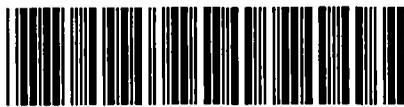


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MONTREAL CLIMATIC DATA FOR EXPO 67

This climatic information report has been prepared for the benefit of the millions of people planning to visit Expo 67 in Montreal during the period April 28 to October 27, 1967.

Because it is in the mid latitudes of the prevailing westerlies Montreal has a continental type climate with warm summers and cold winters. The weather is subject to frequent variations both from day-to-day and from one year to the next. The values given in the tables which follow are averages based on a long-term of years. It is to be expected that on any particular day there will be some variation from the average value.

Average afternoon high temperatures rise from about 60° near the beginning of May, to 80° in the latter half of July, dropping slowly to 60° again by the first week in October. During the summer months there are occasional incursions of moist tropical air from the Gulf of Mexico which gives spells of hot humid weather lasting a few days. Correspondingly the arrival of arctic air sometimes results in a few days with temperatures considerably below average values in all seasons of the year. Expo 67 is built on two islands and a peninsula in the middle of the St. Lawrence River. As a result summertime temperatures will be moderate as compared with those on the mainland so that slightly lower daytime temperatures and higher overnight temperatures will be expected at Expo compared to those in the downtown Montreal area. Visitors will welcome the light cooling breezes that develop in hot afternoons because of the temperature difference between the water and land.

During the summer months of June, July and August most of the rainfall occurs in the form of showers and thunderstorms. Storms of this type occasionally give large amounts of rainfall, but they generally do not last more than a few hours. In the spring and autumn more general rainfall may be expected from large travelling weather disturbances which usually move across the city from the west. Rainfall from this type of storm is of longer duration, but seldom lasts more than one or at the most two days.

Weather records are not available from the actual site of Expo 67. However, detailed records are available from the nearby airport at St. Hubert and from McGill University Campus in downtown Montreal. The following text and climatic tables have been prepared from data observed at these two sites.

SUMMARY BY MONTHS

April - Temperatures usually increase from day-to-day in April with high temperatures reaching the mid 50's by the end of the month, while at night low temperatures are in the neighbourhood of 40°F.

May - The month of May usually sees the beginning of Montreal's summer. Daytime high temperatures of 60°F at the beginning of the month increase to 70°F at the month's end, while nighttime temperatures increase from 42°F to 50°F in the same period. Thunderstorms occur on the average on 2 days during May. Normal precipitation totals 3 inches for the month. Snow sometimes is observed in May but rarely amounts to more than a few flakes.

June - June is a summer month with afternoon highs in the 70's and overnight lows ranging from 55°F to 60°F. Precipitation is showery in nature with an average of 4 days with thunderstorms for the month. These usually occur in the late afternoon or evening. The average total precipitation for the month is about 3½ inches. On the average there are nearly 8 hours of bright sunshine per day. An average June has only 2 days with no sunshine.

July - July is the warmest month with daily maximum temperatures reaching 80°F and minimum temperatures averaging 62°F. Sunshine averages in excess of 8 hours per day. Precipitation is showery with an average of 6 thunderstorm days for the month.

Thunderstorms may occur at anytime throughout the day, but as in June they are most frequent in the late afternoons and evenings. Wholly overcast or rainy days are comparatively rare.

August - August weather is much the same as that in July. However, near the end of the month temperatures become a little cooler and there are fewer rain showers.

September - September sees the beginning of autumn with daytime temperatures of 70°F at the beginning of the month, gradually falling to 62°F by the end of the month. Average nighttime temperatures in September decline from 55°F to 48°F. Precipitation is more frequent, but the number of thunderstorm days declines to an average of 2 for the month. The shorter days of September result in an average of 5½ hours of bright sunshine which is 49% of the possible sunshine at Montreal's latitude.

October - Periods of calm, mild, sunny but hazy skies and cool nights often referred to as Indian Summer may occur early in October. These periods usually, but not always, follow a sharp cold snap during which there is a flurry of snow. The average snowfall for October is ½ an inch.

Much of the above information has been obtained from the booklet *The Climate of Montreal* by R.W. Longley. Those wishing a more complete account of Montreal's climate may purchase this booklet from the Queen's Printer in Ottawa at a cost of 75 cents.

Climatic tables for Montreal City (McGill) and St. Hubert Airport are given on the next pages.

June 20, 1966

SRA/mi

Climatology Division,
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CLIMATIC DATA

Montreal City (McGill Observatory)

St. Hubert Airport

Week	Temperature (°F)		Precipitation (inches)	Temperature (°F)		Precipitation (inches)
	Average Maximum	Average Minimum		Average Maximum	Average Minimum	
April 23 - 29	56	41	.73	57	37	.67
April 30 - May 6	59	43	.70	60	40	.64
May 7 - 13	63	46	.67	63	43	.63
May 14 - 20	66	49	.71	66	45	.63
May 21 - 27	68	51	.76	69	48	.64
May 28 - June 3	70	53	.80	71	50	.67
June 4 - 10	72	56	.82	73	53	.71
June 11 - 17	74	58	.84	75	55	.76
June 18 - 24	76	59	.84	76	56	.81
June 25 - July 1	77	61	.86	77	58	.85
July 2 - 8	78	62	.89	79	59	.84
July 9 - 15	79	63	.92	80	60	.83
July 16 - 22	80	63	.93	80	60	.79
July 23 - 29	80	64	.89	81	61	.77
July 30 - Aug. 5	79	64	.83	80	60	.74
Aug. 6 - 12	78	62	.78	79	59	.69
Aug. 13 - 19	77	61	.74	78	57	.65
Aug. 20 - 26	75	59	.77	76	55	.68
Aug. 27 - Sept. 2	73	57	.82	74	54	.74
Sept. 3 - 9	71	55	.86	71	52	.78
Sept. 10 - 16	68	53	.90	69	50	.83
Sept. 17 - 23	66	51	.89	66	48	.77
Sept. 24 - 30	63	49	.84	63	45	.77
Oct. 1 - 7	60	46	.79	60	43	.69
Oct. 8 - 14	58	44	.73	57	40	.63
Oct. 15 - 21	55	41	.70	54	38	.63
Oct. 22 - 28	52	39	.72	51	36	.66

MONTHLY DATA

Montreal City

Element	Apr.	May	June	July	Aug.	Sept.	Oct.
Extreme Maximum Temperature (°F)	86	94	94	97	96	91	84
Extreme Minimum Temperature (°F)	2	23	34	46	43	32	19
Average Number of Days with Rain	13	13	13	13	10	14	12
Average Number of Days with Thunderstorms	1	2	4	6	4	2	1
Average Number of Hours of Bright Sunshine per Day	5.1	6.7	7.7	8.2	7.7	5.6	4.3
Percentage of Possible Sunshine	41	49	54	59	60	49	42
Average Number of Days with no Sun	5	3	2	1	2	3	6

St. Hubert Airport

Element	Apr.	May	June	July	Aug.	Sept.	Oct.
Extreme Maximum Temperature (°F)	85	92	95	96	96	91	85
Extreme Minimum Temperature (°F)	5	25	34	42	37	27	16
Average Number of Days with Rain	12	12	12	12	9	13	11
Average Number of Days with Thunderstorms	1	2	3	4	3	2	1

FREQUENCY TABLES FOR ST. HUBERT AIRPORT

Percentage Frequencies of Hourly Temperatures in Various Ranges
Based on the Period 1956 - 1965

Range (°F)	Apr.	May	June	July	Aug.	Sept.	Oct.
Less Than 30	5	*					2
30 - 39	37	6	*		*	3	19
40 - 49	36	23	5	*	2	16	35
50 - 59	16	35	25	14	20	32	32
60 - 69	5	24	38	42	41	32	10
70 - 79	1	10	25	33	30	14	2
80 - 89	*	2	7	10	7	3	
90 or More		*	*	1	*		

* Less than 0.5%

Percentage Frequencies of Hourly Wind Speeds in Various
Speed Groups Based on the Period 1956 - 1965

Speed Groups (mph)	Apr.	May	June	July	Aug.	Sept.	Oct.
0 - 9	46	46	48	54	58	55	48
10 - 19	42	43	43	40	38	38	43
20 - 29	11	10	9	5	5	7	8
30 or More	1	1	1	*	*	*	1

* Less than 0.5%