U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
IN COOPERATION WITH Michigan Weather Service
CLIMATOGRAPHY OF THE UNITED STATES NO. 20 -- 20

CLIMATOLOGICAL SUMMARY

LATITUDE 43° 01'
LONGITUDE 84° 33'
ELEV. (GROUND) 755 Feet

STATION St. Johns, Michigan

MEANS AND EXTREMES FOR PERIOD 1939 - 1962

Month	Temperature (°F) Means: Daily maximum	Daily minimum	Monthly	Extremes: Record highest	Year	Record lowest	Year	** Mean degree days	Precipitation Totals (Inches): Mean	Greatest daily	Year	Snow, Sleet: Mean	Maximum monthly	Year	Greatest daily	Year	Mean number of days: Precip. .10 inch or more	Temperatures: Max. 90° and above	Max. 32° and below	Min. 32° and below	Min. 0° and below	Month
(a)	24	24	24	24		24		24	24	24		24	24		24		24	24	24	24	24	
JANUARY	30.6	15.0	22.8	64	1944	-19	1951	1280	1.70	1.46	1947	9.6	20.7	1943	7.5	1954	5	0	18	30	4	JANUARY
FEBRUARY	33.3	15.6	24.5	61	1944	-17	1948	1180	1.53	1.05	1950	8.5	19.1	1956	6.6	1946	5	0	13	28	3	FEBRUARY
MARCH	42.2	23.1	32.7	80	1939	-14	1948	980	2.06	2.25	1947	6.4	16.1	1948	8.0	1948+	5	0	6	26	1	MARCH
APRIL	58.1	34.5	46.3	86	1960	10	1954	560	2.96	1.70	1945	2.1	7.8	1952	6.5	1952	7	0	*	14	0	APRIL
MAY	69.7	44.5	57.1	90	1962+	23	1949	270	3.35	1.94	1942	T	T	1954+	T	1954+	7	*	0	3	0	MAY
JUNE	79.5	55.0	67.3	100	1953	29	1949	60	3.43	1.83	1949	0.0	0.0		0.0		7	2	0	*	0	JUNE
JULY	84.1	58.3	71.2	100	1940	39	1945	10	2.62	2.71	1949	0.0	0.0		0.0		5	6	0	0	0	JULY
AUGUST	82.7	57.2	70.0	102	1947	39	1951+	20	3.63	3.78	1952	0.0	0.0		0.0		6	4	0	0	0	AUGUST
SEPTEMBER	74.7	50.3	62.5	99	1953	27	1951+	140	2.77	3.38	1950	0.0	0.0		0.0		6	2	0	1	0	SEPTEMBER
OCTOBER	63.9	40.7	52.3	89	1953	18	1960	400	2.46	2.21	1954	0.1	1.0	1957	1.0	1957	5	0	0	6	0	OCTOBER
NOVEMBER	46.4	30.0	38.2	79	1950	-6	1949	800	2.00	1.78	1952	4.0	15.7	1951	10.0	1951	6	0	3	19	*	NOVEMBER
DECEMBER	34.5	20.1	27.3	65	1941	-11	1942	1150	1.71	1.66	1946	6.0	21.0	1951	9.0	1946	5	0	14	28	2	DECEMBER
Year	58.3	37.0	47.7	102	Aug. 1947	-19	Jan. 1951	6850	30.22	3.78	Aug. 1952	36.7	21.0	Dec. 1951	10.0	Nov. 1951	69	14	54	155	10	Year

(a) Average length of record, years.

T Trace, an amount too small to measure.

** Base 65°F

+ Also on earlier dates, months, or years.

* Less than one half.

CLIMATE OF ST. JOHNS, MICHIGAN

St. Johns is located in central Lower Michigan about twenty miles north of Lansing. The topography of the area is level to gently rolling. Soils vary from sandy loams to clay loams and are generally quite fertile. General farming is practiced with corn, beans and small grains produced. Considerable livestock is raised and much dairying is done.

The inland location of St. Johns away from Lakes Michigan and Huron, lessens the lake influence to some considerable extent but there is still a moderation of climate caused by the lakes. Prevailing westerly winds are cooled in the summer and warmed in the winter as they cross Lake Michigan. Easterly and northeasterly winds are also moderated in crossing Lake Huron and Saginaw Bay. Winds from the south and southwest have come over long land surfaces unaffected by the lakes, so there is a variation from a modified marine to a continental climate. Available weather data for the St. Johns area show that the highest temperature ever recorded here is 102° on August 6, 1947. The lowest of record is 22 below zero on February 10, 1899. Winters have an average of ten days with temperatures of zero or lower. At the other extreme, 100° or higher is recorded in about one year out of eight. Summers average fourteen days with 90° and above.

February, 1904 is the coldest month of record with an average temperature of 12.6°. July, 1901 is the warmest month of record with an average temperature of 76.6°. The average dates of the last freezing temperature in the spring and the first in the fall are May 12th and September 29th respectively.

Precipitation is heaviest during the growing months and averages 62% of the annual total during the six months period April through September. August has the largest average, 3.63 inches, and February is driest with an average of 1.53 inches. Largest amount ever recorded in one month is 8.00 inches in September, 1950. Hourly intensity of 1.2 inches or more occurs once in about two years and two hourly intensity of 1.5 inches or more occurs once in about two years. Hourly intensity of 2.1 inches or more occurs once in about twenty five years. Twenty four hourly amounts of 2.4 inches and 4.1 inches occur once in about two years and twenty five years respectively. Thunderstorms have a frequency of thirty eight per year as shown by Lansing Weather Bureau records (nearest First Order Weather Bureau Office). Relative humidity at 1 PM ranges from 71% in December and January to 50% in July at Lansing.

Snowfall totals 36.7 inches per year with a variation during a twenty four year record ranging from 16.2 inches in the 1949-50 season to 76.8 inches in the 1952-53 season. Six months of the year usually have measurable snow.

The cloudiest month is December with an average of twenty one cloudy days and 27% of possible sunshine and the least cloudy month is July when twelve clear days are reported with an average 72% of possible sunshine. Prevailing wind is southwest and the highest wind ever recorded in the area is 50 MPH. (Cloud and wind data taken from Lansing Weather Bureau records).

Degree day data is provided as an index of heating requirements for buildings. For example; April averages 560 degree days and February, 1180 degree days, which means that during an average February, fuel necessary for heating will be over twice that required for April. Degree days for a single day are obtained by subtracting the mean temperature from 65. The need for the heating of buildings is considered none or slight if a day has an average temperature of 65° or higher.

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Weather Bureau Office
East Lansing, Michigan

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1939	1.71	2.84	1.40	5.22	1.23	4.52	.52	1.85	1.83	2.37	.53	.61	24.63
1940	1.39	.44	.84	1.56	3.75	5.21	.46	7.56	1.24	2.93	3.04	1.99	30.41
1941	2.29	.62	1.55	1.59	3.01	2.49	.76	2.24	2.41	5.88	2.54	1.31	26.69
1942	1.51	.87	4.54	.51	6.92	3.75	3.24	2.34	5.52	3.27	2.72	2.59	37.78
1943	2.14	1.31	2.90	3.36	5.67	5.22	1.22	3.34	4.20	1.62	1.66	.26	32.90
1944	1.27	1.54	2.82	2.53	2.96	2.07	1.24	3.13	2.76	1.26	1.64	1.28	24.50
1945	.41	1.40	1.39	3.98	6.39	3.46	3.82	1.59	7.15	2.26	1.63	1.28	34.76
1946	1.90	1.98	1.61	.57	4.24	1.89	2.73	3.26	1.44	1.75	2.22	3.83	27.42
1947	2.92	.30	3.28	5.35	4.57	2.80	3.16	4.20	3.37	1.41	2.23	1.96	35.55
1948	.98	1.56	4.72	2.98	3.23	4.73	1.82	3.36	1.78	.87	1.82	2.06	29.91
1949	3.27	1.81	1.74	2.30	1.24	4.78	5.48	2.05	1.34	2.02	1.29	4.71	32.03
1950	3.87	3.02	2.09	4.32	1.50	5.25	5.77	1.81	8.00	1.38	2.34	2.15	41.50
1951	2.09	1.51	2.21	3.48	3.27	3.88	.68	5.65	2.77	3.85	2.57	2.44	34.40
1952	1.79	1.57	1.81	2.55	3.21	1.50	3.56	7.40	1.15	.17	3.69	1.79	30.19
1953	1.93	1.00	1.72	2.62	1.58	2.75	1.68	2.06	1.61	2.63	.97	1.72	22.27
1954	1.12	2.27	2.90	3.56	.90	3.98	1.48	2.79	1.93	6.32	2.67	2.10	32.02
1955	1.15	1.41	1.84	2.50	2.55	3.32	1.45	7.00	1.18	3.62	2.84	.94	29.80
1956	.56	1.90	2.33	3.67	6.83	2.84	2.92	5.32	.83	.46	1.27	.82	29.75
1957	1.01	2.18	1.44	4.61	5.50	4.18	6.15	1.39	2.09	3.78	2.48	1.71	36.52
1958	.73	.14	.19	1.46	.84	2.79	3.49	3.54	2.65	2.05	1.76	.39	20.03
1959	1.95	1.85	1.77	4.47	3.05	1.13	4.04	3.68	3.02	4.21	2.17	2.76	34.10
1960	2.36	2.33	.71	2.19	3.42	3.08	3.44	6.18	2.04	1.17	1.71	.39	29.02
1961	.35	1.26	2.61	4.31	1.35	2.80	1.86	3.99	3.88	1.93	1.64	1.52	27.50
1962	2.07	1.68	.93	1.31	3.10	3.92	1.97	1.36	2.17	1.91	.57	.41	21.40

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1939	25.0	25.8	32.7	43.9	60.8	68.7	72.0	72.0	64.6	51.5	38.1	32.8	49.0
1940	18.3	25.1	27.8	42.4	56.3	67.9	73.8	69.6	61.9	51.3	35.6	30.2	46.7
1941	25.4	23.4	29.1	50.8	61.8	69.4	74.1	68.9	66.0	52.8	41.9	35.0	49.9
1942	22.8	20.0	35.4	51.2	57.3	68.3	69.4	68.6	60.2	50.7	39.3	23.4	47.2
1943	17.8	25.1	29.5	41.3	54.2	69.2	71.6	70.3	57.6	47.7	35.5	25.2	45.4
1944	27.8	24.9	28.0	41.3	59.9	67.9	71.9	72.3	64.1	49.8	40.6	22.1	47.6
1945	16.8	23.9	46.6	49.4	51.1	63.2	68.4	69.6	62.8	48.8	39.5	22.4	46.9
1946	25.3	23.4	44.1	47.2	54.6	66.3	72.5	66.8	64.1	56.3	41.1	28.9	49.2
1947	25.7	20.4	28.6	43.7	52.7	64.1	69.3	76.5	63.9	59.1	33.9	25.9	47.0
1948	16.6	21.4	31.8	50.1	53.9	65.9	71.6	69.8	65.0	48.5	42.2	28.1	47.1
1949	27.6	26.6	33.4	45.6	58.5	70.8	73.4	70.1	58.7	55.7	36.2	30.3	48.9
1950	29.3	23.7	28.7	40.1	58.0	66.8	68.1	67.3	60.2	54.8	34.2	22.7	46.2
1951	23.8	25.2	33.8	44.2	59.5	65.1	70.0	66.6	59.2	52.8	29.7	25.4	46.3
1952	25.5	26.9	31.7	47.5	55.9	70.0	73.9	68.5	62.0	45.1	40.4	30.9	48.2
1953	26.8	29.0	35.9	43.1	58.5	69.3	72.2	70.9	62.7	54.3	41.9	30.3	49.6
1954	22.1	31.0	31.3	49.1	52.2	70.4	70.0	68.0	62.9	52.0	39.1	26.3	47.9
1955	22.9	24.0	32.5	53.1	59.1	66.0	76.3	74.2	62.2	54.2	35.7	25.2	48.8
1956	23.2	23.7	29.2	44.6	55.1	69.1	68.6	68.4	59.0	55.6	39.1	31.5	47.3
1957	18.8	27.8	34.4	48.3	55.7	67.2	71.0	68.7	60.4	48.5	38.7	31.5	47.6
1958	22.6	18.5	34.0	47.8	57.0	61.7	70.5	69.8	62.2	54.3	41.8	19.0	46.6
1959	17.8	22.3	32.2	47.2	62.6	68.8	70.8	73.7	67.3	51.5	31.9	32.6	48.2
1960	25.7	25.7	23.2	49.3	56.4	64.3	69.2	69.4	64.5	49.9	41.3	21.8	46.7
1961	20.0	27.8	37.2	43.4	55.5	66.7	71.5	69.5	68.0	55.0	40.8	28.5	48.7
1962	19.7	21.5	33.7	47.6	64.1	67.7	69.8	70.3	61.1	54.7	39.2	25.5	47.9

STATION HISTORY

The St. Johns station was established in 1887 but its location is unknown until it was moved to the City Water Works in 1904. This location was at 716 North Street. It remained there until closed in 1909. In 1938, it was re-opened at a location 0.3 miles southeast of the Post Office. In 1940, it was moved to the County Road Commission at 700 West State Street. In 1942, it was moved to a location four miles north of the Post Office. In 1956, the station was moved 1.5 miles west of the former location. In 1961, the station was moved to the St. Johns Sewage Treatment Plant and it is located there at the present time (1963).

DATES OF FREEZING TEMPERATURES IN THE SPRING AND FALL (1939 - 1950)

	Last in the Spring			First in the Fall		
Minimum Temperature	Earliest	Average	Latest	Earliest	Average	Latest
32° or below	4/25/41	5/12	6/08/49	9/03/46	9/29	10/24/41
28° or below	4/17/48	5/03	5/13/46	9/25/47	10/20	11/22/41
24° or below	4/03/41	4/22	5/13/46	10/02/50	11/05	11/24/41
20° or below	3/08/45	4/02	4/15/43	11/04/39	11/16	12/08/41
16° or below	3/07/45	3/27	4/13/50	11/11/40	11/27	12/28/39

Example in using table: The average date of the last temperature of 32° or colder in the spring is May 12th. The earliest date of this event in all springs of the 1939-1950 period was April 25, 1941. The latest date was June 8, 1949. In the fall, 32° or colder occurred for the first time as early as September 3, 1946, and as late as October 24, 1941. The average date is September 29th.