

## Bihar 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.

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### 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 7<sup>th</sup> 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 7<sup>th</sup> 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 10<sup>th</sup> 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 10<sup>th</sup> 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.

	June			July			August			SEPTEMBER			OVERALL SEASON						REMARKS
	T	R	C	T	R	C	T	R	C	T	R	C	T	R	C				
1	2020																		
	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	7396	-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	+55.6	-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	20.3	-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	22.0	+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	+298.6	-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	283.3	+133	+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	-26	-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	-75.5	+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	-16.1	-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	?	-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			

8	JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			REMARKS
	T	R	C	T	R	C	T	R	C	T	R	C	T	R	C	
	2025															
	2003	+11.3	-14.8	-21.6	-7.57	+22.3	-0.9	77.85	-6.2	-28.8	-1.86	-20.1	-13.2	-8.2	8	+3.2
	1986	79.92	+5.6	-19.6	-21.4	-28.4	+52.9	+47.3	-54.8	+31.1	-34.3	+20.3	-43.6	-1	-5	-3
	1969	+6.09	+11.3	-37.4	77.99	+11.0	-5.0	-26.4	+53.5	-57.1	-78.9	-73.9	-20.6	+9	+44	-22
	1947	-56.9	-16	-46.5	-29.3	+25.6	-3.5	-25.0	+85.6	-7.2	764.9	70.8	+28.8	+35	-3	+19
	1930	740.5	+42.7	+39.8	-46.6	-61.0	-44.4	-41.8	-62.7	-48.7	+410	+35.1	-17.6	-17	-39	-8
	1913	-32.1	-66.5	-13.3	+25.3	-18.9	-9.7	-48.6	-69.7	-63.8	-3.9	-3.52	-33	-18	+74	-17
	1874	-45.9	+39.5	+7.3	-4.1	+50.6	-13.4	-43.8	-58.1	-59.8	+15	+252.0	+32.3	-2	-12	+14
	2004															
	1976	-30.7	-2.6	-63.3	+77.3	-23.9	+24.8	+2.73	+83.1	+17.4	20	-54.4	-52.3	+18	2	+7
	1948	-69.0	-48.1	-61.5	-45.8	-35.6	-26.6	-58.7	-15.6	-48.9	+66.3	-19.3	-8.1	-10	-30	-19
	1820	-39.6	-39.5	-42.8	-40.6	-71.8	-99.4	+55.5	-36.6	-47.4	-22.7	+24.3	-35.6	66	-30	-38
	1892	+20.1	+16.5	+2.4	-23.5	+5.41	-32.6	783.3	+133.1	+50.6	+148.0	+16	+31.9	+49	+62	+40
	2005															
	1983	+7.42	+17.6	+19.8	+2.92	-88.9	+7.0	+85.1	+77.8	+22.4	+127	+160	+39.6	+51	+65	+50
	1960	-29.2	+5.97	-12.1	-39.3	+23.1	-17.2	-67.6	-88.5	-59.9	7105.2	+167	+60.4	-9	+29	+12
	1949	-26.3	+51.6	-8.4	-24.4	+13.7	+3.1	-11.9	+29.5	+8.9	+106.1	+109.0	+61.1	+5	+50	+47
	1927	+55.6	+25.9	+34.2	+4.10	+26.3	-23.5	-35.7	+46.0	-9.3	+7.67	+94.1	+16.4	+1	+24	+23
	1910	+81.6	-22.2	+20	-36.6	+76.6	+2.1	-34.1	+62.9	-17.8	+76.6	+55.2	+4.8	+10	+45	+22
	1893	+42.3	+53.4	-13.4	+10.5	+98.2	-55.1	+67.6	-35	-10.6	+15.0	-8.96	-56.6	+45	+16	+19
	1871	-41.2	-59.5	+399.6	-44.5	+31.0	+65.6	-77.8	+6200	-99.9	+65.4	+26.6	+714	-36	-7	-18
	2006															
	1989	+71.8	-47.9	-20.3	+72.1	+26.5	+80.2	+2.64	-79.6	-10.5	753.3	+59.8	-99.3	+43	+49	+42
	1967	+17.4	-25.4	-1.7	+51.5	+6.11	-0.4	-25.2	-72.2	-55	+28.3	+8	-16.7	+19	-10	+2
	1950	-51.7	-12.2	-40.7	-33.7	-20.8	-9.4	-67.6	-7.19	-59.9	+31.5	+11.3	+2.8	+1	-5	-9
	1933	+87.3	-76.1	-52.5	+116	-18.9	-6.9	-22.9	+80.3	-29.6	749.7	-48.4	-32.1	+11	-11	-5
	1911	+0.78	+3.47	-22.9	-36.6	-26.4	-22.2	-28.4	-59.8	-62.5	+1.00	-22	-13.5	-20	-32	-18
	1894	+7.8	-45.4	-8.2	+25.4	+15.3	-51.4	+14.6	-78.6	-31.4	+3.0	-17.3	-0.06	+19	+11	-7
	1877	-43.2	+5.41	-70	-75.6	-65.4	-53.4	-58.5	-48.5	-56.3	+15.9	+7.20	+21.4	-39	-19	+21
	2007															
	1990	+48.6	-29.3	-9.3	-39.0	-45.2	-54.4	+49.2	-2.2	+6.1	+10	+32.3	-99.3	+11	+8	-2
	1973	+0.31	+0.5	-33.6	-9.41	-29.8	-48.7	+42.2	+15.4	-19.9	-40.0	+10.1	-31.5	+1	-8	-21
	1951	-17.0	-15.9	+3.1	-5.77	-7.8	+28.6	-405	-62.2	-26.4	-0.3	-33.6	-31.4	-10	-33	+11
	1934	-3.04	+25.6	-4.5	+22.8	+27.0	+5.9	+0.3	-68.0	-18.8	+11.5	-62.4	-40.4	+5	-30	-1
	1917	+43.9	+36.3	+87.7	+7.94	-38.8	-38.4	-17.2	+52.1	+3.2	+11.3	+22.0	+30	+25	+17	+38
	1895	-17.5	-44.5	-21.4	-7.9	+27.6	-17.4	-15.4	-27.6	-4.8	-60.3	+41.3	+25.5	+45	+2	+19
	2008															
	1980	+66.0	-17.6	+80	-34.3	-28.4	-11.6	-99.9	2017	-6.6	+2.48	-447	-37.1	+5	-25	+20
	1952	-50	+34	-37.8	-59.7	-45.3	-45.0	-60.4	-42.1	-51.0	-40.1	-63.6	-53.2	-30	-41	-39
	1924	-4.8.6	-58.8	-56.6	-36.1	-13.3	-45.2	-16.7	-38.6	-32.8	+105.9	+81.4	+7.4	-7	-3	+8
	1896	-34.0	-32.3	-22.8	-18.7	-38.8	-29.3	+0.18	-21.8	-25.3	+08.2	-31.2	-16.5	-24	-32	6
	2009															
	1987	-31.1	-36.5	-53.8	-12.6	-6.2	-53.6	+0.63	+30	-20.9	-52.1	-18.0	-60.6	-18	-21	-33
	1970	775.9	-5.1	+41.5	-39.9	-2.8	-39.7	+63.4	+77.2	+9.0	+36.3	+83.0	+477.5	+25	+39	-5
	1953	-20.3	-26.5	+0.8	-56.1	+4.1	-40.1	-35.7	-48.4	-20.4	714.6	+54.8	-10.3	+25	+10	-3
	1931	+50	-440	+768.9	+12.3	-2.70	-24.0	+38.0	-26.8	+39.2	+14.3	-33.2	+12.8	+18	-11	-12
	1914	7159.0	-13.6	-7.9	+11.6	-23.1	-19.7	-6.43	+42.1	-31.3	+67.9	+60.8	+44	+27	+20	+18
	1897	-34	-42.6	-57.2	+47.5	-9.47	-48.1	-34.6	+32.1	-26.5	+42.4	+12.8	+39.4	-1	+35	-2
	1875	-	+11.5	-64.1		-89.5	-47.4		+50.6	-22.8		+58.1	+25.5	-29	+25	-7
	2010															
	1993	-37.1	-46.1	-58.6	-17.1	+19.3	-36.9	-27.9	+43.4	-40.1	-2.40	+9.9	-1.8	-17.5	-12.8	-6.3
	1971	77.89	-31.3	-32.3	-61.3	-26.6	-57.4	-19.4	-25.4	-24.6	-14.3	-46.7	+5.1	-29	-35	-10
	1954	-27.1	-54.6	-9.4	-30.0	+93.4	-4.8	-40.2	-17.3	-26.6	778.9	-52.8	739.9	+24	-10	+19
	1937	-50.8	+15.9	-89.6	+10.9	-9.48	-35.2	-43.5	+63.1	-31.4	+11.3	+86.7	+444.8	-18	-11	-28
	1915	+99.4	-39.0	+18.1	-15.2	+58.2	-24.4	-8.40	-49.2	+24.4	-12.6	+58.3	-14.9	+10	+6	+21
	1898	-20	-37.2	+5.3	+47.8	-30.2	-18.1	-34.6	-42.1	-51.4	+42.4	+106.4	-8.5	+18	+3	-3
	1881	-18.9	+15.0	+41.2	-56.7	-78.3	-73.3	-34.2	+75.1	-123	+41.0	+12	+10.4	-36	+5	+4
	2011															
	1994	-29.0	-40	-55.7	-20.0	-98.9	-9.7	+6.71	-10.8	-37.2	-71.7	-71.3	-49.3	-23.5	-34.9	-21.4
	1977	70.93	+39.5	-17.6	-42.6	-67.6	-49.6	-58.4	-85.1	+22.9.9	-37.2	+39.9	+446.6	-39	-24	-34
	1955	-49.8	-48.3	-37.6	-55.5	+17.2	-39.2	-16.5	+94.7	+3.2	+29.2	+10.6	+1.0	+35	+20	+3
	1938	795.6	733.3	+25	715.8	-34.1	-36.1	+25.8	+13.9.8	77.7	+89.8	+81.7	782.2	+48	+58	-45
	1921	+44.2	-4.16	-39.8	-660	+75.5	+2	-47.2	+45.7	-30.7	+50.6	-23.2	+2.5	-1	-5	+13
	1899	-17.2	-85.4	-57.8	-74.7	-88.4	-68.4	-38.1	-37.7	-34.1	-10	+43.5	-22.9	-43	-36	-32
	1882	+20.1	+165	+2.4	-23.5	+5.41	-32.6	783.3	+133.1	+50.6	+148.0	+16	+31.9	+49	+62	+40
	2012															
	1984	-34.6	-56.1	-37.4	+0.50	+49.4	-15.2	-58.5	-84.1	-71.6	+24.6	-22	-37.8	-20	-30	-23
	1966	76.875	+21.8	+32.8	70.96	+80.9	+37.8	-30.7	-88.4	-14.3	+503.6	+38	+19.6	+24	+20	+40
	1928	+37.3	+21.8	-56.2	-21.5	-38.5	-20.2	-27.5	-17.4	-29.7	+102	-3.44	+9.5	+9	-5	-2
	1900	-10.9	-30.1	-47.8	+29.3	+48.5	-19.3	-38.7	-78.6	-63.6	+90.3	+53.8	+10.0	+10	-2	-12
	1872	-44.5	-13.8	-0.2	-29.9	-17.7	-18.1	-45.0	-99.1	-9.49	+44.4	+54.3	+16	-25	+4	+18

	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	+138.6	+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	+578	-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	74.76	+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	-4.83	+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	

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
1701	29.518	696.410	-36.909	-58.947	51.553	123.446	45.598	7.448	18.608	-76.696	-100	-59.058
1702	2.6426	-29.196	-20.818	-32.189	27.239	71.469	-50.287	-1.072	29.115	114.209	620.628	113.613
1703	178.308	449.924	-100	-40.526	-8.715	-2.038	11.056	61.805	-58.761	149.771	-100	-9.449
1704	257.838	0.754	-85.445	-77.563	-79.195	65.106	-1.265	-37.688	17.910	-34.53	-100	137.839
1705	92.771	591.700	-26.7363	-19.447	-21.38	-16.338	-4.171	-36.279	1.034	-16.978	-100	-100
1706	-37.951	-40.880	-10.909	-71.042	-48.736	-1.039	763.041	-29.170	21.466	-78.105	448.65	193.978
1707	-6.0144	-63.136	-9.090	-22.105	-14.076	-14.731	-44.541	9.460	3.035	-90.649	-100	171.891
1708	-13.539	-34.618	12.323	-65.181	-13.251	-15.989	42.310	3.959	13.407	-87841	-100	91.891
1709	58.000	-74.358	75.054	-94.786	-98.903	-24.981	9.935	50.400	-45.629	-19.309	-100	-40.549
1710	93.134	31.078	-100	-98.949	-76.685	-36.526	-46.511	50.331	50.666	-99.136	-100	-100
1711	-36.385	-100	-17.272	56.315	76.416	40.381	-37.949	87.715	36.393	-88.310	-100	-100
1712	248.78	60.623	2.727	-97.739	54.661	-51.209	-31.791	21.931	-36.266	-12.374	48.708	-100
1713	-100	92.807	-99.039	-100	-49.360	-2.310	14.815	10.693	97.389	110.699	-98.14	-85.70
1714	-19.877	-44.871	-47.178	137.844	6.398	48.383	49.136	57.685	-12.786	-40.935	90.740	132.43
1715	-24.638	-30.741	-4.545	-26.081	-4.238	-24.053	4.248	-57.793	38.186	-8.611	-100	-100
1716	-21.088	-29.490	-60	16.941	-72.59	-24.970	-48.208	83.383	-12.787	-18.249	-100	-90.694
1717	-3.409	-82.956	-10	-16.84	10.579	-38.260	49.718	-19.690	-8.823	-100	-100	-100
1718	783.951	-40.708	58.781	-22.437	-94.689	23.061	32.939	-34.071	-2.0714	-11.913	-100	-10.849
1719	-29.164	-18.126	18.8.636	0	0.204	-37.888	7.019	-21.256	64.035	-44.043	-72.78	-100
1720	-31.9211	-11.483	-15.445	-83.157	-12.647	-36.74	6.063	33.404	65.284	-87.589	-100	915.57
1721	-30.733	109.56	138.181	45.749	26.776	-57.362	46.777	34.585	23.461	19.244	342.69	81.180
1722	187.244	67.323	116.363	843.63	84.604	-46.78	60.241	-2.655	-23.08	-100	20.370	178.349
1723	456.626	-74.871	8.5.469	-3.105	5.71846	-38.414	-31.449	-10.253	-48.280	87.136	-100	-100
1724	126.705	289.61	62.277	-24.736	-49.340	-31.033	-29.919	19.200	75.893	-100	-100	-13.703
1725	-31.70	-72.805	-24.611	104.724	-40.743	-38.219	-11.910	82.267	9.952	-78.279	50	-100
1726	-43.87	-12.649	-84	-13.70	-43.327	-5.177	-67.808	0.540	-29.059	93.664	-100	-100
1727	-64.86	-76.072	38.590	-3.318	14.635	0.2938	27.594	40.304	69.699	139.772	-4.874	64.944
1728	-45.180	45.279	152.129	76.242	-3.775	-4.372	-19.131	40.804	-25.76	-26.808	-98.780	210.97
1729	80.249	-6.109	-62.636	-83.687	-12.248	-13.278	-10.692	-18.104	-50.288	-70.949	350	-18.979
1730	-100	-24.786	-78.48	-9.5.73	-85.071	-30.044	-28.872	-23.97	-17.640	-59.710	1279.63	97.207
1731	-48.972	-70.634	-13.63	-8.5.78	102.58	43.576	12.488	26.88	-64.330	59.773	-100	-54.067
1732	-81.951	-100	-98.45	16.842	-48.679	-18.659	-26.991	47.923	11.485	106.608	-100	-100
1733	-22.108	108.98	-62.92	-94.736	-73.209	5.430	-36.645	12.092	28.529	-85.467	104.81	1100
1734	-11.048	132.478	190.709	-43.67	-5.9800	19.468	-16.29	-8.061	-3.407	144.063	29.339	70.912
1735	-0.814	306.7	-100	-31.573	-23.218	32.118	-26.434	-10.182	-30.178	280.703	-16.296	134.837
1736	-46.44	526.44	-4.345	-26.871	-64.361	-11.167	-16.594	-0.253	-10.246	-5.765	-100	-100
1737	-6.624	-58.047	-100	-44.246	-68.293	189.777	12.482	74.264	3.672	-72.124	-32.592	96.486
1738	-15.093	122.43	138.181	16.304	82.832	-35.016	6.724	71.979	39.29	-89.038	-100	-83.785
1739	109.034	-87.179	-16.36	-43.185	48.263	99.680	-10.07	-23.248	-26.979	-97.719	-74.46	-83.78
1740	73.474	-44.871	-10.909	-35.263	157.028	34.600	-34.708	-42.772	-14.25	59.424	-100	-100
1741	-6.626	73.309	-60.489	31.106	-90.678	-50.349	53.271	-48.790	-24.203	54.244	617.44	500
1742	-19.871	-11.708	-20	-9.073	-3.461	-15.771	-40.343	27.648	5.241	-11.439	-100	32.437
1743	245.781	177.794	-75.493	71.062	-77.915	-144.668	-36.629	-10.428	18.053	144.316	-100	5.182
1744	-7.6809	207.812	-42.129	-40.624	-17.367	-10.664	-38.104	-22.741	-30.171	-34.244	-94.444	-87.185
1745	965.404	58.428	-27.272	-71.874	-20.478	24.286	3.330	61.252	-50.670	-41.807	-100	-100
1746	246.585	144.871	-87.218	-100	-46.805	94.258	5.523	-19.763	30.019	27.785	9.259	-100
1747	-70.120	38.461	-64.545	122.105	69.287	-46.271	-77.232	-31.510	-35.585	-52.971	-19.69	-94.58
1748	-43.735	-43.82	-57.050	-63.684	24.244	-9.632	44.280	-78.409	51.683	133.10	-100	51.961
1749	-45.788	-70.632	43.054	-25.894	60.874	-11.85	-8.78	-0.169	18.523	76.870	192.592	-74.289
1750	-100	94.077	-10.309	132.631	74.721	0.021	12.724	-13.334	13.982	105.771	168.578	-100
1751	125.303	-14.871	-13.634	15.268	-39.883	-33.085	-7.794	14.707	-64.707	23.9208	-100	1351.95
1752	-94.38	344.44	250	57.368	-46.067	49.771	-20.540	-24.771	-10.132	-36.234	-100	-45.94
1753	-87.951	-79.44	-38.909	-84.943	27.654	75.799	61.304	37.844	-6.409	15.107	-100	-94.634
1754	-24.698	-98.29	192.12	-10.62	-21.38	-36.666	8.933	-13.840	-41.384	-100	-100	8.104
1755	-76.502	-65.819	-100	-82.401	21.607	-51.011	-8.564	-25.95	-65.442	-20.885	-70.370	-97.29
1756	-76.286	-65.812	-100	-82.402	21.627	-51.011	-10.20	-25.96	-65.442	-20.886	-70.370	-97.29
1757	-92.771	-62.57	-63.09	50	24.54	-2.978	46.304	-08.09	2.694	38.983	-44.84	-100
1758	-60.241	-21.538	-172.27	-71.052	35.253	1.444	35.046	-2.801	74.601	68.293	-100	130.240
1759	-3.014	61.962	-70.279	-39.973	-40.502	-24.242	-20.949	-38.408	-30.590	-70.50	-100	-9.80
1760	-63.835	48.461	-64.545	-84.210	2.316	3.292	20.974	16.42	-67.783	47.86	-3.467	62.162
1761	-100	-91.434	-100	-87.578	42.413	61.008	25.8056	15.466	-37.769	87.184	-25.925	-100
1762	-77.70	63.249	147.27	-36.242	-37.84	18.181	-36.739	-18.288	-39.899	-41.057	320.370	-68.644
1763	-100	-44.871	39.088	84.340	-73.236	-57.762	-19.721	15.347	6.947	-63.791	-77.77	-72.349
1764	92.785	25.55	-100	59.41	-69.073	-51.88	-20.872	-15.939	12.758	-21.97	-65.461	-100
1765	-27.108	-91.745	56.363	-19.489	-25.949	-75.283	26.889	0.6071	-11.814	-76.596	-75.925	18.918
1766	-71.054	-22.222	-100	291.578	-48.416	165.100	-22.100	15.499	-19.604	-24.640	-100	-18.613
1767	-26.172	78.683	-60	71.052	540	-6.643	35.983	101.35	67.123	-37.31	62.960	-51.251
1768	-15.060	35.58	117.272	-30	-58.640	-46.009	-5.840	-8.499	-26.304	-36.971	-100	-100

1778	-27.108	-44.751	18.181	0.8-431	2.4.712	-15.586	-2.027	-40.255	7.347	6.710	-8.782	-100	-100
1779	-95.180	-100	283.181	-77.879	3.210	-33.632	-14.388	-2.3011	61.150	6.973	-8.782	-100	-100
1780	11.446	329.346	2.8.881	123.021	69.106	32.432	27.600	23.182	1.991	62.459	-100	-100	
1781	43.313	211.945	180.707	-72.105	-4.670	-30.213	-18.642	-38.206	-32.716	-77.166	601.351	-100	-100
1782	-59.789	-48.779	-40.707	-41.578	-20.770	57.241	1.727	-5.332	16.150	74.887	288.55	-100	-100
1783	33.134	259.05	-24.035	98.421	37.853	21.301	53.544	-25.246	29.729	97.182	-10.00	-100	-100
1784	-97.547	-41.880	-28.187	126.516	21.7695	35.528	10.780	29.832	84.604	-88.653	-85.183	10.810	-100
1785	-100	-100	-13.656	15.157	81.852	96.227	-17.874	-35.028	53.475	-70.215	-9.259	-83.785	-100
1786	-51.204	-10.236	-24.34	-75.189	97.074	-0.629	12.275	-19.674	45.044	-48.201	-77.772	20.56	-100
1787	-57.206	-10.156	-24.606	-75.189	97.074	-0.645	-22.812	-73.249	-8.053	-16.203	-31.461	-21.671	-100
1788	-60.203	-9.401	-127.278	-93.680	-25.674	89.850	-27.232	-2.876	-41.591	-32.402	-100	45.945	-100
1789	30.130	20.572	-75.733	275.238	84.277	7.163	9.466	13.501	-15.716	-100	-100	-100	-100
1790	-59.684	-100	730	-31.831	-23.377	71.258	-15.771	10.735	23.825	177.625	272.22	-100	-100
1791	-79.597	53.848	-80	-35.204	-13.859	15.509	-13.442	23.350	18.933	170.275	292.148	-87.189	-100
1792	-198.192	2.14.73	-47.272	2.7.348	155.466	-74.176	-10.472	-50.182	-25.931	76.646	-100	862.484	-100
1793	79.512	111.965	-99.090	-50	-48.466	62.570	-21.716	24.1733	-21.546	-41.892	-100	-100	-100
1794	124.07	-82.966	-57.876	-65.737	-68.921	79.208	-11.575	-25.188	-57.920	72.541	-100	102.702	-100
1795	-57.85	-23.478	-29.090	-55.262	-18.027	-26.674	83213	-8.460	-10.171	-7.352	-100	-100	-100
1796	-71.074	-63.246	97.272	416.526	6.032	-18.659	-5.028	-50.240	-11.235	287.65	-100	-100	-100
1797	-87.712	-87.717	-99.070	-68.021	-20.422	3.1145	-35.328	-27.452	-38.805	57.96	-100	-100	-100
1798	-28.915	628.70	546.4	77.268	0.3656	88.782	-7.205	29.64	-31.607	80.675	-100	62.162	-100
1799	-49.180	-32.623	-74.54	8.7177	88.277	-71.53	21.316	-25.645	-15.854	69.084	-40.700	102.24	-100
1800	-46.214	0.854	2.5.454	-17.874	2.0.628	23.223	-9.280	22.704	16.822	-64.187	922.22	-100	-100
1801	-31.951	-35.478	-29.070	-25.24	-36.067	-65.574	8.227	-8.460	-10.171	-7.352	-100	-100	-100
1802	-37.451	-41.85	-10.907	-70.052	-49.725	-1.029	-12.623	-29.110	21.106	-72.705	102.35	12.77	-100
1803	-100	276.04	86.356	-97.86	77.325	129.673	-20.201	20.18	74.911	0.451	-100	732.481	-100
1804	110.248	149.71	472.727	-28.021	70.405	-3.653	30.667	21.453	-21.522	-65.23	-100	-100	-100
1805	-12.018	152.736	-62.727	11.052	-73.007	89.734	-18210	-18.947	12.566	52.230	-100	-100	-100
1806	-48.792	-78.633	-60	71.032	-4.810	-6.643	35.949	101.319	67.123	81.24	62.962	-51.581	-100
1807	104.819	68.374	16.865	-60.224	53.797	20.336	-14.401	-12.356	41.769	-72.907	-100	-100	-100
1808	-16.788	196.687	-17.272	-32.607	-20.637	-70.102	36.651	-26.171	14.923	-45.036	-100	-91.971	-100
1809	-100	214.688	-34.36	67.578	98.286	-23.977	-22.525	52.738	-66.702	8.169	-100	-100	-100
1810	-76.586	14.786	225.15	50	-45.155	82.197	-22.410	-3.854	-5.727	152.944	-46.276	-100	-100
1811	30.732	-17.218	-100	-22.105	57.977	36.375	34.15	5.512	-32.028	-100	-100	-100	-100
1812	-39.876	-63.247	100.078	102.263	10.420	5.119	-30.521	24.174	31.017	-35.37	285.125	-100	-100
1813	12.650	38.081	-68.181	410.226	105.521	66.684	-6.731	42.368	-24.681	125.68	-85.85	-100	-100
1814	-100	462.136	-96.363	-40.524	70.546	-62.377	-4.445	66.067	-24.743	23.574	-100	-87.187	-100
1815	-50.831	-33.523	80	-79.48	102.200	-18.240	-0.949	31.712	-19.835	30.167	680.58	-100	-100
1816	-79.617	72.923	-38.181	-32.631	19.072	-27.63	-79.074	22.438	132.256	-33.307	-100	-83.303	-100
1817	-75.80	-71.45	214.34	-32.909	26.873	63.027	-20.025	9.204	-28.672	97.077	-100	-100	-100
1818	-92.163	109.401	-51.515	143.15	182.545	69.246	-19.102	-32.622	47.123	-83.747	-100	-100	-100
1819	-37.162	264.75	-32.636	-92.105	-37.945	-79.491	-56.077	-26.421	16.238	-33.093	210.66	-100	-100
1820	50.682	109.401	268.368	108.107	-79.541	6.354	-41.740	-0.921	-10.854	-17.563	-100	-67.567	-100
1821	-100	50.700	-100	24.742	-69.469	45.889	26.237	14.754	26.115	91.798	-100	-100	-100
1822	81.030	-94.271	-31.218	69.473	17.001	-46.251	41.700	38.847	-37.035	-12.028	85.85	-100	-100
1823	-98.798	269.230	180	-15.789	27.067	-11.65	22.220	52.084	62.477	-12.705	-76.296	-71.2793	-100
1824	-100	196.58	50.707	-78.416	119.542	-13.749	26.137	-26.006	-20.925	-40	-100	-100	-100
1825	110.84	-22.222	-50.674	-70.026	27.688	15.135	-35.184	-24.079	38.584	193.824	28.323	-100	-100
1826	-24.819	-36.723	-20.090	-61.573	-40.285	-29.231	6.2140	-33.468	-24.847	-53.034	29.624	-100	-100
1827	115.060	7.407	-81.181	-68.449	-72.748	-4.657	27.072	-13.466	5.763	-24.460	59.257	-100	-100
1828	-89.759	84.102	-49.07	-74.210	93.727	53.475	-16.070	-34.298	25.132	48.700	-100	-86.4186	-100
1829	-35.181	-11.765	-73.63	-1.052	-2.173	-24.610	7.352	-7.757	-22.215	-86.906	-85.113	-5.405	-100
1830	51.407	-40.770	-60.090	24.736	85.257	-20.725	-15.621	-7.590	-17.150	-79.424	382.185	-100	-100
1831	103.012	213.931	-70.54	-52.105	-13.311	-20.092	-44.923	26.734	-4.077	-45.814	-14.84	-100	-100
1832	-64.048	-82.906	-12.727	-22.681	29.981	-30.250	22.675	-17.807	-22.274	192.58	68.518	321.62	-100
1833	1.284	-26.09	-75.104	-25.789	-64.420	-17.966	27.815	-5.516	-4.755	-33.63	12.962	-71.891	-100
1834	-24.576	211.714	-100	-89.47	68.190	110.217	4.890	37.757	-5.038	-66.187	-100	-100	-100
1835	51.104	27.871	-77.272	-30	-50.296	-24.231	-24.589	66.236	57.654	-27.767	-100	-100	-100
1836	110.248	-100.17	-68.181	157.36	30.712	50.777	70.080	45.346	2.123	-61.423	-100	-100	-100
1837	-100	20.42	-55.454	-69.47	29.067	72.973	154.94	74.619	-32.477	89.351	337.03	-100	-100
1838	24.698	-43.762	-80	83.697	87.736	54.977	-16.340	-14.421	-71.902	-69.946	-100	-100	-100
1839	-81.757	-2.418	-100	-50.05	52.520	-17.351	-26.420	-2.707	81.194	-50.359	-22.146	-100	-100
1840	-62.048	-52.124	-68.181	-20.210	-19.198	-38.739	15.228	11.452	10.690	48.633	378.27	-100	-100
1841	-100	109.001	175.05	-20.423	-47.82	-37.137	17.078	-23.24	56.081	-64.13	-100	-100	-100
1842	-75.189	57.316	-83.63	-19.173	-18.23	12.536	-2.127	58.920	-47.604	-27.366	-100	-100	-100
1843	71.084	21.623	-73.63	-20	50.639	82.619	-4.04	53.610	-4.283	-68.720	-68.578	-100	-100
1844	-62.048	-78.632	10.218	-48.07	150.27	-0.061	25.292	-18.985	20.287	-100	-100	-100	-100
1845	-100	-512	87.272	-6.398	-6.398	50.373	-35.948	7.343	45.824	-83.701	-68.278	-100	-100
1846	-28.177	-7.672	-20.070	-63.187	-78.477	-25.975	61.507	-8.296	43.023	-25.871	1152.52	-100	-100
1847	-77.277	53.814	-80	-35.245	-73.257	15.307	-14.472	23.350	18.933	170.275	292.148	-87.189	-100