Rockies 2017 - Week #2A

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Introduction

Note, I discovered that I had inadvertently numbered these articles starting with *Wk1* before the start of the season. This report should be numbered *Wk2* but since last week's already has that label, and to get us back on track number the articles as *Wkn* designating the review of the *nth* week of the season, I will label this as *Wk2A*. Hereafter, we will number the weeks *Wk3*, *Wk4*, ...

This week we will continue to develop a Rockies Dashboard of performance and progress for the season. Presented here are the following:

- National and American League Standings
- Game-by-Game Results of the past week.
- Colorado Rockies batting statistics in rank order.
- Pythagorean Theorem prediction of the number of wins by end of the season based on the number of runs scored (R) and the number of runs allowed (RA).
- Colorado Rockies Pitching Statistics

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

In the future I would like to add other statistics having to do with pitching and other defense-related measures. I am open to input on this. If there are favorite pitching or fielding measurements you would like to see, let me know.

National League Standings

Table 1: NL East Standings

Tm	W	L	W-L%	GB
Miami Marlins	7	5	.583	–
Washington Nationals	7	5	.583	–
New York Mets	7	6	.538	0.5
Atlanta Braves	5	6	.455	1.5
Philadelphia Phillies	4	8	.333	3.0

Table 2: NL Central Standings

Tm	W	L	W-L%	GB
Cincinnati Reds	8	5	.615	–
Milwaukee Brewers	7	6	.538	1.0
Chicago Cubs	6	6	.500	1.5
Pittsburgh Pirates	6	6	.500	1.5
St. Louis Cardinals	3	9	.250	4.5

Table 3: NL West Standings

Tm	W	L	W-L%	GB
Colorado Rockies	9	5	.643	–
Arizona Diamondbacks	8	5	.615	0.5
Los Angeles Dodgers	7	6	.538	1.5
San Diego Padres	5	8	.385	3.5
San Francisco Giants	5	9	.357	4.0

American League Standings

Table 4: AL East Standings

Tm	W	L	W-L%	GB
Baltimore Orioles	8	3	.727	–
New York Yankees	8	4	.667	0.5
Boston Red Sox	7	5	.583	1.5
Tampa Bay Rays	6	7	.462	3.0
Toronto Blue Jays	2	10	.167	6.5

Table 5: AL Central Standings

Tm	W	L	W-L%	GB
Detroit Tigers	8	4	.667	–
Minnesota Twins	7	5	.583	1.0
Chicago White Sox	6	5	.545	1.5
Kansas City Royals	6	6	.500	2.0
Cleveland Indians	5	7	.417	3.0

Table 6: AL West Standings

Tm	W	L	W-L%	GB
Houston Astros	8	4	.667	–
Los Angeles Angels of Anaheim	6	7	.462	2.5
Oakland Athletics	5	7	.417	3.0
Seattle Mariners	5	8	.385	3.5
Texas Rangers	4	8	.333	4.0

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	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	++

The Rockies current record is 9 Wins and 5 Losses. So far, the Rockies have scored 76 runs and have had 77 runs scored against them.

2017 Colorado Rockies Batting Statistics (non-pitchers)

Table 8: Rockies Batting Statistics (non-pitchers).

Rk	Pos	Name	Age	G	AB	R	H	2B	3B	HR	RBI	SB	BB	BA	OBP	SLG	OPS	OPS+
1	C	Wolters	25	9	26	6	7	1	0	0	0	0	2	.269	.321	.308	.629	63
2	1B	Reynolds	33	14	49	8	15	3	0	4	11	0	4	.306	.358	.612	.971	143
3	2B	LeMahieu	28	14	50	6	14	1	1	1	3	1	6	.280	.357	.400	.757	95
4	SS	Story	24	14	44	6	5	3	0	1	2	1	9	.114	.264	.250	.514	34
5	3B	Arenado	26	14	52	8	17	5	0	4	8	0	5	.327	.397	.654	1.050	163
6	LF	Parra	30	10	35	3	12	1	0	1	6	0	2	.343	.378	.457	.836	114
7	CF	Blackmon	30	14	56	5	13	1	1	3	9	1	4	.232	.283	.446	.730	83
8	RF	Gonzalez	31	13	52	3	10	4	0	1	2	0	2	.192	.218	.327	.545	37
9	C	Garneau	29	8	22	2	4	2	0	1	2	0	2	.182	.250	.409	.659	65
10	OF	Cardullo	29	11	19	1	2	0	0	0	2	0	2	.105	.227	.105	.333	-10
11	SS	Adames	25	7	9	0	0	0	0	0	0	0	0	.000	.000	.000	.000	-100
12	UT	Amarista	28	4	7	0	1	1	0	0	1	0	0	.143	.143	.286	.429	6
13	LF	Tapia	23	2	7	0	0	0	0	0	0	0	0	.000	.000	.000	.000	-100

Pythagorean Win-Loss Theorem

> The Pythagorean Win-Loss Theorem of Baseball is a creation of Bill James which relates the number of runs a team has scored (R) and surrendered (RA) to its actual winning percentage, based on the idea that runs scored compared to runs allowed is a better indicator of a team's (future) performance than a team's actual winning percentage. Feb 20, 2015

James put this formula forward with exponent of 2, thus the similarity to the actual Pythagorean Theorem. Statisticians have postulated that an exponent of 1.81 or 1.83 better fits historical data. Here is the generalized formula:

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

Rockies Predicted Season Wins using Bill James' "Pythagorean" Formula

So, using the commonly used values of k, the Rockies predicted wins for the 2017 season look good but not as good as it could be. As the season progresses and more R/RA history is generated, we will keep an eye on these numbers.

Table 9: Predicted Wins for Entire 2017 Season

Wins (k=1.81)	Wins (k=1.83)	Wins (k=2.00)
80	80	80

Rockies Pitching

Table 10: 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	1	2	.333	3.54	3	3	0	1	0	0	20.1	16	8
2	SP	Senzatela	22	2	0	1.000	2.37	3	3	0	0	0	0	19.0	14	5
3	SP	Anderson	27	1	2	.333	8.59	3	3	0	0	0	0	14.2	18	14
4	SP	Gray	25	0	0		4.38	3	3	0	0	0	0	12.1	11	6
5	SP	Freeland	24	1	1	.500	5.91	2	2	0	0	0	0	10.2	12	7
6	CL	Holland	31	0	0		0.00	7	0	7	0	0	7	7.0	2	0
7	RP	Oberg	27	0	0		1.29	6	0	2	0	0	0	7.0	4	1
8	RP	Ottavino	31	0	0		1.42	7	0	0	0	0	0	6.1	3	1
9	RP	Dunn	32	2	0	1.000	0.00	7	0	0	0	0	0	6.0	1	0
10	RP	Estevez	24	1	0	1.000	5.06	6	0	0	0	0	0	5.1	7	3
11		Lyles	26	0	0		8.44	3	0	1	0	0	0	5.1	7	5
12		Rusin	30	1	0	1.000	1.69	2	0	1	0	0	0	5.1	6	2
13		McGee	30	0	0		7.36	5	0	1	0	0	1	3.2	4	3
14		Carle	25	0	0		0.00	1	0	1	0	0	0	1.0	0	0

Table 11: Rockies pitching statistics (2 of 2).

Rk	Pos	Name	ER	HR	BB	IBB	SO	HBP	BK	WP	BF	ERA+	FIP	WHIP
1	SP	Chatwood	8	4	5	0	16	0	1	1	77	131	4.65	1.033
2	SP	Senzatela	5	1	4	0	14	1	0	0	74	196	2.93	0.947
3	SP	Anderson	14	4	6	0	12	0	2	1	66	54	6.07	1.636
4	SP	Gray	6	1	7	0	9	0	0	1	53	107	4.23	1.459
5	SP	Freeland	7	1	5	1	8	0	0	0	47	80	4.06	1.594
6	CL	Holland	0	0	3	0	9	0	0	1	24		1.64	0.714
7	RP	Oberg	1	0	1	0	6	1	0	0	25	373	2.07	0.714
8	RP	Ottavino	1	1	3	0	10	0	0	0	24	339	3.25	0.947
9	RP	Dunn	0	0	2	0	10	0	0	0	20		0.60	0.500
10	RP	Estevez	3	0	1	0	5	0	1	0	22	96	1.62	1.500
11		Lyles	5	1	1	0	6	1	0	1	24	58	4.24	1.500
12		Rusin	1	0	0	0	4	0	0	0	22	288	1.43	1.125
13		McGee	3	0	2	0	8	0	0	0	17	68	0.20	1.636
14		Carle	0	0	0	0	1	0	0	1	4		0.93	0.000

Topics for Future Articles

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

- pitching metrics
- What is the OPS+ statistic and how is it calculated.

Here are a couple of suggestions my children came up with:

- Survey MLB team payroll budgets.
- Survey MLB ticket prices.

Let me know what you would like to see in future articles. Send me email at jdreed@q.com.

Yours truly,

Jim Reed

Appendix

Glossary

Batting Statistics

Statistic Abbreviation	Definition
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
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
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	Games Played or Pitched
GS	Games Started
GF	Games Finished
CG	Complete Game
SHO	Shutouts No runs allowed and a complete game.
SV	Saves
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 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 game played
HR9	9 x HR / IP For recent years, leaders need 1 IP per team game played
BB9	9 x BB / IP For recent years, leaders need 1 IP per team game played
SO9	9 x 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.

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