

North Central 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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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.

	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	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	+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	783.3	+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				

	June			July			August			SEPTEMBER			OVERALL SEASON			REMARKS
	T	R	C	T	R	C	T	R	C	T	R	C	T	R	C	
18	2013															
	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	+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	71.32	-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	-4.33	+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

NIPRO, Central India

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Ann	JF	MAR	JUN	JUL	AUG	ANN	Remitt
K 2018																				
1998	31.0	32.0	1.3	14.2	30.3	307.1	340.0	396.4	284.2	32.1	0.0	2.1	1367	63.0	45.8	1797.1	34.7	496.8	-65.4	116.8
1999	14.5	16.3	1.0	4.6	5.5	2.3	2.1	2.2	2.2	1.5	1.0	1.0	1468.4	31.3	34.4	1145.8	43.3	1113.8	179.5	13.2
2000	21.8	48.5	3.2	21.0	31.4	15.4	326.1	198.7	17.0	10.0	6.7	11.4	1625.0	76.2	56.1	541.8	125.1	181.8	451.9	-93.3
2001	53.8	1.5	4.4	18.1	40.5	135.5	149.3	233.5	327.5	48.8	0.0	1.5	1258.3	62.4	62.0	704.8	43.3	116.4	-13.26	11.31
2002	28.1	18.5	3.4	13.1	23.1	100.0	343.8	149.1	116.5	65.8	3.0	4.2	1212.8	43.4	41.7	1688.8	12.4	115.2	-3.08	10.86
2003	11.6	19.0	4.6	17.8	51.4	61.0	384.8	315.4	131.7	16.4	2.4	1.4	986.4	38.7	30.3	634.4	27.2	116.8	-15.2	-3.04
K 2019																				
1990	6.9	11.3	8.2	14.3	20.4	113.6	410.1	283.8	265.0	31.7	44.3	4.5	1234.1	12.2	43.4	1042.2	91.4	143.6	1154.8	11.9
Z 2018																				
1991	18.1	5.6	21.3	16.3	23.3	145.4	236.5	374.0	267.0	20.3	3.7	4.0	1119.0	27.7	57.1	966.2	54.6	-6.48	-18.4	-1.64
1992	1.4	4.0	14.8	5.1	18.4	85.0	344.8	281.9	167.8	44.3	2.1	6.3	1635.0	4.8	48.8	933.7	51.2	10.23	-2.1	-14.8
1993	20.4	1.2	24.0	3.7	3.9	43.8	164.3	108.4	166.1	10.9	2.0	3.5	1045.0	60.1	53.3	833.9	12.7	86.4	-3.2	-12.5
1994	14.0	18.3	6.9	10.0	5.9	108.1	321.8	285.4	330.1	10.4	0.0	2.1	1078.8	38.2	31.7	1600.1	8.4	-2.34	-8.8	-10.1
1995	3.0	0.1	6.3	12.5	5.2	15.9	152.8	368.3	168.7	2.0	5.3	3.5	1018.8	3.4	70.0	916.4	1.4	-8.88	-20.4	-18.1
1996	5.4	4.4	11.5	11.2	38.4	55.3	460.5	346.8	218.1	17.8	16.8	0.2	1011.2	104.5	61.2	834.3	8.4	-12.82	-63.8	-9.11
1997	7.4	0.4	16.8	5.7	30.7	87.0	371.8	308.8	152.8	10.3	3.1	3.0	635.8	3.2	46.2	783.1	24.2			
1998	21.3	0.6	25.0	16.0	48.4	134.6	336.6	151.0	119.4	0.1	1.4	1.4	1332.1	23.3	36.4	1045.8	10.0	114.8	112.0	14.7
2000	6.3	13.3	16.3	13.2	38.7	42.0	344.8	32.3	43.5	18.5	3.2	4.6	1472	50.1	64.2	1001.8	3.3	-2.24	-6.4	-5.31
K 2010																				
1997	11.5	2.4	7.8	26.0	34.0	69.3	367.2	235.1	377.3	46.5	31.0	5.3	1215.0	16.5	71.8	1080.9	111.8	154.4	1084	13.5
1998	11.6	11.4	16.3	10.7	2.2	111.0	345.0	306.3	211.3	16.0	1.1	0.0	1453.2	23.3	48.7	1062.5	30.1	172.1	-11.1	13.23
1999	12.6	15.1	12.5	1.1	26.4	43.2	485.8	188.7	136.2	18.0	3.3	7.4	1138.2	27.8	41.1	458.8	106.3	-14.4	14.1	12.13
2000	26.3	8.1	4.4	4.8	85.1	111.3	128.8	231.1	172.4	65.5	16.3	0.1	1083.1	31.4	42.3	984.0	81.5	10.16	12.96	16.6
2001	43.3	19.2	18.6	13.0	42.8	198.3	384.3	346.0	194.9	45.6	6.1	2.0	1851.5	81.5	71.2	182.8	82.6	11.62	41.20	14.26
2002	4.5	3.8	12.3	23.3	43.3	53.3	378.3	222.2	277.2	19.8	11.7	3.4	1066.8	8.3	78.8	545.5	17.7	-14.2	-6.5	-11.10
2003	14.5	15.1	8.4	8.2	36.4	230.6	354.0	244.4	181.3	28.4	5.7	5.0	1157.2	23.7	53.3	1143.1	81.1	110.3	110.6	18.2
2004	3.2	9.0	2.5	15.2	21.3	235.0	362.7	340.7	238.2	36.5	4.6	0.4	1336.1	18.2	83.4	1178.0	106.4	414.4	123.2	1.01
2005	2.4	17.0	33.4	6.3	27.5	336.2	189.5	371.0	233.3	21.1	2.1	0.6	1160.4	24.4	73.1	1023.0	14.4	-6.61	-64.2	-5.04
K 2011																				
K 2012																				
K 2013																				
1998	38.3	18.7	36.6	21.6	37.2	91.4	316.0	346.2	232.3	95.7	56.1	0.8	1461.4	52.0	71.5	586.3	151.6	-4.68	15.35	17.28
1999	28.3	18.2	22.6	27.2	17.7	110.3	447.0	388.3	246.2	2.4	6.7	4.4	1957.1	41.4	117.6	1016.1	128.2	-11.44	-14.1	12.13
2000	51.1	5.1	5.2	14.2	44.7	166.4	156.6	320.1	176.8	163.4	40.4	0.2	1141.1	66.2	64.0	887.4	184.6	-18.7	11.8	-15.0
2001	0.0	20.0	8.7	5.0	3.8	192.1	442.4	365.1	193.8	116.7	23.7	1.3	1845.1	38.5	115.6	1083.3	156.8	16.18	41.1	11.03
2002	4.0	2.0	6.3	26.4	42.0	78.3	469.5	538.2	210.8	43.7	12.0	0.6	2174	9.0	75.4	1138.4	133.7	14.54	-36.0	25.11
2003	11.4	6.1	6.4	11.6	31.3	113.3	185.0	300.0	222.2	561.2	1.0	0.0	1260.2	18.3	56.2	1084.0	153.9	-11.61	10.0	-10.44
2004	6.4	1.0	3.4	3.4	56.2	175.3	485.0	245.6	233.2	132.4	17.7	14.3	1056.4	8.5	51.5	1056.5	154.2	12.18	15.4	11.18
2005	3.8	4.8	31.0	4.0	18.8	135.1	306.1	222.1	248.2	131.2	6.0	6.3	1128.0	8.6	52.6	567.0	158.9	-11.74	10.0	-6.22
2006	24.3	10.1	3.2	4.6	24.3	104.5	344.3	362.2	172.6	165.8	48.4	0.5	1490.0	34.4	57.2	1226.2	211.2	-3.38	11.1	12.20
K 2017																				
1995	28.4	22.6	19.1	4.0	33.6	188.3	175.2	324.7	175.7	30.4	51.0	11.3	1199.8	51.0	56.2	1077.5	44.2	11.88	18.5	10.01
1998	14.7	36.3	24.7	15.4	26.2	100.8	243.3	312.4	233.6	11.4	25.0	13.1	1812.6	66.5	76.6	1631.1	10.5	11.41	11.6	18.31
1999	17.2	60.3	7.5	4.7	17.3	154.5	310.3	171.1	283.8	176.3	2.1	10.3	1128.8	67.6	34.3	181.0	202.2	11.63	11.85	15.2
2000	13.4	25.3	15.5	3.0	13.1	147.6	342.0	302.0	227.6	161.4	1.4	0.2	1255.5	13.0	37.4	1108.6	14.0	11.88	-18.1	13.66
2001	21.8	6.1	6.5	8.2	65.3	144.4	470.0	416.2	274.4	181.0	9.2	4.2	1148.3	13.7	24.1	1255.3	26.1	4.18	-93.4	13.28
2002	25.4	3.4	8.2	21.8	46.4	38.0	365.0	330.4	251.8	15.8	0.0	2.4	1613.4	64.8	106.6	1064.1	16.3	-1.0	-4.6	-24.0
2003	28.8	4.4	8.2	8.8	27.3	222.0	360.1	194.0	181.1	13.8	1.0	5.4	1651.3	30.5	65.3	50.4	24.4	-10.1	-46.6	-18.18
2004	21.6	43.1	3.2	35.7	10.8	162.6	520.4	507.8	196.4	13.2	1.3	1.0	1121.6	64.7	52.7	156.6	32.5	-4.25	15.6	-8.22
2005	37.7	7.9	2.3	14.4	26.1	172.3	188.5	274.8	128.2	125.3	4.4	6.4	1360.8	44.4	31.2	161.0	141.4	-24.7	17.8	-15.1
K 2017																				

Year	Monthly												Quarterly				Annual			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1	Q2	Q3	Q4	Total	Diff		
1922	2.9	19.4	20.8	7.8	26.5	21.7	402.9	209.7	293.3	91.1	0.4	6.3	1154.2	47.4	55.1	863.6	99.1	-1.16	123.8	-4.12
1923	2.6	16.0	10.0	24.8	58.6	12.3	274.3	270.8	307.9	51.4	0.3	14.4	121.3	23.8	103.9	376.1	106.1	-5.15	133.9	10.10
1924	12.0	0.2	37.0	3.7	24.3	47.5	357.8	204.3	209.8	105.2	0.7	0.8	1229.4	47.3	65.1	1044.9	106.2	-1.56	134.1	11.38
1925	7.5	30.0	7.8	27.0	64.2	130.7	354.2	357.3	248.9	117.8	0.1	0.2	362.7	37.5	104.5	104.5	118.7	-1.22	149.1	12.97
1926	15.2	40.9	22.7	4.8	43.0	108.7	344.5	214.2	150.7	59.8	48.4	2.3	1151.0	56.1	70.4	1053.0	124.1	-2.40	156.6	13.40
1927	7.8	7.6	0.7	16.2	35.4	201.6	145.7	253.2	222.5	77.4	2.5	6.0	210.8	10.4	52.7	1179.6	122.9	-14.7	153.7	13.74
1928	32.2	57.4	23.2	16.7	107.3	244.5	304.8	263.0	208.4	109.4	13.0	0.2	1513.8	84.4	15.7	1534.9	22.2	-12.84	161.3	12.25
1929	4.5	12.4	13.4	22.0	72.3	251.1	428.7	286.5	251.4	12.5	0.6	15.7	1481.3	16.4	10.3	101.7	151.6	-3.74	166.7	18.12
1930	2.6	83.4	3.3	7.7	42.1	267.1	169.4	240.6	267.8	81.8	49.2	0.6	1317.4	35.21	62.0	101.7	151.6	-3.74	166.7	18.12
1931	0.6	0.0	22.8	24.7	64.8	164.0	270.4	256.0	185.3	23.8	6.7	0.8	1119.3	0.6	117.3	99.01	31.2	-4.58	160.4	-6.70
1932	0.6	0.0	22.8	24.7	64.8	164.0	270.4	256.0	185.3	23.8	6.7	0.8	1119.3	0.6	117.3	99.01	31.2	-4.58	160.4	-6.70
1933	2.0	38.4	5.8	42.0	184.4	308.0	317.2	197.4	78.9	28.9	3.5	1.7	253.7	69.6	135.2	107.5	54.6	-14.78	167.81	12.7
1934	20.1	0.2	23.0	7.8	23.4	132.5	378.0	369.6	100.7	100.7	33.7	0.0	1210.3	20.3	61.2	1055.3	124.5	-12.52	167.81	12.7
1935	6.1	28.5	2.5	8.3	9.6	256.8	376.6	399.5	217.2	248.1	4.3	0.4	1607.3	24.4	20.9	1258.0	237.9	-21.9	172.7	13.28
1936	60.2	33.3	15.0	33.5	67.6	124.6	202.5	218.6	113.8	80.1	1.3	21.8	981.2	44.4	14.1	666.4	103.8	-8.63	172.7	13.28
1937	4.6	15.3	56.0	42.4	14.3	135.2	386.8	166.4	280.9	11.9	3.8	0.7	112.83	19.9	112.6	467.3	26.6	-5.93	166.4	-6.67
1938	3.8	28.4	3.5	10.3	14.5	195.0	256.3	363.2	169.0	61.8	2.5	6.2	1126.8	64.7	29.3	977.0	64.8	-4.98	181.3	-6.12
1939	3.0	10.6	6.6	5.3	10.0	173.8	326.7	292.2	111.2	58.5	3.3	4.1	1039.1	43.6	21.4	507.1	66.2	-11.78	162.8	-14.22
1940	7.4	12.5	15.0	5.3	26.6	111.4	408.2	306.5	225.9	51.7	1.3	10.0	1203.7	32.9	50.7	1051.3	68.5	-12.28	182.8	-10.55
1941	8.7	21.7	15.3	18.1	20.5	67.5	324.6	326.3	181.3	77.5	4.0	0.8	1064.5	30.4	65.3	705.1	64.6	-11.58	182.8	-10.55
1942	1.1	7.5	1.2	9.1	2.5	133.3	207.7	33.0	109.6	85.3	0.1	0.1	1074.3	4.0	39.7	101.5	28.3	-15.70	111.7	11.08
1943	3.5	5.5	35.3	70.3	33.3	28.5	281.5	105.3	198.9	146.9	14.5	6.4	1291.4	35.3	38.5	991.7	100.5	-2.51	110.9	14.73
1944	11.0	44.9	18.3	15.1	23.6	111.3	289.0	301.3	333.9	119.8	0.3	13.3	1355.7	57.9	53.0	1001.4	113.7	-3.10	123.0	11.30
1945	0.9	28.9	7.2	20.2	59.6	181.3	216.4	240.3	158.7	35.2	11.2	40.0	1111.9	99.3	82.8	900.3	122.5	-12.4	167.2	-3.05
1946	0.9	5.2	6.8	18.4	54.5	111.7	315.1	219.1	115.9	83.3	2.3	6.5	1133.4	10.5	34.8	1030.9	45.8	-10.64	144.6	-8.58
1947	11.4	15.3	19.0	5.3	27.6	111.4	408.2	306.5	225.9	51.7	1.3	10.0	1203.7	32.9	50.7	1051.3	68.5	-12.28	182.8	-10.55
1948	1.3	11.3	8.4	10.3	28.9	113.6	410.7	415.3	262.7	37.3	40.2	4.5	1277.7	18.2	45.4	1014.3	113.7	-14.36	144.6	-8.58
1949	1.3	30.4	20.0	10.0	71.4	124.3	218.4	200.3	108.3	400.5	6.2	16.9	1131.0	11.7	18.1	986.7	113.7	-2.94	144.6	-8.58
1950	11.3	10.4	19.5	0.4	7.3	151.1	311.0	310.0	238.3	88.4	0.1	0.3	1389.7	47.2	35.1	1017.5	83.0	-1.83	171.9	11.63
1951	1.3	29.5	11.0	6.2	18.4	114.1	311.3	215.5	235.1	9.0	1.0	121.1	19.4	67.3	1084.9	40.5	-15.44	148.8	-10.04	
1952	4.3	15.1	10.2	15.0	41.0	151.3	400.7	311.3	215.5	235.1	9.0	1.0	121.1	19.4	67.3	1084.9	40.5	-15.44	148.8	-10.04
1953	11.5	18.5	8.3	13.9	35.5	61.5	231.9	322.8	217.5	61.5	13.8	5.6	1193.3	25.0	60.7	1014.6	91.0	-1.33	171.9	11.63
1954	2.3	13.1	20.1	8.0	40.0	203.2	212.5	234.0	134.3	48.7	7.5	0.0	1213.0	38.0	31.2	1010.3	11.7	-18.29	157.5	7.58
1955	8.5	8.3	7.3	0.4	20.0	123.0	241.7	303.3	267.8	109.0	13.0	0.5	1013.9	55.1	80.0	405.3	126.2	-2.10	155.5	7.048
1956	0.6	50.3	0.7	0.4	20.0	123.0	241.7	303.3	267.8	109.0	13.0	0.5	1013.9	55.1	80.0	405.3	126.2	-2.10	155.5	7.048
1957	6.4	13.1	30.2	21.1	67.4	87.7	435.3	311.3	215.5	118.7	7.3	0.1	1263.8	19.3	33.9	1053.8	126.3	-16.10	152.2	14.32
1958	14.3	11.4	1.3	11.6	41.8	210.5	305.6	318.0	200.6	38.1	0.0	0.1	1163.8	21.4	61.3	1045.4	21.4	-10.55	155.4	-12.36
1959	14.3	23.5	7.7	10.4	41.9	117.7	405.7	332.4	133.2	53.0	5.2	18.4	1233.9	40.4	60.4	1051.6	80.7	-2.20	111.3	7.04

Year	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	ERC	Ann	OP	MAM	JTAS	OND	JTAS	OND	Annua	Rank
2007																						
2008	2.4	6.6	2.7	30.8	49.7	104.4	105.1	125.0	315.4	30.2	10.3	0.0	1140.1	9.0	104.1	435.2	41.7	-4.02	41.7	-4.02	41.7	-4.02
2009	15.3	18.0	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1
2010	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1
2011	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1
2012	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1
2013	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1
2014	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1
2015	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1
2016	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1
2017	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1
2018	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1

3/25/2018