	6	Kershaw	Chatwood		N	-
38	Sat	May 13	H	LAD	L	0	4	Wood	Anderson		N	-
39	Sun	May 14	H	LAD	W	9	6	Senzatela	Urias	Holland	D	+
40	Tue	May 16	A	MIN	W	7	3	Freeland	Hughes	Holland	N	++
41	Thu	May 18 (1)	A	MIN	W	5	1	Marquez	Santana	Holland	D	+++
42	Thu	May 18 (2)	A	MIN	L	0	2	Berrios	Chatwood	Kintzler	N	-
43	Fri	May 19	A	CIN	W	12	6	Anderson	Bonilla		N	+
44	Sat	May 20	A	CIN	L	8	12	Wojciechowski	Dunn		D	-
45	Sun	May 21	A	CIN	W	6	4	Freeland	Arroyo	Holland	D	+
46	Mon	May 22	A	PHI	W	8	1	Hoffman	Eickhoff		N	++
47	Tue	May 23	A	PHI	W	8	2	Marquez	Eflin		N	+++
48	Wed	May 24	A	PHI	W	7	2	Chatwood	Hellickson		N	++++
49	Thu	May 25	A	PHI	L-wo	1	2	Gomez	Oberg		D	-
50	Fri	May 26	H	STL	W	10	0	Senzatela	Martinez		N	+

Gm#	Day	Date	H/A	Opp	W/L	R	RA	Win	Loss	Save	D/N	Streak
51	Sat	May 27	H	STL	L	0	3	Wainwright	Freeland	Oh	N	-
52	Sun	May 28	H	STL	W	8	4	Marquez	Lynn		D	+
53	Mon	May 29	H	SEA	L	5	6	Gaviglio	Chatwood	Diaz	D	-
54	Tue	May 30	H	SEA	L	4	10	Miranda	Anderson		N	-
55	Wed	May 31	A	SEA	L	0	5	Paxton	Senzatela		N	—
56	Thu	Jun 1	A	SEA	W	6	3	Freeland	Gallardo	Holland	D	+
57	Fri	Jun 2	A	SDP	L	5	8	Richard	Marquez	Maurer	N	-
58	Sat	Jun 3	A	SDP	W	10	1	Chatwood	Chacin		D	+
59	Sun	Jun 4	A	SDP	W	3	1	Hoffman	Cosart	Holland	D	++
60	Tue	Jun 6	H	CLE	W	11	3	Senzatela	Clevinger		N	+++
61	Wed	Jun 7	H	CLE	W	8	1	Freeland	Bauer		D	++++
62	Thu	Jun 8	A	CHC	W	4	1	Chatwood	Lester	Holland	N	+++++
63	Fri	Jun 9	A	CHC	W	5	3	Rusin	Frankoff	Holland	D	++++++
64	Sat	Jun 10	A	CHC	W	9	1	Hoffman	Butler		D	++++++
65	Sun	Jun 11	A	CHC	L	5	7	Edwards	Lyles	Davis	D	-

The Rockies current record is 41 Wins and 24 Losses. So far, the Rockies have scored 342 runs and have had 272 runs scored against them.



## Pythagorean Win-Loss Theorem

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

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 10: Predicted Wins for Entire 2017 Season

Wins (k=1.81)	Wins (k=1.83)	Wins (k=2.00)
98	98	99

## Batting Statistics (non-pitchers)

Table 11: Rockies Batting Statistics (1 of 2).

Rk	Pos	Name	Age	G	AB	R	H	2B	3B	HR	RBI	SB	CS	BB
1	C	Wolters*	25	39	116	26	35	6	1	0	8	0	1	19
2	1B	Reynolds	33	61	220	37	69	9	0	17	54	1	1	28
3	2B	LeMahieu	28	65	256	33	72	12	1	3	30	3	3	23
4	SS	Story	24	50	172	27	35	10	0	8	22	2	0	24
5	3B	Arenado	26	64	248	43	71	21	2	14	46	1	0	22
6	LF	Desmond	31	38	152	21	43	4	1	3	19	5	3	4
7	CF	Blackmon*	30	64	264	53	89	16	8	15	53	5	4	18
8	RF	Gonzalez*	31	59	215	32	48	12	0	5	19	1	0	26
9	LF	Parra*	30	49	148	23	47	6	0	6	28	0	4	6
10	UT	Amarista*	28	33	75	12	24	6	0	2	14	0	0	1
11	C	Garneau	29	22	68	5	14	7	0	1	6	0	0	4
12	UT	Valaika	24	36	66	11	14	5	0	4	10	0	0	3
13	C	Hanigan	36	13	43	4	11	0	0	2	8	0	0	3
14	OF	Cardullo	29	15	28	2	4	0	0	0	3	0	0	3
15	OF	Tapia*	23	12	19	2	2	1	0	0	1	1	0	2
16	IF	Adames#	25	12	13	1	0	0	0	0	0	0	0	1

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

Rk	Pos	Name	Age	SO	BA	OBP	SLG	OPS	OPS+	TB	GDP	HBP	SH	SF	IBB
1	C	Wolters*	25	24	.302	.409	.371	.779	97	43	5	2	0	0	5
2	1B	Reynolds	33	61	.314	.392	.586	.978	139	129	6	1	0	1	0
3	2B	LeMahieu	28	39	.281	.348	.371	.719	80	95	6	3	2	0	0
4	SS	Story	24	68	.203	.301	.401	.702	73	69	3	0	0	0	1
5	3B	Arenado	26	46	.286	.347	.556	.903	119	138	10	3	0	4	2
6	LF	Desmond	31	40	.283	.308	.382	.690	71	58	6	2	1	1	1
7	CF	Blackmon*	30	61	.337	.384	.629	1.013	146	166	0	4	3	3	2
8	RF	Gonzalez*	31	49	.223	.302	.349	.651	62	75	2	0	0	4	2
9	LF	Parra*	30	27	.318	.348	.480	.828	103	71	4	2	0	2	0
10	UT	Amarista*	28	15	.320	.329	.480	.809	98	36	1	0	1	0	0
11	C	Garneau	29	24	.206	.260	.353	.613	51	24	1	1	1	0	0
12	UT	Valaika	24	20	.212	.246	.470	.716	72	31	0	0	2	0	0
13	C	Hanigan	36	10	.256	.304	.395	.700	73	17	1	0	0	0	0
14	OF	Cardullo	29	7	.143	.250	.143	.393	2	4	0	1	0	0	0
15	OF	Tapia*	23	6	.105	.227	.158	.385	-1	3	0	1	0	0	0
16	IF	Adames#	25	6	.000	.071	.000	.071	-80	0	0	0	0	0	0

- \* - bats left-handed, # - bats both, else - bats right, ? - unknown; OPS<sub>lg</sub> for OPS+ does not include pitchers.

## Pitching Statistics

Table 13: Rockies pitching statistics (1 of 2).

Rk	Pos	Name	Age	W	L	W-L%	ERA	G	GS	GF	CG	SHO	SV	IP	H	R
1	SP	Chatwood	27	6	7	.462	4.37	13	13	0	1	1	0	78.1	64	38
2	SP	Senzatela	22	8	2	.800	3.84	13	13	0	0	0	0	77.1	71	34
3	SP	Freeland*	24	7	3	.700	3.34	12	12	0	0	0	0	70.0	66	28
4	SP	Anderson*	27	3	5	.375	5.85	11	11	0	0	0	0	60.0	69	41
5	SP	Marquez	22	4	3	.571	4.44	9	9	0	0	0	0	48.2	52	25
6	CL	Holland	31	0	0		1.14	25	0	25	0	0	23	23.2	10	3
7	RP	McGee*	30	0	0		1.40	26	0	7	0	0	1	25.2	16	4
8	RP	Oberg	27	0	1	.000	4.88	28	0	5	0	0	0	24.0	26	15
9	RP	Ottavino	31	0	0		2.45	24	0	0	0	0	0	22.0	15	6
10	RP	Dunn*	32	2	1	.667	4.71	27	0	1	0	0	0	21.0	22	11
11		Rusin*	30	3	0	1.000	2.43	22	0	3	0	0	1	33.1	23	10
12		Lyles	26	0	2	.000	6.67	20	0	8	0	0	0	28.1	34	22
13		Hoffman	24	4	0	1.000	2.33	5	4	1	0	0	0	27.0	17	7
14		Qualls	38	1	0	1.000	4.11	16	0	8	0	0	0	15.1	12	8
15		Estevez	24	3	0	1.000	8.16	16	0	5	0	0	0	14.1	22	14
16		Gray	25	0	0		4.38	3	3	0	0	0	0	12.1	11	6
17		Carle	25	0	0		0.00	1	0	1	0	0	0	1.0	0	0

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

Rk	Pos	Name	ER	HR	BB	IBB	SO	HBP	BK	WP	BF	ERA+	FIP	WHIP
1	SP	Chatwood	38	11	37	0	64	1	2	4	319	114	4.74	1.289
2	SP	Senzatela	33	10	23	0	54	4	2	1	318	130	4.43	1.216
3	SP	Freeland*	26	7	28	1	44	6	1	0	298	150	4.60	1.343
4	SP	Anderson*	39	13	20	0	59	2	2	2	263	86	5.05	1.483
5	SP	Marquez	24	6	18	2	49	2	0	2	217	113	3.92	1.438
6	CL	Holland	3	1	11	0	32	0	0	2	89	442	2.34	0.887
7	RP	McGee*	4	1	5	0	32	0	0	2	99	359	1.70	0.818
8	RP	Oberg	13	1	12	2	24	1	0	3	107	103	3.26	1.583
9	RP	Ottavino	6	1	15	1	26	2	0	3	95	206	3.64	1.364
10	RP	Dunn*	11	5	11	0	28	0	0	2	93	107	5.10	1.571
11		Rusin*	9	2	8	0	26	1	0	1	130	207	3.13	0.930
12		Lyles	21	7	5	0	20	2	0	1	122	75	5.64	1.376
13		Hoffman	7	3	3	0	34	1	0	0	102	216	2.47	0.741
14		Qualls	7	3	5	0	9	0	0	0	63	124	5.45	1.109
15		Estevez	13	0	5	1	15	0	1	1	70	62	2.05	1.884
16		Gray	6	1	7	0	9	0	0	1	53	116	4.40	1.459
17		Carle	0	0	0	0	1	0	0	1	4		1.10	0.000

\* - throws left-handed

# National League Team Standard Batting

Table 15: NL Team Batting statistics (1 of 2).

Tm	#Bat	BatAge	R/G	G	PA	AB	R	H	2B	3B	HR	RBI	SB	CS	BB	SO
WSN	35	29.3	5.37	62	2430	2176	333	591	120	12	91	326	42	14	217	485
COL	33	28.5	5.26	65	2478	2225	342	599	118	13	81	330	19	16	189	557
ARI	31	28.1	5.15	65	2491	2235	335	580	126	17	87	318	55	15	219	580
CIN	36	27.4	5.11	62	2421	2165	317	568	107	18	92	307	60	14	197	505
NYM	37	29.8	4.90	61	2386	2113	299	518	117	10	87	290	19	6	222	469
MIL	36	27.1	4.89	64	2453	2188	313	548	122	13	88	297	55	20	220	620
LAD	35	28.1	4.83	64	2438	2138	309	533	126	6	73	287	30	9	243	557
CHC	35	27.2	4.60	62	2406	2097	285	488	97	12	81	265	16	8	246	530
LgAvg	35	28.2	4.57	63	2406	2148	287	541	111	12	75	274	34	13	205	519
MIA	38	28.4	4.56	62	2376	2147	283	572	96	10	75	270	32	7	165	485
ATL	36	29.6	4.40	62	2394	2143	273	564	112	8	59	262	30	14	187	455
PIT	38	28.2	4.22	63	2435	2159	266	535	104	16	57	243	30	23	220	469
STL	33	28.6	4.07	61	2327	2060	248	516	112	9	60	234	36	15	207	491
PHI	34	27.3	3.97	61	2264	2055	242	498	114	11	63	234	22	14	173	509
SFG	39	29.7	3.68	65	2462	2216	239	525	109	9	49	229	33	11	190	484
SDP	39	26.3	3.50	64	2335	2108	224	475	78	10	75	219	33	15	182	596

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

Tm	#Bat	BatAge	R/G	BA	OBP	SLG	OPS	OPS+	TB	GDP	HBP	SH	SF	IBB	LOB
WSN	35	29.3	5.37	0	0.338	0.463	0.802	109	1008	44	9	15	13	25	439
COL	33	28.5	5.26	0	0.330	0.443	0.773	90	986	47	20	29	15	13	408
ARI	31	28.1	5.15	0	0.330	0.448	0.777	96	1001	38	18	12	7	19	438
CIN	36	27.4	5.11	0	0.329	0.456	0.785	103	987	35	26	17	16	10	437
NYM	37	29.8	4.90	0	0.321	0.434	0.754	100	916	40	21	12	18	17	422
MIL	36	27.1	4.89	0	0.324	0.439	0.763	98	960	40	21	18	6	13	423
LAD	35	28.1	4.83	0	0.331	0.416	0.747	100	890	57	24	17	15	12	432
CHC	35	27.2	4.60	0	0.323	0.406	0.729	93	852	45	37	15	10	19	450
LgAvg	35	28.2	4.57	0	0.321	0.418	0.739	94	898	47	22	17	14	15	427
MIA	38	28.4	4.56	0	0.324	0.425	0.749	102	913	52	26	19	18	14	427
ATL	36	29.6	4.40	0	0.330	0.406	0.736	93	869	66	33	21	10	27	436
PIT	38	28.2	4.22	0	0.324	0.390	0.714	89	842	50	28	17	10	14	459
STL	33	28.6	4.07	0	0.323	0.401	0.724	93	826	55	22	18	20	13	414
PHI	34	27.3	3.97	0	0.305	0.400	0.705	87	823	51	17	7	12	10	374
SFG	39	29.7	3.68	0	0.299	0.361	0.659	77	799	50	17	13	26	10	442
SDP	39	26.3	3.50	0	0.290	0.379	0.669	78	798	40	15	18	12	7	401

## Current Injuries

	Name	Updated	Type	Details
1	Tyler Anderson	June 03 2017	Knee	Anderson has been placed on the 10-day disabled list with knee inflammation it is unknown when he will rejoin the team.
2	Chad Bettis	June 03 2017	Illness	Bettis is on the 60-day disabled list while recovering from testicular cancer and it is unknown as to when he will be ready to rejoin the team.
3	David Dahl	May 29 2017	Ribs	Dahl is on the 10-day disabled list with a stress reaction of his sixth rib and is likely to remain sidelined until sometime in June.
4	Jon Gray	June 01 2017	Toe	Gray has been placed on the 10-day disabled list with a stress fracture in his left foot and is expected to be sidelined until the end of June.
5	Tom Murphy	May 30 2017	Wrist	Murphy is on the 10-day disabled list while he recovers from a hairline fracture in his wrist but is expected to return by the end of June.
6	Adam Ottavino	May 30 2017	Shoulder	Ottavino has been placed on the 10-day disabled list with a inflammation in his right shoulder and is without a timetable for return.

Table 17: Current Injuries

## Topics for Future Articles

Here are a few suggestions, but I would prefer to hear from you, dear reader, on what interests you.

- Player Value - I am personally just getting familiar with this concept. Work In Progress (WIP)
- What is the OPS+ statistic and how is it calculated.
- Survey MLB ticket prices.
- A suggestion from a work colleague that we investigate what budding talent we have in the Rockies farm system. I will look into this and see what I can find.

Let me know what you would like to see in future articles. Send me email at [jdreed@q.com](mailto:jdreed@q.com).

Yours truly,

Jim Reed

# Appendix

## Glossary

### Batting Statistics

Statistic Abbreviation	Definition
<i>G</i>	number of games (participated)
<i>PA</i>	plate appearances
<i>AB</i>	at bats
<i>R</i>	runs scored by player or team
<i>RA</i>	runs allowed
<i>H</i>	hits
<i>2B</i>	doubles
<i>3B</i>	triples
<i>HR</i>	home runs
<i>RBI</i>	runs batted in
<i>BA</i>	batting average
<i>OBP</i>	on-base percentage
<i>SLG</i>	slugging percentage
<i>OPS</i>	on-base percentage plus slugging percentage
<i>OPS+</i>	This statistic normalizes a player's OPS. It adjusts for small variables that might affect OPS scores (e.g., park effects).

## Pitching Statistics

Pitching Statistic	Definition
<i>Rk</i>	Rank This is a count of the rows from top to bottom. It is recalculated following the sorting of a column.
<i>Pos</i>	Position
<i>Name</i>	Player Name
<i>Age</i>	Player's age at midnight of June 30th of that year
<i>W</i>	Wins
<i>L</i>	Losses
<i>W-L%</i>	Win-Loss Percentage $W / (W + L)$ For players, leaders need one decision for every ten team games. For managers, minimum to qualify for leading is 320 games.
<i>ERA</i>	$9 * ER / IP$
<i>G</i>	Games Played or Pitched
<i>GS</i>	Games Started
<i>GF</i>	Games Finished
<i>CG</i>	Complete Game
<i>SHO</i>	Shutouts No runs allowed and a complete game.
<i>SV</i>	Saves
<i>IP</i>	Innings Pitched
<i>H</i>	Hits/Hits Allowed
<i>R</i>	Runs Scored/Allowed
<i>ER</i>	Earned Runs Allowed
<i>HR</i>	Home Runs Hit/Allowed
<i>BB</i>	Bases on Balls/Walks
<i>IBB</i>	Intentional Bases on Balls First tracked in 1955.
<i>SO</i>	Strikeouts
<i>HBP</i>	Times Hit by a Pitch.
<i>BK</i>	Balks
<i>WP</i>	Wild Pitches
<i>BF</i>	Batters Faced
<i>ERA+</i>	$ERA+ 100*[lgERA/ERA]$ Adjusted to the player's ballpark(s).
<i>FIP</i>	Fielding Independent Pitching
<i>WHIP</i>	$(BB + H)/IP$ For recent years, leaders need 1 IP per team game played
<i>H9</i>	$9 \times H / IP$ For recent years, leaders need 1 IP per team game played
<i>HR9</i>	$9 \times HR / IP$ For recent years, leaders need 1 IP per team game played
<i>BB9</i>	$9 \times BB / IP$ For recent years, leaders need 1 IP per team game played
<i>SO9</i>	$9 \times SO / IP$ For recent years, leaders need 1 IP per team game played
<i>SO/W</i>	SO/W or SO/BB For recent years, pitching leaders need 1 IP per team game played.



## Fielding Statistics

Fielding Statistic	Definition
<i>Name</i>	Player Name Bold can mean player is active for this team or player has appeared in MLB * means LHP or LHB, \# means switch hitter, + can mean HOFer.
<i>Age</i>	Player's age at midnight of June 30th of that year
<i>G</i>	Games Played or Pitched
<i>GS</i>	– Games Started
<i>CG</i>	– Complete Game
<i>Inn</i>	– Innings Played in Field
<i>Ch</i>	– Defensive Chances Putouts + Assists + Errors
<i>PO</i>	– Putouts
<i>A</i>	– Assists
<i>E</i>	– Errors Committed
<i>DP</i>	– Double Plays Turned
<i>Fld%</i>	– Fielding Percentage (Putouts + Assists) / (Putouts + Assists + Errors)
<i>Rtot</i>	– Total Zone Total Fielding Runs Above Avg The number of runs above or below average the player was worth based on the number of plays made. This number combines the Rtz, Rdp, Rof, Rcatch numbers into a total defensive contribution. See the glossary section for a more complete explanation. Provided by BaseballProjection.com
<i>Rtot/yr</i>	– Total Zone Total Fielding Runs Above Avg per 1,200 Inn The number of runs above or below average the fielder was worth per 1,200 Innings (approx 135 games). This number combines the Rtz, Rdp, Rof, Rcatch numbers into a total defensive contribution. See the glossary section for a more complete explanation. Provided by BaseballProjection.com
<i>Rdrs</i>	– BIS Defensive Runs Saved Above Avg The number of runs above or below average the player was worth based on the number of plays made. This number combines the Rpm, Rbdp, Rbof, Rbcatch numbers into a total defensive contribution. Provided by Baseball Info Solutions
<i>Rdrs/yr</i>	– BIS Defensive Runs Saved Above Avg per 1,200 Inn The number of runs above or below average the fielder was worth per 1,200 Innings (approx 135 games). This number combines the Rpm, Rbdp, Rbof, Rbcatch numbers into a total defensive contribution. For pitchers, this is set to 200 Innings. Provided by Baseball Info Solutions
<i>RF/9</i>	– Range Factor per 9 Inn $9 * (\text{Putouts} + \text{Assists}) / \text{Innings Played}$
<i>RF/G</i>	– Range Factor per Game $(\text{Putouts} + \text{Assists}) / \text{Games Played}$
<i>PB</i>	– Passed Balls
<i>WP</i>	– Wild Pitches
<i>SB</i>	– Stolen Bases
<i>CS</i>	– Caught Stealing

Fielding Statistic	Definition
<i>CS%</i>	– Caught Stealing Percentage $CS / (SB + CS)$
<i>lgCS%</i>	– League Caught Stealing Percentage League Expected $CS / \text{Players } SB + \text{Players } CS$
<i>PO</i>	– Pickoffs Runner picked off a base. May include cases they were safe on an error. Also includes Pickoff Caught Stealing plays.
<i>Pos</i>	Summary – Positions Played The positions either followed by the games played at that position or in order of games or innings played. For a single season, * indicates they played at least 2/3rds of the team games there Positions after / indicate less than ten games played at those positions. For career, a + sign means more than 300 games at that position and a - sign means less than 30 games.

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