Environment Canada / Environnement Canada

Climatic Perspectives

Monthly Review — OCTOBER – 1989 — *Vol. 11*

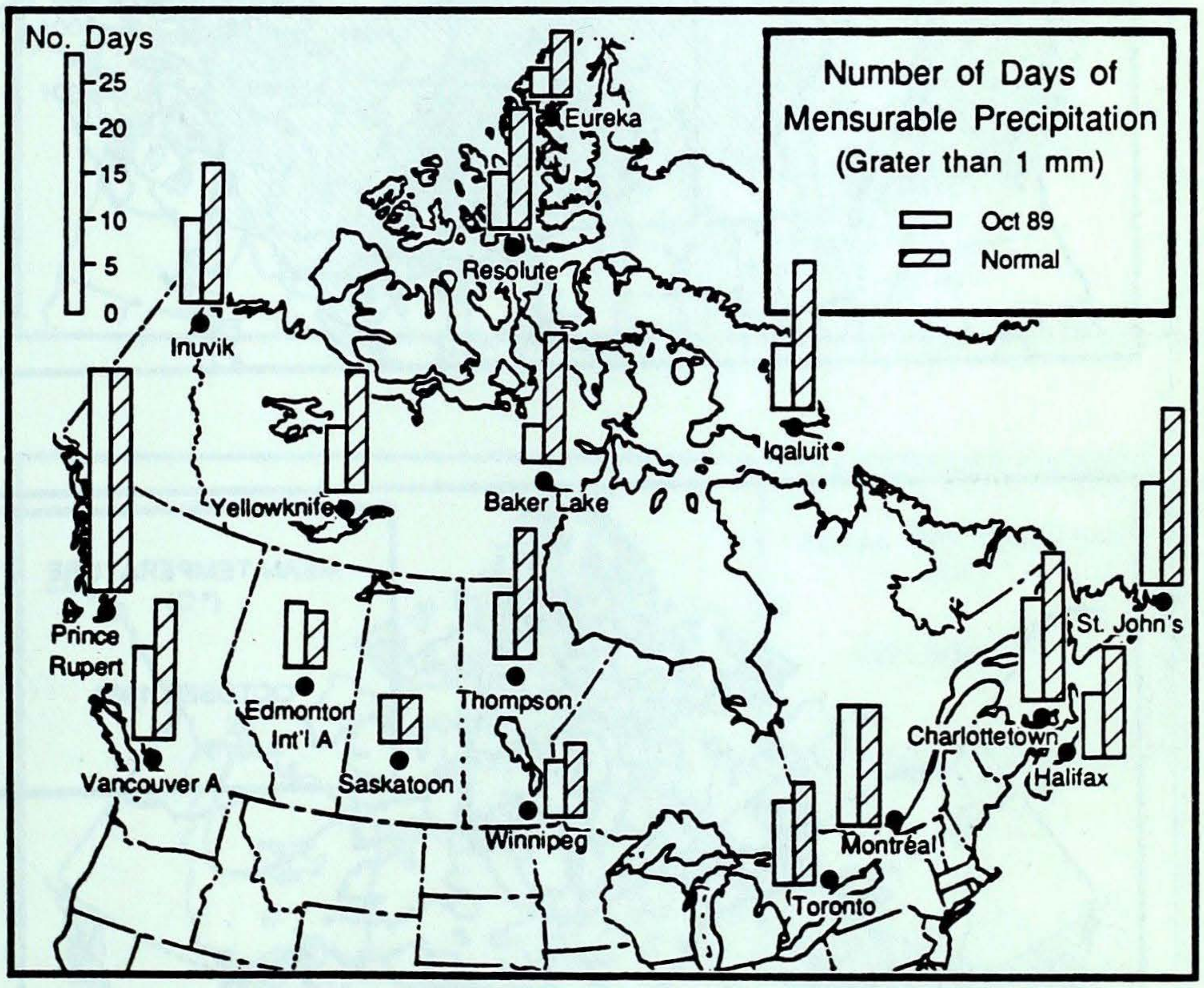
CLIMATIC HIGHLIGHTS

DRAMATIC TEMPERATURE FLUCTUATIONS

Despite rather unspectacular monthly temperature anomalies during October '89, the week-to-week variability across the country was striking, particularly during the first and last weeks of the month.

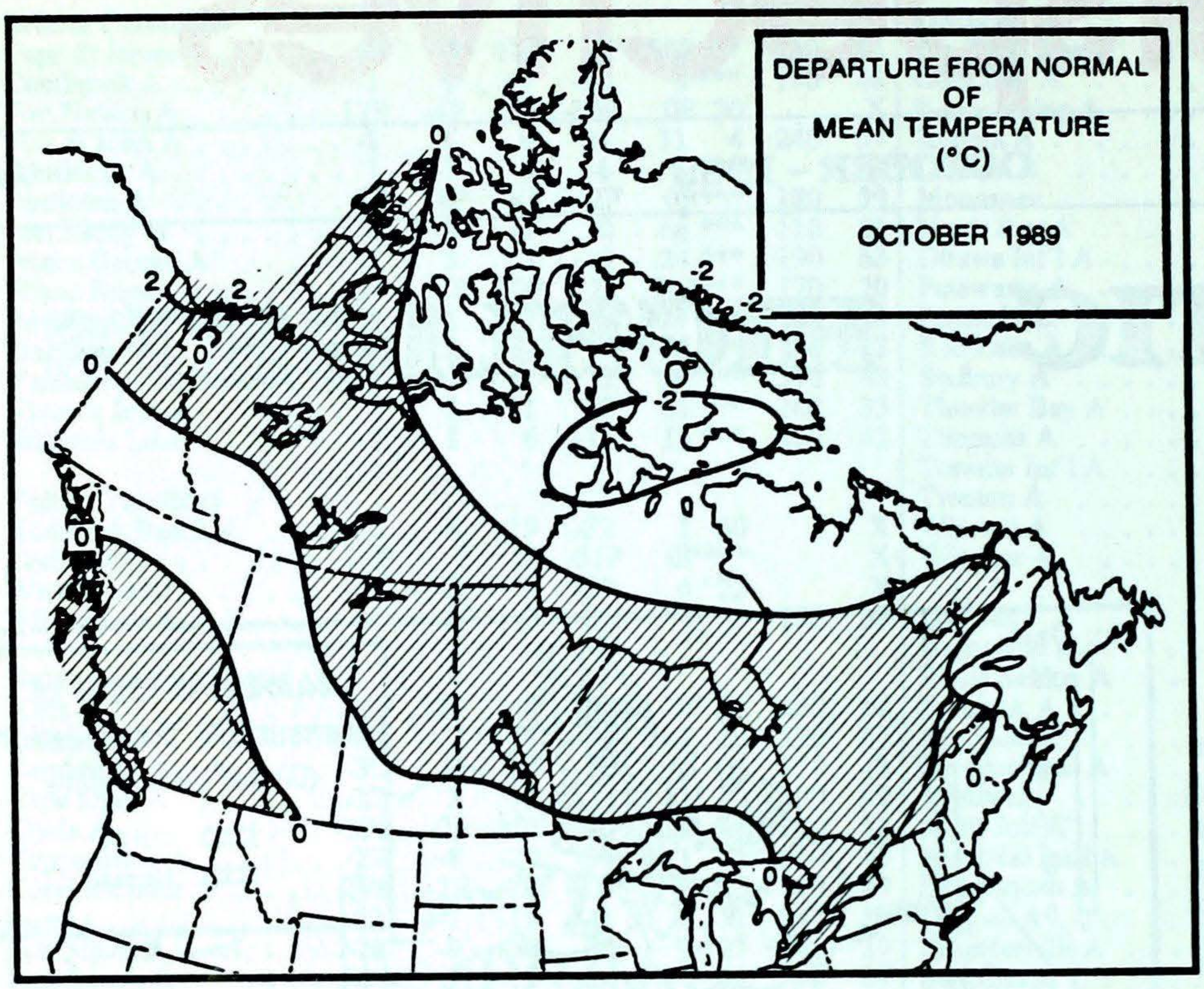
During the first week of the month, the western and most of the northern parts of Canada enjoyed warm, dry, Indian summer weather. Departures of 6 to 8°C were recorded across the Yukon, the District of Mackenzie, Northwest Territories and most of the Arctic. On the other hand, the weather was cool, particularly across the southern parts of Saskatchewan, Manitoba and Ontario.

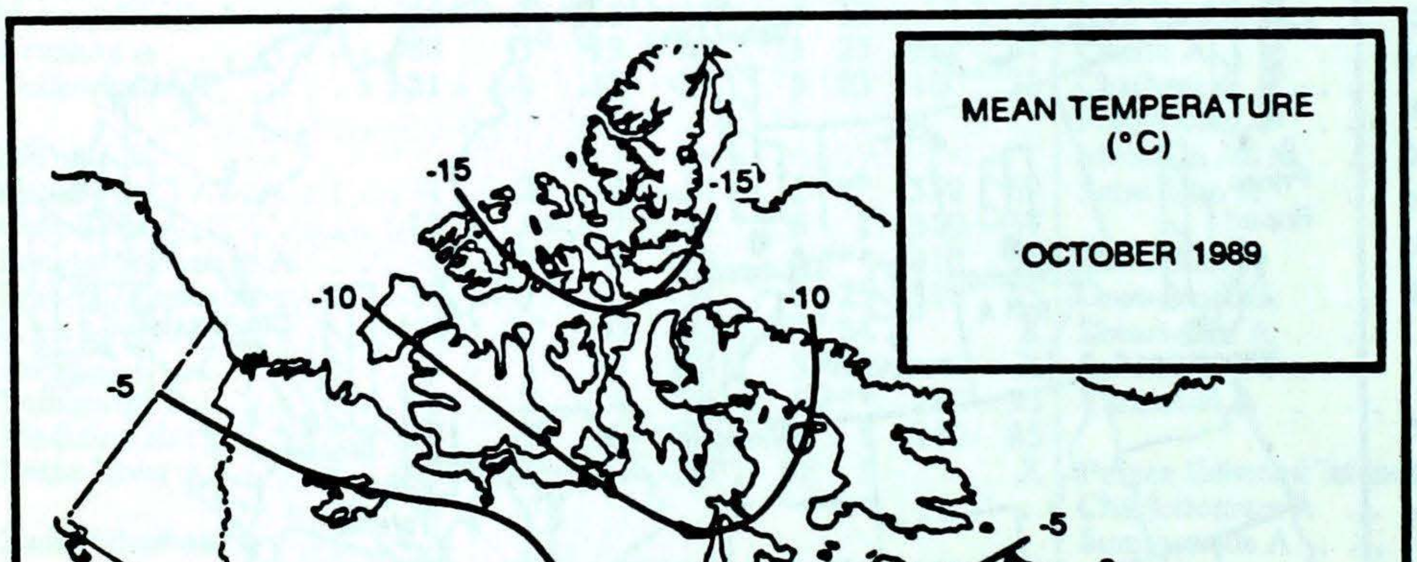
During the last week of the month there was a reversal of weather types as the western parts of the Northwest Territories and the Yukon experienced well-below-normal temperatures while the rest of the country, particularly Ontario and Québec basked in a period of Indian summer. Parts of Ontario and Québec recorded temperatures in the mid-twenties. Temperatures across southern Ontario topped 20°C or more on six consecutive days. On the down side, high pollution levels were recorded at both Montréal and Toronto, a common occurrence accompanying Indian summer.



The country, on the whole, experienced a dearth of precipitation. Below-normal precipitation was also reflected by the low number of days of measurable precipitation as compared to the 30-year normal. Fall soil moisture is depleted across southern Alberta, southwestern Saskatchewan and southern Manitoba.

Assuming normal amounts of winter snow cover and spring rains, the Winnipeg Climate Centre predicts that by mid-May 1990, crops in southeastern Alberta, southwestern and south-central Saskatchewan may suffer from inadequate soil moisture.





Across the country

Yukon

Generally, mean temperatures in the Yukon were close to normal, except in the extreme north, where anomalies were 3 degrees above normal. Whitehorse finally succumbed to a month which averaged out to be below normal after experiencing 5 consecutive months of above-normal temperatures.

The first extensive outbreak of cold Arctic air occurred during the second week of the month. Rain changed to snow, and road conditions deteriorated. By the third week, temperatures had dropped into the minus thirties in the north. The last week of the month saw the Arctic front oscillate back and forth across the southern half of the Territory, allowing large fluctuations in both daily temperatures and forms of precipitation. By month's end, snow covered almost the entire Yukon.

Northwest Territories

With the passage of the autumnal equinox, temperatures in the Arctic and the Northwest Territories continued their slide into a winter regime. By the middle of the month, snowfalls and sub-freezing daytime temperatures were common in the Arctic archipelago.

In the Northwest Territories, the first substantial snowfalls occurred in the District of Keewatin. Weather warnings for blizzards, blowing and drifting snow and gales were issued regularly.

Ferries crossing the Peel and Mackenzie Rivers were taken out of service just before freeze-up during the latter half of the month. As a result, motorists and transports travelling on the Dempster Highway had to wait a couple of weeks for ice bridges to be built at the river crossings. At the end of the month, many of the smaller lakes were covered with ice, but Great Bear Lake was only partially ice-covered owing to its size. Further to the south, the ferry at Fort Simpson was operating on a day-to-day basis into

November. The river crossing at Fort Providence, linking the Mackenzie Highway to Yellowknife, was still operational at the end of the month.

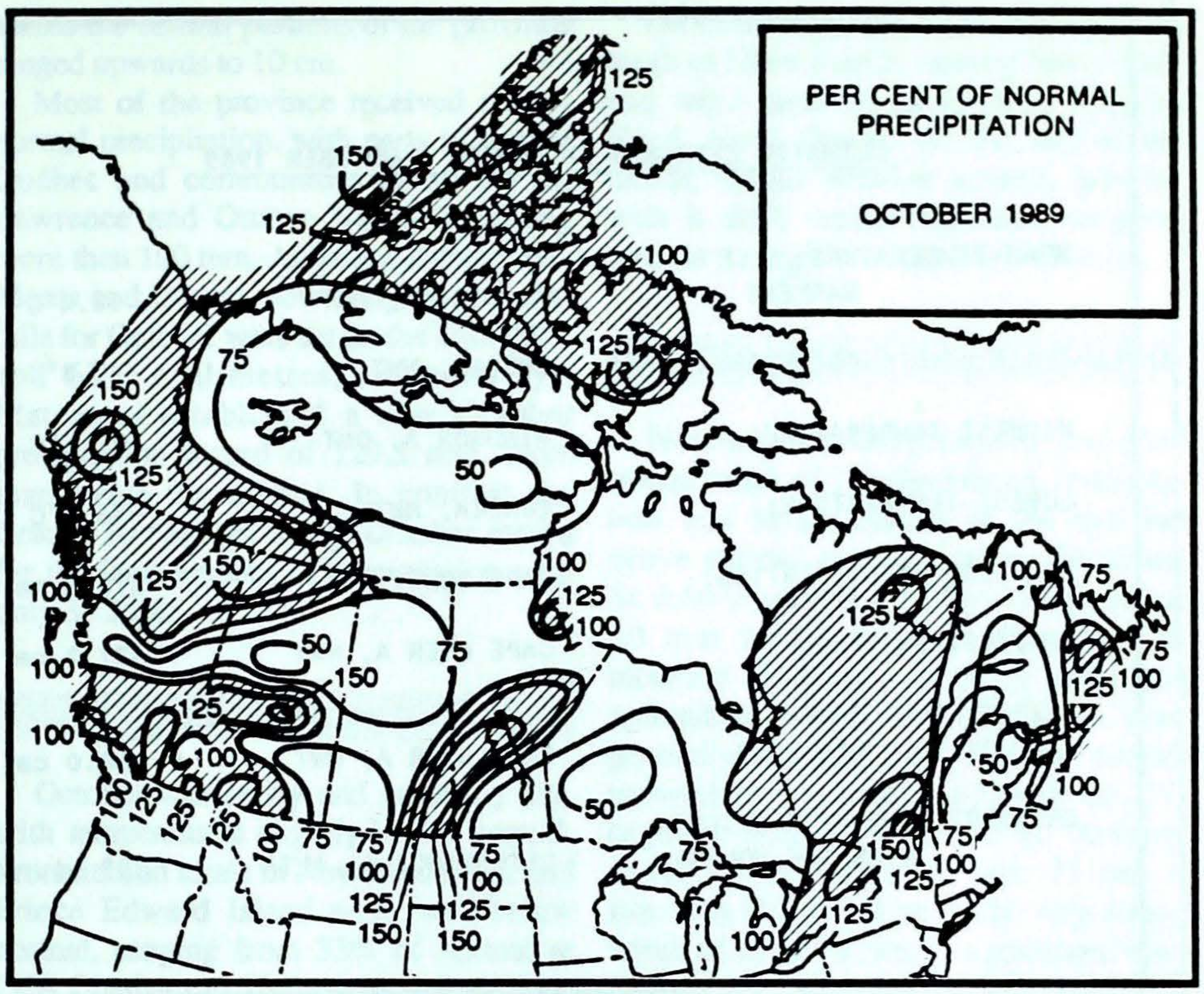
British Columbia

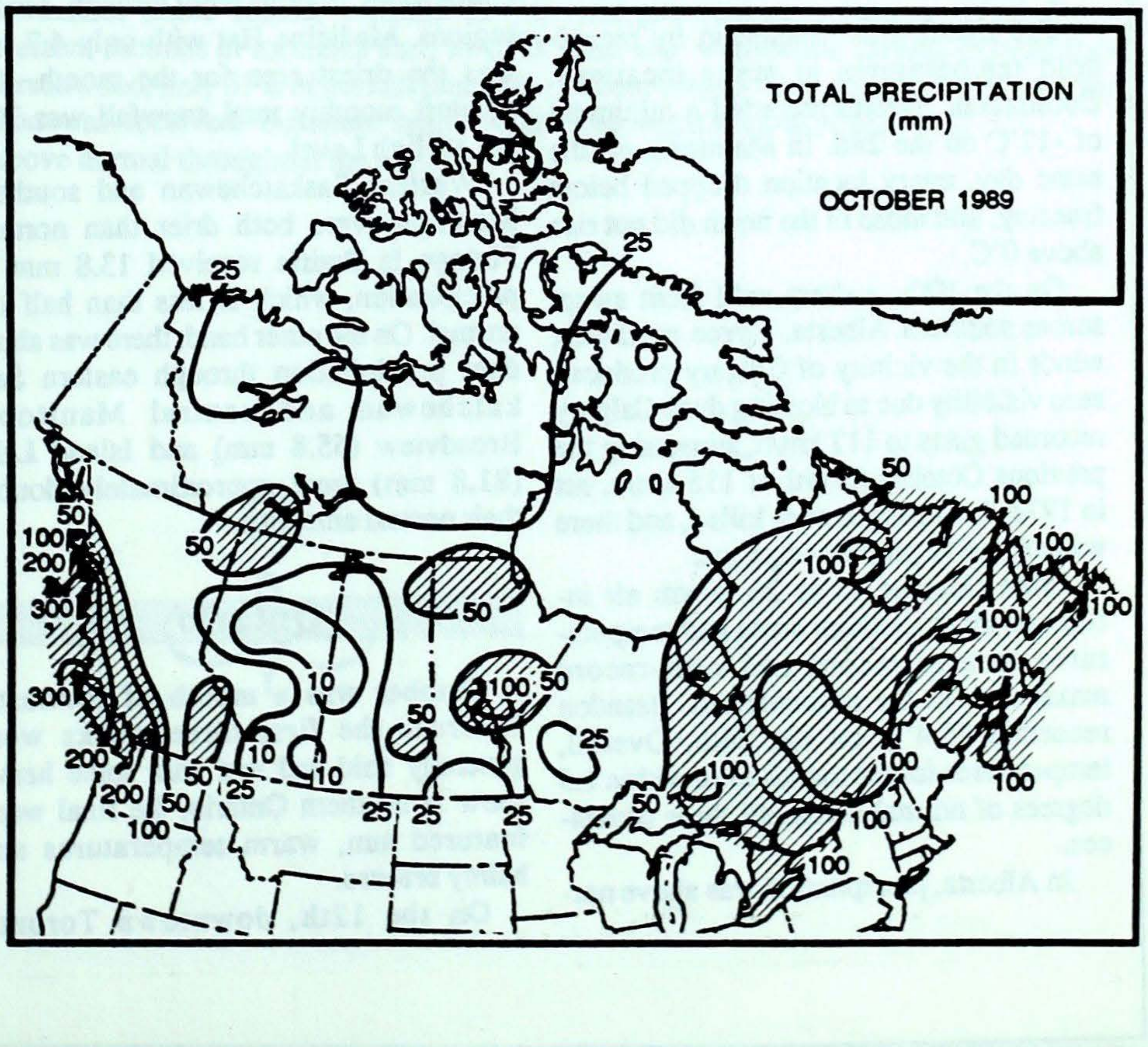
An atmospheric ridge of high pressure dominated the weather pattern during the first part of the month, producing for the most part, dry and sunny weather conditions. Temperatures this month averaged very close to normal although on a daily and weekly basis there were some significant temperature fluctuations. Especially notable were the mild temperatures that covered the province at the beginning of the month, and later in the period, the incursion of cold Arctic air from the north.

The lack of a significant snow cover in the north allowed the ground to freeze quickly, which enabled logging companies to move heavy equipment into the bush earlier than usual this season. At first, heaviest snowfalls occurred on the windward side of the western Cordillera, but by month's end all northern communities reported between 5 and 25 centimetres of snow on the ground.

Overall, precipitation for the month varied widely, with above-normal amounts reported in the northern and southern portions of the province. Late-season thunderstorms, associated with heavy downpours and strong winds, moved across the southern interior during the middle of the month.

Towards month's end, a series of Pacific frontal systems produced unsettled weather conditions, hindering and eventually ending slash-burning operations for the season. As these Pacific storm systems approached the mainland, gale-force winds occurred recurrently, particularly along the north and central coast. Sunshine was unusually plentiful inland near the north coast; in contrast, northeastern B.C. residents received approximately half their normal hours of bright sunshine for the month.





CLIMATIC EXTREMES IN CANADA - OCTOBER 1989

MEAN TEMPERATURE: WARMEST	WINDSOR A, ONT	11.4°C
COLDEST	EUREKA, NWT	-23.8°C
HIGHEST TEMPERATURE:	WINDSOR A, ONT	27.5°C
LOWEST TEMPERATURE:	EUREKA, NWT	-36.5°C
HEAVIEST PRECIPITATION:	CAPE SCOTT, BC	373.8 mm
HEAVIEST SNOWFALL:	CAPE DYER A, NWT	127.2 cm
DEEPEST SNOW ON THE GROUND ON OCTOBER 31, 1989:	CAPE DYER A, NWT	58.0 cm
GREATEST NUMBER OF BRIGHT SUNSHINE HOURS:	LETHBRIDGE A, ALTA	209 hours

Prairie Provinces

The month was ushered in by record-cold temperatures at many locations. Coronation, Alberta recorded a minimum of -12°C on the 2nd. In Manitoba, on the same day, every location dropped below freezing, and those in the north did not rise above 0°C.

On the 10th, a sharp cold front swept across southern Alberta. Fierce northwest winds in the vicinity of Calgary produced zero visibility due to blowing dust. Calgary recorded gusts to 117 km/h, surpassing the previous October record of 115 km/h, set in 1978. Two people were killed, and there was extensive property damage.

From October 18 to 26, warm air infiltrated most southern areas and temperatures rose to record and near-record maximums in the mid-twenties. Brandon recorded 25.4°C on the 24th. Overall, temperatures for the month were within 1.5 degrees of normal across all three provinces.

In Alberta, precipitation was above normal across the High Level and Fort Chipewyan regions and through central regions. Medicine Hat with only 4.7 mm was the driest area for the month. The greatest monthly total snowfall was 30.9 cm at High Level.

Western Saskatchewan and southern Manitoba were both drier than normal. Portage la Prairie received 13.8 mm of precipitation, which is less than half the normal. On the other hand, there was abundant precipitation through eastern Saskatchewan and central Manitoba; Broadview (55.8 mm) and Island Lake (81.8 mm) were approximately double their normal amounts.

Ontario

October was a month of contrasts. Whereas the first three weeks were generally cold and wet with some heavy snow in northern Ontario, the final week featured sun, warm temperatures and balmy breezes.

On the 12th, downtown Toronto received its earliest measurable snowfall in 37 years. Wawa's 44 cm of snow and 15 cm at Windsor set new records for October. The last week of the month featured a beautiful Indian summer. Temperatures rose to the mid-to-high teens and low twenties across most of Ontario. In southern Ontario, temperatures topped 20°C on 6 consecutive days. However, with the warm weather, fog was thick during the morning hours, causing several serious motor vehicle accidents. Accompanying the fog, there were high air pollution conditions, especially in the Toronto and Hamilton regions.

On Saturday, October 14, a severe thunderstorm complex developed rapidly along a warm front, striking south-central Ontario during the afternoon and evening hours. Waterspouts and funnel clouds were reported, along with torrential rain, hail and damaging winds. Along the Toronto waterfront, winds gusted to 124 km/h. The thunderstorms produced startling water-level fluctuations on Lakes Ontario, Simcoe, Huron and Georgian Bay. In some cases water levels dropped by almost two metres and then recovered, all in a matter of hours. This seiche phenomenon was caused by the strong winds and pressure differences generated by these storms. Severe thunderstorms redeveloped again on Sunday in the southern Georgian Bay region, prompting more weather warnings.

Despite this month's contrasting weather, temperatures were within 1.6 Celsius degrees of normal. Precipitation was very prevalent at the beginning of the month and practically non-existent at the end, allowing for some perfect harvesting weather. The driest area was the northwest, 25 to 75% of normal precipitation. Sioux Lookout recorded only 17 mm of precipitation, making it the driest in the province. Wawa was the wettest with 125 mm, followed by Kingston and Muskoka's 117 mm.

Québec

Despite below-normal temperatures during the first three weeks of the month, Indian summer weather over southwestern Québec during the last week of October resulted in above-normal mean-monthly temperatures. Mean temperatures during the final week of the month were as much as 10 degrees above normal. It has been two years since southern Québec experienced an Indian summer, with the last one in 1987 lasting only 3 days.

The sunny and warm weather regime started on Sunday, October 22, and by Wednesday through to the end of the month approximately thirty new daily high temperature records were established in the southwestern portion of the province. Associated with this very stable air mass was dense early morning fog and a pollution index which climbed to unacceptable levels for several days.

Although the month ended on a sunny note in the southwest, near the southern Hudson Bay coastline and along the north coast, overall total hours of bright sunshine in the province were below normal. The extreme north showed the greatest deficiency of sunshine, in some cases almost half of what is normally expected.

In northern Québec, mean temperatures were frequently below normal and snowfalls exceeded 25 cm. Shefferville recorded 89.4 cm of new snow this month, which is twice their normal. Snowfalls across the central portions of the province ranged upwards to 10 cm.

Most of the province received above-normal precipitation, with parts of central Québec and communities along the St. Lawrence and Ottawa Valley receiving more than 100 mm. At Sainte-Agathe-des-Monts and Dorval, new daily record rainfalls for October were set on the 20th (69.2 and 63.8 millimetres, respectively). Matagami established a new October precipitation record of 129.3 mm, more than twice the normal. In contrast, La Grande Rivière set a new October record for the least amount of precipitation with only 38.2 mm.

Maritimes

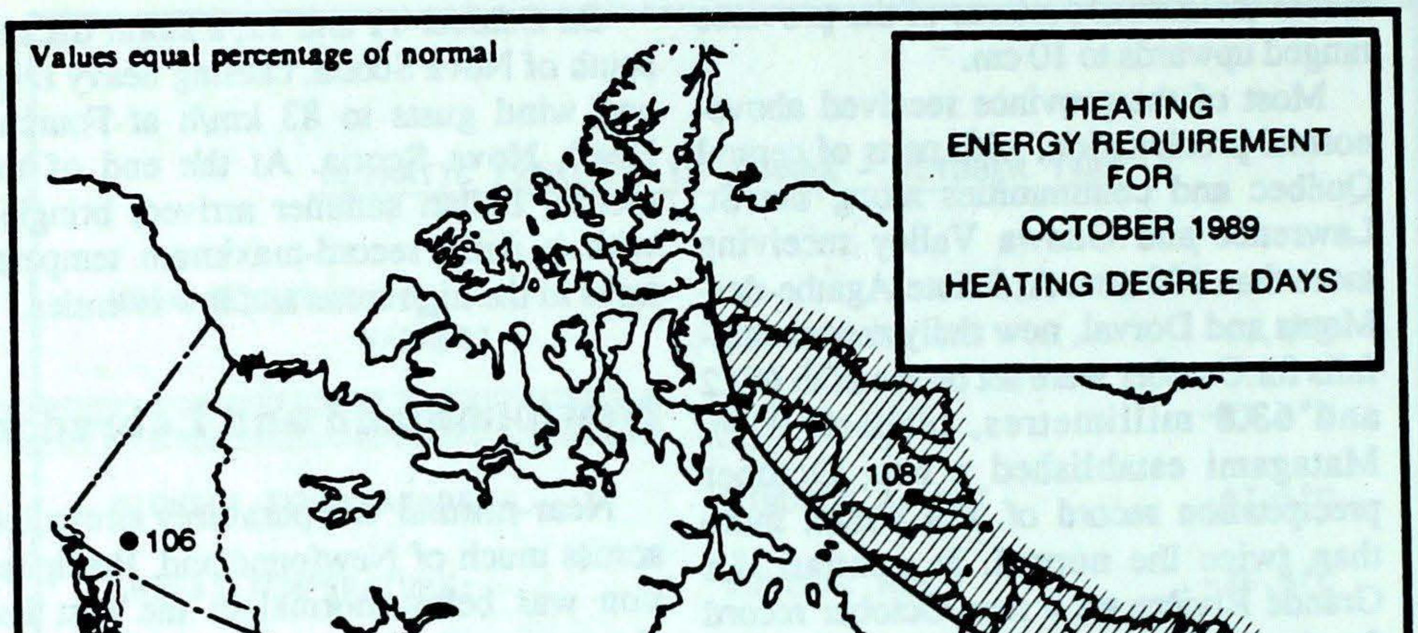
October was sunny and generally dry, with temperatures slightly-below normal. Precipitation totals in New Brunswick and Prince Edward Island were well-below normal, ranging from 33% of normal at CFB Chatham to 70% of normal at Charlottetown. In Nova Scotia, eastern locations were above normal, such as 151% of normal at Sable Island, whereas in the western sections at locations such as CFB Greenwood, only 61% of normal precipitation was received. Sunshine hours were above normal throughout the region.

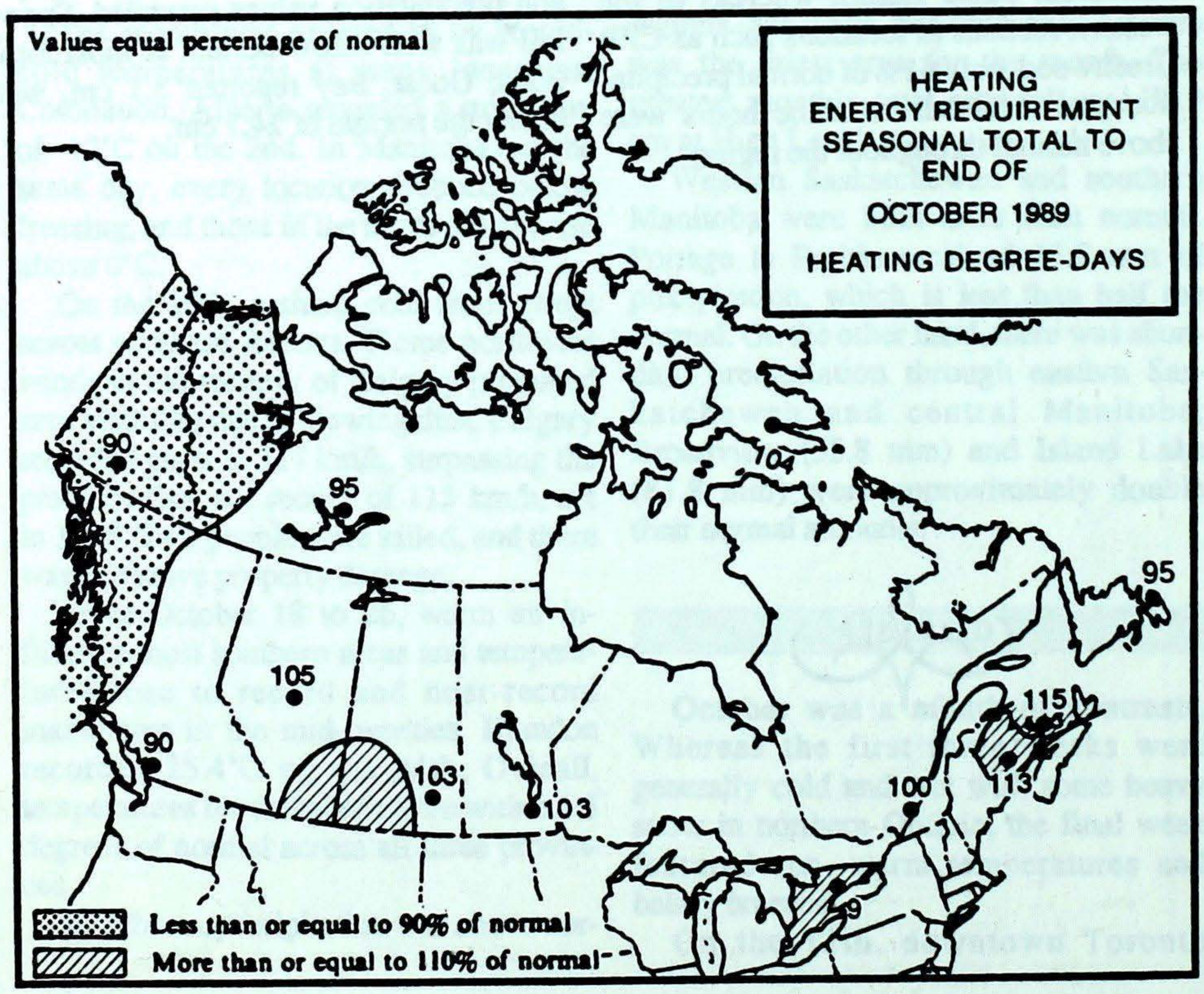
On October 11 and 12, a storm tracked south of Nova Scotia, causing heavy rains and wind gusts to 83 km/h at Fourchu Head, Nova Scotia. At the end of the month, Indian summer arrived, bringing with it daily record-maximum temperatures in the high teens and low twenties.

Newfoundland and Labrador

Near-normal temperatures prevailed across much of Newfoundland. Precipitation was below normal in the east but above normal at most western locations. St. John's recorded 91.3 mm of rain, about 50 mm below normal; Stephenville recorded 161.8 mm, compared to the normal of 11.6 mm. Snowfall totals were generally less than 2 cm, whereas normal snowfall for the month is 5 to 10 cm. Exceptions were La Scie and St. Anthony which reported totals of near 25 cm. A storm on October 9 produced very strong winds of up to 133 km/h in southern Newfoundland. Fishermen in Bonavista Bay reported some damage to equipment.

In Labrador, near-normal temperature and precipitation values prevailed. Snowfall was well-below normal at most locations; Goose Bay reported 3.1 cm, well below the normal of 24.7 cm.



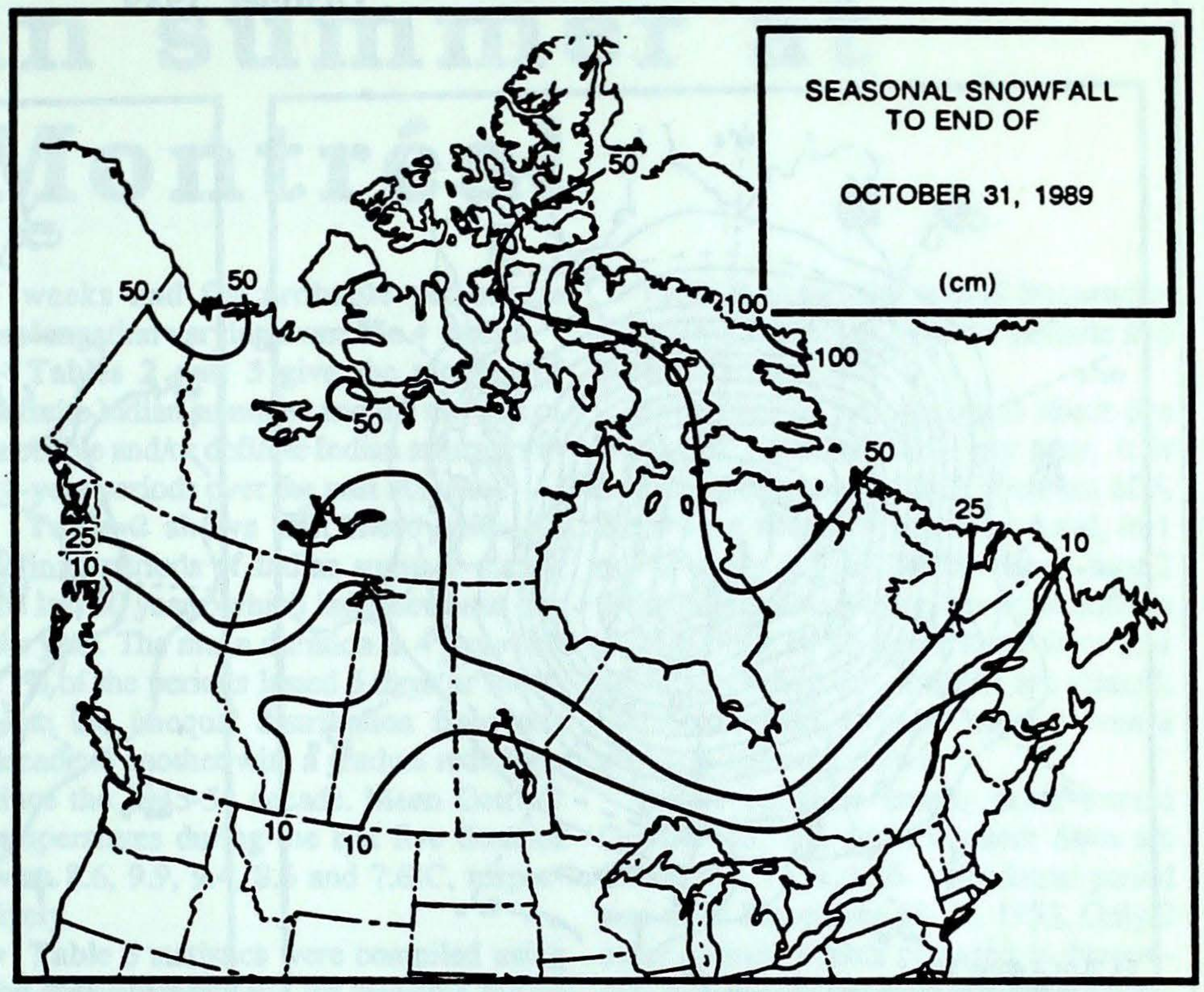


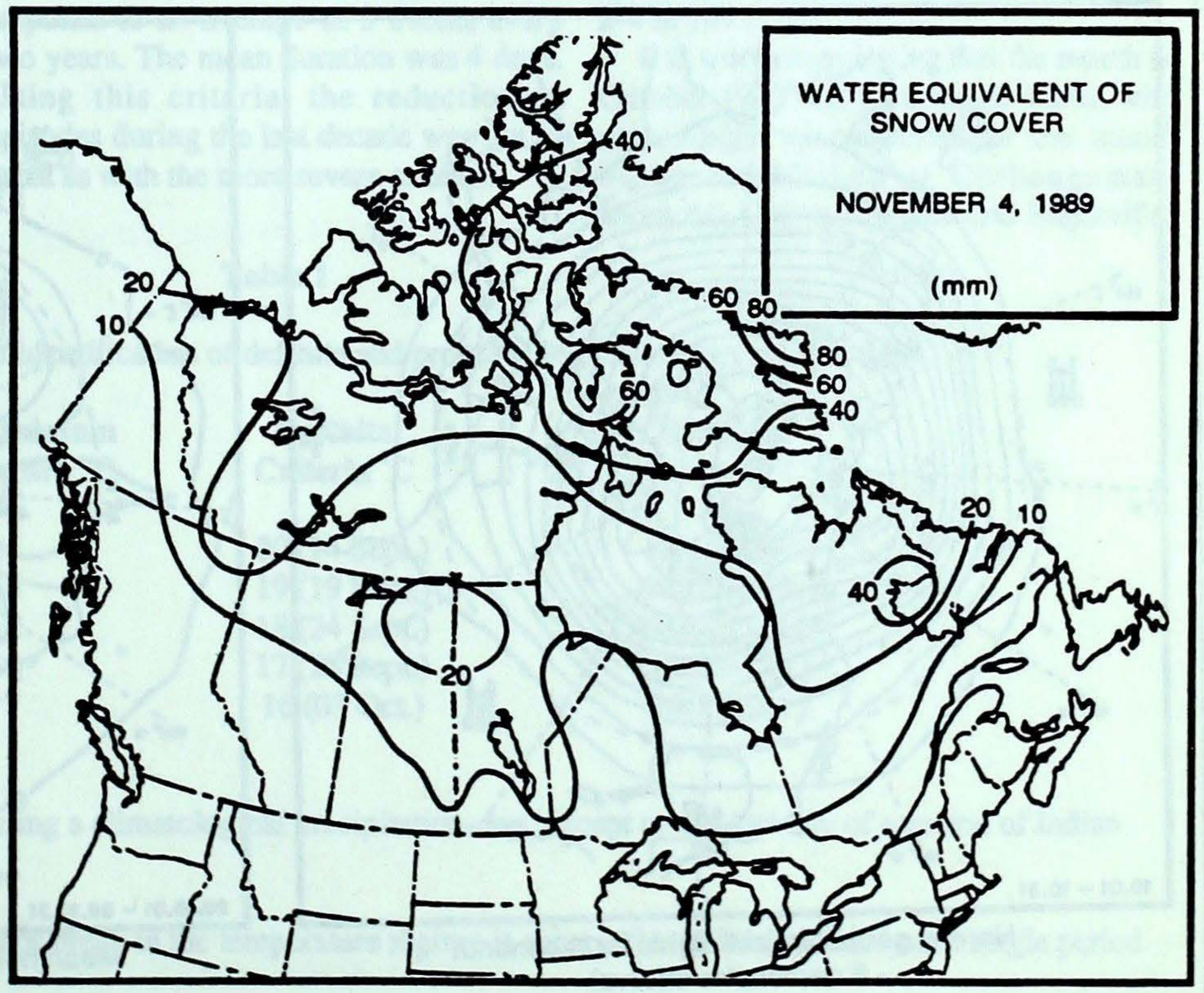
SEASONAL TOTAL OF HEATING DEGREE-DAYS TO END OF OCTOBER

	1989	1988	NORMAL
BRITISH COLUMBIA			
Kamloops	384	403	393
Penticton	408	388	393
Prince George	773	856	874
Vancouver	374	398	416
Victoria	503	514	492
YUKON TERRITORY			
Whitehorse	1031	1232	1149
NORTHWEST TERRITORIES			
Iqaluit	1927	1567	*
Inuvik	1430	1631	1623
Yellowknife	1060	1123	1121
ALBERTA			
Calgary	710	753	748
Edmonton Mun	703	681	667
Grande Prairie	814	811	844
SASKATCHEWAN			
Estevan	580	593	535
Regina	628	686	609
Saskatoon	659	714	645
MANITOBA			
Brandon	657	710	619
Churchill	1255	1314	1386
The Pas	787	771	770
Winnipeg	563	627	547
ONTARIO			
Kapuskasing	771	828	786
London	397	662	597
Ottawa	411	520	420
Sudbury	579	634	565
Thunder Bay	683	710	658
Toronto	382	449	351
Windsor	292	352	249
QUEBEC			
Baie Comeau	858	905	848
Montréal	390	511	389
Quebec	517	652	540
Sept-Iles	913	925	919
Sherbrooke	582	670	612
Val-d'Or	714	807	752
NEW BRUNSWICK			
Charlo	650	733	664
Fredericton	545	609	483
Moncton	555	593	501
NOVA SCOTIA			
Halifax	*	439	439
Sydney	560	579	471
Yarmouth	517	521	502
PRINCE EDWARD ISLAND			
Charlottetown	539	560	468
NEWFOUNDLAND			
Gander	682	723	694
St. John's	665	665	702

SEASONAL SNOWFALL TOTALS (cm)
TO END OF OCTOBER

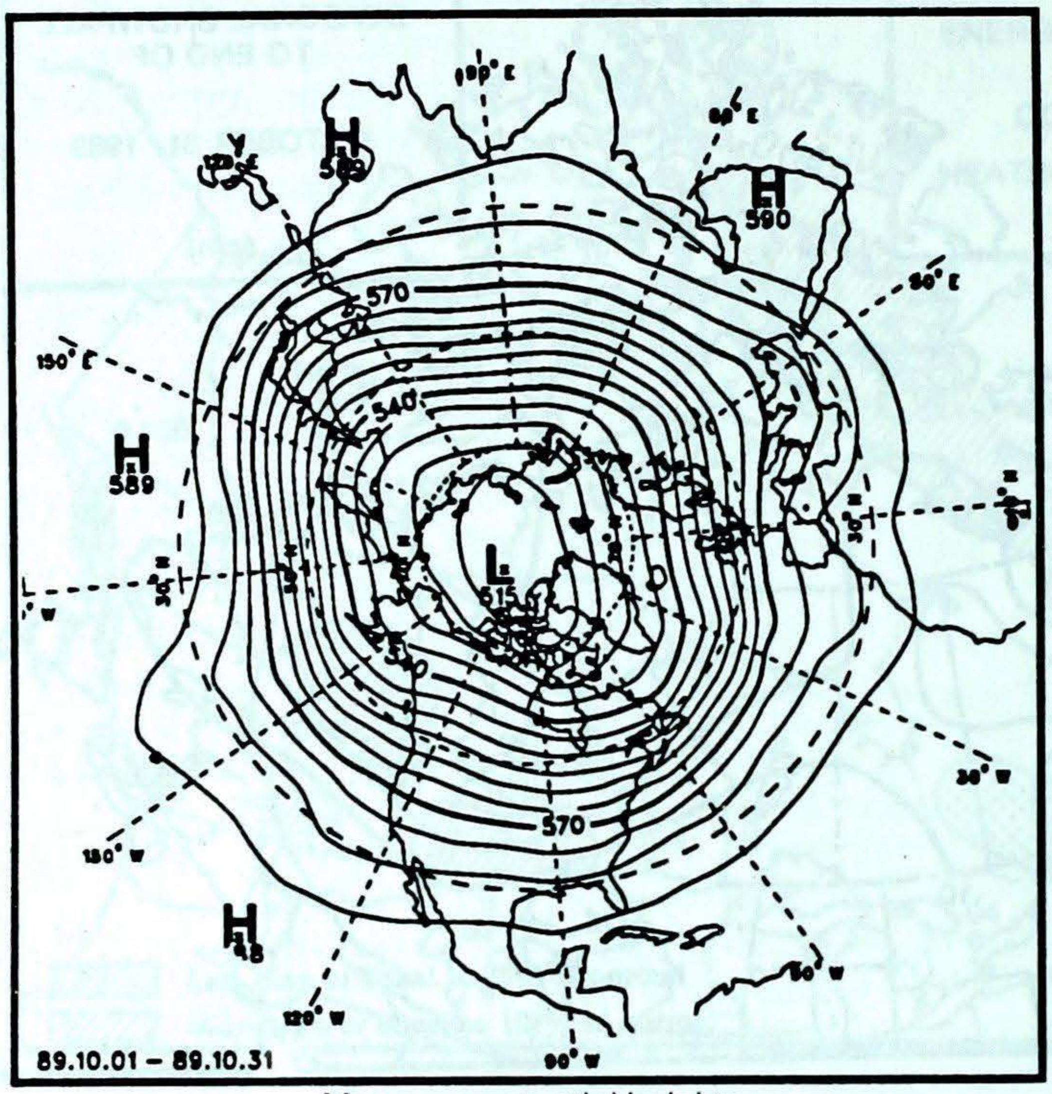
	1989	1988	NORMAL
YUKON TERRITORY			
Whitehorse	30.4	19.0	21.4
NORTHWEST TERRITORIES			
Cape Dyer	178.0	289.8	54.3
Inuvik	71.8	48.0	53.0
Yellowknife	17.6	10.6	26.7
BRITISH COLUMBIA			
Kamloops	0.0	0.0	0.4
Port Hardy	0.0	0.0	0.2
Prince George	1.2	0.0	10.4
Vancouver	0.0	0.0	0.0
Victoria	0.0	0.0	0.0
ALBERTA			
Calgary	3.6	14.3	19.4
Edmonton Namao	3.4	2.4	9.7
Grande Prairie	13.4	1.4	16.3
SASKATCHEWAN			
Estevan	5.4	0.6	8.2
Regina	6.4	2.2	10.0
Saskatoon	12.0	2.2	10.4
MANITOBA			
Brandon	0.4	9.6	6.7
Churchill	40.0	65.6	35.7
The Pas	18.3	5.7	11.7
Winnipeg	1.4	12.6	5.4
ONTARIO			
Kapuskasing	42.0	22.1	23.5
London	10.0	11.8	1.9
Ottawa	3.2	24.6	2.7
Sudbury	1.6	2.6	6.5
Thunder Bay	5.0	4.2	3.3
Toronto	0.0	0.0	0.9
Windsor	15.2	0.2	0.1
QUEBEC			
Baie Comeau	11.2	1.8	6.1
Montréal	5.8	22.4	1.7
Québec	2.2	6.6	4.4
Sept-Iles	11.8	12.0	10.6
Sherbrooke	7.6	10.6	5.6
Val-d'Or	20.6	35.4	15.7
NEW BRUNSWICK			
Charlo	0.4	8.8	5.8
Fredericton	2.1	4.0	2.3
Moncton	0.0	0.5	3.1
NOVA SCOTIA			
Shearwater	0.2	0.4	5.8
Sydney	0.4	1.0	2.3
Yarmouth	0.2	0.2	3.1
PRINCE EDWARD ISLAND			
Charlottetown	0.4	0.0	2.6
NEWFOUNDLAND			
Gander	3.8	2.7	12.3
St. John's	0.4	0.0	4.4



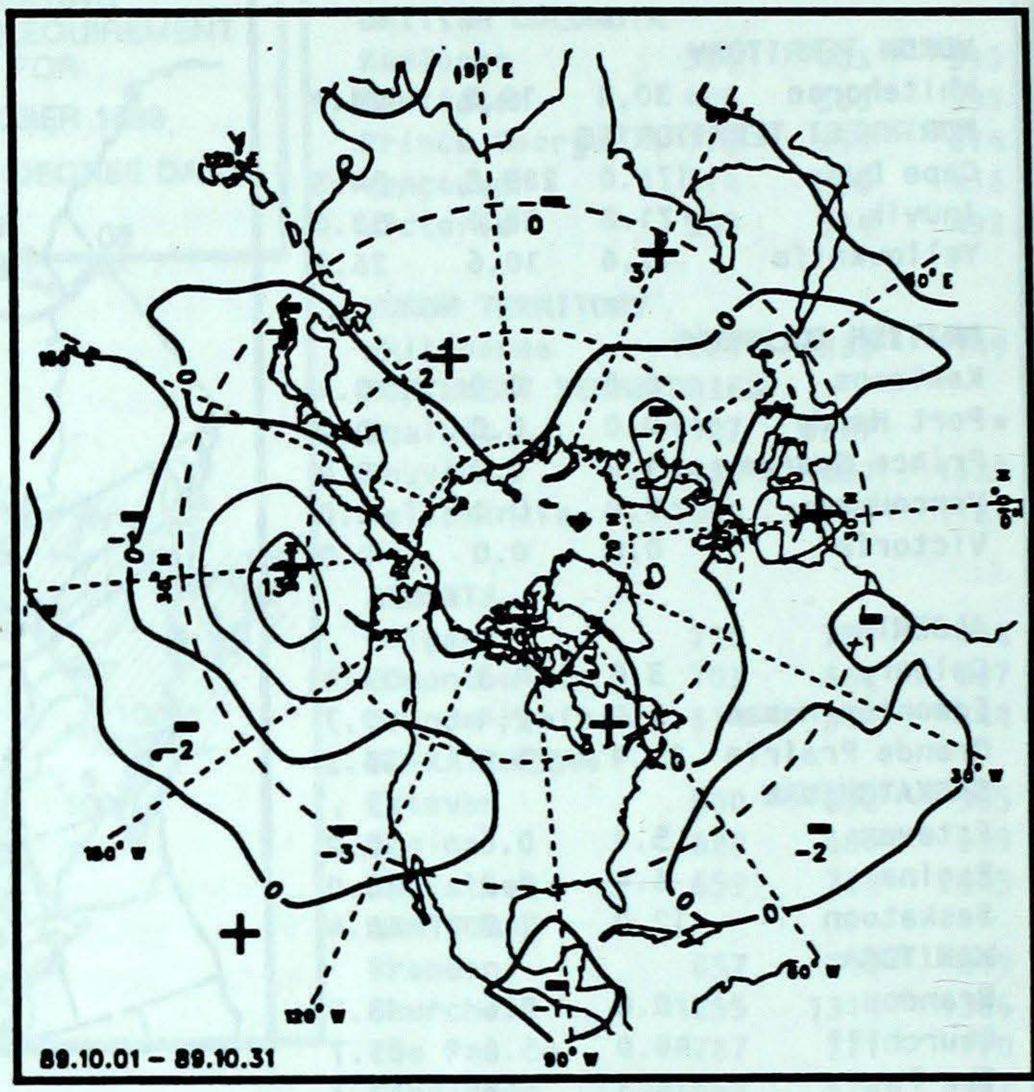


50-kPa ATMOSPHERIC CIRCULATION

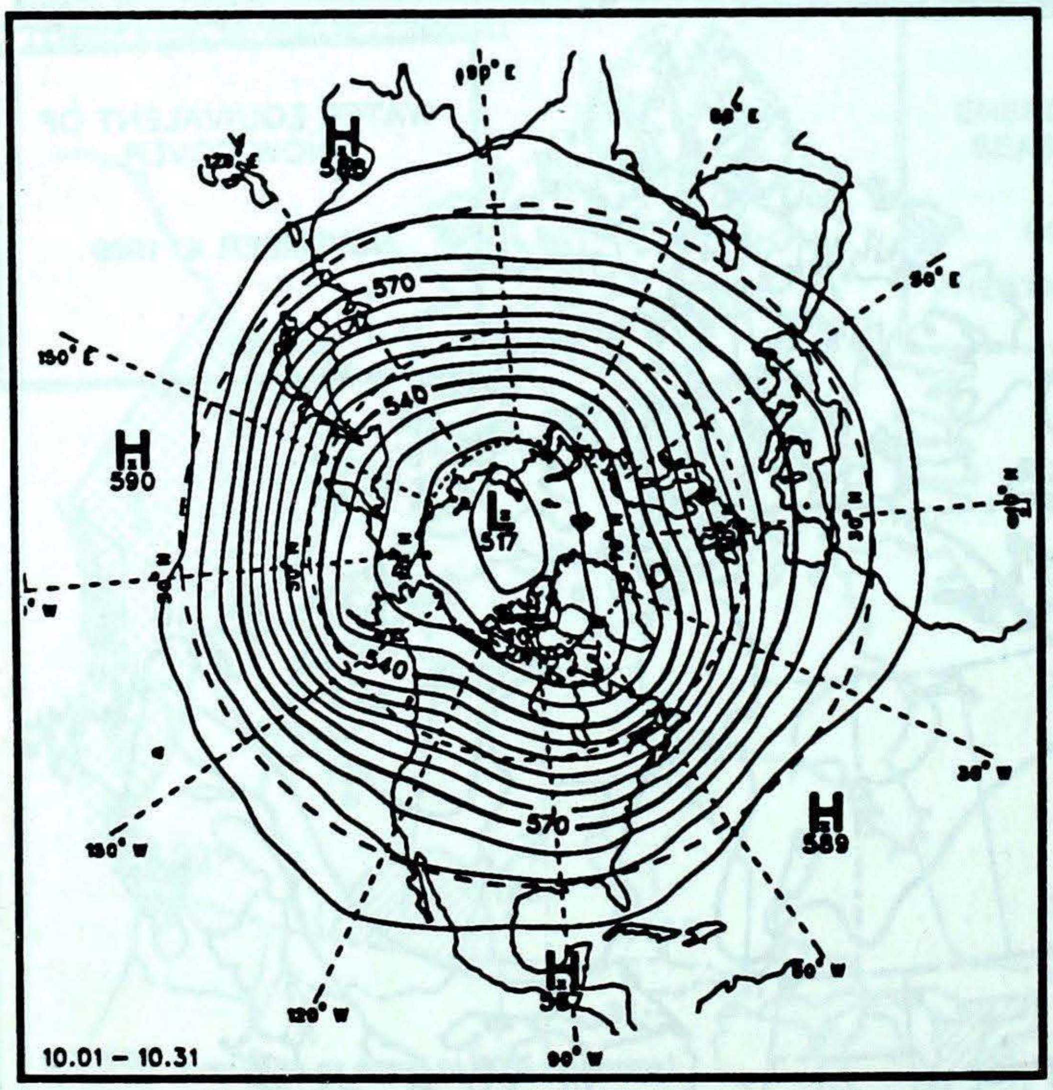
October 1989



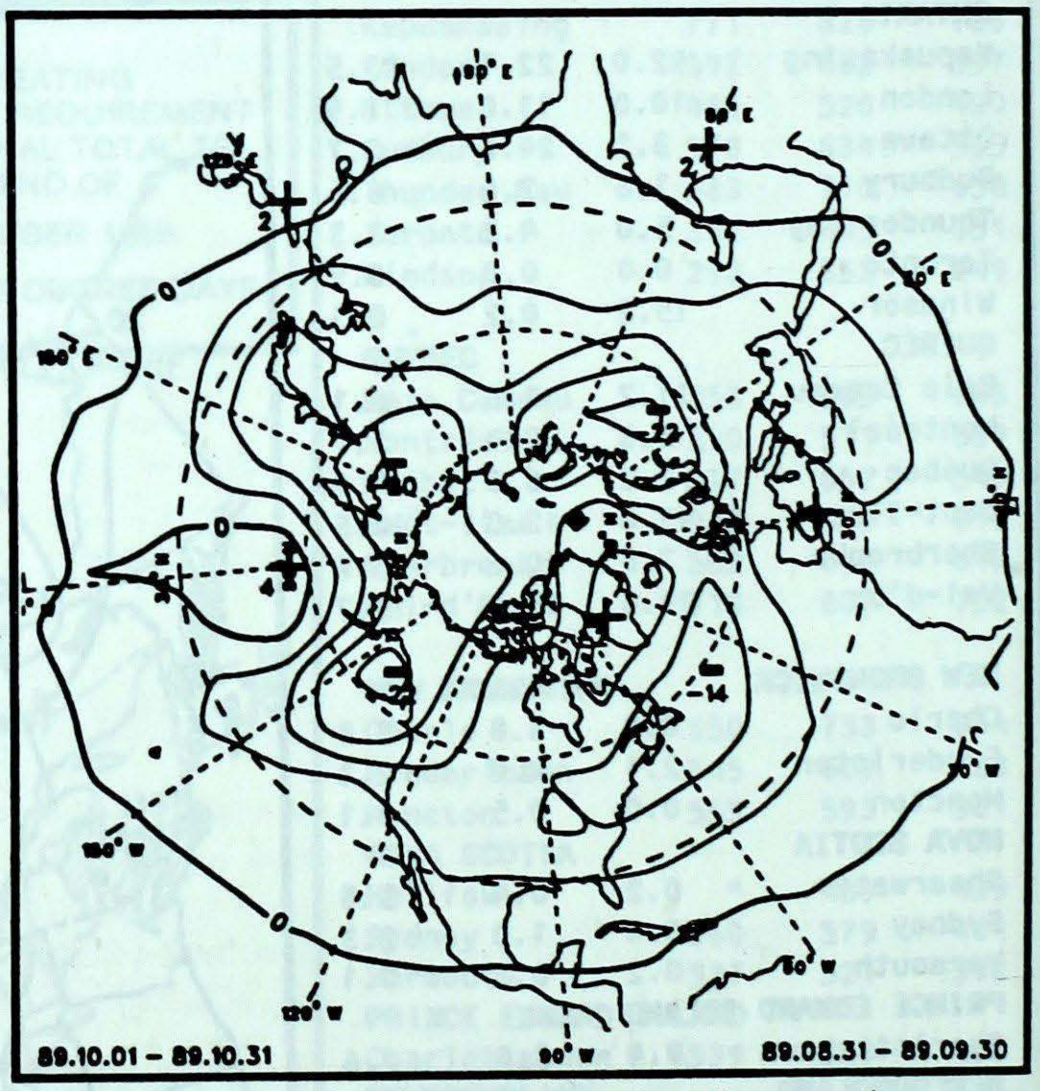
Mean geopotential heights
- 5 decametre interval -



Mean geopotential height anomaly
- 5 decametre interval-



Normal geopotential heights for the month
- 5 decametre interval -



Mean heights difference w/r to previous month
- 5 decametre interval -

Indian summer at Montréal

The legendary expression "Indian summer" is used in the United States and Canada to designate a period of fine autumn weather with particularly warm days.

A systematic study of previous periods when these conditions prevailed indicated the need to numerically identify periods of fine weather with warm temperatures. Based on comparing the actual maximum temperature to the mean for the date, two actual maximum temperature thresholds were identified; the first specifying definite periods of Indian summer and the second, probable periods. **Table 1** summarizes the values chosen. It should be noted that these criteria are not absolute and each situation which was close to meeting the criteria was examined closely. The dates in parentheses beside the threshold temperature values are the normal dates in the autumn when temperatures reach that maximum value. By comparing the dates on **Table 1**, it can be seen that the definite periods of Indian summer correspond to a climatological prolongation of summer weather from 2 to 5 weeks and for probable periods, a prolongation varying from 1 to 4 weeks.

Tables 2 and 3 give the number of definite Indian summers and the number of probable and/or definite Indian summers in 10-year periods over the past 50 years.

Table 2 shows that there were 45 definite periods of Indian summer during the last 50 years, which indicate about one per year. The mean duration is 4 days and 27% of the periods lasted 5 days or more. Note the unequal distribution from one decade to another with a gradual reduction since the 1945-54 decade. Mean October temperatures during the last five decades were 8.6, 9.9, 9.4, 8.6 and 7.6°C, respectively.

Table 3 statistics were compiled using the less severe criteria for probable Indian summers. There were 73 occurrences (compared to 45) over 50 years which corresponds to an average of 3 events every two years. The mean duration was 4 days. Using this criteria, the reduction in episodes during the last decade was not as great as with the more severe criteria.

Table 4 shows the annual frequencies of Indian summer in both the definite and probable categories.

Even though the average is about one period of Indian summer per year, it is surprising to note that in 2 years out of 5, there were none. On the other hand, in 1 out of every 4 years there were at least 2 definite episodes during the same autumn and in 1 out of 25 years there were 3 or more. Even when the criteria are relaxed, there have been 8 years without even a probable Indian summer.

Indian summers usually occur around October 10. The most frequent dates are October 7, 15 and 16 . The latest period was from November 18-20, 1953. Only 2 other definite events occurred in November, 3-8 in 1938 and 1-4 in 1944. There were, however, probable November episodes from 4-7 in 1956, 3-5 in 1961 and 2-4 in 1977.

It is worth mentioning that the month of October 1947 was particularly warm, with record-high temperatures for the month being established at Chibougamau, Montréal, Ottawa, Québec and Bagotville.

Table 1

Numerical values chosen for identification of definite and probable Indian summers at Montréal.

DATE	Mean Maximum Temperature °C	Definite Criteria °C	Probable Criteria °C
1 Oct.	16	20 (14 Sept.)	18 (24 Sept.)
10 Oct.	14	19 (19 Sept.)	17 (28 Sept.)
20 Oct.	12	18 (24 Sept.)	16 (03 Oct.)
1 Nov.	10	17 (28 Sept.)	15 (08 Oct.)
10 Nov.	7	16 (03 Oct.)	14(13 Oct.)

— Absence of rain totalling 5mm or more during a climatological precipitation-day, except on the last day of a period of Indian summer.
— Persistence of at least 3 consecutive days.
— Note: In the case of probable events, a minor break in the temperature regime is accepted in order to identify one single period instead of two.

Table 2

Characteristics of definite Indian summers at Montréal.

Decade	Length of Periods in Days							Total Number of Periods	Total Number of Days
	3	4	5	6	7	8	9		
1935-44	3	1	1	2				7	30
1945-54	5	4	1	2	1		1	14	64
1955-64	7	3	1			1		12	46
1965-74	8	1	1					10	33
1975-84	1		1					2	8
TOTAL	24	9	5	4	1	1	1	45	181

Table 3

Characteristics of probable and/or definite Indian summers at Montréal.

Decade	Length of Periods in Days											Total Number of Periods	Total Number of Days
	3	4	5	6	7	8	9	10	11	12	13		
1935-44	6	2	2	1		2						13	58
1945-54	5	4	3	2	2				1		1	18	96
1955-64	9	4	3	1		1						18	72
1965-74	7	3	1		1	1						13	53
1975-84	6	2	2	1								11	42
TOTAL	33	15	11	5	3	4	0	0	1	0	1	73	321

Table 4

Annual frequency at Montréal of periods of Indian summer identified as definite or those identified as being definite and/or probable.

Decade	Number of definite Indian summer periods occurring during the same autumn					Number of definite and/or probable Indian summer periods occurring during the same autumn				
	0	1	2	3	4	0	1	2	3	4
1935-44	5	3	2		1	3	2	4	1	
1945-54	3	2	4		1	1	3	3	3	
1955-64	2	5	2			2	3	2	2	1
1965-74	2	6	2			1	6	2	1	
1975-84	8	2				1	7	2		
TOTAL	20	18	10	0	2	8	21	13	7	1

REFERENCES

Gauthier, M. and Boisvert, J.J. (1984). L'été des indiens en Estrie, Départment de géographie, Université de Sherbrooke.
Ouellet, A., La météo, Les éditions de l'homme/Les éditions ici Radio-Canada.

Courtesy AES, Québec. Climatolocal bulletin #003

OCTOBER 1989

STATION	Temperature C: Mean	Temperature C: Difference from Normal	Temperature C: Maximum	Temperature C: Minimum	Snowfall (cm)	% of Normal Snowfall	Total Precipitation (mm)	% of Normal Precipitation	Snow on ground at end of month (cm)	No. of days with Precip 1.0 mm or more	Bright Sunshine (hours)	% of Normal Bright Sunshine	Degree Days below 18 C
BRITISH COLUMBIA													
ABBOTSFORD A	10.5	0.4	21.5	-0.7	0.0		157.9	103	0	14	122	89	230.7
ALERT BAY	9.2	-0.1	18.0	1.9	0.0		232.6	111	0	19	*	*	278.1
AMPHITRITE POINT	10.6	0.1	15.6	3.8	0.0		232.6	65	0	19	*	*	229.6
BLUE RIVER A	5.5	0.5	19.0	-6.0	6.2	188	87.6	115	0	16	86	94	*
CAPE ST JAMES	10.4	0.5	16.1	5.1	0.2	200	154.4	78	0	22	97	*	235.1
CAPE SCOTT	10.3	0.5	16.0	4.8	0.0		373.8	104	0	22	*	*	240.3
CASTLEGAR A	7.8	0.0	23.1	-3.4	0.0		57.0	100	0	9	106	85	315.9
COMOX A	9.7	0.5	17.0	0.7	0.0		118.7	93	0	13	98	*	258.6
CRANBROOK A	5.7	0.3	21.1	-5.4	0.0		29.8	164	0	6	136	80	381.2
DEASE LAKE	0.6	-0.7	14.0	-10.3	29.9	170	39.3	112	11	7	52	59	539.4
FORT NELSON A	0.3	-0.8	20.6	-15.8	33.7	178	28.1	116	24	7	107	*	549.0
FORT ST JOHN A	3.7	-0.6	18.9	-11.2	18.4	102	20.9	75	6	6	114	*	443.8
HOPE A	10.3	-0.1	21.9	0.8	0.0		224.9	131	0	17	96	92	238.8
KAMLOOPS A	9.0	0.6	22.4	-4.0	0.0		17.8	117	0	6	127	93	279.8
KELOWNA A	7.5	0.8	20.7	-6.2	0.0		16.0	83	0	4	126	84	325.9
LYTTON	10.3	0.2	23.6	-0.7	0.0		39.1	126	0	9	100	73	239.4
MACKENZIE A	3.8	0.0	16.4	-9.0	1.2	7	85.8	171	4	19	93	80	439.0
PENTICTON A	9.0	0.3	22.0	-4.1	0.0		27.8	182	0	5	127	81	280.0
PORT ALBERNI A	10.3	0.5	22.9	0.2	0.0		214.2	122	0	14	83	*	237.5
PORT HARDY A	9.1	0.4	18.9	-0.4	0.0		243.6	100	0	19	95	97	274.6
PRINCE GEORGE A	5.1	0.3	19.1	-9.8	0.8	9	33.7	57	0	8	98	89	402.0
PRINCE RUPERT A	8.0	-0.1	15.9	-1.0	0.0		345.3	94	0	24	72	111	309.9
PRINCETON A	6.6	0.0	22.1	-4.6	0.0		17.3	76	0	6	125	*	*
REVELSTOKE A	6.9	0.6	16.9	-3.4	0.0		74.4	105	0	13	68	76	344.9
SANDSPIT A	9.6	0.6	17.4	1.8	0.0		122.3	63	0	21	86	94	260.4
SMITHERS A	5.3	0.6	16.7	-5.6	0.0		31.9	50	0	11	94	103	392.3
TERRACE A	6.7	0.3	16.1	-1.3	0.0		179.9	84	0	18	81	131	349.2
VANCOUVER INT'L A	10.5	0.5	20.0	-1.3	0.0		96.4	85	0	10	119	98	232.6
VICTORIA INT'L A	9.6	-0.3	18.7	0.1	0.0		44.2	56	0	11	118	82	259.6
VICTORIA MARINE	9.8	0.1	19.0	1.5	0.0		92.6	80	0	16	*	*	272.9
WILLIAMS LAKE A	6.0	0.9	17.8	-7.6	1.0	13	33.5	111	0	7	116	85	373.3
YUKON TERRITORY													
DAWSON A	-0.1	*	12.9	-27.8	38.8	*	35.6	*	23	*	*	*	*
MAYO A	1.6	*	13.1	-20.1	12.8	*	14.6	*	*	*	*	*	*
WATSON LAKE A	-1.5	-1.4	14.2	-16.5	31.0	144	40.9	117	9	9	60	62	604.4
WHITEHORSE A	-0.3	-0.9	13.4	-16.9	30.4	189	40.1	187	3	10	76	82	566.5
NORTHWEST TERRITORIES													
ALERT	-20.5	-0.8	-6.0	-33.2	17.6	113	16.8	124	23	5	9	97	1193.8
BAKER LAKE A	-9.6	-1.9	2.7	-27.4	19.6	84	14.4	47	6	4	83	116	856.3
CAMBRIDGE BAY A	-12.1	-0.4	0.9	-29.9	14.4	94	13.8	93	12	5	78	134	933.1
CAPE DYER A	-8.0	-0.3	0.3	-24.3	127.2	128	89.3	89	58	10	*	*	806.3
CAPE PARRY A	-6.2	0.6	4.0	-20.0	19.1	71	14.8	74	9	5	*	*	748.9
CLYDE A	-9.6	-2.7	0.1	-27.3	35.0	94	30.0	87	21	11	46	95	855.6
COPPERMINE A	-6.0	0.6	10.0	-26.7	40.5	193	27.0	84	33	6	70	151	744.8
CORAL HARBOUR A	-9.9	-2.1	0.2	-25.5	33.4	125	34.1	92	15	6	71	82	863.4
EUREKA	-23.8	-1.7	-6.4	-36.5	12.8	171	8.8	126	11	3	10	113	1295.3
FORT RELIANCE	-1.6	0.2	9.9	-22.1	10.6	52	18.6	67	3	5	*	*	605.9
FORT SIMPSON A	-1.9	-0.3	19.6	-22.4	30.3	164	39.4	147	16	9	92	108	617.1
FORT SMITH A	0.1	-0.2	18.0	-22.0	11.1	70	34.5	130	5	7	94	*	535.3
IQALUIT	-6.9	-1.9	3.1	-20.7	34.5	87	37.2	84	12	7	69	119	772.2
HALL BEACH A	-10.7	-0.2	-0.6	-29.1	28.5	133	29.1	137	33	12	*	*	890.5
HAY RIVER A	1.3	0.4	16.6	-15.2	29.0	153	56.8	186	11	11	*	*	520.4
INUVIK A	-8.2	-0.1	12.0	-32.9	41.4	111	36.8	110	20	9	56	111	810.2
MOULD BAY A	-17.3	0.3	-2.5	-32.7	18.9	171	16.9	179	15	3	19	*	1094.8
NORMAN WELLS A	-4.1	0.1	20.8	-15.3	23.0	92	19.7	74	10	9	107	182	696.3
POND INLET A	-11.4	*	0.0	-29.4	14.6	*	10.8	*	11	4	30	*	914.3
RESOLUTE A	-16.0	-0.9	-2.5	-35.5	15.4	104	14.9	108	32	6	13	56	1053.9
YELLOWKNIFE A	-1.0	0.6	12.1	-22.7	12.8	55	31.6	92	6	7	76	136	589.5
ALBERTA													
BANFF	4.0	-0.4	16.5	-11.5	7.6	43	25.2	81	1	7	*	*	*
CALGARY INT'L A	5.7	0.2	21.2	-8.9	3.6	27	6.0	34	1	3	176	100	382.0
COLD LAKE A	4.3	-0.2	18.3	-9.8	5.6	80	9.4	56	0	3	169	109	407.7
CORONATION A	4.5	-0.3	19.7	-12.3	11.4	131	13.4	89	0	4	199	111	428.2
EDMONTON INT'L A	4.3	-0.4	20.3	-9.1	4.0	60	26.8	174	0	7	172	105	426.6
EDMONTON MUNICIPAL	5.3	-0.5	19.8	-7.5	1.4	*	15.0	90	0	4	176	109	394.5
EDMONTON NAMAO A	4.5	-0.6	20.0	-8.3	3.0	39	15.9	88	0	6	*	*	415.7

OCTOBER 1989

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	Mean	Difference from Normal	Maximum	Minimum									
EDSON A	3.1	-0.6	19.7	-10.6	5.6	28	20.4	104	6	6	150	99	462.0
FORT CHIPEWYAN A	1.4	0.1	16.0	-18.0	8.2	46	19.4	69	6	*	*	*	*
FORT MCMURRAY A	3.4	0.1	19.8	-12.1	6.3	50	17.1	61	2	5	116	93	479.2
GRANDE PRAIRIE A	3.4	-0.8	21.5	-14.5	13.4	114	22.1	83	6	6	130	*	451.9
HIGH LEVEL A	0.5	-1.5	18.1	-16.7	30.8	201	58.7	408	11	6	98	69	543.8
JASPER	4.3	-0.4	17.3	-9.0	2.8	52	36.2	124	0	5	120	*	424.9
LETHBRIDGE A	7.0	-0.5	23.8	-11.7	10.4	89	19.4	109	0	4	209	*	339.0
MEDICINE HAT A	7.6	0.2	24.5	-7.8	1.6	20	4.7	29	0	2	193	111	323.1
PEACE RIVER A	2.7	-1.0	20.0	-10.1	3.0	31	6.9	34	0	3	*	*	473.2
RED DEER A	4.3	-0.3	21.1	-10.6	12.6	107	41.0	199	1	7	*	*	424.5
ROCKY MTN HOUSE A	4.0	-0.9	20.9	-10.2	15.2	101	51.8	228	1	6	*	*	433.9
SLAVE LAKE A	3.6	-0.6	20.0	-7.9	0.4	3	3.0	12	0	1	138	93	447.1
SUFFIELD A	*	*	*	*	*	*	*	*	*	*	*	*	*
WHITECOURT A	3.8	0.4	19.7	-10.2	3.0	19	8.1	29	3	3	*	*	441.3
SASKATCHEWAN													
BROADVIEW	5.1	0.8	22.2	-8.7	7.8	92	55.8	225	0	7	184	115	401.7
COLLINS BAY	-0.4	*	14.9	-24.0	58.2	*	59.4	*	19	8	96	*	560.9
CREE LAKE	1.1	-0.1	13.8	-14.5	9.4	64	19.8	51	7	6	84	87	523.4
ESTEVAN A	5.5	-0.9	24.0	-9.8	5.4	78	48.0	217	0	6	181	96	385.6
HUDSON BAY A	3.7	*	21.6	-10.8	28.6	*	42.6	*	5	8	154	*	447.7
KINDERSLEY	5.1	-0.2	22.0	-9.5	7.0	103	8.6	62	0	1	192	*	400.0
LA RONGE A	2.6	0.0	17.3	-13.2	12.4	127	25.3	74	8	9	*	*	474.8
MEADOW LAKE A	3.9	*	18.4	-3.8	7.6	*	9.8	*	0	5	156	*	439.2
MOOSE JAW A	6.0	-0.4	22.5	-7.5	6.6	87	8.4	46	0	2	176	101	373.0
NIPAWIN A	3.2	*	19.6	-16.3	37.0	*	33.7	*	15	7	160	*	460.2
NORTH BATTLEFORD A	4.9	0.0	19.9	-11.0	8.8	124	10.7	68	0	5	*	*	406.2
PRINCE ALBERT A	4.1	0.4	18.8	-10.5	7.4	80	15.0	69	2	7	163	111	431.2
REGINA A	5.1	-0.1	21.4	-7.9	5.6	68	51.1	272	0	5	170	101	400.6
SASKATOON A	4.9	0.0	19.4	-8.5	12.0	130	19.2	111	2	5	*	*	408.0
SWIFT CURRENT A	5.1	-0.7	23.4	-10.1	10.0	110	12.1	67	2	3	172	102	399.8
WYNYARD	*	*	*	*	*	*	*	*	*	*	*	*	*
YORKTON A	4.3	-0.5	22.2	-8.5	6.4	85	46.0	202	3	5	173	110	429.2
MANITOBA													
BRANDON A	4.4	-0.8	25.4	-13.5	0.4	6	12.2	57	0	3	163	*	422.7
CHURCHILL A	-1.3	0.2	9.6	-19.4	38.8	132	59.6	139	14	11	50	81	598.2
DAUPHIN A	5.5	0.0	23.5	-8.2	1.2	14	48.4	167	0	6	149	97	388.3
GILLAM A	0.2	0.9	16.2	-19.5	26.8	127	24.2	61	11	5	*	*	553.7
GIMLI	4.9	*	18.6	-7.9	5.6	*	29.3	*	0	9	164	114	405.0
ISLAND LAKE	3.4	0.8	19.5	-9.6	14.6	89	81.8	150	0	9	*	*	453.4
LYNN LAKE A	0.9	1.4	14.5	-21.5	51.3	184	36.6	78	27	9	101	142	531.0
NORWAY HOUSE A	2.8	*	16.7	-11.4	11.0	*	60.8	*	0	9	*	*	470.5

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	Mean	Difference from Normal	Maximum	Minimum									
PORTAGE LA PRAIRIE	6.0	-0.5	24.5	-9.8	1.6	21	13.8	45	0	3	*	*	371.9
THE PAS A	3.7	0.1	17.2	-9.3	18.3	179	31.6	95	5	6	161	134	446.1
THOMPSON A	1.0	1.3	6.2	-4.3	24.5	89	43.2	82	14	7	113	142	525.7
WINNIPEG INT'L A	5.8	-0.3	23.0	-9.3	1.4	27	16.6	54	0	6	156	103	378.5
ONTARIO													
BIG TROUT LAKE	2.6	0.8	16.6	-8.7	20.8	86	41.6	74	*	8	129	*	488.5
EARLTON A	6.1	0.7	22.0	-7.0	4.4	59	60.9	87	0	11	*	*	366.6
GERALDTON A	3.7	*	22.4	-9.0	16.4	*	47.8	*	12	9	*	*	445.6
GORE BAY A	8.1	-0.2	19.1	-0.8	*	*	56.4	83	0	9	*	*	305.5
HAMILTON RBG	10.6	*	25.3	-0.2	*	*	75.8	*	0	9	166	*	*
HAMILTON A	9.7	0.3	23.8	0.2	3.4	262	70.1	114	0	10	*	*	256.1
KAPUSKASING A	4.7	0.3	24.6	-8.3	40.0	190	95.4	123	5	13	*	*	414.0
KENORA A	6.2	0.6	22.3	-3.8	3.6	49	37.4	92	0	4	*	*	367.3
KINGSTON A	8.5	-0.5	23.0	-2.5	*	*	117.4	143	0	12	137	91	286.7
LANSDOWNE HOUSE	*	*	*	*	*	*	*	*	*	*	*	*	*
LONDON A	9.5	0.1	23.8	-0.4	10.0	526	79.1	108	0	12	146	103	262.9
MOOSONEE	4.4	0.3	22.6	-6.2	35.7	246	73.6	99	0	11	98	112	421.4
MUSKOKA A	7.7	0.2	21.3	-4.4	2.7	84	116.7	124	0	17	*	*	324.4
NORTH BAY A	7.0	0.6	21.4	-4.5	1.2	17	96.6	110	0	9	118	99	340.2
OTTAWA INT'L A	9.0	0.9	22.8	-2.8	3.2	119	95.2	140	0	14	147	108	277.8
PETAWAWA A	7.4	1.1	24.1	-6.2	0.6	12	82.6	114	0	10	*	*	328.4
PETERBOROUGH A	8.1	0.6	23.3	-6.0	1.2	109	101.2	163	0	13	*	*	307.7
PICKLE LAKE	3.8	1.1	20.0	-6.3	21.2	101	30.2	48	*	6	*	*	441.3
RED LAKE A	4.6	0.6	20.7	-7.4	9.2	84	18.8	37	*	7	148	*	414.5
ST CATHARINES A	11.1	1.0	25.0	0.2	0.0		66.2	93	0	9	*	*	213.0
SARNIA A	10.4	0.5	24.8	0.1	4.0	105	54.4	91	0	8	163	112	236.3
SAULT STE MARIE A	7.5	-0.1	23.8	-4.6	2.6	43	64.4	87	0	12	135	114	325.8
SIOUX LOOKOUT A	5.2	0.5	22.9	-6.5	7.4	52	17.0	26	0	2	*	*	406.0
SUDBURY A	6.7	0.4	20.7	-3.2	1.6	25	69.0	92	0	10	126	104	349.8
THUNDER BAY A	5.3	-0.4	23.6	-8.9	5.0	152	31.4	57	*	4	176	138	394.0
TIMMINS A	5.4	0.6	23.8	-9.7	21.9	174	70.8	103	0	14	*	*	329.1
TORONTO	11.1	*	22.1	1.9	0.2	*	100.2	*	0	10	*	*	213.4
TORONTO INT'L A	9.8	0.5	25.0	-3.4	*	*	76.2	123	0	9	*	*	253.9
TORONTO ISLAND A	10.1	*	21.4	2.0	0.4	133	89.4	*	0	11	*	*	244.6
TRENTON A	8.6	-0.6	21.9	-4.0	0.0		109.1	156	0	12	*	*	292.6
WATERLOO WELLINGTON	8.7	0.5	23.7	-2.4	3.4	486	49.6	73	0	10	*	*	286.4
WAWA A	4.8	*	23.9	-9.5	44.4	*	125.0	*	0	11	*	*	402.4
WIARTON A	9.2	0.2	24.0	-2.5	0.4	12	73.6	89	0	13	142	106	277.0
WINDSOR A	11.4	0.3	27.5	-0.7	15.2	***	57.5	101	0	6	*	*	207.7

OCTOBER 1989

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	Mean	Difference from Normal	Maximum	Minimum									
QUEBEC													
BAGOTVILLE A	5.9	0.6	21.4	-8.1	5.6	48	73.1	102	0	12	*	*	377.2
BAIE COMEAU A	3.9	-0.4	16.9	-9.2	11.0	180	88.6	99	0	9	114	94	438.1
BLANC SABLON A	3.2	-0.5	13.0	-10.1	6.4	71	134.6	137	0	14	106	*	458.0
CHIBOUGAMAU CHAPAIS	3.4	*	18.8	-10.6	32.8	*	116.9	*	0	17	74	105	453.0
GASPE A	4.7	*	22.5	-7.8	1.8	*	42.8	*	0	9	136	*	410.2
INUKJUAK A	-0.7	-0.3	4.7	-10.8	33.6	153	42.8	93	4	9	30	58	578.7
KUUJJUAQ A	-1.1	-0.2	10.1	-10.4	38.6	142	43.8	90	0	11	1	2	*
KUUJJUARAPIK A	2.5	0.5	12.0	-5.2	20.7	76	74.9	102	2	17	72	154	481.0
LA GRANDE IV A	0.8	*	17.3	-11.5	13.4	*	63.0	*	0	12	56	*	536.1
LA GRANDE RIVIERE A	1.9	*	18.7	-7.5	12.0	*	38.2	*	0	10	67	*	500.6
MANIWAKI	7.3	0.8	24.0	-5.3	0.0	0	105.6	146	0	11	122	101	330.1
MATAGAMI A	*	*	21.8	-11.4	43.7	*	129.3	*	0	15	69	73	437.2
MONT JOLI A	6.0	0.3	21.7	-7.3	0.4	5	86.2	114	0	8	122	105	372.0
MONTREAL INT'L A	9.5	0.8	24.4	-1.4	5.8	341	125.0	166	0	13	153	112	265.1
MONTREAL MIRABEL I/	8.2	*	23.3	-4.8	2.2	*	125.0	*	0	11	153	*	303.5
NATASHQUAN A	2.9	-1.2	11.7	-9.9	11.0	282	55.4	51	0	11	137	106	467.4
QUEBEC A	7.2	0.6	18.7	-1.3	2.2	50	115.8	128	0	10	112	96	332.5
ROBERVAL A	6.9	1.7	21.4	-8.0	0.0	0	77.9	122	0	11	118	*	350.9
SCHEFFERVILLE A	-2.3	-0.9	6.1	-15.3	89.4	198	126.4	167	5	13	50	77	629.0
SEPT-ILES A	2.6	-1.0	12.4	-10.5	11.4	108	86.0	89	0	140	120	95	475.7
SHERBROOKE A	7.3	0.9	21.5	-3.1	7.6	136	48.9	54	0	12	112	*	330.1
STE AGATHE DES MONT	6.9	1.6	20.3	-5.1	3.8	50	135.3	144	0	12	120	93	344.8
ST HUBERT A	9.2	0.8	24.0	-3.5	3.8	*	106.3	138	0	11	153	*	273.5
VAL D'OR A	5.9	1.3	21.5	-8.8	12.6	87	82.8	101	0	13	106	120	377.6
NEW BRUNSWICK													
CHARLO A	5.5	0.1	22.7	-6.5	0.4	7	57.7	62	0	9	132	103	386.4
CHATHAM A	7.0	-0.1	21.1	-6.8	0.0		31.2	33	0	5	156	110	341.5
FREDERICTON A	7.4	-0.1	21.7	-5.4	2.1	91	57.7	59	0	8	142	*	328.8
MONCTON A	7.1	-0.5	21.3	-7.0	0.6	19	48.5	49	0	6	150	105	337.8
SAINT JOHN A	7.4	-0.2	22.2	-2.4	0.6	24	75.6	59	0	9	164	116	327.2

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	Mean	Difference from Normal	Maximum	Minimum									
NOVA SCOTIA													
GREENWOOD A	7.9	-0.7	22.8	-3.5	0.6	22	59.9	61	0	9	*	*	311.6
HALIFAX INT'L A	7.8	-0.8	20.0	-2.5	1.6	44	130.7	98	0	7	*	*	316.2
SABLE ISLAND	11.2	-0.3	18.7	4.1	0.0	*	175.9	151	0	10	138	115	211.3
SHEARWATER A	8.3	-1.2	20.4	-0.5	0.2	12	137.1	113	0	8	164	104	283.9
SYDNEY A	7.6	-0.8	20.5	-3.4	0.4	15	134.4	110	0	10	154	117	321.2
YARMOUTH A	9.2	-0.3	18.7	-0.6	0.2	11	91.0	78	0	7	160	107	272.9
PRINCE EDWARD ISLAND													
CHARLOTTETOWN A	7.3	-0.8	19.1	-3.3	2.2	85	74.5	70	0	11	*	*	328.1
SUMMERSIDE A	7.8	-0.8	19.5	-1.0	0.4	19	58.6	62	0	6	147	110	315.9
NEWFOUNDLAND													
BONAVISTA	7.0	-0.2	18.4	-0.6	0.0		72.8	71	0	12	*	*	341.8
BURGEO	5.5	-1.4	13.1	-2.2	0.0		177.9	109	0	14	*	*	384.5
CARTWRIGHT	3.0	-0.1	16.7	-7.2	4.2	35	68.3	95	0	15	107	120	464.9
CHURCHILL FALLS A	-0.4	0.4	10.1	-13.8	17.6	33	83.9	101	0	12	67	100	569.2
COMFORT COVE	5.5	-0.3	18.6	-3.5	0.6	5	74.1	63	0	14	*	*	390.6
DANIELS HARBOUR	*	*	*	*	*	*	*	*	*	*	*	*	*
DEER LAKE A	5.6	0.2	18.5	-7.8	0.2	3	101.0	88	0	10	*	*	404.6
GANDER INT'L A	5.5	-0.5	20.0	-4.9	3.4	28	67.0	64	0	14	123	111	387.0
GOOSE A	2.9	0.2	14.1	-12.0	3.1	13	66.5	87	*	9	106	113	468.4
MARY'S HARBOUR	3.0	-0.6	16.1	-9.0	18.6	219	68.0	92	0	12	*	*	472.8
PORT AUX BASQUES	5.7	-1.3	13.3	-0.6	0.0		166.4	126	*	17	128	*	381.4
ST ANTHONY	2.4	-0.8	11.0	-7.4	27.8	323	*	*	*	16	*	*	*
ST JOHN'S A	6.3	-0.6	19.5	-2.3	0.4	9	91.7	63	0	11	129	117	362.1
ST LAWRENCE	6.4	-0.8	15.6	-4.2	0.0	0	100.3	68	0	9	*	*	353.0
STEPHENVILLE A	6.6	-0.4	17.6	-0.2	1.0	28	161.8	145	0	21	*	*	353.8
WABUSH LAKE A	-0.6	0.1	11.1	-7.9	35.1	70	91.4	108	0	12	59	90	570.8

AGROCLIMATOLOGICAL STATIONS **OCTOBER 1989**

STATION	Temperature C				Snowfall (cm)	Total Precipitation (mm)	% of Normal Precipitation	Snow on ground at end of month (cm)	No. of days with Precip 1.0 mm or more	Bright Sunshine (hours)	Degree days above 5 C	
	Mean	Difference from Normal	Maximum	Minimum							This month	Since jan. 1st
BRITISH COLUMBIA												
AGASSIZ	10.8	-0.1	23.0	0.0	0.0	162.5	92	0	15	125	181.8	2228.3
KAMPLOOPS	*.*	*.*	*.*	*.*	*.*	*.*	**	***	***	**	*.*	*.*
SIDNEY	10.5	0.4	19.0	2.5	0.0	50.4	62	0	13	106	173.7	1927.0
SUMMERLAND	8.9	-0.1	21.0	-2.5	0.0	17.6	100	0	4	136	131.9	2250.8
ALBERTA												
BEAVERLODGE	3.4	-1.0	21.5	-16.0	11.0	20.4	71	5	8	128	32.7	1326.0
ELLERSLIE	*.*	*.*	*.*	*.*	*.*	*.*	**	***	***	**	*.*	*.*
LACOMBE	4.6	-0.1	21.0	-11.5	4.0	44.5	253	0	4	170	43.4	1329.4
LETHBRIDGE	*.*	*.*	*.*	*.*	*.*	*.*	**	***	***	**	*.*	*.*
VEGREVILLE	*.*	*.*	*.*	*.*	*.*	*.*	**	***	***	**	*.*	*.*
SASKATCHWAN												
INDIAN HEAD	4.9	-0.4	21.0	-8.0	8.0	71.4	289	3	8	**	62.5	1831.2
MELFORT	4.2	0.0	19.0	-11.0	20.9	27.4	103	2	7	152	54.5	1579.0
REGINA	7.8	3.3	21.0	-10.0	2.6	64.1	348	***	7	**	45.9	1765.7
SASKATOON	5.4	0.2	20.0	-7.0	13.2	15.4	88	0	3	167	63.5	1729.5
SCOTT	4.4	0.2	20.0	-8.0	5.0	14.6	107	4	***	1215	*.*	*.*
SWIFT CURRENT	5.4	-0.5	23.5	-8.5	6.2	8.7	54	5	4	154	69.1	1676.7
MANITOBA												
BRANDON	5.1	-0.5	25.7	-13.6	0.4	9.4	40	0	3	**	67.3	1932.0
GLENLEA	6.8	1.0	25.0	-11.5	1.8	9.0	24	0	3	167	100.0	2157.0
MORDEN	4.5	-2.5	24.0	-10.5	0.2	13.8	44	5	***	1927	*.*	*.*
ONTARIO												
DELHI	9.7	-0.2	23.0	-2.0	6.4	92.8	124	0	9	**	153.9	2165.7
ELORA	8.5	0.0	22.8	-3.6	0.0	59.4	90	0	11	**	127.6	1870.6
GUELPH	8.7	-0.5	24.0	-5.0	0.0	63.1	86	0	9	139	132.3	1969.1
HARROW	11.4	0.1	26.0	-1.5	8.5	59.1	106	0	8	181	202.1	2396.3
KAPUSKASING	4.5	-0.1	24.0	-9.5	50.0	112.2	150	10	13	122	70.8	1394.5
OTTAWA	9.3	0.8	23.1	-3.6	2.0	96.5	141	0	12	147	141.6	2179.7
SMITHFIELD	9.5	0.6	23.9	-3.0	0.0	117.2	145	0	12	**	148.1	2185.3
VINELAND	10.9	-0.1	24.5	0.6	0.0	55.6	95	0	10	157	182.0	2230.0
WOODSLIE	*.*	*.*	*.*	*.*	*.*	*.*	**	***	***	**	*.*	*.*
QUEBEC												
LA POCATIERE	7.6	0.7	22.0	-5.5	0.0	88.0	123	0	8	127	102.2	1775.9
L'ASSOMPTION	8.8	0.8	21.5	-3.5	0.0	113.2	142	0	11	145	128.5	2090.6
LENNOXVILLE	*.*	*.*	*.*	*.*	*.*	*.*	**	***	***	**	*.*	*.*
NORMANDIN	5.2	0.6	20.0	-10.0	0.4	96.8	162	0	10	120	57.9	1498.5
STE.CLOTILDE	9.0	0.7	26.5	-5.0	2.0	91.2	109	0	11	146	139.5	2124.5
NEW BRUNSWICK												
FREDERICTON	8.3	0.6	21.5	-4.5	0.0	40.4	40	0	5	142	93.9	1830.8
NOVA SCOTIA												
KENTVILLE	8.9	-0.2	22.5	-2.0	0.0	75.4	74	0	14	141	121.8	1975.6
NAPPAN	7.8	-0.5	20.0	-5.0	0.0	49.0	48	0	9	138	88.3	1760.8
PRINCE EDWARD ISLAND												
CHARLOTTETWN	8.0	-0.7	19.5	-3.0	1.0	76.4	74	0	8	146	*****	1079.2
NEWFOUNDLAND												
ST.JOHN'S WEST	6.7	-0.4	18.5	-2.5	0.0	91.2	63	0	11	117	74.5	1447.5