

West Rajasthan Indian Weather Time Scales

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History: I have conducted many researches on the Indian weather and proposed hundreds and thousands of Indian weather Time Scale pertaining to the all Homogeneous Regions, Meteorological Subdivisions, states and districts of Indian which can help to forecast the weather changes in advance in 1980, Sri G. Surya Rao MLA had sent these Indian weather time scales to the chief minister of Andhra Pradesh for consideration and necessary action in 2004, some consultations were made with the planning department to implement the Indian weather time scale at the directorate of Economics & Statistics department in 2006, some correspondences were made with the environment, forest, science & Technology department for implementation of the Indian weather time scale the same scales were sent to the chief minister of Andhra Pradesh in 2003. And the same was again submitted to the chief minister of Andhra Pradesh in 2006. Many consultations were made with the commissioner for disaster Management in the years of 2008,2009 about the implementation of Indian weather time scale. In 2010, these scales were consulted with the A.P state council of science & Technology in 2008, Sri T. Subbirami Reddy, Honable Union Minister of state had recommended the Indian weather time scale to the Indian Meteorological department for implementation in the services to the country. Later consultations were made with the India meteorological department about the Indian weather time scale during the years of 2008-2008.

Abstract: I have conducted many extensive researches on the astronomical forces and its effects on the earth climate particularly on various regions of the India. The variations in the solar cycle affects and stimulate the earth climate. The moon affects and stimulate the ocean tides and atmosphere too. The movement of axis of the earth inclined at $23\frac{1}{2}$ degrees from vertical to its path around the sun affects and stimulate the earth weather and leads to formation of monsoons and seasons etc. So the astronomical forces affect and stimulate the earth climate it may be more or less but it is true. These scales may be taken as a part of scientific study of astronomical forces & its effects on the earth climate.

[Gangadhara Rao Irlapati. **West Rajasthan Indian Weather Time Scales.** *Academ Arena* 2018;10(3s): 189-196]. (ISSN 1553-992X). <http://www.sciencepub.net/academia>. 26. doi:[10.7537/marsaaj1003s1826](https://doi.org/10.7537/marsaaj1003s1826).

Keywords: Indian weather, astronomical forces.

Introduction:

In the time and scale of the universe some things from astronomy to atom including living beings have been repeating once in every certain time or period. For example, the south and north magnetic poles have been shifting in every certain period. The sun spots have been repeating once in every eleven years. The lunar and solar eclipses have also been occurring once in every 18.6 years. The seasons such as winter, autumn etc. also have been repeating once in every year in the same month of the year. The periodical menses in the females repeating once in every month.

Construction: On the basis of the said universal facts, I have prepared a time scale with 21 blocks, each block containing certain prescribed cycle of years in which similar calendar years repeating one after another that leads similar weather conditions of those previous years to future years likely repeating every year approximately. The rainfall of the years, have been entering in the scale in percentages or as it is pertaining to month, season, annual wise of the each and every year. If we managing the scale in this manner continuously, we may assuming the weather

conditions of the anterior years on the basis of the posteriors years weather. On the basis of the principle, we can assume that a considerable, of course it may be little chance of predication for an ensuing years by study the data of earlier years.

Studies Carried Out: Many experiments were carried out on the Indian weather Time Scale and it was successfully proved out.

Firstly, see the Indian weather time scale. In this scale, the June, July, August and September months of the summer monsoon season were taken in a table in which the each month is also divided into three parts the Telangana, Rayalaseema and Coastal Andhra regions. The monthly wise rainfall data of the months of the regions from 1870 to till available years are taken in the form of percentages or as it is and entering in the scale pertaining to the region wise of the each and every year. If we managing the scale in this manner continuously, we may assuming the weather conditions of the anterior years on the basis of the posterior years weather.

Example for assuming the dry season or suppose to predict the rainfall situation in the summer season

of the ensuing year 2019: study the 7th cycle in which wet conditions in 10 years and dry conditions in 14 years were occurred in the month of June: wet conditions in 2 years and dry conditions in 22 years were occurred in the month of July: wet conditions in 4 years and dry conditions in 20 years were occurred in the month of August and wet conditions in 8 years and dry conditions in 16 years were occurred in the month of September. On the whole, wet conditions in 24 times and dry conditions in 72 times repeated in the summer monsoon season of the 7th cycle (As a result, there were dry conditions occurred in the 2002 year also). Therefore it is a considerable chance to predict that a dry season will be repeated in the ensuing year of 2019.

Example for assuming the wet season or suppose to predict the rainfall situation in the summer season of the ensuing year 2022: study the 10th cycle in which wet conditions in 13 years and dry conditions in 8 years were occurred in the month of June: wet

conditions in 13 years and dry conditions in 8 years were occurred in the month of July: wet conditions in 9 years and dry conditions in 12 years were occurred in the month of August and wet conditions in 19 years and dry conditions in 2 years were occurred in the month of September. On the whole, wet conditions in 54 times and dry conditions 30 times were repeated in the summer monsoon season of the 10th cycle. As a result, there were wet conditions occurred in the 2005 years also. Therefore, it is a considerable chance to predict that a wet season will be occurred in the ensuing year of 2022.

In the same manner, we can study the remaining All Indian weather time scales of all Homogeneous regions and subdivisions, states and districts of India.

Conslusions: We can make many more modifications thus bringing many more developments in the Indian weather time scale and its all additional Indian weather time scale.

	2020	June			July			August			SEPTEMBER			OVERALL SEASON			REMARKS
		T	R	C	T	R	C	T	R	C	T	R	C	T	R	C	
1	1992	77.18	-9.5	-54.0	-39.2	+5	-15.8	+4.70	-11.2	-10.8	-35.2	-19.1	-26	-1	-12	-6	
	1964	-31.6	+21.3	-15.0	-36.6	+108	-13.4	799.5	-17.8	-11.8	+1503	+139	+95.4	+17	+16	+44	
	1936	+31.7	-9.16	-13.0	-14.1	-35.3	-7.00	-12.5	-65.7	-32.3	+7.82	+21.2	-39.2	-3	-29	-5	
	1908	-32.3	-62.9	+69.9	+5.8	-29.4	-50.9	-9.13	-57.2	-25.2	+10.8	+84.9	+48.4	+38	-9	-2	
	1880	+21.5	+15.2	-99	-24.0	-50.2	-46	-60.7	+2.63	-99.4	+56.2	+19.7	-51	-11	-18	-30	
2	2017																
	1995	-1.01	-11.5	-36.2	-13.6	+6.5	-20.9	-46.7	-20	-23.0	-71.7	-17.3	-49.3	-33.5	-27.1	-16.3	
	1978	-78.2	-7.7	+26.2	-1.17	+57.5	+6.9	+47.0	-13.1	+31.7	+169.0	+100	+8.0	+50	+37	+55	
	1961	+34.0	+27.8	+70.9	-37.9	+32.9	-24.3	-8.35	-4.9	+13.3	+20.0	-49.6	-6.1	+12	+1	+30	
	1939	-38.0	-20.5	-38.2	-44.6	-34.6	-42.3	-27.5	+13.9	7398	-3.95	+81.7	-13.5	-28	-12	-23	
	1922	-12.3	-50.4	-90.2	-27.6	-516	-31	-36.8	-30.3	-42.0	+22.6	-1.2	-48.3	-18	-29	-15	
	1905	-17.6	+8.61	-29.3	-64.4	-62.2	-72.7	+16.8	+103	-10.5	734.8	-58.1	-6.5	-5	-4	-18	
	1883	+60	+23.3	-25.1	-8.24	-23.5	-55.1	+32.2	+36.4	-10.6	+85.1	-32.1	-56.6	+31	-4	-21	
3	2024																
	1996	+13.5	+29.4	+13.7	-32.4	-21.4	-17.3	+21.1	+96.6	-9.8	-4.49	+51.2	+19.3	-3.6	+83.1	+46	
	1968	-330	-28.3	-38.7	-28.0	-39.4	-38.4	-82.5	-34.2	-99.4	+1.007	+53.6	-26.6	-20	-18	-39	
	1940	-19.8	+24.3	-2.0	+9.24	-159	-34.0	-89.9	-33.9	-18.4	-26.2	+35.0	-21.5	-5	-5	-3	
	1912	-61.1	-53.3	-74.3	+12.5	-20	-5.6	-11.8	+20.0	+15.3	-12.1	+41.4	70.3	-15	+1	+10	
	1884	-38.8	-53.7	-69.4	+40.7	-43.1	-33.7	-23.1	-25.0	-15.3	+65.6	-30.9	+8.1	+12	-48	-1	
4	1999	-24.2	-25.8	-13.9	-23.5	-30.1	-48.8	-2.28	+7.8	-40.9	+25.8	-24.0	-18.4	-9.1	-20	-15.9	
	1982	+5.15	+59.3	-34.4	+27.6	+0.5	-24.1	-28.6	-66.3	-40.9	+12.4	+17.0	-27.0	+1	-5	+13	
	1965	-51.1	+40.2	-36.6	-44.5	-23.3	-24.2	-27.0	+2.08	-9.7	+80.8	-7.04	72.0	+10	+3	+3	
	1943	+13.5	-54.8	-20.8	-31.4	-30.9	-35.8	-50.5	-9.5	+27.8	+99.1	+1.76	-14.9	-5	-20	-20	
	1926	-69.7	+32.3	+299.6	-10.8	-33.5	+1.8	-19.4	-31.4	-36.5	-18.6	-36.7	-5.3	-25	-2	-1	
	1909	-6.87	-45.4	-32.6	+0.71	-45.4	-22.4	-35.9	+2.06	4.5	+1.24	+26	+4.3	-12	+44	+7	
	1887	+20.1	+165	+2.4	-23.5	+5.41	-32.6	783.3	+133.1	+506	+148.0	+16	+31.9	+49	+62	+40	
	1870		+11.5	-64.1		-89.5	-42.4		+50.6	-22.8		-58.1	+25.5	-29	+25	-7	
5	2000	+56.9	+75.4	+47.8	-22.9	-7.8	-34.8	+66.5	+145	764.9	-57.0	-25.1	-57.9	+11	+39	+23	
	1972	70.93	+39.5	-77.6	-42.6	-67.6	-49.6	-58.4	-85.1	+29.9	-37.2	+39.9	+446.6	-1	-24	-34	
	1944	-17.7	+99.9	-0.2	-1.96	+5.6	-17.4	-310	+33.6	35.4	+74.8	-1.92	-10.9	-39	+15	-2	
	1916	+42.2	-36.5	-2.4	+9.79	+12	+36	-24.3	+17.9	11.5	+92.0	+54.0	-38.4	+19	+45	+18	
	1888	-18.3	-55.3	-56.2	-4.76	-53.2	-32.5	-43.6	-42.2	-57.4	-49.3	+72	-57.6	-28	-14	-39	
6	2018																
	2001	714.4	-61.8	-13.4	-6.5	-44.4	-52.0	-53.8	-22.4	-94.3	-28.4	+10.9	+15.1	-25.1	+2.1	-1.2	
	1979	-18.7	-26.9	-23.0	-530	-40.4	-60.9	-50.4	-578	-64.2	+99.3	+37.8	+12.1	-8	-20	-21	
	1962	-48.5	+54.0	-36.1	-24.9	-47.1	+2.5	-27.6	+6.1	-10.5	+103	+4.4	+58.9	+14	-11	+30	
	1945	+17.1	-58.3	-67.7	+14.2	+112	-6.7	-2.23	+17.7	26.6	+18.9	-15.6	+6.3	+8	+15	-1	
	1923	-80.1	-11.2	-76.5	+3.97	-53.4	-57.5	-54.2	-80.7	-99.4	+73.8	+33.5	-99.3	-17	-29	-13	
	1906	+95.6	+57.6	+180.6	-10.7	+18.0	-34.9	-3.33	+13.8	+10.9	+34.8	+47.4	-45.6	+10	+29	+18	
	1889	-16.6	-25.8	+50.1	+2.55	+43.6	-27.4	+24.0	+28.8	-33.2	+76.8	+17.8	+45.2	+18	-34	+23	
7	2019																
	2002	-23.0	+16.5	+478	-70.2	-50.1	-69.6	+5.43	-44.2	+64.9	-58.4	-23.4	57.9	-37.1	-31.5	-35.1	
	1985	+19.3	-21.8	-4.6	-15.4	-85.6	-6.8	-44.5	-18.3	-24.8	-39.2	-62.0	-44.1	-23	-20	-4	
	1963	-24.0	-7.7	-36.3	-43.0	+4.5	-22.2	-25.0	+60.6	-7.2	-27.1	-35.4	-4.3	+11	+2	-3	
	1946	+270	-31.6	-22.0	+5.69	-39.7	-9.8	-18.3	-16.6	-30.5	47.4	+6.4	-18.1	-8	-20	-15	
	1929	-31.6	-20.2	+46.2	-56.6	-44.5	-65.4	-39.9	-69.5	-22.5	+79.3	+58.1	-4.1	-18	-12	-3	
	1907	722	-19.7	+48.8	-42.6	-19.7	-35.1	7	-74.6	-53.6	-18.4	-1.2	-64.4	-8	-28	-19	
	1890	+1.86	+84.1	+2.3	-7.57	-11.6	-39.7	-25.0	+9.21	-50.7	+78.5	+38.5	-30.7	+10	+22	-15	
	1873	-13.5	-47.7	-48.2	-64.5	-53.2	-39.4	-31.5	-24.7	-16.7	+39.8	+25.6	-39.9	-27	-19	-20	

	2013	June			July			August			SEPTEMBER			OVERALL SEASON			REMARKS
		T	R	C	T	R	C	T	R	C	T	R	C	T	R	C	
18	1991	+42.1	+17.7	+64.5	-11.9	-16.1	-30.2	-39.0	-17.8	-93.7	+1.31	-11.6	+32.7	-9.6	+14.7	+22.6	
	1974	-26.6	-5.5	-14.3	-46.9	-12.2	-99.9	-22.6	-20.7	-37.2	+17.6	+10.3	+33.6	-24	+19		
	1957	-16.9	+19.5	+45.3	-49.0	-12.9	-30.4	-1.91	-26.6	+21.3	+12.4	-22.4	-12.1		+8	+24	
	1935	-6.87	+43.4	-45.1	+11.5	+4.16	-30.6	-31.1	+138.8	+346.3	+51.0	-11.3	-21.8	+2	-35	-24	
	1918	-93.3	-45.9	-16.8	-46.1	-56.3	-62.1	-57.0	-38.2	-40.5	+1.00	+18.1	-13.2	-40	-29	-20	
	1901	-21.0	-6.25	-40.7	-11.5	-69.7	-43.8	-16.3	+10.4	-42.2	-44.0	+30.1	-28.9	-19	-29	-24	
	1879	-8.51	+18.8	+3.2	-27.8	+48.1	-116.5	+31.4	-10.4	-99.4	+56.7	+19.7	-51	-9	-6	-16	
19	2014																
	1997	-59.7	+7.9	-65.1	-40.2	-54.2	-37.2	-33.8	-40.7	-48.2	+10.6	+134	+109	-33.2	+14.1	+15	
	1975	-15.4	-4.9	+53.8	+7.44	+48.3	-16.3	-10.9	-14.9	-28.5	+149	+31.6	+7.2	+21	+11	+20	
	1958	-60.6	-19.5	-42.3	-10.1	-16.7	+22.7	-32.0	+105	-15.9	+13.0	-10.4	-12.7		+8	+10	
	1941	+18.0	-47.0	+82.5	-67.5	+57.8	-70.2	-33.4	-48.3	2269	+37.2	+53.6	+1.2	-32	+8	-5	
	1919	+26.6	+6.66	-20.1	-41.1	+57.3	-19.7	-55.7	-80.0	-49.2	+457	+10.7	-26	-32	+2	-15	
	1902	-36.6	-27.6	-47.8	-48.6	-13.6	-35.5	-12.1	-55.7	-99.4	+26.3	-13.2	+15.1	-19	-17	+4	
	1885	-20.7	+19.4	-4.2	-14.1	+11.8	-31.5	-47.8	-41.8	-67.3	+38.5	-25.4	+5.5	-18	-18	-10	
20	2015																
	1998	21.32	-529	-34.5	-21.5	-58.6	29.8	+15.4	+20.2	+5.1	+49.0	+70.6	+56	-50.9	+37	+25.3	
	1981	+36.3	-0.6	-26.9	+1.12	-5.9	+10.0	+7.12	-7.6	-28.9	+105.1	+61.2	+24.6	+26	+10	+25.3	
	1959	-4.76	+76.3	+18.3	-11.5	+9.27	+20.5	-34.2	-165	-30.9	-99.9	+136	-28.8	+40	+10	+12	
	1942	24.76	+42.7	-12.1	-7.78	-66.7	-47.9	+22.4	-13.1	-18.4	-44.5	-24.8	+34.2	-4	-20	-20	
	1925	6.28	-47.2	+1.0	+2.38	-9.2	-10	-4.93	+19.1	+2.4	-0.54	-18.4	+386	-2	-14	+4	
	1903	-25.7	-680	+22.6	+54.0	-46.8	+10.2	+34.8	+30.3	+8.0	+5304	+72	+7.0	+45	+39	+37	
	1886	+60.9	+3.88	+25.1	+26.6	+69.4	-4.2	+40.6	+40.1	+55.3	-39.9	+9.04	-99.3	+24	+21	+38	
21	2016																
	1988	-14.2	-57.0	-57.4	+10.7	+77.7	+33.6	-25.9	+12.7	+19.4	+136	+33.4	+37.4	+65	+50	+41	
	1966	-54.9	+67.3	-32.8	715.4	+14.3	+32.3	-7.57	+0.5	+6.1	+61.3	+14.8	-27.2	+3	+20	+9	
	1932	+13.2	-629	-13.1	73.97	-24.1	-13.7	+20.1	+22.0	-36.2	+52.6	-20.32	-32.4	+1	-10	-18	
	1904	+15	-33.4	-42.5	-4.6	-22.1	-51.4	-69	-83.0	-38.0	+36.9	-39.6	-41.5	-24	-55	-30	
	1876	-42.2	-20.8	-33.3	-34.7	73.6	-52.1	-31.8	-42.4	-99.9	-40.6	-71.1	-50.4	-38	-53	-19	

	17 WEST		BALASTAN									
	Jan	Feb	Mar	Apr								
2012												
1984	-100	23.15881	-97.36842	-27.27273	-100	-49.83463	-44.73943	-0.428894	11.39634	-81.09574	-100	-100
1986	-38.46154	-100	131.5789	-73.75758	-96	-31.7037	116.6178	-2.027748	-67.07923	976.1905	-100	-45
1928	-100	-48.21731	-78.94737	-54.54545	-96	-80.74074	-19.86234	41.85251	-53.96034	180.9524	100	-95
1840	-87.17949	-100	-100	151.5152	31	-81.25926	-55.83054	0.218447	207.1702	-80.95238	41.14815	225
1872	-87.17949	-87.67442	-100	-96.9697	35	-21.85185	-35.10324	87.07044	-21.53465	-100	-100	125
1930	-80.71823	-86.04651	-100	-3.030303	82	60.25816	-11.99607	-62.64674	-78.21782	-21.59478	-88.88880	-100
2013												
1991	-71.79487	25.5814	-100	463.6364	-100	-44.44444	-37.56146	-39.70317	-57.67327	-100	-100	-50
1974	-100	-100	-100	-68.68687	142	-8.148148	0.688299	-80.78975	-88.11891	97.61905	-100	-50
1952	-100	-30.21254	-67.89474	-75.75758	-68	-31.27272	14.15261	-5.442903	-100	-100	-100	-85
1935	171.7949	-89.76744	31.57895	287.8788	-82	-88.88889	28.90855	-72.99893	5.893009	2.382652	-82.96796	-70
1948	-79.48718	-100	-71.05303	-81.81818	-85	-89.25026	-89.80314	69.58378	-86.79208	-100	-100	-85
1901	79.48718	-32.55814	-86.84311	-100	-34	-86.2563	-20.94395	-44.50374	-100	-71.42857	-100	-70
1879	-58.97416	276.7442	-14.21053	-95.9697	-79	173.7037	-72.6647	97.7588	-0.49506	28.19048	-100	100
2014												
1997	-32.76923	-86.04653	-86.84211	312.1212	187	291.1111	-13.17601	41.51547	-30.69307	1052.381	86.66667	-60
1975	-84.61538	-45.34884	-58.26316	-100	-84	187.037	33.33333	24.8666	297.8708	745.2381	-100	-25
1958	23.07692	-100	-100	-100	-52	-59.25026	-37.15339	-68.72999	241.0891	-23.82812	611.1111	200
1941	164.1036	-100	-78.94737	-100	-4	-19.25826	-21.92724	-52.01708	-46.53465	-80.95238	-100	45
1919	151.2121	-58.18958	-48.42105	196.9697	10	-97.77778	-16.91249	34.57844	-7.930792	-100	25.92592	10
1902	-100	-100	-100	-93.93939	-60	71.11111	-68.53491	-59.70317	39.10893	4.761905	-100	-100
1885	176.9231	-100	-100	21.21212	107	-23.7037	-37.3648	-21.02455	-89.61388	-100	-100	35
2015												
1998	-100	187.6794	-2.631579	410.303	-75	197.4074	-22.32055	-47.492	44.05941	1496.238	-81.48148	-100
1981	2.564303	-30.23256	231.5789	-96.9697	-19	-47.03704	2.261594	-35.42223	-11.13861	-95.2181	1796.296	-90
1969	-71.79487	-25.5814	-36.84211	54.54545	-7	-20.37037	31.56342	-23.88591	159.961	81.90476	85.18519	-100
1942	43.58974	289.5349	-100	18.18182	137	-27.27273	27.43363	7.257704	90.74257	-100	-100	215
1925	-100	-100	-100	-100	-68	85.92593	-54.57227	-78.73426	-88.86139	-23.80952	37.01794	-100
1903	-48.71795	-13.93349	57.89474	-100	-34	-42.59259	46.80787	-15.79939	-9.883465	-40.47619	-100	-80
1886	-66.66667	-85.34884	-38.94737	-75.75758	-7	208.5185	-18.1707	-8.751334	-77.47525	47.81905	-100	-100
2016												
1988	-10.25641	-25.5814	34.73684	-33.53931	-100	-13.7037	17.40413	-3.415355	-4.207921	-7.142857	-100	-100
1966	-89.74359	244.288	-57.89474	-100	115	20	-39.82301	-20.06493	26.23742	7.142857	-81.48148	-100
1923	-79.48718	-97.67442	55.26316	-81.81818	-32	-71.85185	19.78403	21.13127	-86.88119	-100	-100	-85
1904	-23.07692	-17.2093	426.3158	-93.93939	71	-8.518519	-59.88115	-24.33298	-28.96034	-64.28571	0	285
1876	-100	-42.7907	-68.42105	-39.39394	20	-45.92593	23.40216	-32.67086	109.1584	-52.38265	-77.77778	-100
2017												
1995	223.0769	27.96688	-84.21053	160.6061	-63	9.82983	81.51426	-1.280482	-82.67327	234.6967	-96.2966	-90
1978	-100	227.907	84.21053	18.18182	-100	60.74074	105.0147	-14.08751	-61.63366	-92.85714	459.2393	-75
1961	133.3333	255.834	-100	208.0606	-45	320	-46.43101	-25.40021	210.8911	-23.80952	-55.55556	-45
1939	-100	189.5349	57.89474	-90.90909	-100	-37.03704	-86.43668	-42.36926	-81.43564	-100	-100	-100
1922	-71.79487	-74.8186	-100	-75.75758	-43	-43.33333	-21.33727	-69.37033	101.7327	-16.66667	-100	-25
1905	87.17949	16.27907	-73.68421	-39.39394	-100	-87.03704	-73.22124	-95.62433	46.33465	-100	-100	-30
1883	264.2026	-81.39535	-52.63158	-100	320	-81.48148	-23.40216	-99.35966	78.49535	257.1429	37.03704	-100
2018												
2001	-66.66667	-86.04651	-100	69.69697	197	125.9259	5.918033	-39.27428	-92.57426	-16.66667	-100	-95
1979	35.89744	941.8035	47.36842	-51.52152	252	-6.256256	-7.064897	32.87086	-96.18812	304.7819	493.7037	275
1962	-79.35897	-74.8186	228.9474	-33.33333	-49	-80.37037	17.3025	-13.64062	50.9901	-100	-100	25
1945	574.255	-100	-100	12.12121	173	-6.666667	59.28284	-31.59018	3.217812	-95.2381	-100	-100
1923	10.25641	60.46512	-78.94737	-96.9697	71	-67.40741	10.0395	37.13881	-89.61388	-95.2381	-100	10
1906	-87.4359	869.7674	171.0536	-100	-99	-34.07407	-47.18764	-18.03625	132.4257	-100	-100	35
1889	-41.58974	-9.922121	2.631579	-9.69697	168	139.2929	-64.60377	57.73749	-93.31683	-100	-100	-100

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	DEC
2019												
2002	-79.48718	-86.04851	-73.68421	-48.48485	118	51.11111	-47.66012	-75.21228	-57.42574	-100	-25.92583	240
1985	-84.61538	-100	-73.68421	490.6001	73	-74.07407	20.94395	-27.98158	-72.52475	180.9524	-100	35
1963	-100	-72.09302	152.6316	-100	-80	-83.33333	-85.74298	15.41543	-29.9526	-39.52381	11.11111	-85
1946	-100	-85.34884	-100	-100	-50	47.03704	-58.50541	8.616867	-81.93069	-71.42857	-100	-70
1929	-17.94872	-100	-100	51.51515	18	-78.14815	46.06888	24.8666	-88.11881	-100	-100	200
1907	-94.87179	900	171.0626	66.66667	-32	-57.03704	-24.37547	165.8485	-99.75248	-100	-100	-100
1890	-100	-90.69787	-68.42105	-87.87875	-95	19.25926	9.046214	-27.42796	-67.57426	-40.47829	-27.03704	703
1873	-61.53846	174.4186	-84.21053	-24.24242	98	22.22222	1.179941	3.948373	62.12871	100.382	-41.11111	-90
2020												
1992	295.2974	251.1628	-84.21053	-69.69697	11	-70	11.90807	87.08645	382.1782	52.38095	-44.44444	-100
1964	-89.23077	-86.04651	-57.89474	-100	53	15.92593	48.27925	35.92636	-79.9505	-90.47619	-82.59259	-70
1946	-100	23.29381	-47.16842	-96.9697	-100	116.6667	-54.76893	-1.814801	-21.58465	-100	292.9926	-15
1928	117.9487	-93.02326	-100	127.2727	-2	2.222222	116.4208	171.9317	74.25743	121.4286	-51.85185	-100
1890	-100	23.5814	-100	-100	-54	-2.962962	-7.279302	-27.09178	25	66.66667	-70.37037	83
2021												
1999	94.87179	62.7907	-97.36842	-100	404	10.37037	-39.03638	-30.20277	-92.37426	78.57143	-100	-100
1982	248.7175	-6.970744	339.4737	1284.848	512	-48.88885	-16.12688	0.320171	-91.58416	92.85734	18.51862	10
1965	-85.89344	-62.7907	26.31579	-51.51515	-63	-81.48148	40.90462	-46.63821	-80.19802	-4.761925	-94.2962	-100
1948	-43.58974	-100	-100	12.12121	-94	-57.40741	65.29007	-70.86448	11.88119	-100	-100	-100
1928	-48.71795	-93.02326	573.6842	-88.48485	161	-87.03704	-11.11111	72.14534	172.2772	-100	-100	-50
1908	-31.46154	13.99349	-100	451.5152	-80	21.85185	77.58312	-23.13127	158.9109	-90.47619	-100	910
1887	-5.178205	-62.7907	34.21053	-100	357	21.48148	-77.08946	-83.50053	-87.62376	-100	-100	133
1870												
2022												
2005	-71.79487	391.5349	60.52632	128.1818	121	-1.111111	-45.72271	-72.89221	16.58418	-100	-100	-100
1983	-53.84615	-81.18935	-34.21053	1157.578	345	39.62963	84.85742	36.07257	-27.72277	419.0476	-100	-95
1960	-79.48718	-100	13.15789	-81.81818	-97	5.296228	-2.246509	-14.62113	-81.33663	-100	-100	315
1949	0	-20.23256	-100	-100	-70	3.62963	11.4061	-37.33328	-22.12871	-59.52381	-100	-60
1927	-10.25641	-18.60465	-100	-2.020209	482	91.48148	-14.55261	-46.10459	-98.51485	-100	-100	-100
1910	-17.94872	-100	-100	30.30303	-100	140.3704	-44.44444	70.86446	-66.58416	80.95238	-100	-100
1893	287.1795	155.814	5.243158	-66.66667	122	178.1481	63.22517	-0.747005	195.297	-47.81805	900	85
1871	-23.07692	-100	-100	-63.63636	174	203.7037	85.45723	-61.57951	-58.41584	-80.95238	122.3222	-35
2023												
2006	-100	-100	284.2105	-51.51515	-19	5.555556	-78.07276	124.2263	-54.45345	145.2381	-100	160
1989	176.9231	-100	-55.26316	-96.9697	-100	12.96229	-2.731196	19.53042	-42.52421	-76.19048	-100	-80
1967	-100	-100	1600	-90.90909	-65	20.37037	-30.13471	4.055496	89.35644	69.04762	11.11111	1235
1950	-38.46154	-86.04651	-10.52632	-100	-73	-83.7037	60.86629	-20.06403	45.79208	-100	-100	-100
1933	-100	118.5349	7.894737	272.7272	48	104.4444	-56.7355	115.048	-46.38713	-61.90476	-100	-100
1911	2.564103	-100	978.9474	-90.90909	-99	22.96229	-97.05015	-87.94023	-7.425743	38.09524	0	-100
1894	589.2308	-6.970744	-42.10526	-90.90909	-35	244.8148	-8.751229	5.229456	12.62376	-50.52381	-100	525
1877	74.35897	290.6977	-28.94737	-3.030303	63	-52.24333	-63.40183	-90.80832	-63.36634	388.0952	-7.407407	1430
2024												
1986	2.564103	4.631163	-52.63158	54.54545	172	715.9259	-33.82498	-1.280683	-35.14853	-19.04762	-100	-85
1968	38.46154	134.8837	-7.894737	-100	-37	-100	-26.35202	-84.73853	-97.0297	-97.81905	-100	-100
1947	-30.76923	-44.18925	-100	-100	-95	-100	-80.23599	84.73853	100.495	228.5714	-100	-100
1932	200	-100	-97.36842	-51.51515	-46	-14.81481	0.933334	5.763074	-62.62376	109.5238	48.14815	-100
1884	-84.61538	38.13953	-100	-100	-27	140.3704	6.866332	-20.59769	183.6634	-11.90476	-85.18919	-100
2025												
2003	-23.07692	186.0465	-88.84211	-90.90909	-92	46.2963	68.14159	-27.64141	-75.74257	-100	-100	-65
1986	-84.61538	134.8837	-78.94737	-100	117	-11.11111	-4.129794	-48.83393	-96.78218	-11.90476	-100	-100
1969	-84.61538	60.49312	-78.94737	-18.18182	-73	-81.11111	-62.24389	-89.79712	-50.49505	59.12381	-100	-100
1947	-30.76923	-44.18925	-100	-100	-95	-100	-80.23599	84.73853	100.495	228.5714	-100	-100
1930	-30.76923	-86.04651	-100	-3.030303	87	69.25926	-11.99807	-62.64674	-78.21782	-11.90476	-41.88889	-100
1913	-100	120.9302	39.47368	-90.90909	87	114.8148	-45.3884	-63.75667	-24.0099	-100	-70.37037	590
1891	92.30769	-100	315.7898	33.33333	35	90.74074	3.75648	-78.53255	-26.48325	-4.761925	-100	-100
1874	-100	-100	-78.94737	-100	-19	14.07407	-15.23689	4.16222	-25.74257	-100	-100	-100

cost Rating

2026	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
2009												
1987	-5.128205	-62.7907	34.21953	-100	357	31.48148	-77.02945	-63.50083	-87.82376	-100	-100	155
1970	-25.64103	399.7674	31.57855	-75.75758	-30	44.07407	-41.67257	64.46105	68.05931	-100	-100	-100
1953	87.17549	-100	-100	-63.63636	-65	-16.66667	-22.81219	140.7684	-70.79703	-100	-100	-80
1931	-92.10709	-61.7907	-42.10526	-100	98	-60	-45.23107	169.7972	-64.69356	283.3333	-100	-100
1914	-5.128205	-39.93023	-94.71684	145.4545	-41	108.2583	2.261554	-50.90715	37.37624	-4.761935	122.2222	-100
1897	-30.76823	-100	-57.89474	75.75758	-61	-79.82563	-8.688332	99.89538	3.712871	82.85714	-100	-100
1879	-89.74359	395.3488	7.894737	-100	74	-63.7037	1.146933	-49.30663	209.1584	-57.14286	92.59259	195
2027												
2010												
1993	-30.76823	-9.302326	-62.63158	-17.17171	-17	128.5185	91.3471	-94.00348	3.960396	-71.42857	-85.18519	-100
1971	-69.33077	-93.02326	-100	-59.93939	127	153.7037	-18.77483	-80.55496	-61.63366	-23.80852	-100	-100
1954	-56.41006	276.7942	-92.10526	-100	-84	-10.74074	-1.628151	-70.86446	133.4158	259.5238	-77.77778	-100
1937	-100	748.5116	-78.94737	-75.75758	-95	-96.2963	60.86529	-97.62208	35.15604	-47.61905	-100	749
1915	74.35897	811.9633	202.6316	-90.90909	-92	-37.77778	-77.77778	-78.44184	-52.47525	416.8867	-100	-100
1898	-97.4359	451.1628	-100	-100	30	-9.159259	16.32252	-72.57204	4.455446	-100	-100	195
1881	-100	-11.95349	210.5263	30.30303	-24	-31.11111	43.16618	39.59845	-45.54455	-85.71429	-100	10
2028												
2000	-5.128205	58.13953	-97.36842	-90.90909	-35	-57.40741	45.63495	-70.01067	-82.80079	-69.04763	-62.96296	-100
1972	-17.94872	-81.30535	-100	33.33333	-68	62.59259	-73.25487	30.78639	-92.07921	-97.61905	-100	-85
1944	279.4872	85.04651	284.2105	242.4242	-95	-45.92589	42.67453	295.5176	-72.72728	-71.80952	-100	-100
1916	-23.07692	-93.02326	-84.21053	3.030303	132	-81.31111	-14.94592	54.85592	187.8718	407.1429	-100	-100
1899	158.9744	186.0485	2.631579	-93.93939	-100	-18.14815	-65.88004	76.41409	-100	-61.90476	-100	-100
2007	-100	918.6047	368.4211	-41.42424	-60	-13.7037	-57.71878	-31.37673	33.16832	-100	-100	45
1990	-100	421.2528	-100	-75.75758	160	-15.55556	194.3285	124.4397	-7.425743	-10.95238	-100	-75
1973	-97.4359	-100	-100	-100	62	-37.77778	-39.33137	205.3362	-5.445545	-80.95238	-100	70
1951	-100	-100	15.78947	160.8063	31	-1.481481	-62.93019	14.19424	-92.57436	-100	549.1481	-100
1934	-94.87179	-100	268.4211	-100	-32	73.7037	-57.71878	97.54536	-72.33475	-100	-100	75
1917	-61.53846	-41.86947	-65.78947	409.0109	504	173.3333	-16.42081	134.8096	358.1683	1676.19	-100	-60
1895	146.1538	-88.37209	244.7168	-75.75758	-84	10	-14.11996	-1.373959	-78.21382	-100	-100	-70
1878	-25.64103	11.62791	-89.47368	60.60606	282	-0.740741	5.506391	90.06336	-37.82376	-88.09524	-100	-100
2011												
1994	295.8974	-81.39535	-84.21053	586.3636	-46	50.74074	26.25202	-5.762074	73.26733	-97.61905	-98.2963	-100
1977	78.92308	-98.13953	-100	-9.090909	18	214.8148	58.16224	-93.42628	47.0057	-100	-70.37037	-70
1955	-23.07692	-74.4186	21.05163	-87.87879	-7	-22.12222	-88.88889	171.1896	117.3267	259.5718	-100	-85
1938	-58.97436	-100	-100	-90.90909	-71	122.2222	-45.42773	-27.52469	-92.82178	-92.85714	-100	-60
1921	-100	-100	-100	-96.9697	-109	-78.14815	20.94395	-57.84418	46.53465	-64.28571	-100	-85
1899	-100	-100	-100	21.21212	-92	-0.740741	-81.3176	-99.14621	-95.0495	-100	-100	-85
1882	271.7549	-38.93023	-100	-96.9697	43	35.18519	54.96359	-94.68517	22.52475	-100	-85.18519	-95
2004	-88.71795	-100	-100	-33.33333	-64	-10	-79.64602	-9.498309	-60.35604	259.5238	-100	-40
1976	66.66667	60.46512	-89.47368	-45.45455	28	103.7037	20.33333	34.25827	159.5901	-100	614.8148	-100
1948	510.2564	286.0485	44.73684	-75.75758	-100	-69.25926	-8.08293	-12.57994	-93.81188	-95.2381	-100	-75
1920	-10.25841	-18.80485	-100	-9.090909	482	91.48148	-14.55283	-46.10459	-98.51485	-100	-100	-100
1892	279.4872	-78.74413	-100	-100	83	4.444444	30.0885	37.67343	136.3861	-78.80852	-100	725
2006	-12.82051	-95.34884	-63.15789	333.3333	289	127.4074	-51.81928	13.5539	-16.33663	-88.09524	-94.2963	1365
1980	-84.61538	-100	113.1579	-48.48485	21	39.62963	5.906391	-80.57631	-62.87129	-40.47619	-17.03704	315
1952	-100	-30.23256	-57.89474	-75.75758	-66	-32.22222	14.55263	-5.442903	-100	-100	-100	-85
1924	30.76823	-72.09302	-94.73684	-87.87879	-4	-67.40741	-20.859	-49.83991	159.8901	-100	-100	490
1894	389.2308	-6.978744	-42.10526	-90.90909	-35	244.8148	-8.751225	-5.229456	12.62376	-59.52381	-100	525

3/25/2018