Environment Canada Environnement Canada

Climatic Perspectives

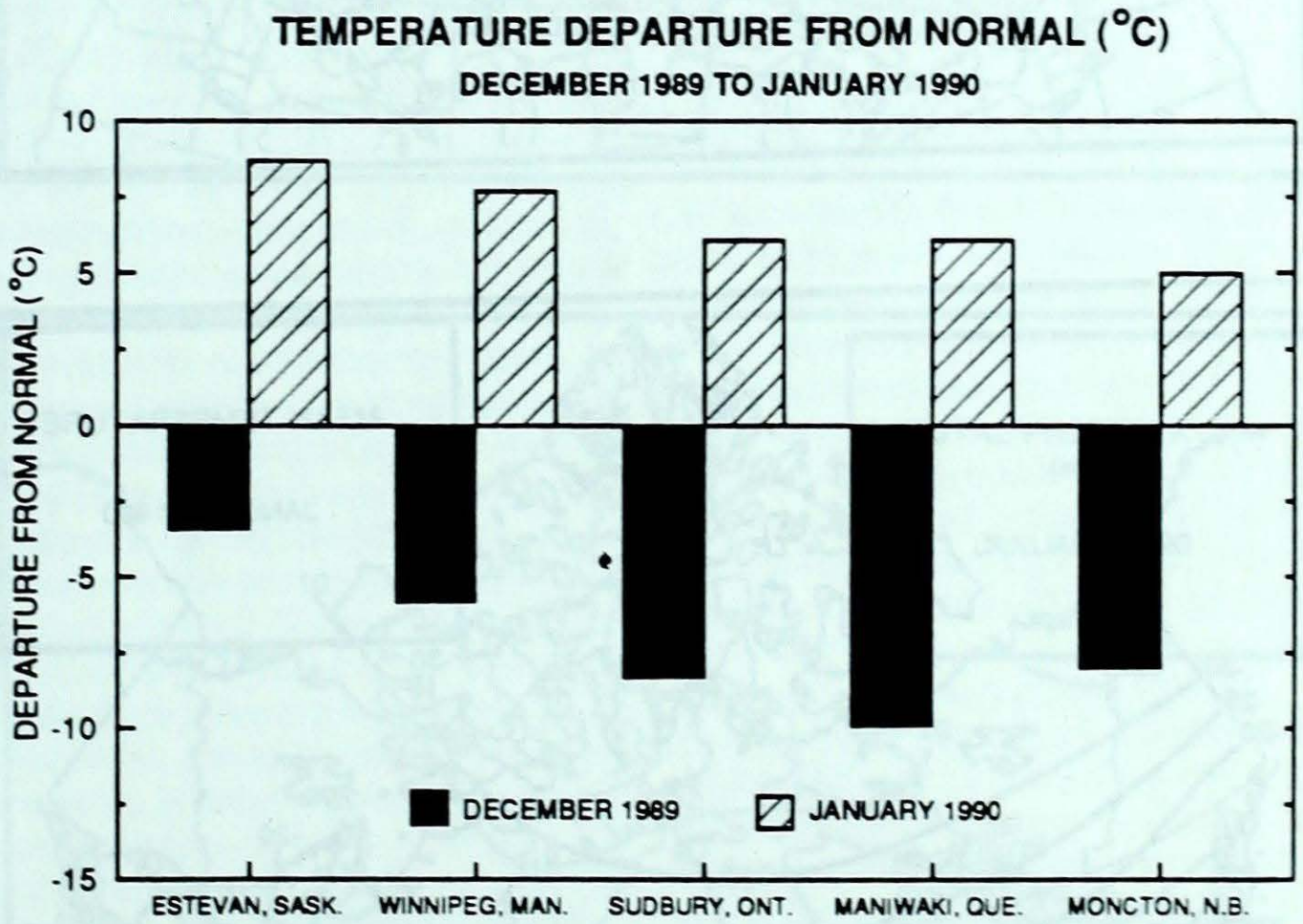
ARCH. C.1.

Monthly Review **JANUARY – 1990** *Vol. 12*

CLIMATIC HIGHLIGHTS

Most of Canada did a spectacular about-face in the past two months: from record below-normal temperatures during the month of December '89 to record above-normal readings in January.

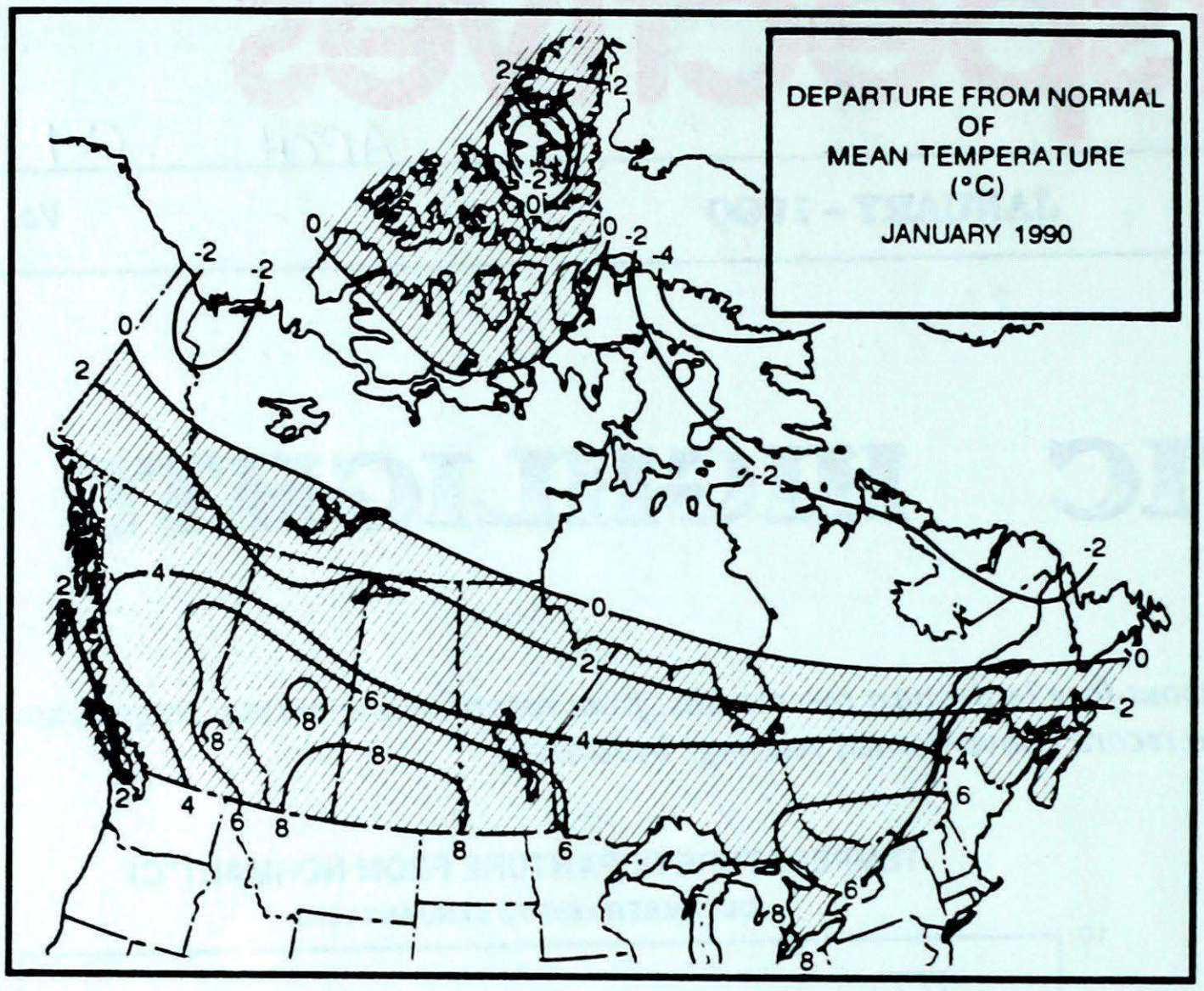
December 1989 yielded record cold weather from Saskatchewan eastwards. Ontario and southern Quebec dipped anywhere from 6 to 9 Celsius degrees below monthly normals, while Manitoba was generally 4 to 6 degrees below normal. On December 20th, the maximum temperature at Saskatoon was -35.8°C, which was the lowest daily maximum reading ever recorded for the month since records began in 1892. Toronto City recorded a monthly mean of -7.8°C, the coldest December mean since 1876, while Moncton and Saint John, N.B., also experienced the coldest December since their records began in 1939 and 1871 respectively.

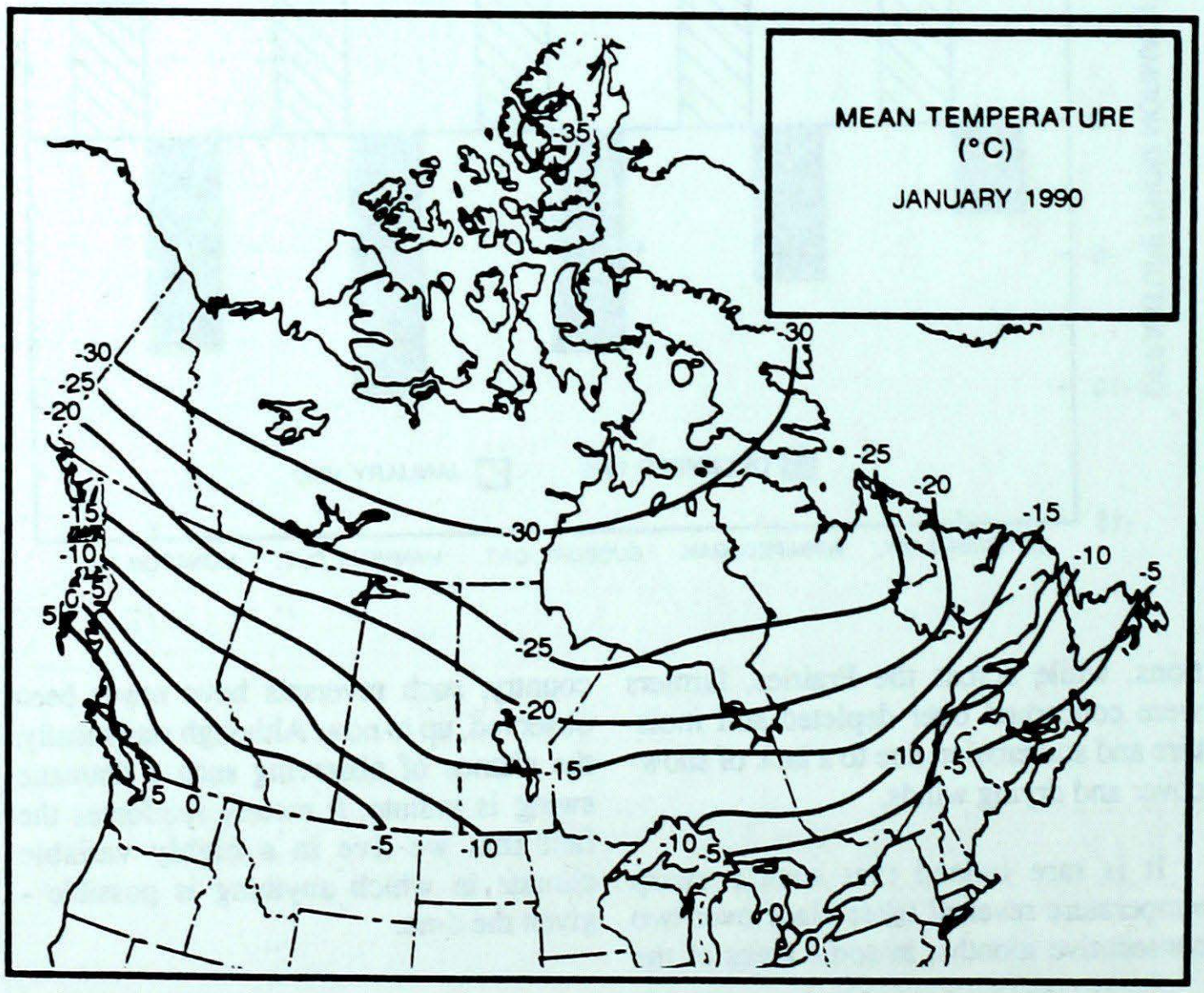


In contrast, during January, the southern half of Canada savoured well-above-normal temperatures as mild Pacific air migrated eastwards, eventually reaching the Atlantic provinces. The Prairies and some parts of British Columbia enjoyed monthly mean temperatures 6 to 8 Celsius degrees above normal, while most of Ontario and southern Quebec were 4 to 6 degrees above the monthly mean. While home- owners beamed at lower heating bills, skiers frowned at the lack of snow-cover. In central British Columbia, the mild weather interrupted logging operations, while across the Prairies, farmers were concerned over depleted soil moisture and soil erosion due to a lack of snow-cover and drying winds.

It is rare indeed that such a sharp temperature reversal takes place over two consecutive months; in some areas of the country, such reversals have never been observed, up to now. Although statistically, the chance of observing such a dramatic swing is minute, it merely reinforces the fact that we live in a highly variable climate in which anything is possible - given the time.

Canada





Across the country

Yukon and Northwest Territories

The kind of weather that makes sled dogs curl and northerners stay indoors affected the northern reaches of the country. Extremely cold air, which was present in the Arctic all month, pushed southwards, with the strongest surge occurring towards the end of the month. This month only the Great Slave Lake region and the southern Yukon averaged above normal, temperature-wise, although temperatures in the Yukon and Mackenzie district fell below minus fifty on several occasions. For the second year in a row, the coldest temperature in the Yukon was recorded at Ogilvie, located on the Dempster Highway. The minimum temperature reading this year was -54°C, which is actually two degrees warmer than last year's territorial low. Temperatures in the mid minus 40s were common right across northern Canada this month, although surprisingly, a number of stations in the Yukon managed to climb above freezing on at least one day this month. The maximum temperature at Whitehorse surpassed the freezing mark on three consecutive days.

Precipitation amounts varied substantially, with heavier-than-normal snowfalls in the western Arctic and in the vicinity of Hudson Bay. Snowfalls were unusually light across Baffin Island, in most cases less than half the normal. On the other hand, more than twice the normal snow fell on the mountain passes near the Alaskan coast, but snowfalls were lighter-than-normal in the Yukon. Whitehorse received 19 cm of snow compared to a normal 21 cm.

Hours of bright sunshine in the Keewatin district were minimal. Baker Lake, N.W.T., had less than one hour of sunshine this month

Once ice roads in northern Canada were completed, moving supplies to and from some of the isolated posts began in earnest. Weather warnings for blowing snow, wind chill and blizzards were issued regularly as weather systems affected the northern reaches of the country.

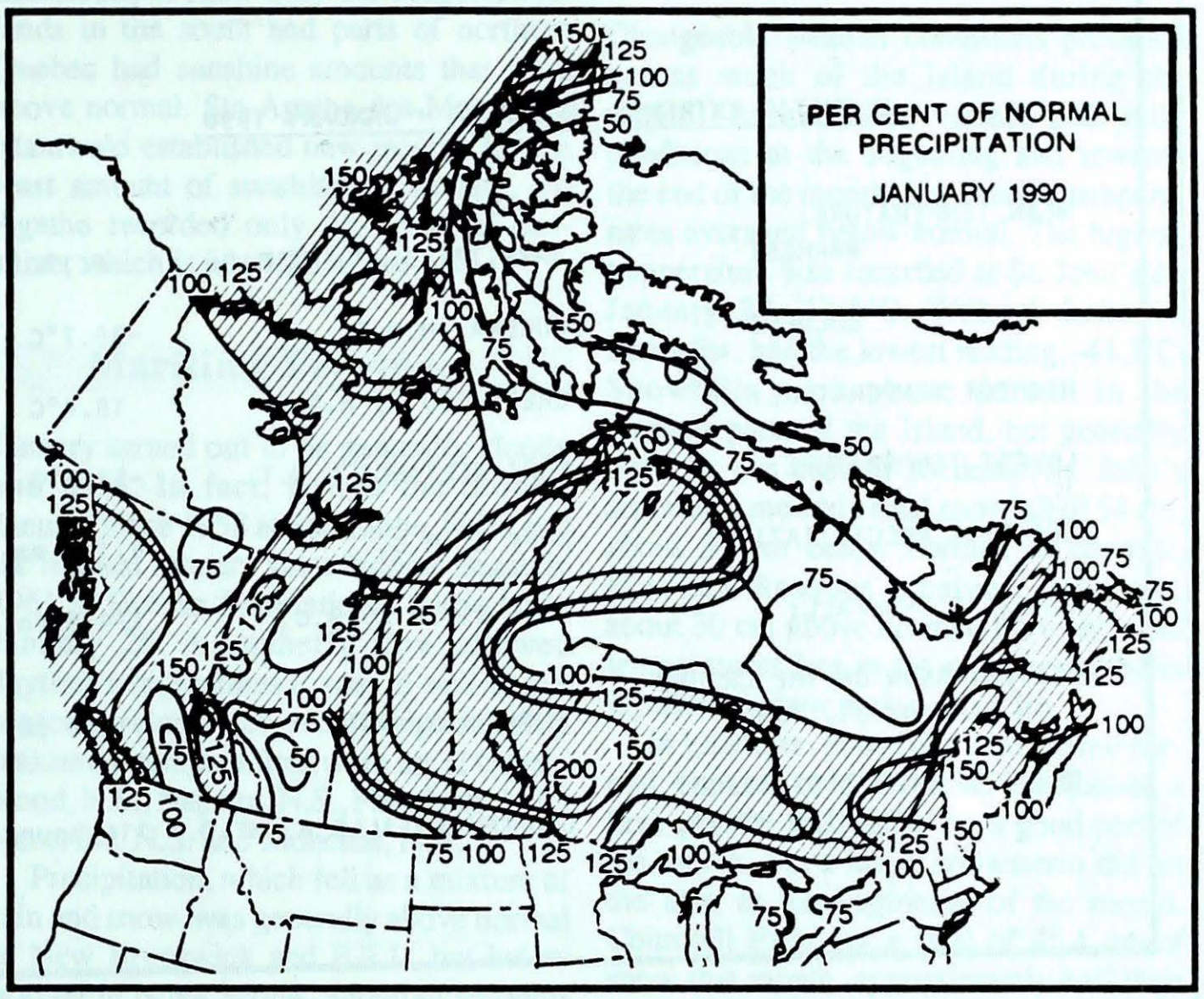
British Columbia

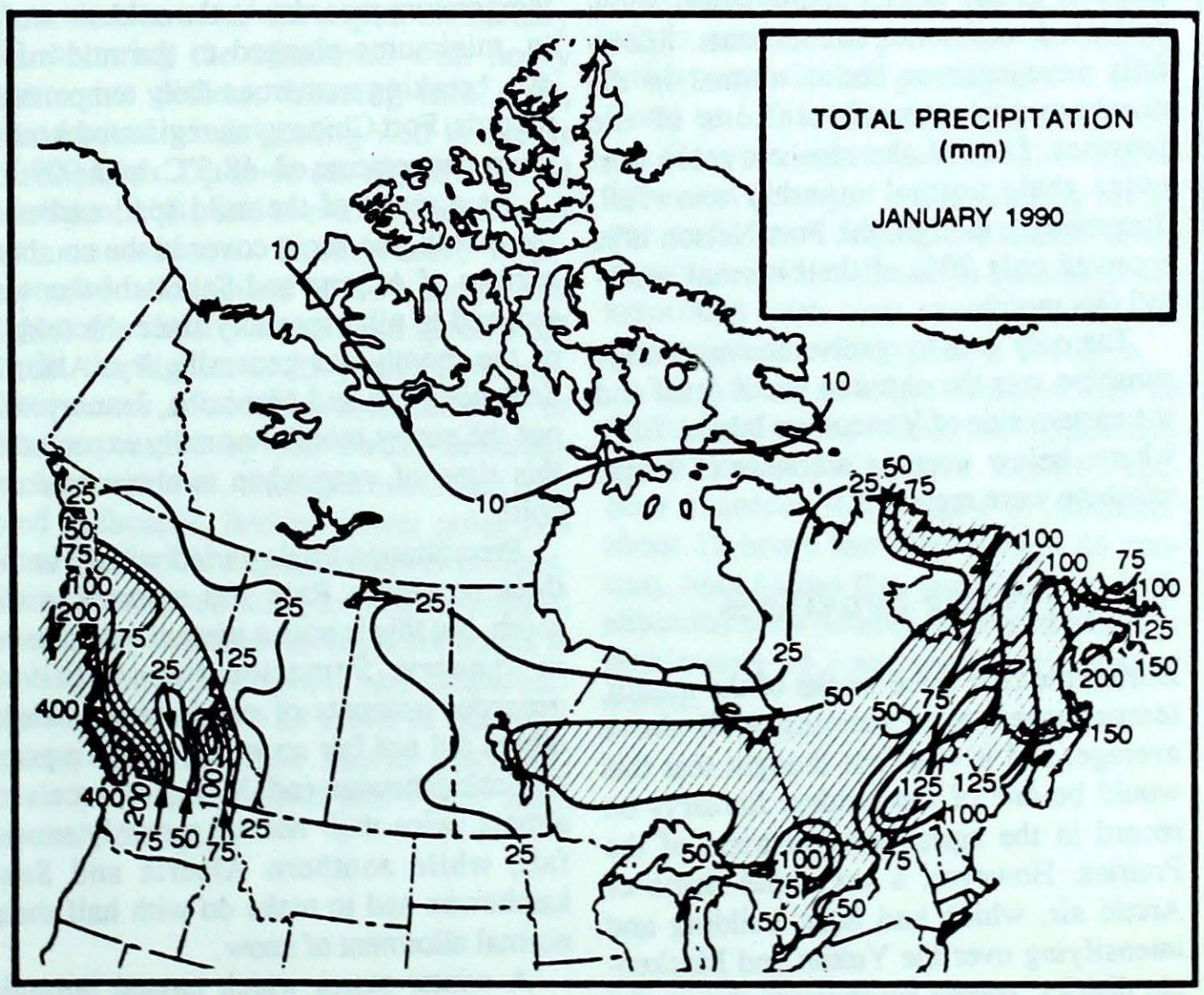
The mild trend of the previous month continued throughout the province. However, by month's end, a frigid Arctic air mass had entrenched itself over the northern districts, and the first significant snowfalls of the winter season occurred in the southern parts of the province.

Temperatures this month were again above normal across the entire province. In the central portions of British Columbia, mean temperatures have now been running above average for more than fourteen consecutive weeks, and at Prince George, the temperature has averaged above normal since last summer. The unusually-mild weather has had a profound effect on the oil and logging industry in the central and northern parts of the province, which rely on cold temperatures during the winter months to be able to transport heavy machinery, forestry products and construction supplies across normally-soft terrain and muskeg. In order to be able to get equipment into the field, ice-strengthened roads are constructed. But this year, because of the mild weather, there have been numerous delays and setbacks in getting the roads strong enough. Logging trucks have been breaking through weak ice roads regularly, and seismic testing and the construction of drilling platforms have also been hampered.

It was a stormy month for the maritime community, with gales occurring along the north and central coast on 15 days, and off the south coast for 8 days this month. Precipitation has been above average along the entire B.C. coast, with amounts being 10 to 50 percent above normal. In contrast, precipitation was well-below normal in the northeast, with less-than-normal precipitation values extending southwards through the central interior into the extreme south.

After a late and dismal start to the skiing season, significant amounts of snow fell in the southern parts of the province during the last few days of the month, much to the delight of the skiing populace. In the Greater Vancouver area, local snowfalls of between 20 and 40 centimetres caused at





CLIMATIC EXTREMES IN CANADA - JANUARY 1990

MEAN TEMPERATURE:		
WARMEST	AMPHITRITE, POINT B.C.	6.1°C
COLDEST	EUREKA, N.W.T.	-39.7°C
HIGHEST TEMPERATURE:	GREENWOOD A, N.S.	18.4°C
LOWEST TEMPERATURE:	FORT RELIANCE N.W.T.	-53.5°C
HEAVIEST PRECIPITATION:	HOPE A, B.C.	411.4 mm
HEAVIEST SNOWFALL:	BLUE RIVER A, B.C.	174.8 cm
DEEPEST SNOW ON THE GROUND ON JANUARY 31, 1990:	TIMMINS A, ONT.	116.0 cm
GREATEST NUMBER OF BRIGHT SUNSHINE HOURS:	CHURCHILL FALLS A, NFLD.	116 hours

least two traffic deaths. There were also power outages and damage to local marinas as the heavy loads of wet snow collapsed roofs onto stored boats. Snowfalls were near or above normal in the northern and eastern sections of the province. Dease Lake received more than twice their normal monthly snowfall. Surprisingly though, the Fort Nelson area received only 70% of their normal snowfall this month.

The only area to receive above-average sunshine was the extreme south coast and the eastern side of Vancouver Island. Elsewhere, below average amounts of bright sunshine were recorded.

Prairie Provinces

During the first three weeks of the month, temperatures were running well-above average, and it was first thought that this would be one of the mildest Januarys on record in the agricultural districts of the Prairies. However, a very cold dome of Arctic air, which had been building and intensifying over the Yukon and Mackenzie district, spread southwards during the final week of the month, and dashed any hopes of setting new monthly high temperature records. As the cold air settled in, minimums plunged to the mid-minus 40s, breaking numerous daily temperature records. Fort Chipewyan registered a minimum temperature of -48.5°C on the 29th.

As a result of the mild spell earlier in the month, the snow cover in the southern regions of Alberta and Saskatchewan was reduced to nil, especially since the middle of the month was generally dry. Also, in Saskatchewan and Manitoba, January was not the sunny month normally expected at this time of year when temperatures are cold.

Precipitation totals varied widely in the three provinces. Rain was reported in the south, but this is not an unusual event even in January. Some locations received generous amounts of precipitation, while others did not fair so well. Northern parts of Saskatchewan and Manitoba received almost twice their normal monthly snowfall, while southern Alberta and Saskatchewan had to make do with half their normal allotment of snow.

A winter storm which passed through the southern districts towards the end of the month, produced snow and blowing snow, and by month's end most southern locations once again reported snow on the ground. In the north, at month's end, snow depths ranged from 40 to 80 centimetres, while across the south depths of 5 to 10 centimetres were more common.

Spring planting and the condition of a newly-seeded grain crop greatly depends on the soil moisture reserves accumulated over the winter months, and as in previous years, the lack of a substantial snow cover in the agricultural districts of Alberta and Saskatchewan has agriculturists worried.

Ontario

Following the coldest December of the century, this month's weather was more like an early spring. Temperatures at the beginning of the year rebounded upwards, with the mildest January temperature readings since the 1930s. Moreover, the January-December temperature contrast was the greatest mean temperature difference from one month to the next ever recorded in southern Ontario. In addition, only three previous times in the 150-year weather history of Toronto has the January mean temperature ended up on the plus side of freezing; this January became the fourth.

In general, mean temperatures in the province were from 2 to 7 degrees above normal. In southern and central Ontario this was the mildest January since 1933. However, in northwestern Ontario, the record-mild January of 1987 remained unbeatable, except at Thunder Bay and Kenora, where January 1990 exceeded all January mean temperatures since 1944.

Across the southern half of the province snowfalls were well below normal, with amounts generally ranging from 15 to 50 centimetres. Sarnia's meagre 6 cm total made this the least snowiest January on record, while Wiarton's 59 cm was their lowest total since 1964, and a long way from the 258 cm total received last month. Although many locations in the south received less than half their normal allotment of snow, rainfall boosted the total precipitation amounts closer to normal. In the north and in the Ottawa Valley, snowfalls were more plentiful, varying between

50 and 80 centimetres. North Bay's 91 cm of snow led the province, and made this their snowiest January since 1975. In the northwest, rainfall was minimal, but snowfall amounts were unusually high. Red Lake's 86 cm was nearly three times their January average.

It was a rather cloudy month throughout the province. Both Sault Ste. Marie and Thunder Bay established new record-low hours of bright sunshine for the month of January, 21 and 76 hours of sunshine, respectively.

January 1990 continued the recent trend in Ontario towards mild Januarys, with the past five in southern Ontario, and four of the last five in northern Ontario, being milder than the long-term average.

Quebec

After the bitter cold encountered in December 1989, temperatures in January switched to the other extreme, with well-above-normal values in the southwest. In contrast, temperatures were below normal in the north and eastern parts of the province. In southwestern Quebec, nine locations established new mean monthly high temperature records this month. In addition, there were numerous daily temperature records broken. The relatively mild weather was just great for avid outdoor winter enthusiasts.

A storm track which steered weather systems from the American mid-west towards Quebec allowed mild, moist air to penetrate northwards from the Gulf States, and also ensured greater-than-normal amounts of precipitation across the south. Precipitation fell as a mixture of snow and rain in the southern part of the province. Rain and freezing rain fell during the middle of the month, and at one point forced the closure of some ski hills, notably in the Eastern Townships. The heaviest snowfalls occurred along the St. Lawrence Valley, with amounts generally greater than 50 cm, and in some cases exceeding 100 cm. Snowfall accumulations were considerably smaller in northern Quebec.

For most Quebec residents, it was a dull and cloudy month. Only the Magdalen Islands in the south and parts of northern Quebec had sunshine amounts that were above normal. Ste-Agathe-des-Monts and Maniwaki established new records for the least amount of sunshine in January. St-Agathe recorded only 46 hours of sunshine, which is just 48% of normal.

Maritime Provinces

January turned out to be generally cloudy and mild. In fact, it was the mildest January since 1958 at Saint John, N.B., and the mildest January since records began in 1961 at Halifax International Airport. On January 26, a southerly flow allowed daytime temperatures to soar to well-above seasonal values. New record-high monthly maximum temperatures were set at Greenwood, N.S., Nappan, N.S., Parrsboro, N.S., Kentville, N.S. and Moncton, N.B.

Precipitation, which fell as a mixture of rain and snow, was generally above normal in New Brunswick and P.E.I., but below normal in Nova Scotia. Snowfall amounts varied widely among the three provinces, but were above normal in New Brunswick. A severe storm hit the region on January 30, battering the Maritimes with heavy snow, ice pellets, freezing rain, rain, thunder and winds gusting well in excess of 100 km/h. Up to 48 cm of snow buried Moncton, N.B., and two-metre drifts were not uncommon. Shearwater, N.S., recorded wind gusts to 117 km/h, and reported an hourly mean wind speed of 82 km/h, the highest in 25 years of records. There was a considerable amount of damage caused by this storm, including broken windows, damaged roofs and toppled billboards. Broken power poles and lines resulted in numerous power outages. Forty-foot waves along the coast swamped one fishing boat and damaged six others at Mill Cove, N.S. Schools and businesses were shut down and all forms of transportation, including C.N. Marine ferry services to Newfoundland and P.E.I. were severely disrupted.

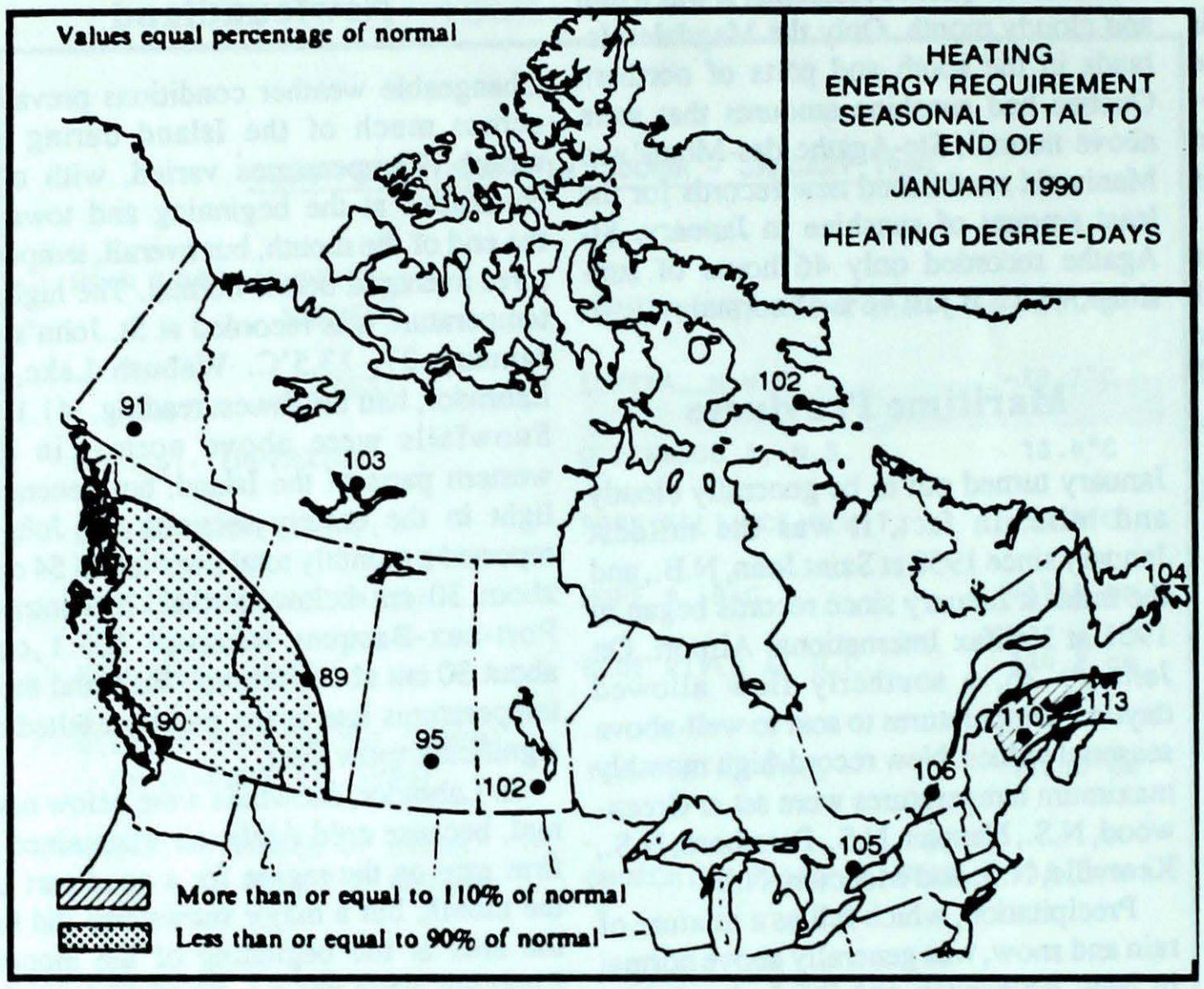
Newfoundland

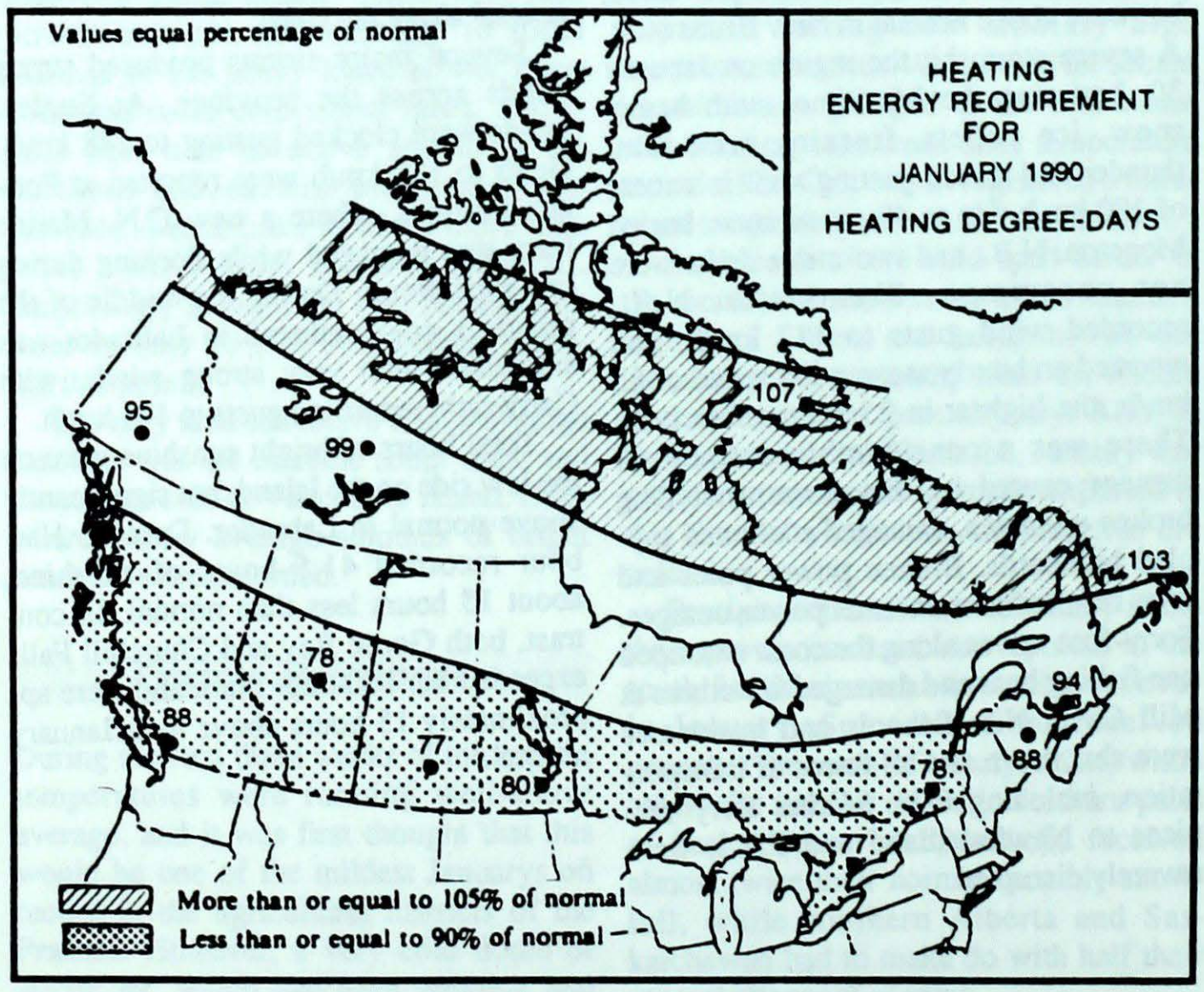
Changeable weather conditions prevailed across much of the Island during the month. Temperatures varied, with mild conditions at the beginning and towards the end of the month, but overall, temperatures averaged below normal. The highest temperature was recorded at St. John's on January 27, 13.5°C. Wabush Lake, in Labrador, had the lowest reading, -41.1°C. Snowfalls were above normal in the western parts of the Island, but generally light in the eastern sections. St. John's reported a monthly total snowfall of 54 cm, about 30 cm below normal. In contrast, Port-aux-Basques received 103.1 cm, about 30 cm above normal. Rain and mild temperatures late in the month resulted in significant snow melt.

In Labrador, snowfalls were below normal, because cold Arctic air maintained a firm grip on the region for a good part of the month, but a major snowstorm did hit the area at the beginning of the month. Churchill Falls got a total of 45.1 cm of snow this month, approximately half their January normal. Snowfalls were closer to normal along the coast.

Several major storms produced strong winds across the province. At Englee, winds were clocked gusting to 148 km/h. Gusts to 130 km/h were reported at Port-aux-Basques, where a new C.N. Marine ferry was damaged while docking during one such storm. During the middle of the month, a cold outbreak in Labrador was associated with very strong winds, with Cartwright recording gusts to 141 km/h.

Total hours of bright sunshine were on the low side on the Island, but significantly above normal in Labrador. Daniel's Harbour recorded 41.5 hours of sunshine, about 15 hours less than normal. In contrast, both Goose Bay and Churchill Falls exceeded the 100-hour mark and were approximately 15 hours above their January normal.



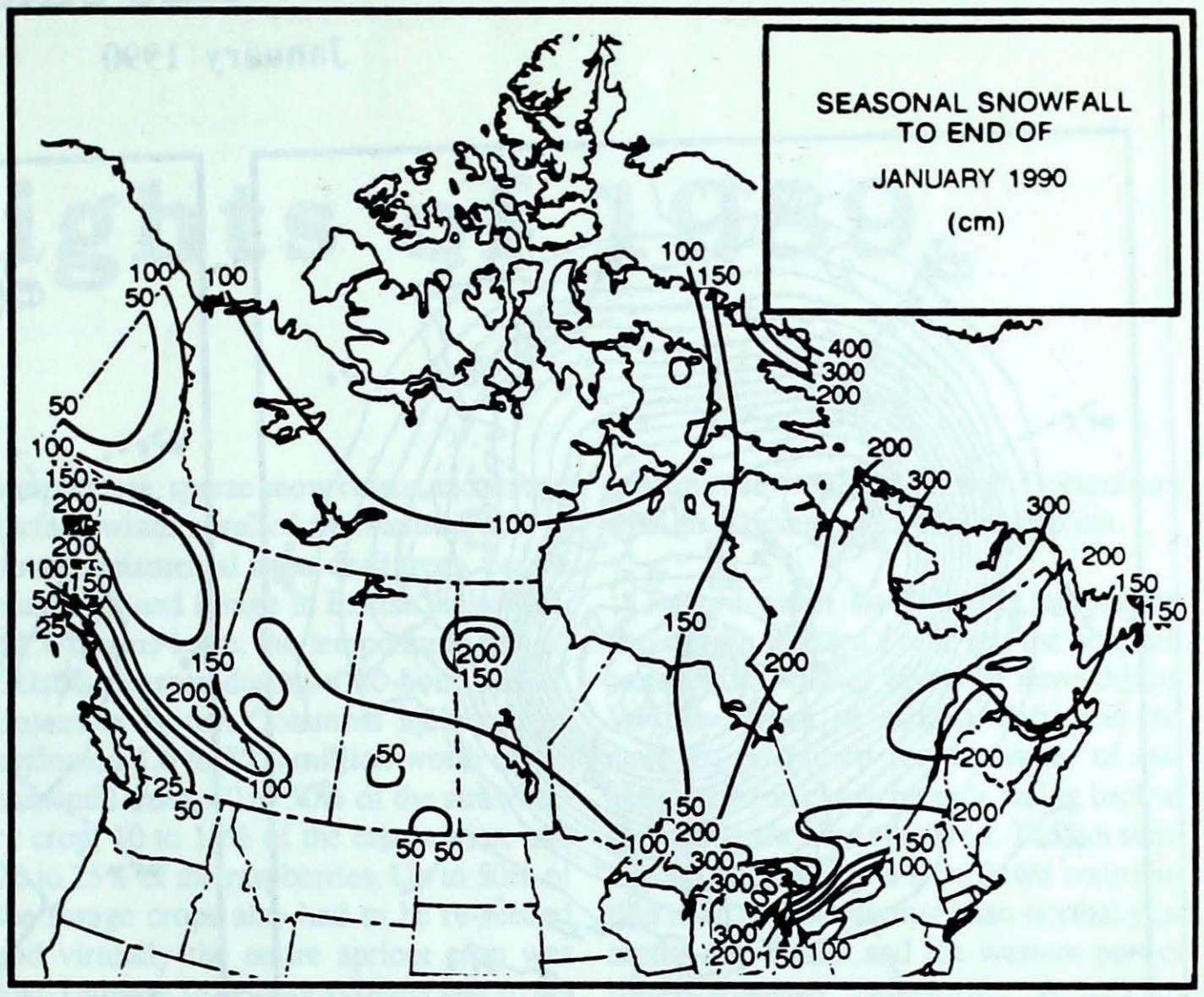


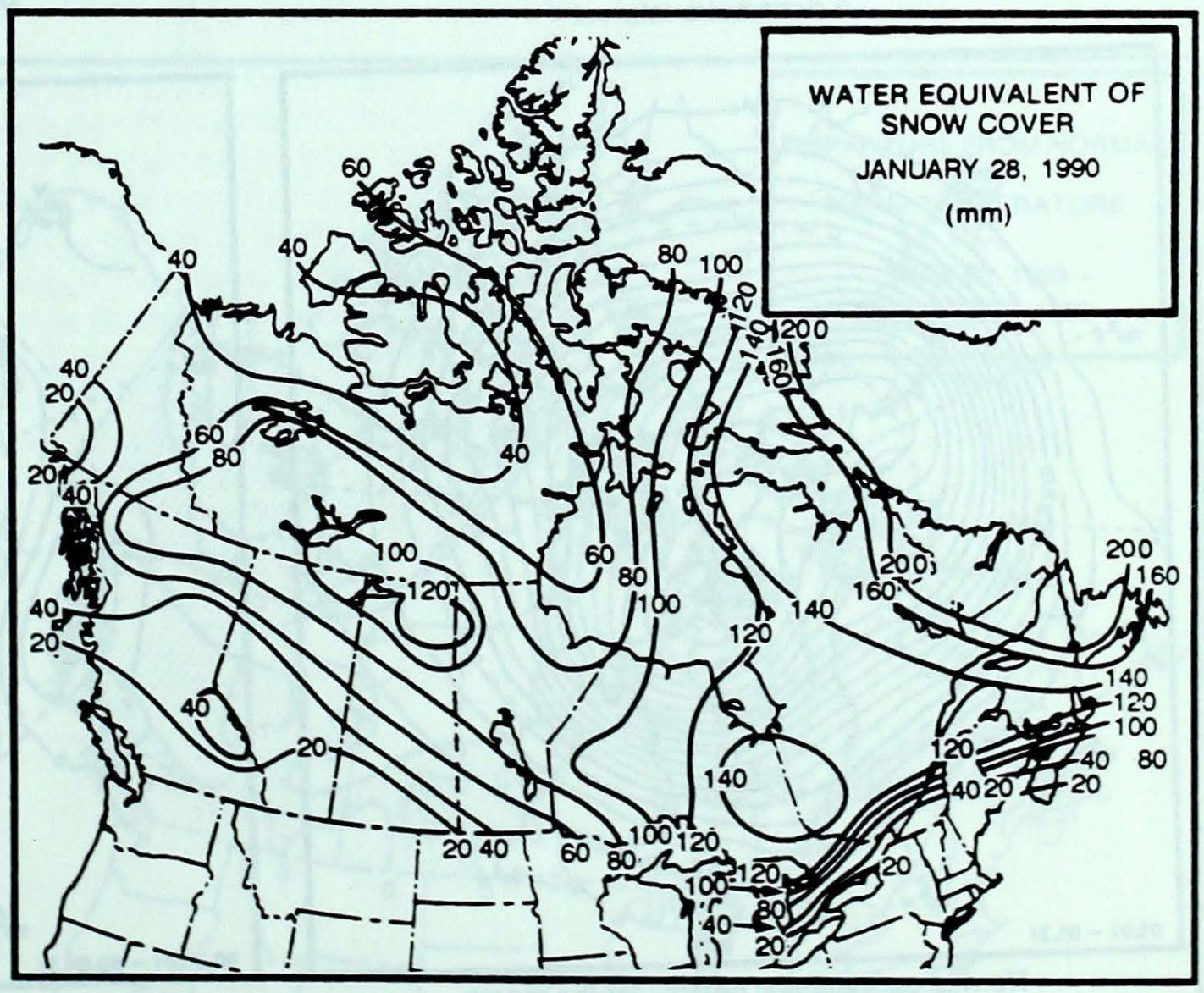
SEASONAL TOTAL OF HEATING DEGREE-DAYS TO END OF JANUARY

	1990	1989	NORMAL
BRITISH COLUMBIA			
Kamloops	2045	2119	2281
Penticton	1857	1973	2056
Prince George	2943	2993	3234
Vancouver	1533	1599	1698
Victoria	1642	1733	1745
YUKON TERRITORY			
Whitehorse	3837	4139	4224
NORTHWEST TERRITORIES			
Iqaluit	5482	5343	5362
Inuvik	5745	5783	5661
Yellowknife	4988	4892	4833
ALBERTA			
Calgary	2689	2815	3091
Edmonton Mun	2868	2876	3218
Grande Prairie	3194	3347	3644
SASKATCHEWAN			
Estevan	3040	3018	3146
Regina	3204	3289	3370
Saskatoon	3364	3313	3506
MANITOBA			
Brandon	3464	3448	3506
Churchill	5105	4962	4943
The Pas	4079	3683	4214
Winnipeg	3431	3323	3367
ONTARIO			
Kapuskasing	3768	3563	3602
London	2343	2122	2224
Ottawa	2777	2619	2617
Sudbury	3202	2929	2996
Thunder Bay	3397	3168	3210
Toronto	2329	2150	2225
Windsor	2070	1887	1983
QUEBEC			
Baie Comeau	3482	3368	3310
Montréal	2667	2571	2516
Québec	3020	2956	2856
Sept-Îles	3606	3456	3421
Sherbrooke	2950	2863	2900
Val-d'Or	3638	3403	3440
NEW BRUNSWICK			
Charlo	3140	3073	3006
Fredericton	2837	2669	2581
Moncton	2711	2563	2517
NOVA SCOTIA			
Sydney	2468	2364	2213
Yarmouth	2241	2062	2094
PRINCE EDWARD ISLAND			
Charlottetown	2690	2477	2381
NEWFOUNDLAND			
Gander	2763	2758	2603
St. John's	2517	2477	2424

SEASONAL SNOWFALL TOTALS (cm)
TO END OF JANUARY

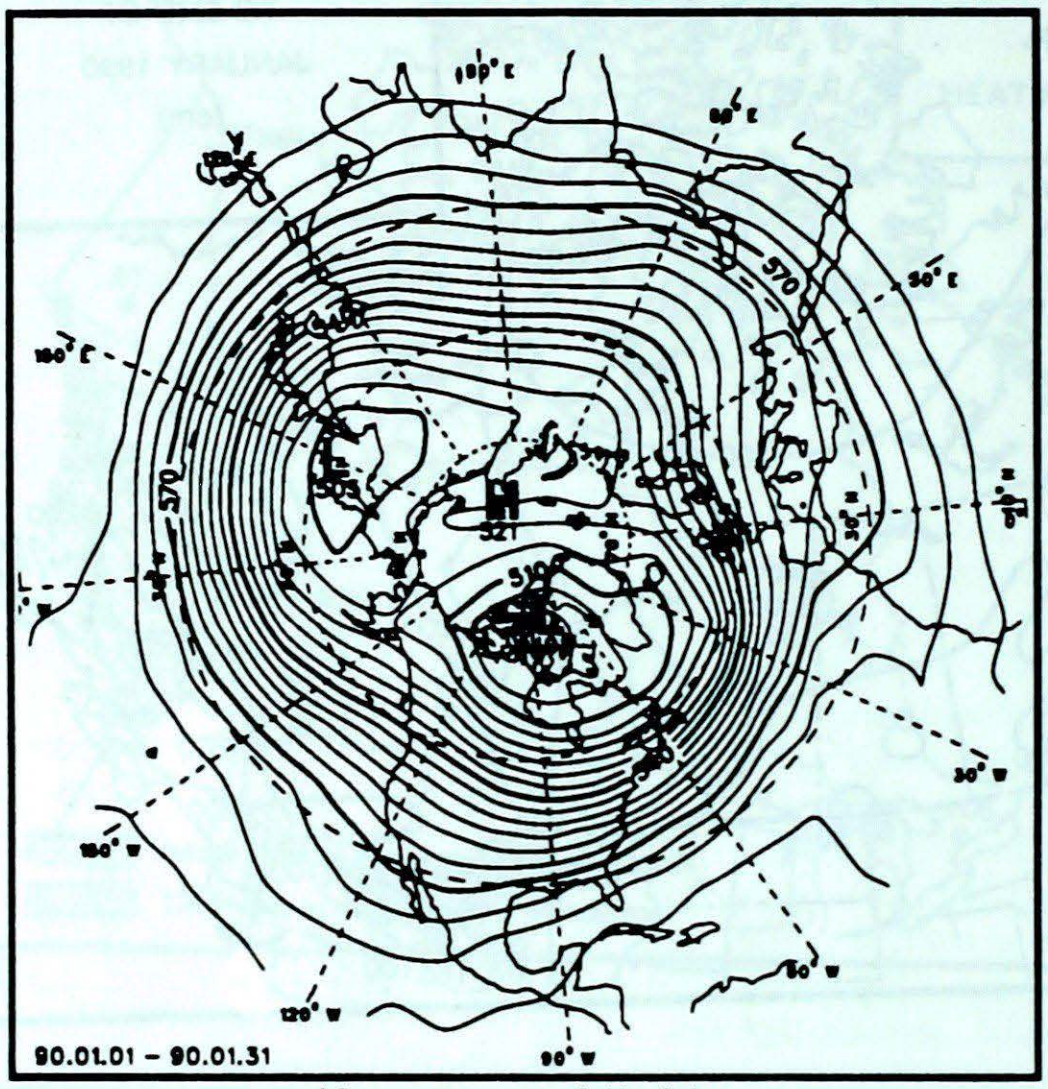
	1990	1989	NORMAL
YUKON TERRITORY			
Whitehorse	117.7	101.3	90.7
NORTHWEST TERRITORIES			
Cape Dyer	447.2	471.2	383.6
Inuvik	129.6	104.4	117.3
Yellowknife	121.7	117.7	94.2
BRITISH COLUMBIA			
Kamloops	41.1	37.5	74.0
Port Hardy	12.9	37.4	49.3
Prince George	166.2	157.9	164.0
Vancouver	4.4	18.0	46.0
Victoria	9.0	13.6	35.4
ALBERTA			
Calgary	53.4	65.0	77.3
Edmonton Namao	51.7	63.3	78.2
Grande Prairie	108.7	83.2	114.7
SASKATCHEWAN			
Estevan	39.5	109.8	63.1
Regina	66.9	61.0	65.0
Saskatoon	46.6	43.0	64.7
MANITOBA			
Brandon	69.6	85.4	64.0
Churchill	115.5	157.0	117.0
The Pas	114.4	60.4	95.6
Winnipeg	63.6	123.9	71.7
ONTARIO			
Kapuskasing	268.4	212.8	193.4
London	149.6	95.0	132.6
Ottawa	159.4	125.6	132.0
Sudbury	208.8	184.4	149.6
Thunder Bay	117.4	168.6	127.7
Toronto	47.4	26.4	74.8
Windsor	58.5	42.2	70.4
QUEBEC			
Baie Comeau	176.7	210.4	203.2
Montréal	129.8	127.2	134.4
Québec	215.8	175.4	201.9
Sept-Iles	207.2	265.4	243.9
Sherbrooke	206.0	145.6	179.8
Val-d'Or	215.8	216.8	187.3
NEW BRUNSWICK			
Charlo	197.0	207.1	219.1
Fredericton	144.9	103.8	155.9
Moncton	235.4	119.4	174.6
NOVA SCOTIA			
Shearwater	102.2	51.9	92.9
Sydney	186.1	142.4	154.7
Yarmouth	162.4	68.6	114.2
PRINCE EDWARD ISLAND			
Charlottetown	211.6	159.2	173.8
NEWFOUNDLAND			
Gander	232.6	350.9	193.7
St. John's	141.7	189.0	172.1



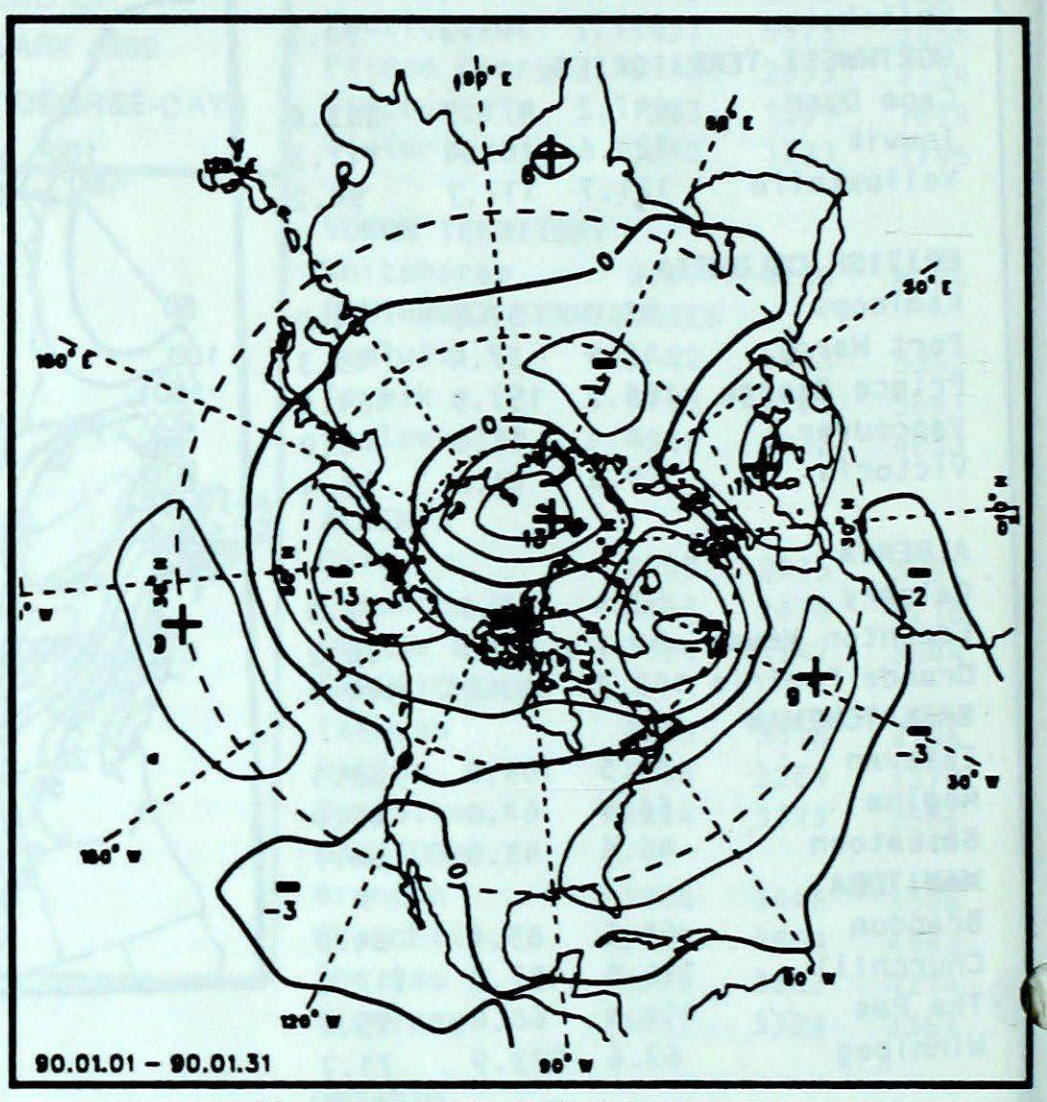


50-kPa ATMOSPHERIC CIRCULATION

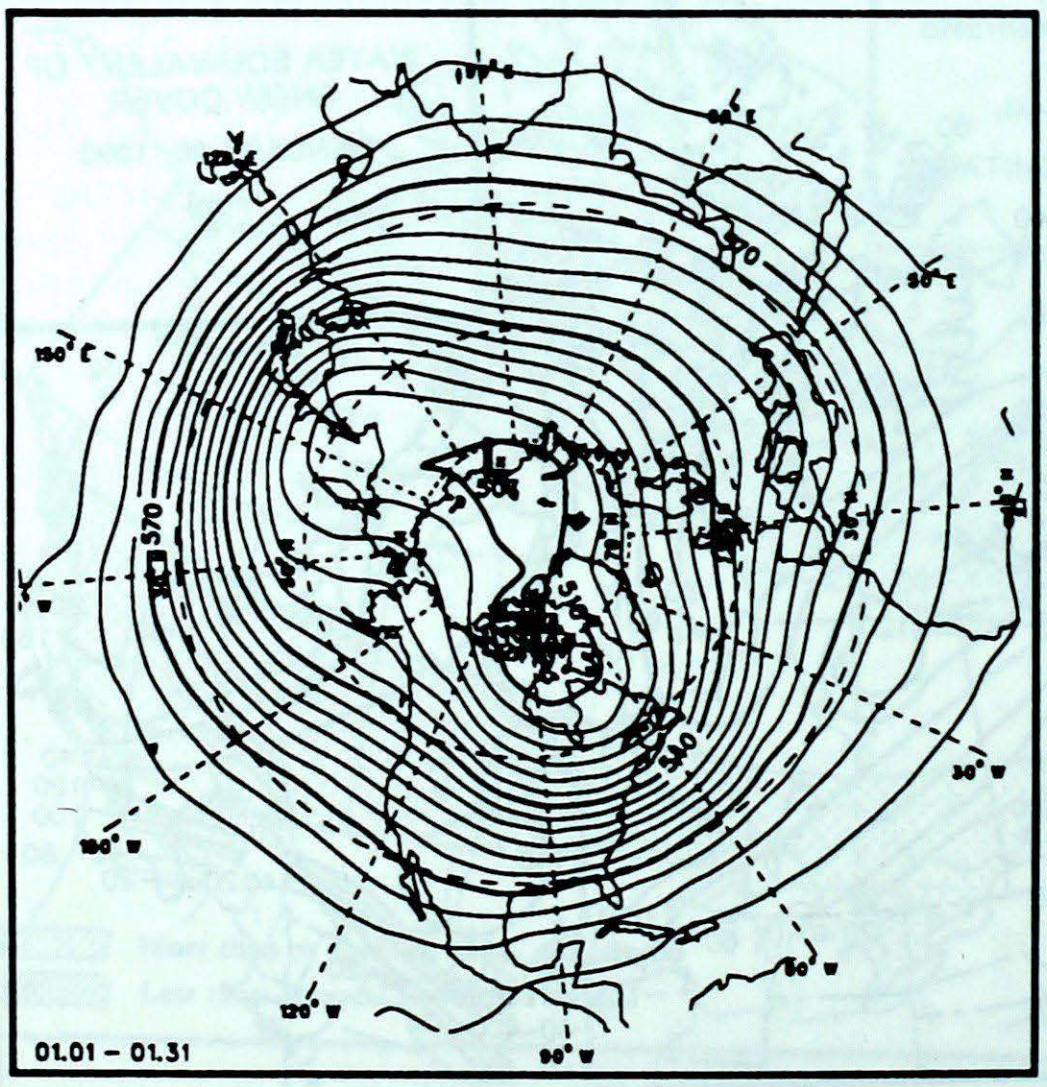
January 1990



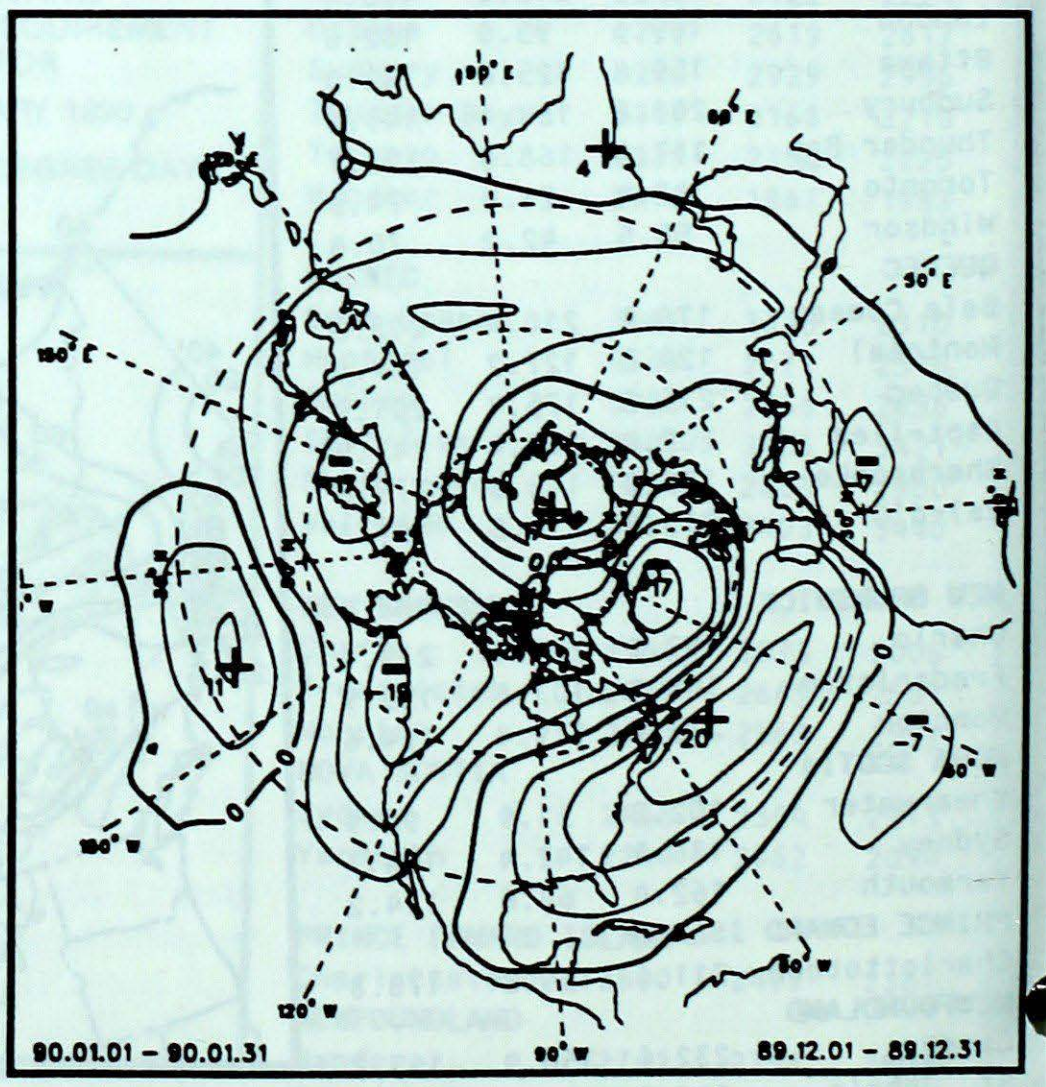
Mean geopotential heights
- 5 decametre interval -



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 -

Highlights of 1989

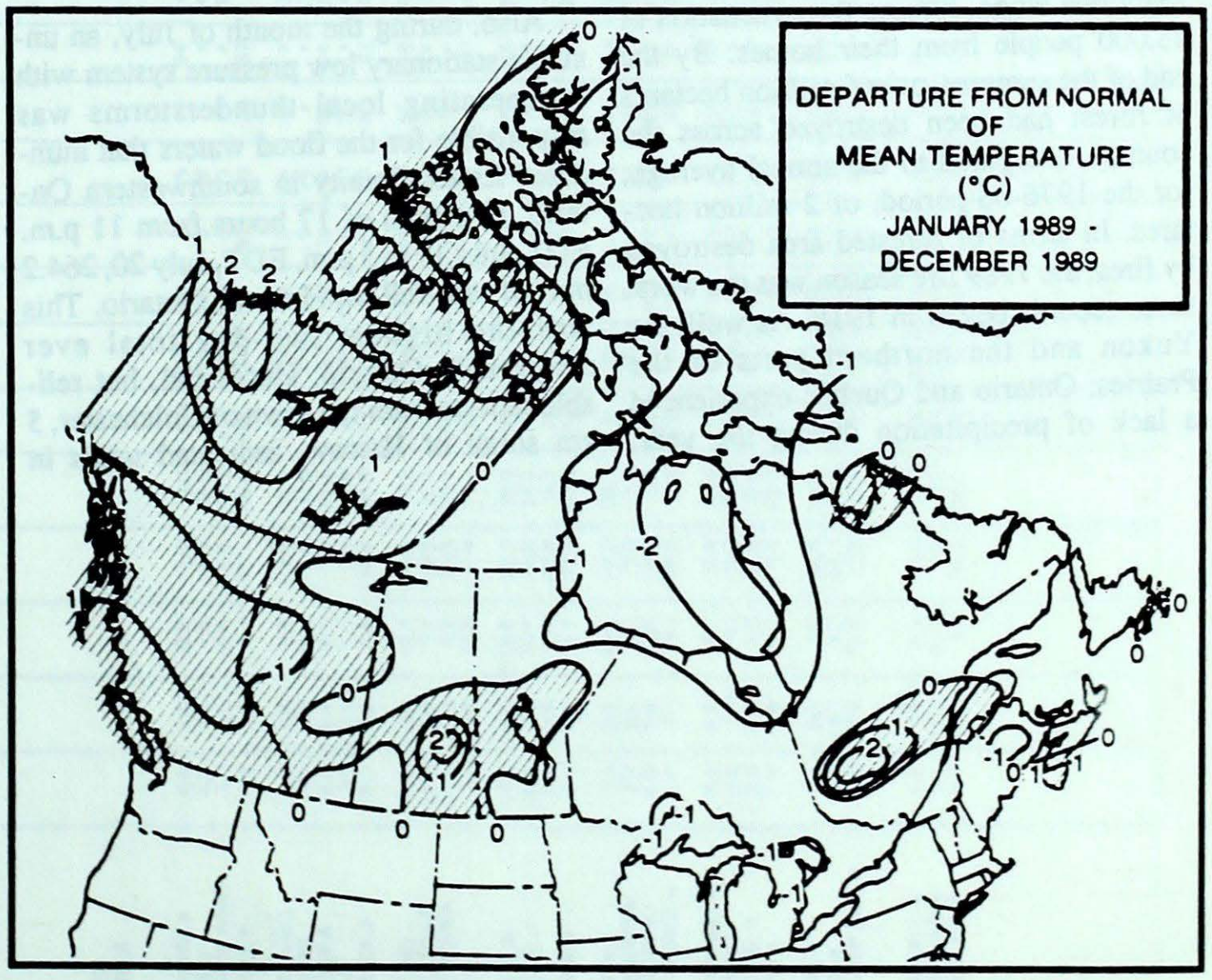
☐ ***Aaron Gergye, Canadian Climate Centre***

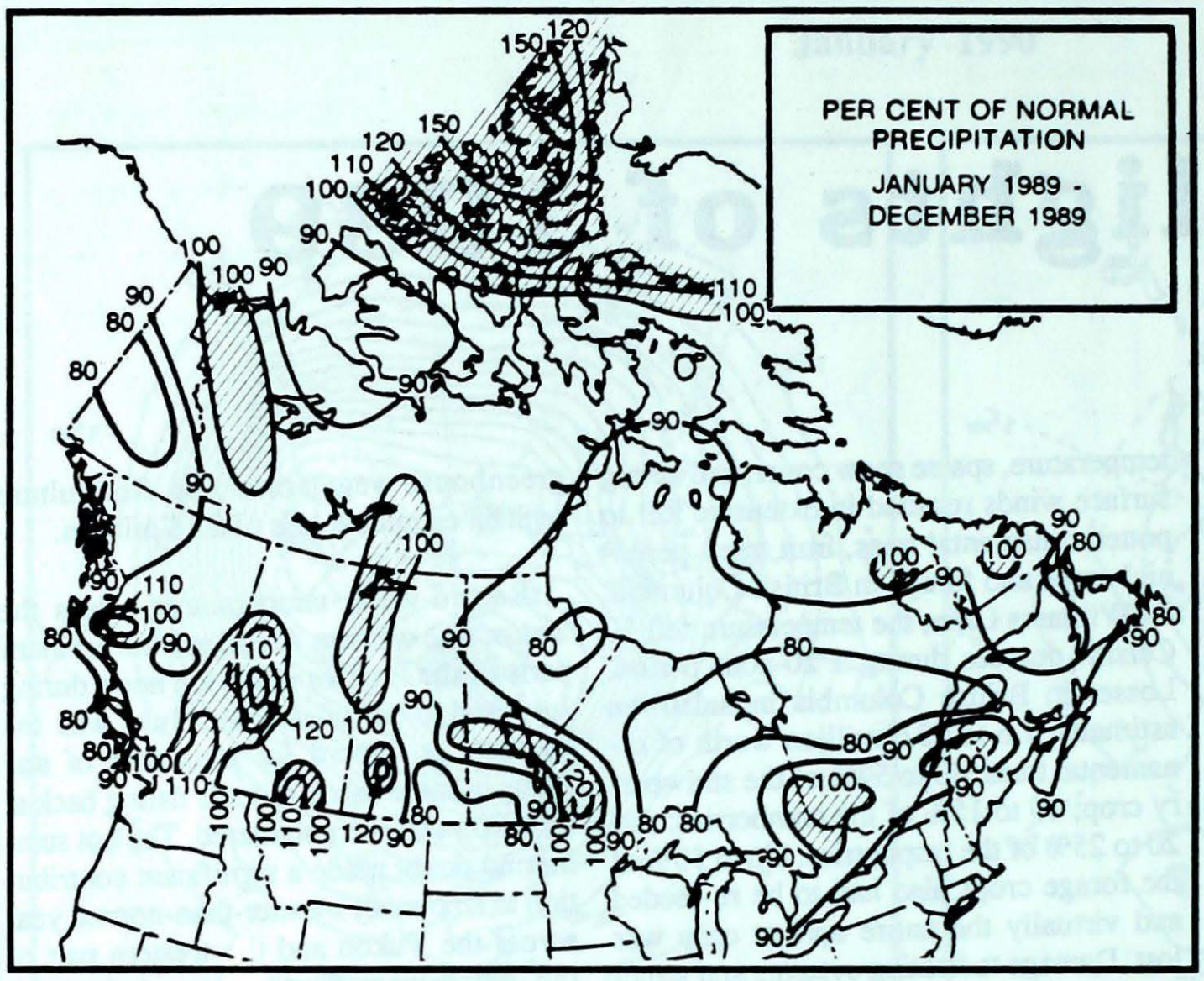
Extreme weather events during 1989 resulted in extensive losses to forestry and agriculture. The most prominent phenomena were: record-cold temperatures across the western parts of the country during late January and early February, causing severe agricultural damage in British Columbia; record-warm temperatures through the Arctic and the northern Prairies during the summer months, resulting in widespread fires in the boreal forest regions; devastating floods in southwestern Ontario during July, spawning major crop losses; and, finally, near the end of the year, a deep freeze that gripped the eastern half of the country, shattering December monthly records and creating some hardships.

During the last few days of January, a dome of bitterly-cold air (affectionately called "The Siberian Express") moved into the Yukon, and produced record-breaking low temperatures in the -50°C range. As a result, gasoline pumps froze and motor oil congealed. The weight of this cold dome also produced the highest pressure reading ever recorded in North America, 107.5 kPa at Northway, Alaska. The cold air plunged southwards from the Yukon, dominating February's weather in British Columbia and the Prairie provinces. Record-low daytime temperature readings were set at several locations in Saskatchewan and Manitoba as the thermometer struggled to climb above -35°C.

From January 30th to February 1st, a combination of spectacular decreases in temperature, sparse snow cover, and strong surface winds resulted in extensive kill to potted ornamental trees, fruit trees, perennial crops and forage in British Columbia. At Williams Lake, the temperature fell 30 Celsius degrees during a 20-hour period. Losses in British Columbia included: an estimated 1.6 to $2.0 million worth of ornamental trees; 40 to 50% of the strawberry crop; 10 to 15% of the cranberries; and 20 to 25% of the raspberries. Up to 50% of the forage crops also had to be re-seeded and virtually the entire apricot crop was lost. Damage to heating systems and structures due to high winds and power outages during the cold spell caused the freezing of greenhouse vegetables and floriculture with an estimated loss of $1.5 million.

Record-warm temperatures across the Yukon, the western Arctic and the northern parts of the Prairies made the news during July and most of August. July was the warmest on record for a number of stations; in some cases, records dating back at least 20 years were shattered. The hot summer no doubt made a significant contribution to an overall warmer-than-normal year across the Yukon and the western part of the Northwest Territories. A lack of precipitation combined with temperatures soaring into the mid-thirty degree Celsius





mark and fuelled countless forest fires across these regions. During mid-July, about 600 fires raged across northern Manitoba alone, forcing the evacuation of 23,000 people from their homes. By the end of the summer, over 6 million hectares of forest had been destroyed across the country, compared to the annual average, for the 1976-86 period, of 2 million hectares. In terms of forested area destroyed by fires, the 1989 fire season was the worst since records began in 1918. As well, the Yukon and the northern parts of the Prairies, Ontario and Quebec experienced a lack of precipitation during the year, which contributed to the rash of forest fires.

Also, during the month of July, an unstable stationary low pressure system with regenerating local thunderstorms was responsible for the flood waters that inundated Essex County in southwestern Ontario. In a span of 17 hours from 11 p.m. EDT, July 19 to 3 p.m. EDT, July 20, 264.2 mm of rain fell on Harrow, Ontario. This was the highest two-day total ever recorded in Ontario. Unofficial, but reliable reports from the town of Colchester, 5 km south of Harrow, indicated totals in excess of 300 mm. Damage was extensive; more than 1000 homes were affected by surface flooding and more than 3000 people had to leave their homes. Fortunately, no lives were lost. Estimates of crop losses in this important agricultural area of Canada were estimated at 60%, while road repairs were expected to cost $35 million.

Finally, from mid-November to the end of December, temperatures plummeted along a wide swath stretching from the Yukon southeastwards into the Atlantic provinces. The deep freeze began in the Yukon and the Northwest Territories during the second week of November as the thermometer bottomed out in the -40 to -50°C range. Many government facilities, which had converted from traditional fuels such as wood and oil to propane, found that the propane had congealed from the cold. Thus, heating systems were crippled, and vital nursing stations and community hospitals were temporarily shut down. In the District of Mackenzie, Northwest Territories, the ferry at Fort Providence plied the Mackenzie River 24 hours a day to keep the critical supply line to Yellowknife open until ice bridges were in place. By the end of November, the cold pincer had reached the Atlantic region: Ontario, Quebec and the Atlantic provinces subsequently experienced the coldest December on record. Early ice formation on the Great Lakes brought a premature halt to shipping, home-heating bills soared and energy conservation became newsworthy. Toronto, Ontario, had the coldest December since 1876 while Saint John, New Brunswick was the coldest since records began in 1871.

JANUARY 1990

STATION	Temperature C Mean	Difference from Normal	Maximum	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	4.6	3.0	12.8	-6.0	16.1	49	254.9	122	0	19	57	84	415.3
ALERT BAY	3.8	1.0	7.6	-3.3	11.8	35	245.0	125	0	22	*	*	439.7
AMPHITRITE POINT	6.1	1.4	10.6	-0.6	17.3	119	440.3	108	0	25	*	*	368.4
BLUE RIVER A	-5.5	5.9	5.1	-25.0	174.8	179	136.8	167	87	18	39	82	0.0
CAPE ST JAMES	5.3	1.4	9.5	-3.5	16.0	98	179.0	111	0	24	47	*	395.5
CAPE SCOTT	5.4	1.8	10.3	-3.0	12.9	56	376.1	112	0	26	*	*	391.4
CASTLEGAR A	0.0	4.4	9.4	-7.5	62.6	75	93.2	116	16	14	56	124	558.7
COMOX A	3.7	1.5	11.0	-3.5	19.8	47	198.1	103	4	21	55	*	441.5
CRANBROOK A	-3.3	7.2	7.0	-16.4	34.9	65	39.7	91	19	10	65	82	662.6
DEASE LAKE	-17.3	2.4	-0.7	-44.6	79.2	234	40.6	146	74	10	55	88	1094.7
FORT NELSON A	-20.9	2.9	-1.7	-42.9	22.6	72	15.1	61	51	3	72	*	1205.9
FORT ST JOHN A	-11.4	6.3	4.2	-39.8	39.9	104	32.7	92	16	7	72	*	911.6
HOPE A	3.1	3.5	11.8	-11.6	54.7	67	411.4	160	17	22	5	31	461.2
KAMLOOPS A	-1.3	4.8	13.4	-20.7	16.8	52	22.4	71	5	8	51	88	598.6
KELOWNA A	-0.4	6.1	13.4	-14.0	24.6	78	32.0	96	5	10	37	83	571.4
LYTTON	1.4	5.6	9.4	-17.6	6.7	12	49.8	72	7	10	34	54	516.4
MACKENZIE A	-8.3	6.2	2.3	-35.5	95.2	118	86.0	133	55	14	38	68	829.8
PENTICTON A	1.2	3.9	10.8	-11.2	20.7	71	23.9	75	5	9	40	83	522.7
PORT ALBERNI A	3.2	2.4	12.1	-3.8	31.0	51	30.4	12	1	22	18	*	460.4
PORT HARDY A	4.0	1.6	9.5	-4.5	11.1	38	309.7	147	0	23	25	40	434.3
PRINCE GEORGE A	-6.0	6.1	4.1	-39.6	78.0	128	57.7	101	21	14	47	79	743.5
PRINCE RUPERT A	3.5	4.0	9.7	-12.0	35.3	71	321.2	139	0	27	33	69	481.5
PRINCETON A	-2.8	5.1	7.1	-16.2	35.8	65	49.7	91	33	13	56	*	*
REVELSTOKE A	0.5	8.3	5.3	-13.9	16.0	11	144.4	130	67	20	31	70	616.3
SANDSPIT A	3.8	1.8	10.2	-5.4	20.3	60	167.6	116	0	21	43	74	439.4
SMITHERS A	-5.3	5.6	4.5	-30.0	98.4	172	71.7	129	48	10	35	64	722.3
TERRACE A	-1.8	4.1	5.2	-20.9	128.9	111	233.3	152	51	18	38	73	612.8
VANCOUVER INT'L A	4.4	1.9	10.8	-2.6	4.4	17	192.6	125	0	18	53	99	423.3
VICTORIA INT'L A	4.6	1.5	11.2	-3.0	9.0	45	200.8	130	0	17	71	112	415.5
VICTORIA MARINE	5.4	2.1	10.0	-1.6	1.0	9	270.2	139	0	23	*	*	390.4
WILLIAMS LAKE A	-5.9	4.5	6.1	-36.2	49.4	100	34.8	79	44	11	59	85	742.7

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YUKON TERRITORY													
DAWSON A	-30.2	*	-8.9	-52.2	35.9	*	16.0	*	66	*	*	*	*
WATSON LAKE A	-23.9	2.8	-4.0	-52.3	44.2	109	27.5	83	56	9	53	118	1293.0
WHITEHORSE A	-17.9	2.8	1.4	-43.7	19.3	91	10.5	59	35	4	48	105	1113.0
NORTHWEST TERRITORIES													
ALERT	-29.6	2.5	-12.3	-39.7	17.2	232	17.2	242	34	5	*	*	1474.7
BAKER LAKE A	-34.1	-1.7	-17.0	-45.4	4.8	60	7.4	96	30	1	1	2	1612.3
CAMBRIDGE BAY A	-33.1	0.5	-20.0	-46.2	5.0	94	4.8	100	29	1	1	70	1584.4
CAPE DYER A	-25.9	-3.8	-13.2	-36.2	6.8	9	6.8	10	108	2	*	*	1361.0
CAPE PARRY A	-30.6	-1.8	-20.3	-41.3	10.4	106	9.5	134	6	4	*	*	1505.0
CLYDE A	-31.9	-5.4	-15.3	-47.1	4.9	49	4.2	42	38	1	*	*	1545.8
COPPERMINE A	-30.5	-0.4	-15.1	-45.3	15.8	172	10.5	113	57	3	4	93	1554.4
CORAL HARBOUR A	-31.6	-1.9	-14.5	-41.8	13.1	154	13.9	167	39	6	14	33	1538.5
EUREKA	-39.7	-3.3	-21.3	-51.5	2.6	81	1.4	48	19	0	*	*	1788.3
FORT RELIANCE	-30.3	-0.7	-7.3	-53.5	20.4	142	12.2	103	39	5	*	*	1483.0
FORT SIMPSON A	-27.7	0.6	-11.8	-45.6	14.7	71	14.1	78	47	6	72	150	1419.4
FORT SMITH A	-24.4	2.4	-3.2	-45.5	18.2	85	13.4	72	64	2	56	*	1315.0
IQALUIT	-29.4	-3.8	-18.5	-36.7	8.4	30	7.8	30	13	2	45	127	1469.4
HALL BEACH A	-31.8	-0.8	-18.5	-41.9	6.0	68	5.6	64	37	3	*	*	1542.9
HAY RIVER A	-25.2	0.6	-2.1	-43.4	22.2	99	22.2	107	78	7	*	*	1340.6
INUVIK A	-32.7	-3.1	-19.9	-48.6	22.8	112	18.4	103	40	7	3	37	1572.6
MOULD BAY A	-32.2	1.3	-20.5	-40.8	8.4	255	7.4	274	40	3	*	*	1555.4
NORMAN WELLS A	-30.8	-1.9	-18.1	-48.6	20.3	99	15.7	81	13	6	43	142	1514.1
POND INLET A	-34.1	*	-24.0	-40.0	4.6	*	4.0	*	25	2	*	*	1612.9
RESOLUTE A	-31.3	0.8	-23.7	-39.1	1.4	41	1.4	42	22	0	*	*	1529.8
YELLOWKNIFE A	-28.2	0.6	-12.4	48.2	25.2	163	20.7	156	42	5	68	48	1431.6
ALBERTA													
BANFF	-6.8	4.7	4.0	-31.5	46.0	104	32.3	85	39	8	*	*	*
CALGARY INT'L A	-4.6	7.2	10.6	-30.5	12.0	58	5.6	35	2	2	104	102	701.3
COLD LAKE A	-13.6	5.4	2.7	-41.6	26.6	112	22.0	100	23	9	75	82	980.0
CORONATION A	-10.5	6.0	4.2	-36.3	26.6	106	16.7	78	20	5	104	87	883.2

JANUARY 1990

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	Mean	Difference from Normal	Maximum	Minimum									
EDMONTON INT'L A	-8.2	8.3	5.6	-35.3	16.4	57	13.6	56	9	5	109	111	812.8
EDMONTON MUNICIPAL	-7.4	7.6	6.4	-33.6	15.7	*	14.6	59	7	6	104	115	787.0
EDMONTON NAMAO A	-7.8	7.8	5.8	-35.4	14.4	58	14.0	56	5	7	*	*	801.4
EDSON A	-8.4	5.9	6.5	-42.8	50.5	140	35.4	139	26	8	91	109	817.9
FORT CHIPEWYAN A	-23.1	2.6	-3.5	-48.5	20.4	96	14.6	71	70	*	*	*	*
FORT MCMURRAY A	-18.0	3.8	2.0	-43.0	25.2	95	16.4	72	45	4	92	104	1115.2
GRANDE PRAIRIE A	-11.9	5.8	4.3	-46.6	53.6	141	42.7	126	31	9	74	*	929.6
HIGH LEVEL A	-22.7	0.5	3.6	-45.1	44.0	165	36.1	156	52	8	64	118	1261.3
JASPER	-6.6	6.2	4.4	-35.4	22.8	60	19.2	56	22	8	69	*	762.6
LETHBRIDGE A	-2.4	7.9	10.9	-34.0	15.4	54	14.4	61	7	6	81	*	631.1
MEDICINE HAT A	-3.8	8.8	8.7	-35.8	13.4	52	14.5	64	7	5	89	96	671.0
PEACE RIVER A	-13.5	6.9	4.1	-34.5	26.1	97	24.7	112	18	8	*	*	975.5
RED DEER A	-9.2	6.3	6.8	-33.6	13.1	53	10.6	45	13	4	*	*	842.2
ROCKY MTN HOUSE A	-8.8	4.2	8.2	-33.5	17.2	57	10.2	37	14	5	*	*	832.4
SLAVE LAKE A	-11.8	5.4	4.6	-36.8	24.0	73	18.8	71	10	10	87	104	920.7
WHITECOURT A	-8.9	7.7	6.0	-38.2	42.6	134	30.9	105	13	9	*	*	764.5
SASKATCHEWAN													
BROADVIEW	-10.3	9.4	4.5	-34.6	2.6	14	23.8	135	14	8	90	75	875.2
COLLINS BAY	-24.2	*	-5.7	-45.3	61.8	*	42.0	*	81	7	88	*	1305.5
CREE LAKE	-21.8	3.1	-3.1	-47.0	34.8	167	28.0	185	45	9	86	102	1230.3
ESTEVAN A	-7.6	8.7	6.6	-31.6	14.4	71	10.0	52	4	4	104	86	794.1
HUDSON BAY A	-15.1	*	2.1	-37.2	31.0	*	20.8	*	23	7	76	*	1027.2
KINDERSLEY	-8.5	8.7	5.7	-33.4	16.3	90	13.2	77	6	3	86	*	854.1
LA RONGE A	-18.7	4.0	-1.4	-40.6	24.8	112	23.2	133	45	6	*	*	1136.6
MEADOW LAKE A	-15.7	*	3.7	-44.4	29.4	*	19.5	*	24	7	6	*	1046.2
MOOSE JAW A	-6.9	8.9	7.9	-33.6	19.9	86	15.0	81	12	4	81	77	772.4
NIPAWIN A	-16.5	*	2.5	-39.5	26.6	*	17.8	*	30	7	76	*	1071.1
NORTH BATTLEFORD A	-12.7	6.3	4.4	-37.6	17.9	81	12.6	64	13	4	*	*	950.6
PRINCE ALBERT A	-16.1	5.4	3.7	-41.7	27.2	149	25.5	154	21	5	71	74	1057.1
REGINA A	-9.5	8.4	5.3	-33.6	23.8	119	22.3	134	16	4	72	72	853.3
SASKATOON A	-12.3	7.0	3.4	-34.7	13.4	67	13.2	74	11	6	*	*	938.9
SWIFT CURRENT A	-5.9	8.8	8.9	-37.2	18.2	82	20.4	97	12	7	91	98	740.1
WYNYARD	*	*	*	*	*	*	*	*	*	*	*	*	*
YORKTON A	-12.6	7.3	4.0	-34.3	28.5	118	29.1	128	32	9	67	62	950.8
MANITOBA													
BRANDON A	-12.0	7.7	4.4	-31.7	24.2	115	22.2	114	25	9	93	*	928.6
CHURCHILL A	-27.4	0.1	-7.6	-41.9	30.9	183	23.4	153	28	5	78	97	1407.3
DAUPHIN A	-12.2	7.3	5.0	-38.1	32.8	128	32.9	134	20	11	***	869	935.8
GILLAM A	-25.2	2.8	-7.8	-42.6	18.6	81	13.7	77	40	4	*	*	1337.9
GIMLI	-12.8	*	3.0	-32.9	45.7	*	38.7	*	20	11	97	79	956.1
ISLAND LAKE	-21.0	3.8	-5.2	-39.3	47.2	118	36.6	166	53	9	*	*	1208.4
LYNN LAKE A	-24.3	2.6	-5.6	-43.3	54.8	206	26.7	144	60	6	85	91	1309.7

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	Mean	Difference from Normal	Maximum	Minimum									
NORWAY HOUSE A	-20.4	*	-5.0	-40.4	39.6	*	29.0	*	57	10	*	*	1190.7
PORTAGE LA PRAIRIE	-10.9	7.4	7.5	-31.0	31.0	101	25.6	98	21	10	*	*	895.2
THE PAS A	-18.6	4.1	-1.1	-38.7	38.4	163	27.4	152	26	8	65	63	1124.7
THOMPSON A	-24.6	2.0	-8.9	-42.6	20.6	81	18.0	95	58	6	82	87	1320.7
WINNIPEG INT'L A	-11.6	7.7	5.1	-32.4	26.0	110	24.4	115	17	8	103	85	918.0
ONTARIO													
BIG TROUT LAKE	-21.7	2.8	-6.0	*	*	*	*	*	58	*	*	*	*
EARLTON A	-10.8	5.5	3.0	-34.1	45.2	79	50.5	90	52	13	*	*	892.8
GERALDTON A	-14.8	*	-0.4	-33.0	55.8	*	45.0	*	39	14	*	*	1015.3
GORE BAY A	-4.6	5.5	4.8	-21.0	65.4	115	58.0	94	57	11	*	*	700.8
HAMILTON RBG	-0.1	*	10.9	-11.1	15.0	*	54.4	*	0	10	79	*	*
HAMILTON A	-1.0	5.4	9.9	-12.3	25.2	64	65.1	92	6	13	*	*	587.2
KAPUSKASING A	-13.8	4.8	1.0	-33.8	78.0	141	66.2	124	91	16	*	*	984.9
KENORA A	-11.7	6.8	1.3	-28.2	41.3	132	37.5	133	38	10	*	*	919.6
KINGSTON A	-2.0	5.7	7.5	-17.0	38.2	74	73.4	92	10	12	68	68	619.9
LONDON A	-1.4	5.2	9.2	-11.5	32.0	58	66.4	88	3	13	56	79	601.2
MOOSONEE	-18.3	2.1	0.7	-37.6	72.8	170	53.4	131	84	17	92	112	1126.1
MUSKOKA A	-4.3	6.1	7.1	-21.6	66.9	83	100.3	117	21	15	*	*	691.7
NORTH BAY A	-7.1	5.9	5.5	-25.3	91.0	153	99.9	157	81	18	64	66	775.7
OTTAWA INT'L A	-4.6	6.3	6.4	-23.7	57.2	114	73.7	121	10	16	*	*	702.0
PETAWAWA A	-7.3	5.8	6.4	-32.7	55.8	120	61.3	108	26	11	*	*	783.5
PETERBOROUGH A	-3.1	6.5	7.9	-18.6	35.4	100	49.0	88	8	11	*	*	643.7
PICKLE LAKE	*	*	*	*	*	*	*	*	*	*	*	*	*
RED LAKE A	-15.8	5.2	-2.8	-36.7	85.8	275	78.0	272	96	12	99	*	1046.5
ST CATHARINES A	0.7	5.4	11.9	-9.2	18.4	56	52.8	90	5	12	69	*	536.2
SARNIA A	-0.1	6.4	10.5	-8.7	5.8	20	35.8	68	0	9	74	89	561.8
SAULT STE MARIE A	-5.1	5.6	4.0	-19.0	87.0	114	64.5	81	37	17	21	27	714.4
SIOUX LOOKOUT A	-13.7	5.7	-1.0	-32.0	57.9	152	57.8	161	51	11	*	*	981.1
SUDBURY A	-7.6	6.1	3.6	-24.4	75.8	140	82.1	143	52	14	68	67	794.2
THUNDER BAY A	-10.1	5.3	2.9	-29.2	54.6	113	38.3	94	30	11	76	64	872.9
TIMMINS A	-11.7	5.6	2.5	-34.0	84.5	128	77.2	138	116	15	*	*	962.6
TORONTO	0.5	*	10.1	-11.9	20.6	*	44.8	*	10	6	*	*	541.2
TORONTO INT'L A	-0.8	5.9	9.6	-13.1	11.8	35	36.8	73	6	11	*	*	583.4
TORONTO ISLAND A	0.4	*	8.9	-11.1	11.8	38	35.5	*	6	10	*	*	546.1
TRENTON A	-1.8	5.8	9.0	-16.6	40.4	84	59.2	86	7	12	*	*	614.9
WATERLOO WELLINGTON	-2.2	5.5	8.0	-13.4	25.5	63	55.9	93	3	12	*	*	625.8
WAWA A	-8.6	*	4.0	-28.6	48.4	*	48.4	*	60	11	*	*	821.8
WIARTON A	-2.2	4.9	8.5	-15.9	58.6	57	76.7	79	5	12	63	93	608.6
WINDSOR A	0.8	5.7	11.5	-8.4	12.2	40	52.8	96	0	8	*	*	533.1

JANUARY 1990

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	Mean	Difference from Normal	Maximum	Minimum									
QUEBEC													
BAGOTVILLE A	-11.5	4.3	6.0	-29.5	74.2	109	78.3	123	44	17	*	*	915.1
BAIE COMEAU A	-12.3	1.7	3.8	-31.3	105.6	125	90.8	100	34	15	90	92	939.3
BLANC SABLON A	-14.3	-3.0	2.8	-28.5	135.0	119	147.2	113	50	17	92	*	999.1
CHIBOUGAMAU CHAPAIS	-16.3	*	1.5	-38.1	71.2	*	57.2	*	52	17	74	85	1064.4
GASPE A	-11.0	*	6.4	-28.0	51.0	*	52.8	*	44	13	94	*	898.4
INUKJUAK A	-26.1	-1.6	-5.4	-35.4	18.6	186	18.6	190	30	6	88	169	1368.9
KUUJJUAQ A	-24.9	-1.6	-7.0	-34.9	26.6	81	26.6	80	39	9	61	97	1335.2
KUUJJUARAPIK A	-23.9	-1.4	-2.2	-39.4	19.4	72	18.1	70	29	5	78	108	1300.0
LA GRANDE IV A	-23.8	*	-2.4	-45.6	36.2	*	32.0	*	80	11	92	*	1294.3
LA GRANDE RIVIERE A	-22.8	*	-2.6	-39.2	28.2	*	23.8	*	47	11	86	*	1245.3
MANIWAKI	-7.4	6.1	7.1	-31.0	66.4	137	93.6	170	40	18	48	52	785.9
MATAGAMI A	*	*	0.8	-38.8	68.1	*	61.1	*	72	18	64	82	1077.7
MONT JOLI A	-9.2	2.4	6.2	-25.5	64.0	74	75.2	86	27	16	57	71	844.0
MONTREAL INT'L A	-3.7	6.5	8.4	-23.7	53.4	101	81.0	113	14	17	76	71	670.9
MONTREAL MIRABEL I/	-5.1	*	7.9	-24.1	67.2	*	116.8	*	29	19	87	*	735.9
NATASHQUAN A	-14.0	-1.9	2.0	-31.2	100.0	145	114.6	126	64	18	103	95	991.9
QUEBEC A	-7.0	5.1	5.1	-22.1	85.6	110	136.8	152	70	19	60	62	776.6
ROBERVAL A	*	*	-2.4	-45.6	36.2	51	32.0	47	72	*	*	*	*
SCHEFFERVILLE A	-24.9	-2.1	-7.9	-42.2	44.8	94	41.2	88	69	9	92	116	1329.6
SEPT-ILES A	-14.5	-0.5	1.7	-31.2	85.4	91	79.4	83	*	18	105	97	1008.2
SHERBROOKE A	-4.6	7.0	7.6	-23.6	91.8	148	95.9	130	*	18	59	*	701.1
STE AGATHE DES MONT	-6.8	6.5	6.8	-25.4	107.6	131	138.2	145	63	19	46	48	768.2
ST HUBERT A	-3.6	6.5	8.9	-20.0	53.9	*	88.3	106	11	1	66	*	669.1
VAL D'OR A	-11.8	5.0	2.5	-35.7	61.6	104	64.4	107	50	18	83	82	923.3
NEW BRUNSWICK													
CHARLO A	-10.5	2.2	5.5	-28.5	100.3	119	92.2	102	78	16	92	78	883.5
CHATHAM A	-7.3	2.4	9.3	-25.0	87.1	131	116.2	118	55	14	98	86	785.0
FREDERICTON A	*	*	*	*	*	*	*	*	*	*	*	*	*
MONCTON A	-3.1	5.0	11.0	-17.2	44.5	57	102.7	82	13	14	*	*	*
SAINT JOHN A	-4.4	3.4	10.4	-21.7	66.0	87	162.1	109	22	19	105	99	693.5

STATION	Temperature C				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
	Mean	Difference from Normal	Maximum	Minimum									
NOVA SCOTIA													
GREENWOOD A	-2.1	2.9	18.4	-15.0	44.8	59	90.9	72	17	16	*	*	624.1
HALIFAX INT'L A	-3.1	2.9	11.0	-17.2	44.5	71	102.7	67	13	14	*	*	646.0
SABLE ISLAND	0.5	0.4	9.8	-8.8	50.7	140	179.1	122	1	16	66	125	542.8
SHEARWATER A	-4.3	-0.2	10.2	-15.4	41.4	91	129.5	90	3	14	80	71	608.7
SYDNEY A	-4.3	0.4	11.7	-14.7	87.1	117	148.5	100	44	15	83	97	689.2
YARMOUTH A	-0.4	2.3	10.0	-12.5	37.4	60	128.0	91	2	20	83	117	570.2
PRINCE EDWARD ISLAND													
CHARLOTTETOWN A	-5.5	1.6	8.9	-20.1	81.4	106	133.5	114	22	18	*	*	728.0
SUMMERSIDE A	-5.2	2.0	9.4	-18.5	85.2	128	136.7	133	47	20	89	82	729.8
NEWFOUNDLAND													
BONAVISTA	-4.6	-0.3	12.4	-16.5	40.4	79	55.3	61	9	11	*	*	700.9
BURGEO	-5.2	-0.4	6.7	-17.0	81.1	142	211.7	138	25	21	*	*	717.9
CARTWRIGHT	-16.2	-3.0	0.6	-29.8	79.6	96	79.6	89	211	12	98	109	1068.3
CHURCHILL FALLS A	-22.4	-1.1	-1.6	-37.8	45.1	53	34.2	47	71	6	116	116	1253.7
COMFORT COVE	-7.6	-0.2	9.8	-20.8	45.8	56	82.2	86	38	10	*	*	795.0
DANIELS HARBOUR	-10.3	-3.4	9.2	-36.5	68.2	77	123.4	124	28	19	42	74	870.7
DEER LAKE A	-9.6	-1.2	10.2	-32.5	117.8	136	126.8	135	67	18	*	*	857.0
GANDER INT'L A	-7.4	-1.2	11.3	-21.1	69.8	89	86.6	79	8	10	78	91	785.7
GOOSE A	-18.9	-2.5	-3.4	-30.7	80.1	100	61.8	83	102	18	103	117	1141.8
MARY'S HARBOUR	-14.2	-3.9	3.7	-30.2	50.8	69	53.4	63	87	12	*	*	996.9
PORT AUX BASQUES	-5.2	-1.1	6.1	-15.9	103.1	140	171.1	128	85	23	30	*	717.8
ST ANTHONY	-12.7	-1.3	3.2	-24.8	108.6	190	111.6	115	88	16	*	*	951.1
ST JOHN'S A	-4.4	-0.5	13.5	-15.9	54.3	67	101.1	65	17	19	77	108	695.4
ST LAWRENCE	-3.8	0.0	7.3	-15.5	82.6	162	140.5	118	25	21	*	*	665.8
STEPHENVILLE A	-6.4	-1.4	9.1	-24.0	113.9	120	149.2	129	64	23	33	75	757.9
WABUSH LAKE A	-23.0	-0.7	-0.9	-41.1	70.8	97	52.7	81	62	11	87	108	*

AGROCLIMATOLOGICAL STATIONS

JANUARY 1990

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	3.9	2.7	11.5	-9.0	38.8	299.7	130	5	23	37	0.0	14.8
KAMPLOOPS	*.*	*.*	*.*	*.*	*.*	*.*	**	***	***	**	*.*	*.*
SIDNEY	5.0	1.9	11.0	-1.5	0.0	163.0	104	0	19	56	0.0	23.8
SUMMERLAND	0.6	4.0	10.0	-12.5	15.2	30.2	85	4	10	41	0.0	2.0
ALBERTA												
BEAVERLODGE	-10.4	5.5	5.0	-43.0	45.3	33.2	101	20	8	72	0.0	0.0
ELLERSLIE	*.*	*.*	*.*	*.*	*.*	*.*	**	***	***	**	*.*	*.*
LACOMBE	-8.8	6.7	4.5	-33.0	10.0	8.2	38	15	4	100	0.0	0.0
LETHBRIDGE	*.*	*.*	*.*	*.*	*.*	*.*	**	***	***	**	*.*	*.*
VEGREVILLE	*.*	*.*	*.*	*.*	*.*	*.*	**	***	***	**	*.*	*.*
SASKATCHWAN												
INDIAN HEAD	-10.8	7.1	4.0	-40.0	24.6	29.4	140	21	9	**	0.0	0.0
MELFORT	-14.9	6.0	2.0	-37.5	20.4	20.4	108	51	6	60	0.0	0.0
REGINA	-10.6	7.4	5.5	-33.0	20.0	27.0	150	12	8	**	0.0	0.0
SASKATOON	*.*	*.*	*.*	*.*	*.*	*.*	**	***	***	**	*.*	*.*
SCOTT	-12.2	6.9	3.0	-35.0	16.8	14.4	85	11	6	82	0.0	0.0
SWIFT CURRENT	-6.2	8.6	8.5	-32.5	16.7	17.1	104	10	5	76	0.0	0.0
MANITOBA												
BRANDON	-11.1	8.2	5.7	-33.3	19.3	19.3	91	15	7	**	0.0	0.0
GLENLEA	-9.5	10.2	8.5	-29.5	12.6	13.4	52	12	6	112	0.0	0.0
MORDEN	-12.0	5.3	4.0	-32.0	16.4	23.2	99	30	8	109	0.0	0.0
ONTARIO												
DELHI	-0.7	5.3	9.5	-10.0	16.8	81.6	122	4	12	**	0.0	0.3
ELORA	-2.8	5.4	6.3	-15.5	0.0	52.2	90	3	0	**	*.*	*.*
GUELPH	-2.3	4.7	8.0	-14.8	24.1	56.3	100	4	9	60	0.0	0.0
HARROW	0.8	5.6	11.0	-11.0	10.6	36.0	61	0	7	73	0.0	3.1
KAPUSKASING	-14.0	4.6	1.0	-35.0	66.9	64.7	134	67	13	63	0.0	0.0
OTTAWA	-4.3	6.5	6.7	-23.5	47.4	66.8	121	16	12	72	0.0	0.0
SMITHFIELD	-1.5	6.0	9.1	-17.5	38.7	63.3	77	10	10	**	0.0	0.0
VINELAND	*.*	*.*	*.*	*.*	*.*	*.*	**	***	***	**	*.*	*.*
WOODSLIE	*.*	*.*	*.*	*.*	*.*	*.*	**	***	***	**	*.*	*.*

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
QUEBEC												
LA POCATIERE	-7.2	4.1	6.0	-23.0	57.7	92.3	117	29	12	86	0.0	0.0
L'ASSOMPTION	-5.0	6.9	7.0	-25.5	71.2	87.3	117	19	16	75	0.0	0.0
LENNOXVILLE	*.*	*.*	*.*	*.*	*.*	*.*	**	***	***	**	*.*	*.*
NORMANDIN	-14.1	3.9	3.0	-37.5	71.2	68.4	108	50	15	89	0.0	0.0
STE.CLOTILDE	-2.9	7.1	11.5	-21.0	63.8	72.4	102	15	14	62	0.0	0.8
NEW BRUNSWICK												
FREDERICTON	-5.5	3.6	11.0	-22.5	53.0	87.3	85	20	12	98	*.*	0.0
NOVA SCOTIA												
KENTVILLE	-1.8	3.2	17.0	-16.0	49.9	99.2	73	18	17	79	0.0	5.3
NAPPAN	-3.5	3.3	16.0	-20.5	72.5	125.6	110	45	18	84	0.0	0.0
PRINCE EDWARD ISLAND												
CHARLOTTETWN	-5.1	1.5	8.5	-20.0	79.8	141.8	139	28	19	90	0.0	0.0
NEWFOUNDLAND												
ST.JOHN'S WEST	-3.5	0.3	13.0	-14.0	42.7	112.8	62	10	17	66	*.*	3.0