

Telangana 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 tp 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 ½ 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 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.

		June				July				August				SEPTEMBER				OVERALL SEASON				REMARKS
		T	R	C	T	R	C	T	R	C	T	R	C	T	R	C	T	R	C			
1	2020																					
	1992	?7.18	-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	-20.8	-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	2398	-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	?0.3	-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	+133.1	+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	264.9	-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	+33.9	+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	214.4	-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	-35.3	-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			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			REMARKS	
	T	R	C	T	R	C	T	R	C	T	R	C	T	R	C	T	R	C		
2025	+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					
2003	+11.3	-14.8	-21.6	-21.4	-28.4	+52.9	+47.3	-54.8	+31.1	-34.3	+20.3	-43.6	-1	-5	-3					
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	+44	-22					
1969	+6.09	+11.3	-37.4	27.99	+11.0	-5.0	-26.4	+53.5	-57.1	-78.9	-73.9	-20.6	+9	+35	-3	+19				
1947	-56.9	-16	-46.5	-29.3	-25.6	-3.5	-25.0	+86.6	-7.2	264.9	20.8	+28.8	+35	-3	+19	-8				
1930	240.5	+42.7	+39.8	-46.6	-61.0	-44.4	-41.8	-62.7	-46.7	+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					
9	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					
1920	-39.6	-89.5	-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					
10	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	+105.2	+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	+62.8	-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					
11	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					
1957	+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	-38.7	-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					
12	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					
13	2008																			
1980	+66.0	-17.6	+80	-34.3	-28.4	-11.6	-99.9	?017	-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	-4.86	-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					
14	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	+14.6	+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	2159.0	-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						
15	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	+4.10	+12	+10.4	-36	+5	+4					
16	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	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	295.6	233.3	+25	715.8	-34.1	-36.1	+25.8	+139.8	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					
17	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					
1956	76.875	+21.8	+32.8	70.96	+809	+37.8	-30.7	-38.4	-14.3	+503.6	+36	+19.6	+24	+20	+40					
1928	+37.3	+21.3	-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					

	18	June			July			August			SEPTEMBER			OVERALL SEASON			REMARKS
		T	R	C	T	R	C	T	R	C	T	R	C	T	R	C	
2013		+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	
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	+19
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	+578	-70.2	-33.4	-48.3	+229	+37.2	+53.6	+1.2	-32	+8	-5		
1919	+28.6	+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	-4.93	+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																	
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	?15.4	+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	?3.97	-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	-61.4	-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		

			PHILADELPHIA											
Year	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.			
2012														
1989	-92	-74.13793	-11.11131	70.48143	-83.56164	-18.33258	0.348845	-58.34562	-6.186354	16.73684	-88.03928	-91.11111		
1990	90.94906	-37.75862	-100	-49.87952	111.98683	43.24723	61.13861	-35.17523	-1.093175	32.18573	190.4206	43.22222		
1991	-100	110.34948	184.8495	-84.93976	-45.89041	29.3917	-21.64851	27.34771	52.15889	12.82461	-100	55.53358		
1992	72.72727	-48.55172	35.36354	56.62651	-77.33226	-15.82716	27.5395	38.48624	43.28655	-57.59955	-70.81294	-100		
1993	100	-100	100	48.19277	-67.94521	-48.63409	-30.98385	-44.77084	8.693116	58.85748	-45.50718	726.66667		
1994														
1995	100	3.446276	-18.18183	7.228916	-38.0137	32.68173	-47.40099	41.55963	6.067628	13.77672	187.395	100		
1996														
1997	151.2227	76.68364	-71.79793	11.44578	-15.06849	34.31734	-11.16202	33.36167	-73.80397	-61.25773	97.12919	43.22222		
1998	100	58.75581	41.92939	1.204819	91.79282	71.8155	-47.88977	22.24723	-11.43524	165.21019	1.485407	-100		
1999	-100	5.172414	31.92929	131.1325	38.42466	16.60517	-17.9888	25.9333	-46.26604	17.45848	100			
2000	132.7771	31.69448	43.33935	225.9334	-84.24658	-12.10213	9.942044	-30.82569	11.65228	23.34997	100	-77.77778		
2001	156.8182	58.62669	24.24747	14.45783	167.1233	-37.04797	-45.86409	50.88873	-33.479	47.1734	20.25549	528.88889		
2002	56.81818	126.1793	17.17172	172.2887	-21.9726	-25.45175	-11.83994	-16.00917	57.93466	-16.88645	93.54545	-100		
2003	-100	86.2069	47.9799	75.1012	124.9575	-13.65318	-28.83663	31.97298	56.94282	33.76723	81.81818	100		
2004														
1991	57.04545	100	25.25353	146.988	62.32877	61.99363	-41.17162	33.57708	-36.68931	72.32773	120.0353	438.88889		
1992	377.7777	117.069	83.81838	-50	32.15693	-20.2214	5.89339	10.55046	81.3375	53.019	42.10636	-100		
1993	81.81818	0	64.64646	136.1446	-42.80827	-35.94096	31.72442	2.614679	-40.62637	76.77293	52.15311	-100		
1994	170.4545	13.7831	50.50905	-46.18795	39.38756	-22.58303	68.07805	33.21101	3.7637211	21.42118	21.7799	86.66667		
1995	288.1818	119.1103	20.09093	36.14488	7.195180	19.04059	-41.5965	55.50611	-28.23804	5.815477	101.3993	168.88889		
1996	95.45453	-100	-82.38288	81.92771	46.57534	-35.05535	49.33963	11.78839	-4.900817	40.38605	77.12919	177.77778		
1997	-100	94.83759	-3.039629	51.20482	60.95889	-25.08225	-15.39777	-47.56883	4.2003	31.4038	753.11	1004.634		
2005														
1998	95.45453	141.3793	-98.0000	43.9759	-20.54795	6.389668	-22.64851	15.9633	12.19337	49.43118	24.88098	-100		
1999	114.0903	100	295.9576	6.616506	-4.105829	28.38779	0.138633	7.614679	54.34007	17.5307	-60.28708	-71.11111		
2000	-100	91.37931	-100	1.614479	39.18256	41.77172	39.97525	51.46789	-14.17736	77.80285	78.76489	86.66667		
2001	-100	112.069	-98.3888	101.8077	-57.87671	-1.03331	9.117162	22.98165	-38.28473	72.32773	62.79465	-88.88889		
2002	-100	100	-100	84.33735	171.9724	-11.43811	0.907591	4.541286	-25.14586	113.8955	-51.67064	22.22222		
2003	122.7273	47.08897	-100	24.8888	27.94521	-29.5103	51.85944	35.41288	15.51305	189.07316	68.42105	131.11111		
2004	-100	-100	104.0404	-89.15663	20.70548	52.01959	24.87634	41.38028	-55.95699	175.4153	-41.14833	68.88889		
2006														
1988	-100	17.24138	-64.64546	63.49578	-72.94521	-18.36675	91.87794	26.51376	28.06303	64.60808	-50.82285	337.77778		
1989	629.2605	-62.06897	84.84848	-63.95547	34.50095	-57.41897	11.86139	-7.70185	21.41118	-50.11876	35.4067	471.11111		
1990	-100	588.0552	-100	-18.03739	-25.34247	-18.08118	2.516592	-19.81651	14.81914	-63.74572	143.5407	-100		
1991	47.72727	-100	-26.26233	85.54717	30.32152	8.108487	35.5156	-41.89903	3.803889	7.45095	-100	-100		
1992	-100	-100	-6.06206	-63.85547	-80.11695	-45.46125	-35.72607	-31.51378	-55.36756	-90.97387	-78.4639	100		
2017														
1993	1481.818	-100	130.303	-15.06024	92.66275	-6.568266	-54.29214	-46.55963	-78.76313	216.81214	55.50239	-100		
1994	438.6364	187.931	-65.65657	-16.86747	-4.794521	14.24356	10.83282	59.6789	4.434072	-20.54813	103.3499	-95.33358		
1995	71.72727	-41.12931	-70.70707	-61.85547	-4.009589	20.369	25.80858	7.20183	-28.06301	136.341	-23.7512	-100		
1996	-100	-100	87.28288	-74.09839	97.94521	-41.47601	38.90064	17.24171	-27.71299	72.56532	26.36354	-100		
1997	1170.455	-100	-100	-71.50802	-4.457055	-17.26932	28.71287	36.55963	-1.758522	52.25623	22.35653	-100		
1998	-100	-100	34.34343	146.988	-4.109583	22.21407	-64.93139	17.33945	1.490233	51.30941	-100			
1999	-100	-100	331.3131	-75.90381	-61.30173	51.14591	9.5291703	32.88404	29.31392	-21.85273	57.89476	-100		

2009	31.07.07	17.06.08	19.05.07	11.05.07	17.05.07	-13.05.07	-14.05.07	-7.05.07	-7.05.07	19.05.07	31.05.07	1.06.07	1.06.07	1.06.07	1.06.07
2001	45.49435	51.72414	89.88899	63.25301	80.33695	4.112031	61.25611	5	50	48.14530	54.75059	-38.58590	-100		
1979	163.6364	222.4138	-88.9899	28.31325	204.7945	-21.26723	-55.75413	-50.22938	50	-68.12267	170.0766	-55.35556			
1982	-100	294.8276	-94.58193	244.5783	33.71918	-27.01107	-11.26738	31.57798	66.10268	-16.38579	115.311	966.54467			
1985	-50	-100	100	151.2078	-71.33973	10.70111	12.68580	-1.68891	-10.56409	30.86348	42.75534	-93.04806	-100		
1988	-86.36354	279.3100	-88.88881	-12.6506	-58.56164	-81.33841	2.518580	-10.08257	30.86348	42.75534	-93.04806	-100			
1990	-42.10526	-135.4095	12.5	-129.2338	32.74854	-131.1529	401.2787	-98.6971	-134.2155	-172.3770	113.5266	-11.31111			
1989	100	-100	-31.31313	-31.00771	-38.0137	-31.32841	1.111861	34.64303	33.08074	50	-38.46389	-40			
2019															
2002	475	-22.65517	-65.69537	-61.85264	-6.8495315	-7.7.30627	-70.10657	5.87135	-68.78950	1.543945	-47.08139	-100			
1985	45.88183	-100	31.37313	-37.95181	-50.72917	31.76753	-16.66667	-44.31193	54.75000	8.07601	79.42584	48.44444			
1983	-100	-100	-69.61857	156.2651	-56.16438	31.59411	18.41895	56.3844	-31.98667	56.58195	100	-100			
1996	-100	239.6562	-51.55515	25.30117	30.82192	20	4.701921	17.98185	53.22935	63.1829	173.9234	22.22222			
1974	63.61616	684.4828	-100	24.0948	-71.57536	6.125481	-57.10168	-35.63321	34.94249	-32.06651	100	102.2222			
1902	81.81818	50	-13.13131	235.3926	85.27789	48.70319	-63.44059	3.472044	-38.68145	99.52494	68.42105	106.6667			
1990	-100	100	87.82879	3.012048	51.71233	40.4428	-8.910891	24.72427	34.36406	-73.23791	88.03617	165.6667			
1973	-100	-100	-50.90505	100	29.09452	-18.49318	65.0165	31.2844	5.190532	61.40143	31.38756	62.55556			
2020															
1992	-33.72727	-79.31034	-100	66.85747	25.34247	1.180812	40.25376	5.189486	51.28355	-26.57953	296.4115	288			
1964	-86.36354	-100	-87.65571	-66.86792	-87.32877	-20.50091	-24.12493	-8.115266	83.6056	-20.28504	60.28708	-100			
1986	-81.81818	151.3769	171.23271	-51.21687	171.1873	24.62884	-15.18379	-11.15593	-18.84481	68.47184	208.130	84.44444			
1908	231.81817	0	-49.99493	-45.98795	-71.57534	-35.16236	-17.22921	-8.715295	197.958	-95.35813	-100	-95.35556			
1980	-100	93.16345	-87.82879	-40.96386	28.68219	14.83395	-25.62551	-65.59046	17.6196	43.30546	116.2679	155.55556			
2021															
1999	-100	31.03448	-100	95.18072	82.83671	-28.48708	-26.58746	-1.233682	-5.406918	-38.46558	-94.25837	-100			
1982	30.45455	-100	51.51515	23.40308	10.27397	-10.07059	25.82506	-28.30275	-15.40357	41.03364	15.70347	-100			
1965	21.72727	-100	64.54546	-31.14658	-71.57534	-33.28912	40.55301	-35.50491	32.43876	-57.01288	100	-100			
1943	175	-100	-74.74747	31.0253	16.43836	7.210422	-32.42524	-50.3211	49.82497	-9.936243	-30.62201	-100			
1926	200	1.724138	31.31314	90.96386	52.39726	-21.47911	-12.12871	-11.69725	-38.73979	-36.12823	-48.08612	-100			
1909	27.72727	62.26859	-86.9537	144.3976	-72.23973	-12.10312	-0.242574	-15.6472	23.80992	57.01288	-100	97.22228			
1987	163.63645	98.61259	149.49493	-45.18072	-22.84521	-15.05635	-13.94189	1.059046	-64.00233	27.55144	663.2656	-73.31111			
2022															
2005	290.9091	293.1034	49.49493	-22.71081	37.61213	-35.90996	34.11716	48.25688	50.33489	88.71734	90.90000	236.77718			
1983	-100	-68.95552	-54.54545	72.89157	36.64384	1.476015	1.485145	35.00917	71.58693	114.133	-76.07656	53.31111			
1960	-50.22222	-100	261.6364	92.10897	8.561644	9.07691	21.25218	57.29904	33.66294	22.44156	60.38608	1.222222			
1989	-45.49445	-98.23566	104	21.68675	119.1781	-52.1107	19.52666	34.49541	22.57076	36.11111	-91.06603	-100			
1997	-31.81813	112.066	26.26253	66.86797	51.71232	-45.93727	26.64264	35.50469	19.01084	-33.44798	214.1818	-100			
1910	-100	-100	49.9899	51.04082	27.02479	71.58672	37.5	31.82908	32.50648	52.015	76.56602	-100			
1898	270.0505	89.65519	1152.523	69.80952	-33.21218	-34.20114	1.991189	61.44037	1955.134	48.52482	136.5636	-100			
1871	-100	-100	61.36651	42.20916	33.31926	-49.57635	49.31828	-21.47873	26.44574	64.11303	31.33971	-100			
2023															
2006	100	344.4444	129.5181	33.32833	-22.82288	-67.20259	-11.78853	71.10853	58.69383	95.69578	-100				
1989	-100	300	311.1616	-93.0759	-84.33151	67.36162	69.38693	3.119266	15.41057	65.43943	89.47268	304.44444			
1967	-45.75553	-100	571.2121	-39.15063	-90.75343	10.50251	49.47334	21.95013	3.183899	88.93483	-100	484.4444			
1950	100	436.2646	152.45051	99.39759	-29.74952	-49.15129	-3.367613	33.11927	64.00333	63.53315	17.0332	-100			
1933	156.81817	241.1093	-1.010101	12.08919	59.93151	76.99417	-12.91254	22.66095	12.14404	16.33208	44.49261	855.55556			
1911	-100	-56.56366	22.89157	-63.0237	-5.461255	28.86337	28.16514	-21.979	-27.79269	-31.57695	66.44383				
1898	231.81813	-82.25863	43.43434	-15.06038	70.45208	1.918819	26.5264	15.10349	73.10385	-18.88363	124.5808	-100			
1877	118.18183	244.4276	333.9193	195.1807	25.51889	-16.42066	-75.9300	-51.49317	-12.71879	71.97115	-31.92823	893.31111			
2024															
1996	100	-17.24128	88.88889	30.12048	-71.71503	7.089871	-33.12706	21.69725	-28.1797	10.64113	29.1866	-97.22228			
1968	215.9991	141.1753	32.27938	-15.06201	61.21863	-31.82887	20.8571	42.47705	51.10852	-5.583448	-45.93301	-97.22228			
1947	63.63636	215.3133	43.33338	90.36145	-76.31686	-12.56613	13.03163	21.82509	56.14736	-23.39662	10.52632	544.44444			
1912	-100	434.4878	-100	41.56627	-48.28767	-61.32103	11.03485	-11.46789	-33.88932	-22.30775	52.88478	-73.31111			
1899	509.0909	-100	-1.000303	-10.88337	-11.54384	-12.21402	38.43633	-33.79817	26.62077	-35.03563	92.60066	676.6666			
2025															
2003	-100	6.896553	-44.39444	6.626906	-100	-16.23616	-8.935899	-2.431193	26.19003	20.96261	100	482.22222			
1886	547.72724	494.8276	-83.88383	22.28916	-49.31507	-14.90725	-22.88976	45.02752	-50.64177	-43.58667	24.40191	260.22222			
1969	-15.90933	-100	-88.88883	-43.9759	290.411	-8.221403	6.426898	-26.19679	34.66578	-13.77672	231.3971	523.22222			
1957	-63.63636	215.5172	-83.88383	-90.36145	-76.31686	-12.56613	13.03163	23.82509	56.14736	-23.39662	10.52632	544.44444			
1930	-100	3.446276	-18.1838	7.228916	88.0137	31.69373	-4.40699	-13.59881	6.067078	13.77672	131.3971	100			
1913	-100	77.58621	-100	15.06020	6.895315	-15.89716	23.55798	-45.49417	-42.86238	-30.78504	-72.39388	11.31111			
1891	93.18382	117.2414	63.62626	-22.88157	-80.13689	71.26812	-33.58308	4.1336917	-9.586381	68.51272	-100	-100			
1873	97.72727	-100	79.79738	-61.25301	50.34247	-45.00369	-25.20627	-43.62315	51.63244	66.74584	-50.7177	2.332222			

2006	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	36-T.2
2009													
1987	185.0746	-100	213.6	-18.55204	-98.50843	-62.26133	-49.21728	-9.102731	-39.92692	-46.11821	205.4686	115.8301	
1970	-47.76119	-53.07356	28.8	-70.12553	-50.69331	-66.51366	-35.59383	35.55267	-41.24538	-7.642276	-85.21038	-100	
1983	164.1791	-100	100	-92.36769	-57.69331	-3.41306	-34.50173	8.452536	-8.377598	62.5	-88.32918	-100	
1931	-47.01493	-100	85.2	-72.82805	-33.89448	-10.05025	-16.84488	-43.43303	14.7349	66.36828	138.1663	39.83384	
1914	-55.32239	-94.25787	86	58.37104	13.71237	-4.723618	-12.07754	-21.00113	-46.48283	76.62602	-34.76261	-81.04358	
1897	128.3582	-61.83759	173.6	-88.68728	-19.89967	55.77885	-63.28883	-15.47484	41.86119	-23.53642	-42.80193	88.16568	
1875	192.5373	-49.27586	-29.6	-61.02893	-41.63883	-67.98457	-42.39198	-11.18336	-22.68187	16.86667	61.91712	4.633508	
2007													
2010													
1993	-67.16413	-98.85057	96	-28.66983	-25.25084	-57.28843	-30.903	-11.07932	0.123305	20.42784	-2.415459	132.4124	
1971	-2.945073	175.8621	72	396.8326	9.886231	-30.09075	53.35403	-13.125	6.966708	9.044715	-73.22705	86.17759	
1954	88.2591	-98.85057	95.2	-100	-79.91639	-6.231156	4.653688	-14.93445	42.09346	45.93498	-59.61353	58.30116	
1931	-100	198.5517	82.4	175.1131	-68.7291	-58.29448	-29.05488	-21.73181	-44.5746	9.908537	20.47622	93.05619	
1915	1103.403	75.36204	488	-3.61991	-58.69985	22.21106	-17.78134	43.23797	-13.32185	-18.95325	257.0048	44.98069	
1898	-100	267.1351	-100	-79.63881	-68.08887	9.046326	10.39445	44.08302	-7.02826	1.876916	138.744	-30.6834	
1881	70.14925	-100	-31.2	-59.37602	-52.17351	46.73116	-70.79787	0.846254	12.26888	75.66867	71.76744	-46.71615	
2018													
2000	95.52229	302.1381	-100	-61.02889	-34.94983	53.06533	28.61614	89.85666	-57.21332	-53.39146	50.5314	16.60232	
1972	-48.58746	79.31034	-100	17.19457	-83.61264	-14.77387	-44.28968	62.07861	44.45129	86.7374	12.8184	91.11969	
1965	-47.76119	16.99195	164.8	-39.1991	-60.20063	-5.075126	-9.643083	-25.6827	-9.371147	107.3173	24.63768	-96.4551	
1916	-100	-68.36553	-100	-75.11312	-44.83605	1.0030273	49.07943	1.820548	-37.42293	68.03863	64.83093	78.37838	
1888	-23.8826	-100	89.1	-61.02897	38.12709	-94.27387	-26.31146	50.97525	-56.90505	52.46984	134.7926	66.09266	
2002	47.01493	21.28736	88	-85.51278	51.50602	154.0304	-20.66376	-9.21277	42.63823	23.17073	-67.02526	48.33977	
1990	-47.76119	488.50257	516	32.1267	510.7023	6.136253	50.03133	22.10642	-13.19155	42.88618	76.11156	-45.25097	
1973	-100	58.85257	-18.4	-97.28507	56.35452	-31.38678	-43.3948	-7.90238	-30.39457	24.54268	-22.22222	-68.11139	
1951	-18.35821	-100	64	57.01357	31.41813	6.633165	40.95178	-15.49962	-30.33292	-56.75813	-25.12077	-58.0486	
1934	-53.23981	-100	98.4	-19.9095	90.86268	-32.01026	16.88305	-6.61936	-39.39281	-17.04268	-25.40386	78.78446	
1917	80.39701	21.83908	76	-37.73281	64.04687	94.27136	32.67367	18.72563	37.30583	48.72967	62.73333	8.777201	
1895	98.50746	77.01149	99.2	-24.83435	-18.0607	18.69347	9.542081	9.557865	27.68137	35.61073	70.91283	56.27066	
1878	-100	-100	76	-38.46154	12.87625	-47.53789	57.56618	36.33108	7.649888	79.13618	-2.801932	775.6757	
2011													
1994	-47.76119	317.58562	-100	62.44344	-67.05686	-54.27136	-1.189731	27.82835	-48.52035	83.46545	295.7005	-10.81083	
1977	-47.76119	-100	96	51.50371	-7.190635	-10.15075	17.020889	9.887065	-52.28113	-11.02842	131.2077	-78.76448	
1956	88.03937	-100	68	-79.63801	181.7725	35.57789	-23.43177	18.89566	2.7127	22.7563	6.763385	6.994450	
1938	-100	198.5517	-18.4	-100	4.347826	29.68724	30.11897	21.90758	85.38881	43.95325	38.260887	89.57520	
1921	422.3881	-100	-100	54.75113	-96.32107	39.68844	11.77207	-20.35111	24.18865	22.18366	58.05411	98.45546	
1899	70.63687	-47.76115	-100	211.23117	45.31773	56.38151	65.43819	-24.25238	-21.63995	-23.06504	-94.30239	-100	
1882	20.88662	-100	-100	94.52034	-35.61873	53.26633	-31.29363	-43.17295	32.4231	-23.68057	283.69118	166.0232	
2004	117.9104	80.46177	96.8	-70.58824	75.41806	0.507513	-22.04113	-47.39072	-6.841403	9.054471	-47.63385	-99.61239	
1976	84.02985	93.10345	95.2	58.87354	71.40484	42.11055	36.81904	35.11053	51.54131	-8.638211	321.3527	84.55391	
1948	4.477612	97.30115	95.2	58.82359	29.43144	-48.30174	-19.03458	-41.22237	-6.596794	38.81058	143.03042	-45.94195	
1920	131.3433	-12.64368	76	-62.44344	-4.683274	-48.80462	-68.49660	-39.53186	-34.58693	51.20826	-11.23671	-100	
1893	-100	65.51724	-100	47.28107	94.54883	6.039851	-26.23689	73.342	34.15636	133.89075	-77.10145	22.37566	
2008	28.0597	385.0575	501.2	-76.0183	-51.50602	-9.447236	-18.78523	18.6606	-31.99353	-41.4126	75.65217	89.18819	
1915	74.61687	-100	99.2	90.04525	-47.05688	28.23116	-3.193888	8.177438	-36.49815	-10.67073	51.46869	24.00347	
1957	-100	-36.78161	-23.6	54.29864	124.2475	-35.67809	-39.88723	43.75813	-52.46826	24.13613	99.80676	333.2664	
1934	-41.79104	-100	-100	57.28507	-47.99131	-33.27638	-40.01251	22.69181	77.0037	56.30081	197.8744	-38.8117	
1894	-8.952201	53.33333	100	68.31579	-60.02001	5.035126	-46.83782	-21.06632	1.607959	108.3841	5.797101	91.9112	