# Rockies 2017 - Week #22

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Figure 1: MLB's luckiest hitters of 2017: Charlie Blackmon

No matter what people tell you, words and ideas can change the world. – Robin Williams (1951-2014)

Table 1: NL West Standings

Tm	W	L	W-L%	GB
Los Angeles Dodgers	92	44	.676	_
Arizona Diamondbacks	79	58	.577	13.5
Colorado Rockies	72	64	.529	20.0
San Diego Padres	62	75	.453	30.5
San Francisco Giants	54	85	.388	39.5

Table 2: Current Rockies Results as of 2017-09-04

Wins	Losses	Win.Pct	Runs	Runs.Ag	Predicted Season Wins
72	64	52.941	689	653	85



#### Week #22

The big, not good, news this week is that the Arizona Diamonbacks are having a winning streak. Ten games in a row, as of today. At least three of those games came at the expense of the Rockies. This has improved the Diamondbacks' lead over our Rockies by 7.5 games.

I am moving the FanGraphs Odds section into the dashboard, so we can watch the results as we get closer to the playoffs.

#### • Featured Article

- None this week. Returning next week.
- Colorado Rockies Dashboard
  - Rockies Win/Loss Graphs for 2017 and 2007
  - Playoff Odds as Presented by FanGraphs. New Regular Feature
  - 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**
- 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.

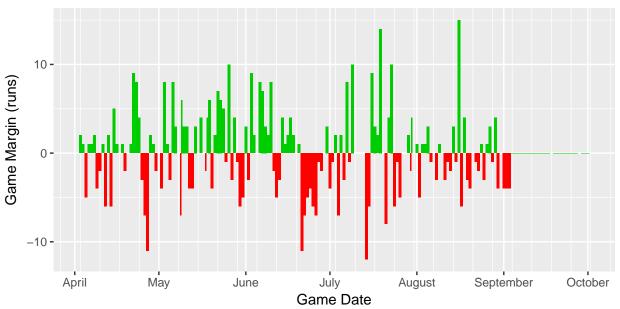
#### Colorado Rockies Dashboard

#### Win Loss Margin

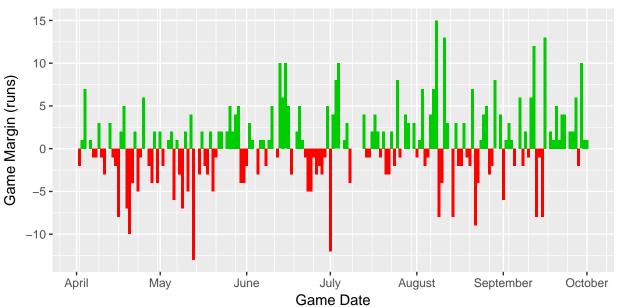
One of the many ways to visualize a teams performance is to show wins and losses as the margin of the win (positive) or loss (negative). In the graphs below, we show the current season performance. For emphasis, wins are displayed in green (above the zero) and losses in red (below).

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 2017 Win/Loss Margin



### Rockies 2007 Win/Loss Margin



#### Playoff Odds as Presented by FanGraphs

#### American League Projected Standings / Odds

Abbreviations used in the following tables:

- W Wins
- L Losses
- W% Win Percentage
- GB Games Back
- EXPW Expected Wins
- EXPL Expected Losses
- rosW% Rest of season wining percentage
- DIV Percent chance of winning division
- WC Percent chance of winning a wildcard spot
- POFF Percent chance winning the division or wildcard spot
- DOFF Percent chance of making the division series
- NL/AL DS Percent chance of winning the divisional and making it to the championship series
- NL/AL CS Percent chance of winning the championship series and making it to the world series
- WS Percent chance of winning the World Series

Table 3: AL East

Team	W	L	W%	GB	EXPW	EXPL	${\rm rosW\%}$	DIV	WC	POFF	DOFF	ALDS	ALCS	WS
Red Sox	77	60	0.562	0.0	91.1	70.9	0.566	87.8	12.0	99.8	95.0	46.2	24.7	13.9
Yankees	73	63	0.537	3.5	87.0	75.0	0.537	11.9	74.1	86.0	52.0	20.8	8.1	3.8
Orioles	70	67	0.511	7.0	81.4	80.6	0.455	0.2	12.5	12.7	6.3	2.0	0.7	0.3
Rays	68	70	0.493	9.5	80.1	81.9	0.504	0.1	6.2	6.3	3.5	1.4	0.7	0.3
Blue Jays	63	74	0.460	14.0	75.5	86.5	0.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 4: AL Central

Team	W	L	W%	GB	EXPW	EXPL	rosW%	DIV	WC	POFF	DOFF	ALDS	ALCS	WS
Indians	80	56	0.588	0.0	96.3	65.7	0.626	100	0.0	100.0	100.0	55.0	28.9	16.5
Twins	71	65	0.522	9.0	83.7	78.3	0.487	0	42.0	42.0	18.4	5.4	1.7	0.5
Royals	67	68	0.496	12.5	80.8	81.2	0.513	0	9.5	9.5	4.1	1.1	0.3	0.1
Tigers	58	78	0.426	22.0	69.7	92.3	0.449	0	0.0	0.0	0.0	0.0	0.0	0.0
White Sox	54	81	0.400	25.5	63.8	98.2	0.361	0	0.0	0.0	0.0	0.0	0.0	0.0

Table 5: AL West

Team	W	L	W%	GB	EXPW	EXPL	${\rm rosW}\%$	DIV	WC	POFF	DOFF	ALDS	ALCS	WS
Astros	83	53	0.610	0.0	98.6	63.4	0.601	100	0.0	100.0	100.0	60.8	32.6	19.4
Angels	70	67	0.511	13.5	82.8	79.2	0.512	0	28.4	28.4	13.6	5.0	1.7	0.6
Mariners	69	68	0.504	14.5	80.8	81.2	0.472	0	8.7	8.7	4.0	1.4	0.3	0.1
Rangers	68	68	0.500	15.0	80.3	81.7	0.474	0	6.6	6.6	2.9	0.8	0.3	0.1
Athletics	58	78	0.426	25.0	70.2	91.8	0.468	0	0.0	0.0	0.0	0.0	0.0	0.0

### National League Projected Standings / Odds

Table 6: NL East

Team	W	L	W%	GB	EXPW	EXPL	rosW%	DIV	WC	POFF	DOFF	NLDS	NLCS	WS
Nationals	82	54	0.603	0.0	97.2	64.8	0.583	100	0.0	100.0	100.0	45.6	21.8	8.8
Marlins	67	69	0.493	15.0	80.1	81.9	0.503	0	3.1	3.1	1.4	0.4	0.2	0.0
Braves	60	75	0.444	21.5	72.6	89.4	0.466	0	0.0	0.0	0.0	0.0	0.0	0.0
Mets	58	78	0.426	24.0	69.7	92.3	0.451	0	0.0	0.0	0.0	0.0	0.0	0.0
Phillies	52	84	0.382	30.0	63.4	98.6	0.437	0	0.0	0.0	0.0	0.0	0.0	0.0

Table 7: NL Central

Team	W	L	W%	GB	EXPW	EXPL	${\rm rosW}\%$	DIV	WC	POFF	DOFF	NLDS	NLCS	WS
Cubs	75	61	0.551	0.0	90.4	71.6	0.593	93.2	4.3	97.5	95.7	53.0	28.7	13.5
Brewers	72	65	0.526	3.5	83.8	78.2	0.472	4.2	26.8	31.0	16.7	5.5	1.9	0.4
Cardinals	69	67	0.507	6.0	82.9	79.1	0.535	2.6	17.4	20.0	11.1	4.4	1.8	0.7
Pirates	65	72	0.474	10.5	76.9	85.1	0.476	0.0	0.2	0.2	0.1	0.0	0.0	0.0
Reds	58	79	0.423	17.5	68.9	93.1	0.436	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 8: NL West

Team	W	L	W%	GB	EXPW	EXPL	${\rm rosW}\%$	DIV	WC	POFF	DOFF	NLDS	NLCS	W
Dodgers	92	44	0.676	0.0	107.7	54.3	0.605	100	0.0	100.0	100	65.2	35.3	17.
Diamondbacks	79	58	0.577	13.5	92.5	69.5	0.539	0	99.7	99.7	52	19.0	7.8	2.
Rockies	72	64	0.529	20.0	84.8	77.2	0.493	0	48.5	48.5	23	7.1	2.6	0.
Padres	62	75	0.453	30.5	71.9	90.1	0.396	0	0.0	0.0	0	0.0	0.0	0.
Giants	54	85	0.388	39.5	65.2	96.8	0.487	0	0.0	0.0	0	0.0	0.0	0.

#### Top Twelve Rockies Players as Measured by WAR

Following is a table of the top twelve Colorado Rockies players as measured by the most recent WAR assessment for pitchers and position players. Week after week Nolan Arenado is at the top of this list. You may be surprised by some of the others on the list.

Table 9: Rockies Top 12 Players (WAR)

Rank	Name	Age	WAR	Salary.M
1	Nolan Arenado	26	5.8	11.750
2	Charlie Blackmon	30	5.3	7.300
3	Kyle Freeland	24	3.9	0.535
4	German Marquez	22	3.5	0.535
5	Chris Rusin	30	2.5	0.535
6	DJ LeMahieu	28	2.3	4.800
7	Antonio Senzatela	22	2.1	0.535
8	Trevor Story	24	1.8	0.535
9	Jon Gray	25	1.7	0.535
10	Jake McGee	30	1.6	5.900
11	Tyler Chatwood	27	1.4	4.400
12	Gerardo Parra	30	1.3	8.000

#### National League Standings

Table 10: NL East Standings

W	L	W-L $%$	GB
82	54	.603	_
67	69	.493	15.0
60	75	.444	21.5
58	78	.426	24.0
52	84	.382	30.0
	82 67 60 58	82 54 67 69 60 75 58 78	67 69 .493 60 75 .444 58 78 .426

Table 11: NL Central Standings

$\overline{\mathrm{Tm}}$	W	L	W-L%	GB
Chicago Cubs	75	61	.551	_
Milwaukee Brewers	72	65	.526	3.5
St. Louis Cardinals	69	67	.507	6.0
Pittsburgh Pirates	65	72	.474	10.5
Cincinnati Reds	58	79	.423	17.5

Table 12: NL West Standings

Tm	W	L	W-L $%$	GB
Los Angeles Dodgers	92	44	.676	_
Arizona Diamondbacks	79	58	.577	13.5
Colorado Rockies	72	64	.529	20.0
San Diego Padres	62	75	.453	30.5
San Francisco Giants	54	85	.388	39.5

#### American League Standings

Table 13: AL East Standings

$\overline{ m Tm}$	W	L	W-L%	GB
Boston Red Sox	77	60	.562	_
New York Yankees	73	63	.537	3.5
Baltimore Orioles	70	67	.511	7.0
Tampa Bay Rays	68	70	.493	9.5
Toronto Blue Jays	63	74	.460	14.0

Table 14: AL Central Standings

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Tm	W	L	W-L%	GB
Cleveland Indians	80	56	.588	_
Minnesota Twins	71	65	.522	9.0
Kansas City Royals	67	68	.496	12.5
Detroit Tigers	58	78	.426	22.0
Chicago White Sox	54	81	.400	25.5

Table 15: AL West Standings

Tm	W	L	W-L $%$	GB
Houston Astros	83	53	.610	_
Los Angeles Angels	70	67	.511	13.5
Seattle Mariners	69	68	.504	14.5
Texas Rangers	68	68	.500	15.0
Oakland Athletics	58	78	.426	25.0

#### 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	$\mathbf{L}$	1	6	Peralta	Chatwood	Feliz	N	-
4	Thu	Apr 6	A	MIL	W	2	1	Dunn	Feliz	Holland	D	+
5	$\operatorname{Fri}$	Apr 7	Η	LAD	W	2	1	Freeland	Ryu	McGee	D	++
6	Sat	Apr 8	Η	LAD	W	4	2	Dunn	Kershaw	Holland	N	+++
7	$\operatorname{Sun}$	Apr 9	Η	LAD	L	6	10	Maeda	Anderson		D	-
8	Mon	Apr 10	Η	SDP	L	3	5	Diaz	Chatwood		N	_
9	Tue	Apr 11	Η	SDP	W	3	2	Senzatela	Diaz	Holland	N	+
10	Wed	Apr 12	Η	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	$\operatorname{Sun}$	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	$\operatorname{Fri}$	Apr 21	Η	SFG	W	6	5	Chatwood	Cueto	Holland	N	+
18	Sat	Apr 22	Η	SFG	W	12	3	Senzatela	Moore		N	++
19	$\operatorname{Sun}$	Apr 23	Η	SFG	W	8	0	Freeland	Samardzija		D	+++
20	Mon	Apr 24	Η	WSN	W	8	4	Estevez	Romero		N	++++
21	Tue	Apr 25	Η	WSN	L	12	15	Romero	Marquez		N	-
22	Wed	Apr 26	Η	WSN	L	4	11	Roark	Chatwood		N	_
23	Thu	Apr 27	Н	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	$\operatorname{Sun}$	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	Η	ARI	L	3	6	Greinke	Marquez	Rodney	N	-
31	Sat	May 6	Η	ARI	W	9	1	Anderson	Corbin	Rusin	N	+
32	$\operatorname{Sun}$	May 7	Η	ARI	W	5	2	Chatwood	Walker	Holland	D	++
33	Tue	May 9 (1)	Η	CHC	W	10	4	Senzatela	Arrieta		D	+++
34	Tue	May 9 (2)	Η	CHC	L	1	8	Lackey	Freeland		N	-
35	Wed	May 10	Η	CHC	W	3	0	Marquez	Hendricks	Holland	D	+
36	Thu	May 11	Η	LAD	W	10	7	Hoffman	Ryu	Holland	N	++
37	$\operatorname{Fri}$	May 12	Η	LAD	L	2	6	Kershaw	Chatwood		N	-
38	Sat	May 13	Η	LAD	L	0	4	Wood	Anderson		N	_
39	$\operatorname{Sun}$	May 14	Η	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	РНІ	W	8	1	Hoffman	Eickhoff		N	++
47	Tue	May 23	A	РНІ	W	8	$\overline{2}$	Marquez	Eflin		N	+++
48	Wed	May 24	A	РНІ	W	7	2	Chatwood	Hellickson		N	++++
49	Thu	May 25	A	РНІ	L-wo	1	2	Gomez	Oberg		D	-
50	Fri	May 26	Н	STL	W	10	0	Senzatela	Martinez		N	+
50	1.11	1V1ay 20	11	SIL	v v	10	U	Denzareia	IMIGI UIIICZ		T .M	_

Gm#	Day	Date	H/A	Opp	W/L	R	RA	Win	Loss	Save	$\mathrm{D/N}$	Streak
51	Sat	May 27	Н	STL	L	0	3	Wainwright	Freeland	Oh	N	-
52	$\operatorname{Sun}$	May 28	$\mathbf{H}$	STL	W	8	4	Marquez	Lynn		D	+
53	Mon	May 29	${ m H}$	SEA	L	5	6	Gaviglio	Chatwood	Diaz	D	-
54	Tue	May 30	${ m H}$	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	$\operatorname{Sun}$	Jun 4	A	SDP	W	3	1	Hoffman	Cosart	Holland	D	++
60	Tue	Jun 6	$\mathbf{H}$	CLE	W	11	3	Senzatela	Clevinger		N	+++
61	Wed	Jun 7	$\mathbf{H}$	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	$\operatorname{Sun}$	Jun 11	A	CHC	L	5	7	Edwards	Lyles	Davis	D	-
66	Mon	Jun 12	A	PIT	L	2	7	Taillon	Freeland		N	_
67	Tue	Jun 13	A	PIT	$\mathbf{L}$	2	5	Cole	Ottavino		N	
68	Wed	Jun 14	A	PIT	W	5	1	Marquez	Kuhl		N	+
69	Thu	Jun 15	H	SFG	W-wo	10	9	Holland	Strickland		N	++
70	Fri	Jun 16	H	SFG	W	10	8	Senzatela	Samardzija	Holland	N	+++
71	Sat	Jun 17	H	SFG	W	5	1	Freeland	Cain		D	++++
72	Sun	Jun 18	Н	SFG	W-wo	7	5	Estevez	Melancon		D	++++
73	Tue	Jun 20	Н	ARI	W	4	3	Ottavino	Greinke	Holland	N	++++
74	Wed	Jun 21	Н	ARI	L	5	16	Walker	Hoffman		N	-
75	Thu	Jun 22	Н	ARI	L	3	10	Godley	Senzatela		D	_
76	Fri	Jun 23	A	LAD	L	1	6	Wood	Freeland		N	_
77	Sat	Jun 24	A	LAD	L	0	4	Kershaw	Chatwood		N	
78	Sun	Jun 25	A	LAD	L	6	12	Baez	Ottavino	Jansen	D	
79	Mon	Jun 26	A	SFG	L	2	9	Samardzija	Marquez	5 0220 022	N	
80	Tue	Jun 27	A	SFG	L-wo	3	$\frac{3}{4}$	Gearrin	Qualls		N	
81	Wed	Jun 28	A	SFG	L	3	5	Blach	Freeland	Strickland	D	
82	Fri	Jun 30	A	ARI	W	6	3	Gray	Ray	Holland	N	+
83	Sat	Jul 1	A	ARI	L	2	6	Greinke	Chatwood	Rodney	N	_
84	Sun	Jul 2	A	ARI	L-wo	3	4	Rodney	Ottavino	rouncy	D	_
85	Mon	Jul 3	Н	CIN	W W	5	3	Hoffman	Castillo	Holland	N	+
86	Tue	Jul 4	H	CIN	L	1	8	Bailey	Freeland	Honand	N	_
87	Wed	Jul 5	H	CIN	W	5	$\frac{3}{3}$	Gray	Feldman	Holland	N	+
88	Thu	Jul 6	H	CIN	L L	3	6	Romano	Chatwood	Honand	D	<del>-</del>
89	Fri	Jul 7	H	CHW	W	12	4	Marquez	Holland		N	+
90	Sat	Jul 8	H	CHW	L L	4	5	Kahnle	Holland	Robertson	N	<del>-</del>
91	Sun	Jul 9	H	CHW	W	10	0	Freeland	Rodon	100010011	D	+
92	Fri	Jul 9 Jul 14	A	NYM	L L	2	14	deGrom	Gray		N	_
93	Sat	Jul 14 Jul 15	A	NYM	L	3	9	Lugo	Chatwood		N	_
93 94	Sun	Jul 16	A	NYM	W	3 13	$\frac{9}{4}$	Hoffman	Matz		D	+
94 95	Mon	Jul 10 Jul 17	H H	SDP	W	13 9	6	Marquez	Perdomo	Holland	D N	
95 96		Jul 17 Jul 18	н Н	SDP	W		6 7	Marquez Senzatela	Perdomo Lamet	Holland		++
	Tue					9				Henon	N	+++
97	Wed	Jul 19	Н	SDP	W	18	4 12	Gray	Richard		D N	++++
98	Fri	Jul 21	Н	PIT	L	5	13	Williams	Hoffman	Hollar J	N N	-
99	Sat	Jul 22	Н	PIT	W	7	3	Marquez	Kuhl	Holland	N	+
100	Sun	Jul 23	H	PIT	W	13	3	Freeland	Nova		D	++
101	Mon	Jul 24	A	STL	L	2	8	Leake	Senzatela		N	-
102	Tue	Jul 25	A	STL	L-wo	2	3	Rosenthal	McGee		N	_

Gm#	Day	Date	H/A	Opp	W/L	R	RA	Win	Loss	Save	D/N	Streak
										Dave		
103	Wed	Jul 26	A	STL	L	5	10	Martinez	Hoffman	TT 11 1	N	
104	Sat	Jul 29	A	WSN	W	4	2	Marquez	Roark	Holland	N	+
105	$\operatorname{Sun}$	Jul 30 (1)	A	WSN	W	10	6	Freeland	Fedde	Holland	D	++
106	$\operatorname{Sun}$	$Jul \ 30 \ (2)$	A	WSN	${ m L}$	1	3	Jackson	$\operatorname{Gray}$	Doolittle	N	-
107	Tue	Aug 1	Η	NYM	W-wo	5	4	Dunn	Robles		N	+
108	Wed	Aug 2	Η	NYM	$\mathbf{L}$	5	10	Bradford	Chatwood		N	-
109	Thu	Aug 3	Η	NYM	W-wo	5	4	Holland	Robles		D	+
110	Fri	Aug 4	Η	PHI	W	4	3	Dunn	Garcia	Holland	N	++
111	Sat	Aug 5	Η	PHI	W	8	5	Gray	Pivetta		N	+++
112	$\operatorname{Sun}$	Aug 6	Η	PHI	L	2	3	Ramos	Holland	Neris	D	-
113	Tue	Aug 8	A	CLE	L-wo	1	4	Kluber	Holland		N	_
114	Wed	Aug 9	A	CLE	W	3	2	Estevez	McAllister	Chatwood	D	+
115	Fri	Aug 11	A	MIA	L	3	6	Tazawa	McGee	Ziegler	N	-
116	Sat	Aug 12	A	MIA	L	3	4	Nicolino	Hoffman	Ziegler	N	_
117	$\operatorname{Sun}$	Aug 13	A	MIA	L	3	5	Guerra	Marquez	Despaigne	D	_
118	Mon	Aug 14	$\mathbf{H}$	ATL	W	3	0	Dunn	Brothers	Holland	N	+
119	Tue	Aug 15	H	ATL	L	3	4	Freeman	Neshek	Vizcaino	N	-
120	Wed	Aug 16	$\mathbf{H}$	ATL	W	17	2	Gray	Foltynewicz		N	+
121	Thu	Aug 17	H	ATL	L	4	10	Sims	Hoffman		D	-
122	Fri	Aug 18	H	MIL	W	8	4	Marquez	Garza		N	+
123	Sat	Aug 19	H	MIL	${ m L}$	3	6	Swarzak	Holland	Knebel	N	-
124	$\operatorname{Sun}$	Aug 20	H	MIL	${ m L}$	4	8	Anderson	Freeland	Knebel	D	_
125	Tue	Aug 22	A	KCR	L	2	3	Duffy	Gray	Alexander	N	_
126	Wed	Aug 23	A	KCR	L-wo	4	6	Maurer	Holland		N	
127	Thu	Aug 24	A	KCR	W	3	2	Ottavino	Minor	Holland	D	+
128	Fri	Aug 25	A	ATL	${ m L}$	2	5	Teheran	Bettis	Vizcaino	N	-
129	Sat	Aug 26	$\mathbf{A}$	ATL	W	7	6	Neshek	Vizcaino	McGee	N	+
130	Sun	Aug 27	$\mathbf{A}$	ATL	W	3	0	Gray	Foltynewicz	McGee	D	++
131	Mon	Aug 28	Η	DET	L	3	4	Zimmermann	Senzatela	Greene	N	-
132	Tue	Aug 29	H	DET	W	7	3	Neshek	Fulmer		N	+
133	Wed	Aug 30	Н	DET	L	2	6	Verlander	Bettis		D	_
134	Fri	Sep 1	Н	ARI	L	5	9	Walker	Freeland		N	_
135	Sat	Sep 2	Н	ARI	L	2	6	Corbin	Gray		N	
136	$\operatorname{Sun}$	Sep 3	H	ARI	L	1	5	Godley	Marquez	Sherfy	D	

The Rockies current record is 72 Wins and 64 Losses. So far, the Rockies have scored 689 runs and have had 653 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 17: Predicted Wins for Entire 2017 Season

Wins (k=1.81)	Wins (k=1.83)	Wins (k=2.00)
85	85	85

#### Batting Statistics (non-pitchers)

Table 18: Rockies Batting Statistics (1 of 2).

Rk	Pos	Name	Age	G	AB	R	Н	2B	3B	HR	RBI	SB	CS	BB
1	С	Wolters*	25	71	213	30	51	8	1	0	14	0	1	31
2	1B	Reynolds	33	127	448	75	121	18	1	28	88	2	1	64
3	2B	LeMahieu	28	129	509	83	160	24	2	7	56	6	5	51
4	SS	Story	24	119	407	54	92	23	1	18	63	5	0	44
5	3B	Arenado	26	133	519	83	157	39	7	30	111	3	2	45
6	$_{ m LF}$	Parra*	30	94	317	51	107	20	0	10	62	0	4	15
7	$\operatorname{CF}$	Blackmon*	30	134	547	120	186	28	14	32	85	13	8	53
8	RF	$Gonzalez^*$	31	114	399	51	96	24	0	8	43	3	0	44
9	$_{ m LF}$	Desmond	31	71	261	36	73	8	1	5	32	11	4	17
10	$_{ m IF}$	Valaika	24	94	164	25	41	10	0	11	34	0	0	6
11	UT	Amarista*	28	83	152	17	36	9	0	3	19	1	0	6
12	OF	Tapia*	23	53	135	22	37	8	2	2	11	5	2	8
13	$\mathbf{C}$	Hanigan	36	29	96	8	24	2	0	2	12	0	0	8
14	$\mathbf{C}$	Lucroy	31	24	76	6	21	5	1	1	5	0	0	10
15	$\mathbf{C}$	Garneau	29	22	68	5	14	7	0	1	6	0	0	4
16	OF	Cardullo	29	15	28	2	4	0	0	0	3	0	0	3
17	$\mathbf{C}$	Murphy	26	9	21	1	1	1	0	0	1	0	0	2
18	OF	Tauchman*	26	13	13	0	3	0	0	0	1	0	1	5
19	$\operatorname{IF}$	McMahon*	22	6	11	1	2	1	0	0	1	0	0	4
20	IF	${\rm Adames} \#$	25	12	13	1	0	0	0	0	0	0	0	1

Table 19: Rockies Batting Statistics (2 of 2).

Rk	Pos	Name	Age	SO	BA	OBP	SLG	OPS	OPS+	ТВ	GDP	HBP	SH	SF	IBB
1	С	Wolters*	25	52	.239	.341	.286	.628	58	61	9	2	2	0	9
2	1B	Reynolds	33	151	.270	.360	.502	.863	110	225	11	1	0	3	0
3	2B	LeMahieu	28	71	.314	.379	.411	.790	95	209	21	5	3	5	1
4	SS	Story	24	162	.226	.304	.420	.724	76	171	7	2	0	1	4
5	3B	Arenado	26	95	.303	.360	.578	.938	126	300	19	4	1	5	5
6	$_{ m LF}$	Parra*	30	56	.338	.367	.495	.863	110	157	10	4	0	7	0
7	$\operatorname{CF}$	Blackmon*	30	114	.340	.404	.618	1.022	147	338	4	8	3	3	6
8	RF	Gonzalez*	31	98	.241	.313	.361	.674	66	144	6	1	0	6	3
9	$_{ m LF}$	Desmond	31	68	.280	.327	.375	.703	73	98	9	3	2	3	1
10	$\operatorname{IF}$	Valaika	24	47	.250	.275	.512	.787	88	84	1	0	4	1	0
11	UT	Amarista*	28	32	.237	.266	.355	.621	51	54	3	0	1	0	0
12	OF	Tapia*	23	31	.274	.324	.407	.732	79	55	0	2	1	0	1
13	$\mathbf{C}$	Hanigan	36	25	.250	.311	.333	.645	60	32	4	1	1	1	2
14	$\mathbf{C}$	Lucroy	31	12	.276	.385	.408	.793	96	31	3	4	0	1	0
15	$\mathbf{C}$	Garneau	29	24	.206	.260	.353	.613	49	24	1	1	1	0	0
16	OF	Cardullo	29	7	.143	.250	.143	.393	2	4	0	1	0	0	0
17	$\mathbf{C}$	Murphy	26	8	.048	.130	.095	.226	-43	2	0	0	0	0	1
18	OF	Tauchman*	26	3	.231	.444	.231	.675	76	3	0	0	0	0	0
19	$\operatorname{IF}$	McMahon*	22	1	.182	.400	.273	.673	72	3	1	0	0	0	0
20	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\_lg for OPS+ does not include pitchers.

#### **Pitching Statistics**

Table 20: Rockies pitching statistics (1 of 2).

Rk	Pos	Name	Age	W	L	W-L%	ERA	G	GS	GF	CG	SHO	SV	IP	Н	R
1	SP	Freeland*	24	11	9	.550	3.89	26	25	0	0	0	0	143.1	148	67
2	$_{ m SP}$	Marquez	22	10	6	.625	4.26	24	24	0	0	0	0	137.1	138	66
3	SP	Senzatela	22	10	5	.667	4.68	27	20	3	0	0	0	125.0	120	67
4	SP	Chatwood	27	6	12	.333	5.00	27	20	3	1	1	1	122.1	111	70
5	$_{ m SP}$	Hoffman	24	6	5	.545	5.30	17	16	1	0	0	0	91.2	94	55
6	$_{ m SP}$	$\operatorname{Gray}$	25	6	4	.600	4.26	15	15	0	0	0	0	80.1	89	40
7	$\operatorname{CL}$	Holland	31	2	5	.286	3.88	52	0	49	0	0	36	48.2	36	21
8	RP	McGee*	30	0	2	.000	3.20	52	0	12	0	0	3	50.2	39	18
9	RP	Oberg	27	0	1	.000	5.44	54	0	11	0	0	0	48.0	61	32
10	RP	Ottavino	31	2	3	.400	5.40	55	0	7	0	0	0	46.2	44	28
11	RP	Dunn*	32	5	1	.833	4.89	59	0	8	0	0	0	46.0	40	25
12		Rusin*	30	3	0	1.000	2.34	49	0	5	0	0	1	73.0	60	24
13		Anderson*	27	3	5	.375	6.11	13	12	1	0	0	0	63.1	75	45
14		Lyles	26	0	2	.000	6.94	33	0	12	0	0	0	46.2	61	37
15		Bettis	28	0	2	.000	4.88	4	4	0	0	0	0	24.0	27	13
16		Estevez	24	5	0	1.000	6.65	23	0	8	0	0	0	23.0	32	18
17		Qualls	38	1	1	.500	5.40	19	0	9	0	0	0	16.2	17	11
18		Neshek	36	2	1	.667	2.84	17	0	1	0	0	0	12.2	13	6
19		Diaz	26	0	0		9.00	4	0	3	0	0	0	5.0	12	6
20		Rosscup*	29	0	0		9.00	5	0	1	0	0	0	4.0	7	4
21		Carle	25	0	0		0.00	1	0	1	0	0	0	1.0	0	0

Table 21: Rockies pitching statistics (2 of 2).

Rk	Pos	Name	ER	HR	ВВ	IBB	SO	HBP	BK	WP	BF	ERA+	FIP	WHIP
1	SP	Freeland*	62	17	55	3	98	8	2	1	622	128	4.63	1.416
2	$_{ m SP}$	Marquez	65	20	41	2	134	7	0	3	587	117	4.12	1.303
3	$_{ m SP}$	Senzatela	65	18	43	1	93	4	2	1	523	107	4.64	1.304
4	$\operatorname{SP}$	Chatwood	68	18	67	2	100	2	2	11	521	100	5.10	1.455
5	$\operatorname{SP}$	Hoffman	54	14	33	1	73	4	0	2	398	94	4.74	1.385
6	$\operatorname{SP}$	$\operatorname{Gray}$	38	8	26	0	79	1	1	3	346	118	3.47	1.432
7	$\operatorname{CL}$	Holland	21	6	24	1	59	1	0	6	201	129	3.85	1.233
8	RP	McGee*	18	4	13	0	53	1	0	5	199	157	2.90	1.026
9	RP	Oberg	29	3	19	2	44	2	0	3	222	92	3.42	1.667
10	RP	Ottavino	28	7	33	2	52	4	0	7	214	93	5.23	1.650
11	RP	Dunn*	25	8	26	0	53	0	0	2	201	103	4.78	1.435
12		Rusin*	19	7	18	1	58	1	0	3	287	214	3.57	1.068
13		Anderson*	43	15	23	0	63	2	2	3	281	82	5.41	1.547
14		Lyles	36	11	12	1	33	4	0	2	211	72	5.81	1.564
15		Bettis	13	5	5	0	15	1	0	1	102	104	5.34	1.333
16		Estevez	17	2	9	2	20	1	1	1	110	76	3.83	1.783
17		Qualls	10	3	5	0	11	0	0	0	72	94	5.05	1.320
18		Neshek	4	1	0	0	14	0	0	0	51	180	1.95	1.026
19		Diaz	5	0	5	0	2	1	0	0	30	59	5.93	3.400
20		Rosscup*	4	2	0	0	7	0	0	0	19	60	6.13	1.750
21		Carle	0	0	0	0	1	0	0	1	4		1.13	0.000

\* - throws left-handed

#### National League Team Standard Batting

Table 22: 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
WSN	48	29.2	5.21	136	5247	4683	709	1259	265	24	186	688	91	23	461	1098
CHC	44	27.1	5.09	136	5277	4624	692	1176	228	25	197	656	51	25	518	1172
COL	41	28.3	5.07	136	5199	4648	689	1262	241	30	160	663	49	28	425	1191
ARI	43	28.3	4.93	137	5254	4673	675	1187	267	34	181	643	88	26	479	1257
LAD	49	27.9	4.91	136	5214	4557	668	1158	261	17	190	630	65	24	548	1163
STL	45	28.2	4.78	136	5241	4618	650	1204	249	25	166	620	62	26	487	1129
CIN	45	27.2	4.75	137	5292	4666	651	1190	215	33	191	619	108	31	490	1103
MIA	43	28.4	4.66	136	5195	4660	634	1230	219	24	167	605	74	27	398	1060
LgAvg	44	28.1	4.61	136	5212	4645	628	1182	237	26	168	600	70	27	448	1137
ATL	48	29.0	4.59	135	5181	4661	619	1230	246	21	140	594	63	28	386	992
NYM	50	29.1	4.57	136	5183	4642	622	1150	236	24	196	603	41	17	436	1085
MIL	47	27.3	4.53	137	5178	4636	620	1156	229	21	195	589	108	34	439	1338
PIT	45	28.3	4.17	137	5226	4635	571	1132	210	30	132	540	57	30	451	1001
PHI	46	26.9	4.09	136	5146	4658	556	1159	248	34	143	530	52	22	403	1183
SFG	47	29.5	3.91	139	5291	4782	543	1179	254	24	108	519	68	31	407	1020
SDP	48	26.2	3.85	137	5050	4537	528	1059	189	27	166	505	74	28	393	1270

Table 23: NL Team Batting statistics (2 of 2).

$\overline{\mathrm{Tm}}$	#Bat	BatAge	R/G	BA	OBP	SLG	OPS	OPS+	ТВ	GDP	НВР	SH	SF	IBB	LOB
WSN	48	29.2	5.21	0	0.334	0.455	0.789	101	2130	99	22	38	43	49	928
CHC	44	27.1	5.09	0	0.337	0.442	0.780	101	2045	111	74	35	24	46	964
COL	41	28.3	5.07	0	0.335	0.440	0.775	89	2043	112	39	50	36	33	904
ARI	43	28.3	4.93	0	0.328	0.442	0.770	92	2065	85	46	33	23	39	945
LAD	49	27.9	4.91	0	0.339	0.444	0.783	104	2023	100	51	26	31	33	961
STL	45	28.2	4.78	0	0.336	0.433	0.769	101	2001	115	56	42	38	29	941
CIN	45	27.2	4.75	0	0.332	0.438	0.770	99	2044	99	62	42	32	31	978
MIA	43	28.4	4.66	0	0.328	0.429	0.757	101	1998	104	60	43	32	39	930
LgAvg	44	28.1	4.61	0	0.325	0.425	0.750	94	1975	102	50	36	31	34	933
ATL	48	29.0	4.59	0	0.326	0.416	0.742	94	1938	120	57	49	27	49	921
NYM	50	29.1	4.57	0	0.317	0.436	0.752	96	2022	99	46	27	32	28	906
MIL	47	27.3	4.53	0	0.319	0.434	0.753	94	2012	91	47	36	20	26	913
PIT	45	28.3	4.17	0	0.320	0.388	0.708	85	1798	104	77	37	25	34	972
PHI	46	26.9	4.09	0	0.312	0.409	0.721	89	1904	103	38	18	29	23	912
SFG	47	29.5	3.91	0	0.308	0.377	0.685	80	1805	111	34	26	42	35	948
SDP	48	26.2	3.85	0	0.299	0.397	0.696	84	1800	82	46	45	29	17	872

### **Current Injuries**

	Name	Updated	Type	Details
1	Tyler Anderson	September 02 2017	Knee	Anderson has been transferred to the 60-day disabled list due to
				arthroscopic left knee surgery and is expected to be sidelined until the middle of September.
2	Ryan Hanigan	August 22 2017	Groin	Hanigan is on the 10-day disabled list with a left groin strain and will miss an undetermined amount of game action.

Table 24: 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 There is much more to cover here. Perhaps we can rank some of the past greats based on their modern day WAR rating?
- What is the OPS+ statistic and how is it calculated.
- Survey MLB ticket prices.
- Are WAR ratings a good indicator of past season's playoff and World Series teams?
- 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 an email at jdreed@q.com.

Yours truly,

Jim Reed

## Appendix

### Glossary

#### **Batting Statistics**

Statistic Abbreviation	Definition
$\overline{G}$	number of games (participated)
PA	plate appearances
AB	at bats
R	runs scored by player or team
RA	runs allowed
H	hits
2B	doubles
3B	triples
HR	home runs
RBI	runs batted in
BA	batting average
OBP	on-base percentage
SLG	slugging percentage
OPS	on-base percentage plus slugging percentage
OPS+	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
$\overline{Rk}$	Rank This is a count of the rows from top to bottom.
	It is recalculated following the sorting of a column.
Pos	Position
Name	Player Name
Age	Player's age at midnight of June 30th of that year
$\widetilde{W}$	Wins
L	Losses
W- $L%$	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.
ERA	9 * ER / IP
G	·
G	Games Played or Pitched Games Started
GF	Games Started Games Finished
CG	
SHO	Complete Game
	Shutouts No runs allowed and a complete game. Saves
SV	
IP	Innings Pitched
H	Hits/Hits Allowed
R	Runs Scored/Allowed
ER	Earned Runs Allowed
HR	Home Runs Hit/Allowed
BB	Bases on Balls/Walks
IBB	Intentional Bases on Balls First tracked in 1955.
SO	Strikeouts
HBP	Times Hit by a Pitch.
BK	Balks
WP	Wild Pitches
BF	Batters Faced
ERA+	ERA+ 100*[lgERA/ERA] Adjusted to the player's
T.D.	ballpark(s).
FIP	Fielding Independent Pitching
WHIP	(BB + H)/IP For recent years, leaders need 1 IP per
	team game played
H9	9 x H / IP For recent years, leaders need 1 IP per team
HR9	game played $9 \times HR / IP$ For recent years, leaders need 1 IP per
	team game played
BB9	$9 \times BB$ / IP For recent years, leaders need 1 IP per
	team game played
SO9	$9 \ge SO$ / IP For recent years, leaders need 1 IP per
	team game played
SO/W	SO/W or SO/BB For recent years, pitching leaders
	need 1 IP per team game played.

#### Fielding Statistics

Fielding Statistic	Definition
Name	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.
Age	Player's age at midnight of June 30th of that year
G	Games Played or Pitched
GS	- Games Started
CG	- Complete Game
Inn	– Innings Played in Field
Ch	– Defensive Chances Putouts + Assists + Errors
PO	- Putouts
A	$ { m Assists}$
E	– Errors Committed
DP	– Double Plays Turned
Fld%	- Fielding Percentage (Putouts + Assists) / (Putouts +
	Assists + Errors)
Rtot	- 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
Rtot/yr	– 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
Rdrs	- 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
Rdrs/yr	– 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
RF/9	- Range Factor per 9 Inn 9 * (Putouts + Assists) /
101 / 0	Innings Played
RF/G	- Range Factor per Game (Putouts + Assists) / Games
101 / G	Played
PB	– Passed Balls
WP	- Wild Pitches
SB	- Stolen Bases
CS	- Caught Stealing
	Caught Docume

Fielding Statistic	Definition
CS%	- Caught Stealing Percentage CS / (SB + CS)
lgCS%	<ul> <li>League Caught Stealing Percentage League Expected</li> <li>CS / Players SB + Players CS</li> </ul>
PO	– Pickoffs Runner picked off a base. May include cases
	they were safe on an error. Also includes Pickoff
	Caught Stealing plays.
Pos	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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