



Environment
Canada

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Canada

Climatic Perspectives



Ref 1

Monthly Review

April - 1991

Vol. 13

CLIMATIC HIGHLIGHTS

Record warm weather spread eastwards across the country early in April, sending daytime temperatures soaring into the record mid to high twenties. In Winnipeg, Manitoba, the first week in April was the warmest ever recorded for this time of the month, and records date back to 1872. At Petawawa, Ontario, the thermometer registered a record 29°C on April 7, rapidly melting the snow cover.

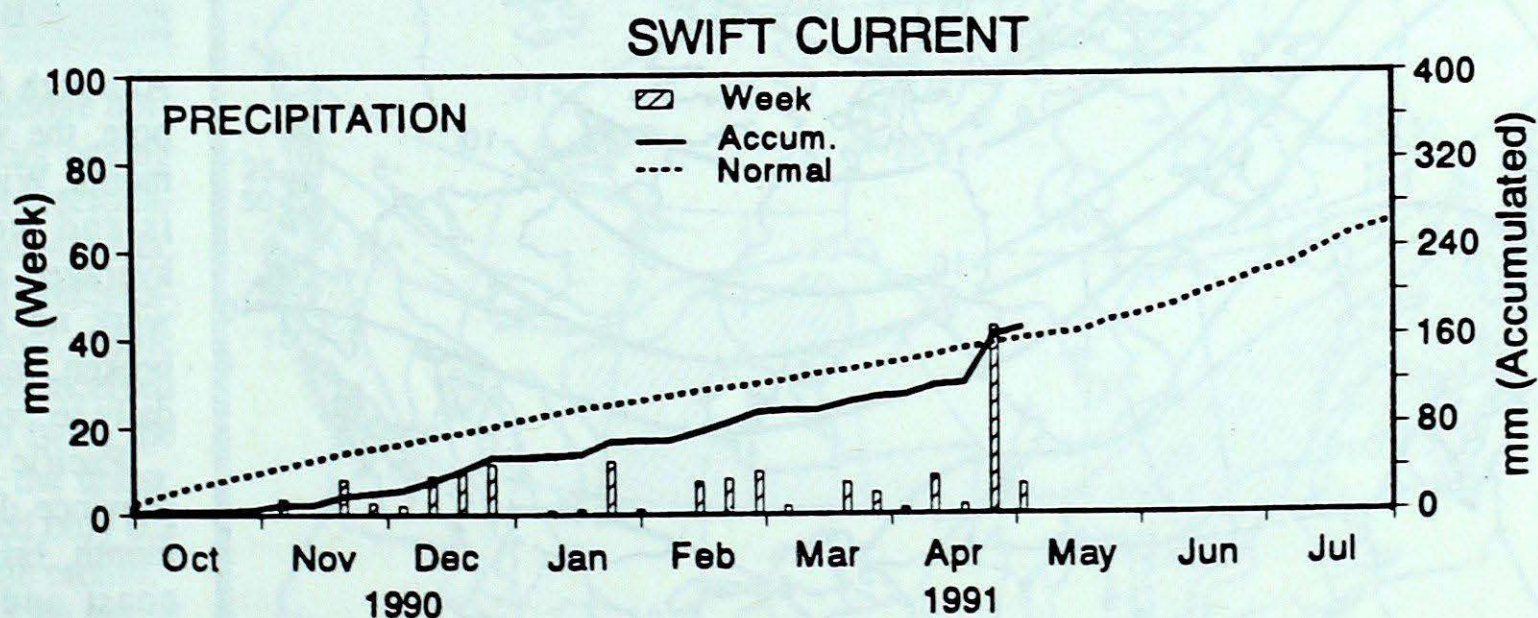
However in eastern Canada, it was the April precipitation that was most noteworthy. Farmers in southern Ontario were unable to venture onto their saturated fields to prepare for seeding. There was too much precipitation in the south and perhaps not enough in north, as one weather system after another crossed the Lower Great Lakes. The pattern was very similar to that of March, and as a result, southern Ontario endured one of the wettest springs on record. In excess of 100 mm of rain, caused some of the worst flooding in 60 years, in some parts of southern and central Ontario, especially along the Trent-Severn Waterway northeast of Toronto. In Mus-

koka, this was the wettest April on record, 145 mm or two and a half times the normal.

In Quebec it was much the same story, as this month's frequent rainfalls and melting snow combined to produce flooding along the rivers leading to the St. Lawrence and Ottawa Valleys. The Eastern Townships, east of Montreal, were particularly susceptible to high water levels. The most significant floods occurred in the Beauce region, where the Chaudière River caused the worst flooding since 1957.

In northern New Brunswick, the St. John River overflowed its banks near Edmundston because of ice jams. Towns were put on alert, but luckily, precipitation was not heavy enough to aggravate the situation.

On the Prairies by mid-April, spring soil moisture levels were lower than they had been in the last two years, and ranchers were worried about the future of their about to be seeded grain crops. Luckily, during the final week of the month, Mother Nature was able to turn the situation around, as a major spring storm arrived, dumping copious amounts of timely precipitation on the Prairies. The driest areas, southeastern Alberta and southwestern Saskatchewan, received amounts ranging between 25 to 60 millimetres, washing away most farmers concerns, at least for the time being. Lloydminster was buried under 80 cm of new snow, providing ample moisture to start off the growing season.



Below normal accumulated precipitation during the winter months rose sharply at the end of April.

Canada

Across the country

Yukon and Northwest Territories

In Canada's northern Territories, winter was gradually coming to an end. By the end of the month winter roads and ice bridges were being closed for the season, and ice started to breakup on some of the more southern rivers.

Total precipitation was below normal except in the Keewatin district, where amounts were double the monthly average. Coral Harbour was the wettest area, 41.4 mm, which is more than triple the normal.

Sunshine was abundant across the Territories, with the exception of the Keewatin. Resolute Bay had 375.8 hours of bright sunshine, almost 100 hours more than the long term average.

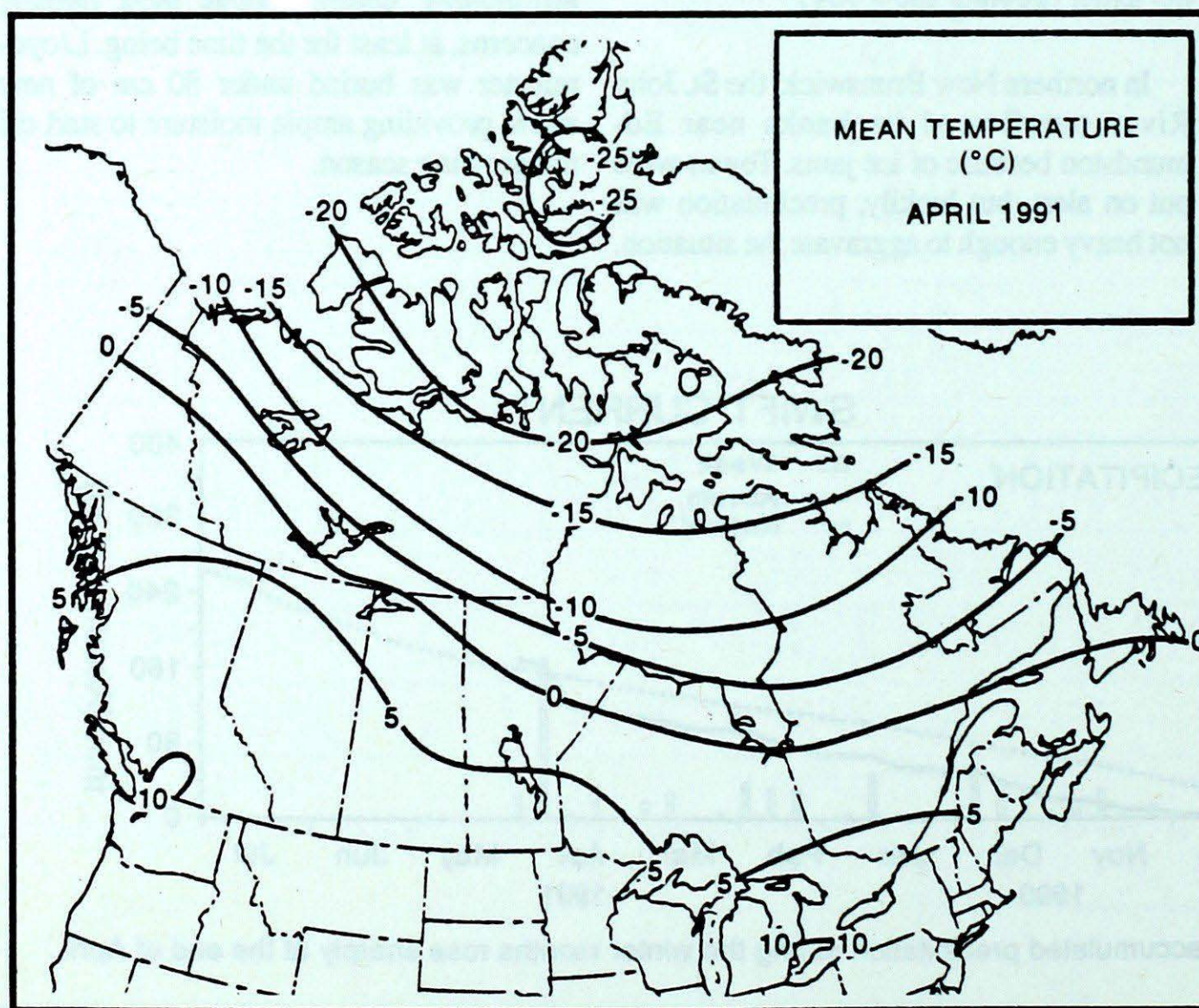
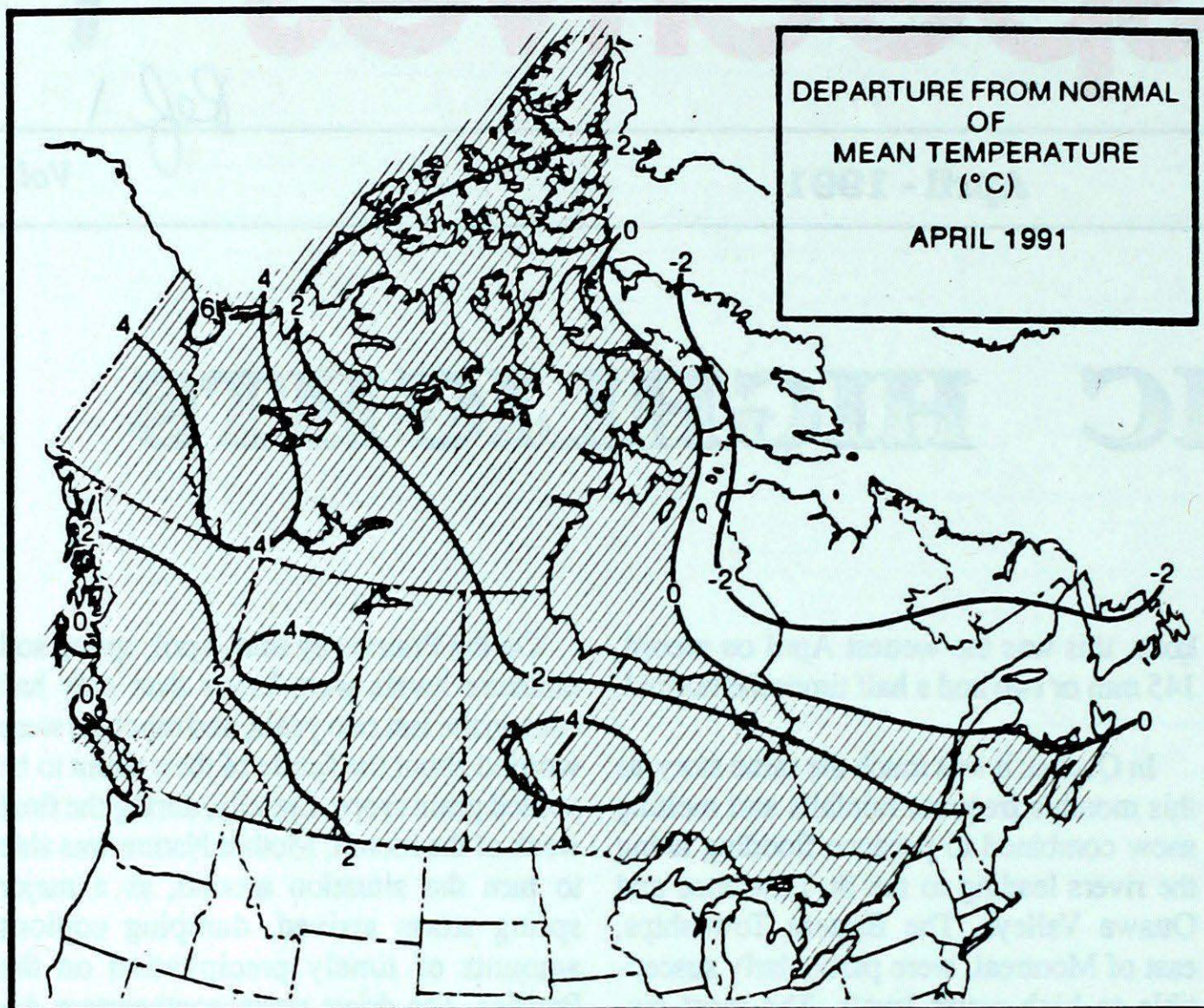
In the Yukon, it was an unusually warm and dry month. The highest temperature was, 17.0°C, which was tied at a number of Yukon locations. April is generally the driest time of the year in the Yukon, and this year was no exception. Many stations received less than half their normal precipitation, and in fact, some had no precipitation at all.

At Whitehorse, this was the fifth warmest April on record and also the fifth driest, with total precipitation amounting only to 2.0 mm. In the southern Yukon, the warm temperatures and plentiful amounts April sunshine brought spring flowers into bloom on most south facing slopes.

British Columbia

Although the month began on a unsettled note, the weather had improved by mid-month. With the exception of some coastal island communities, temperatures averaged above normal. Although there were no monthly temperature records broken, many stations did set individual daily records.

Pacific weather systems crossed the province during the first ten days of the month, bringing heavy rain to the south coast and southern interior. A more pleasant spring weather pattern became established by the middle of the month. Precipitation was more than twice the April normal in Victoria and Vancouver.



In contrast, in the far north and the Peace River district, precipitation was well below average. Fort St. John reported a record low April amount of only 1.0 mm, breaking the old record of 2.5 mm set in 1960. Spotty snowfalls still occurred in the interior valleys.

A very active Pacific storm on April 3, provided Victoria with their total monthly precipitation allotment in just 12 hours, and set a new one day precipitation record of 53.2 mm. Victoria received 81.7 mm of rain in the first seven days of the month, which is only 23 mm short of the wettest April on record. Coastal locations also received heavy rainfalls, some coming close to breaking their one-day maximum rainfall records for the month. By month's end drier conditions coupled with warm temperatures resulted in the first "high" forest fire hazard ratings. A couple of minor fires were reported. Milder temperatures began melting the snowpack at higher elevations, and some minor river flooding was reported at Quesnel and Williams Lake in central B.C.

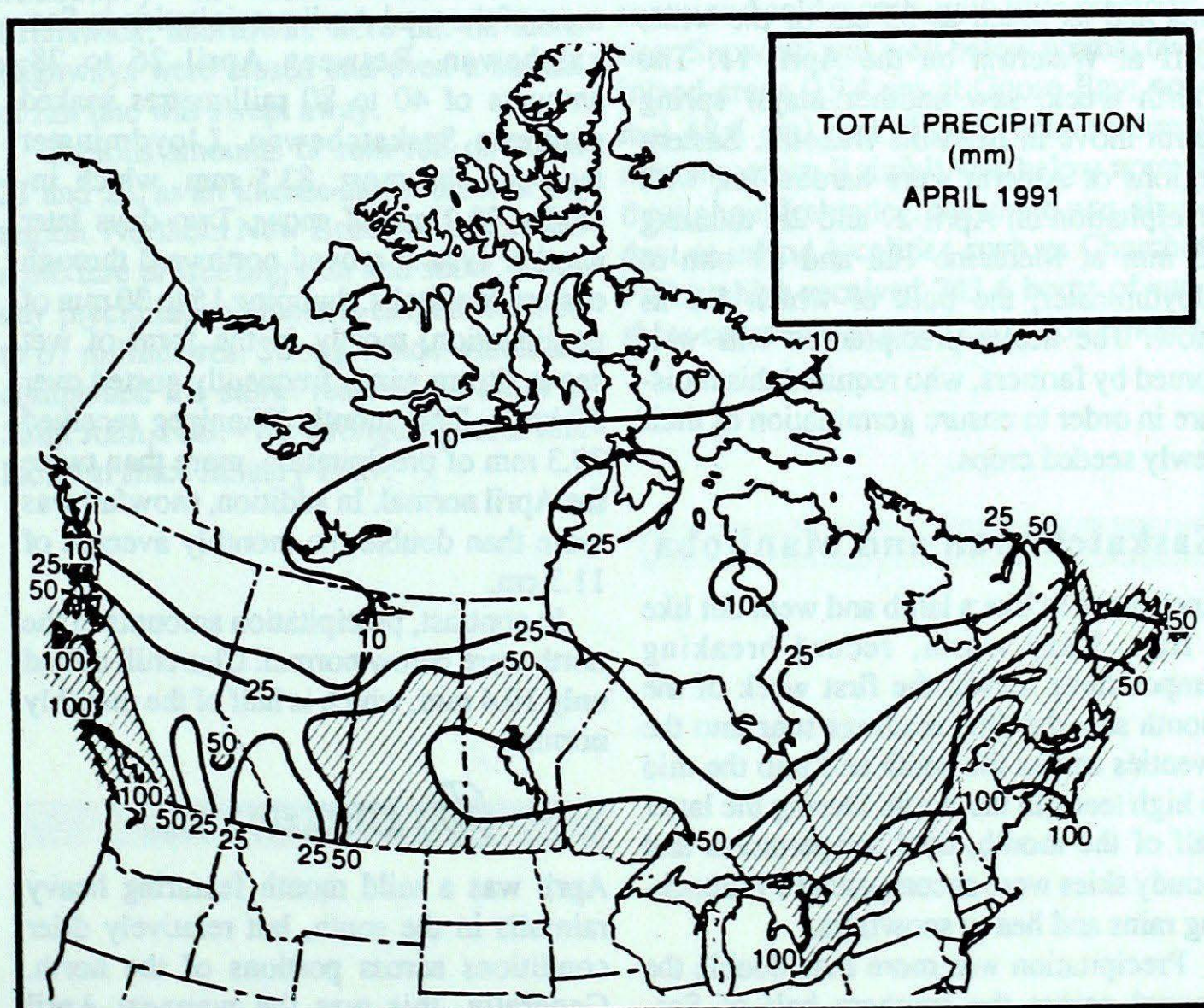
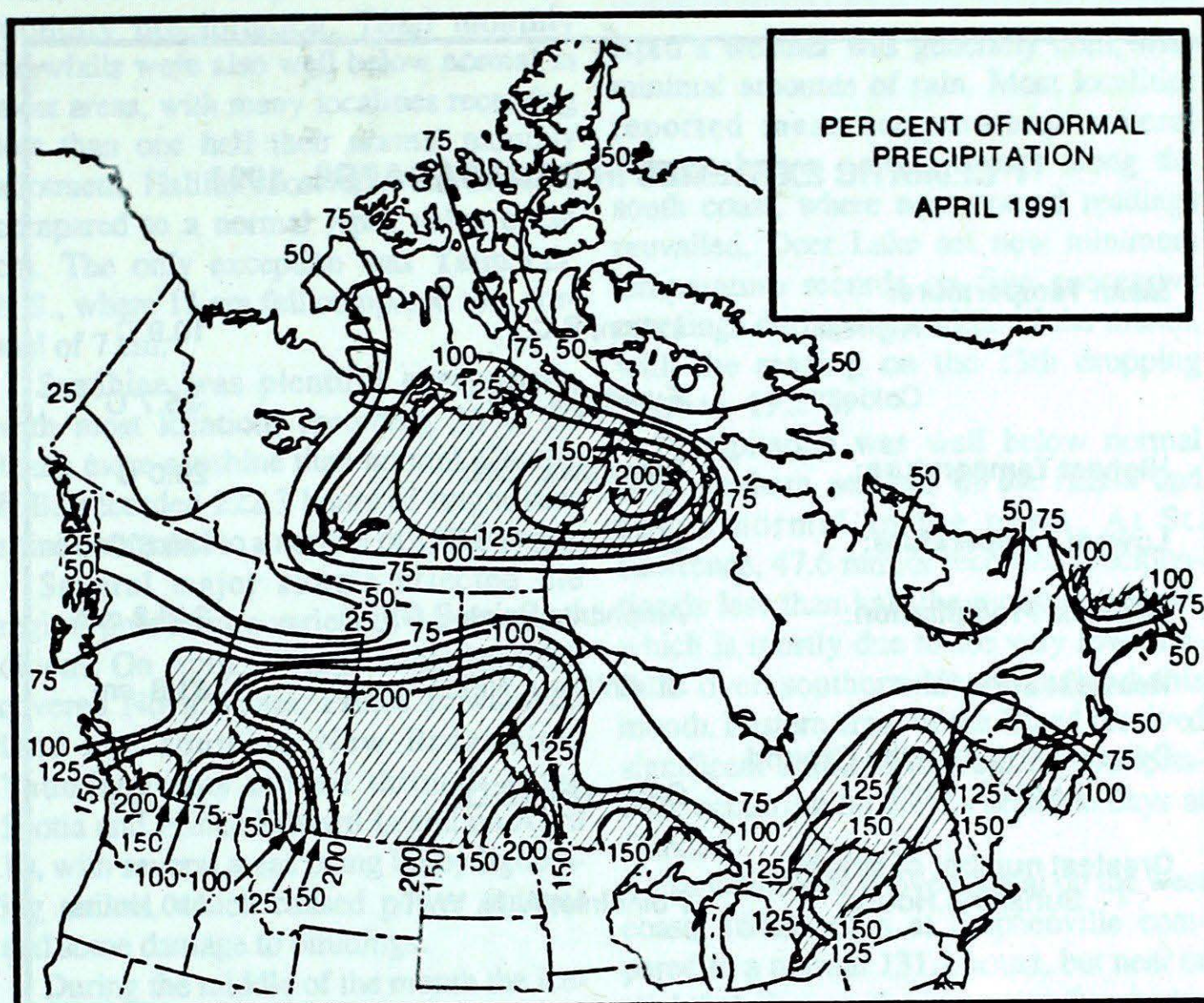
Sunshine was plentiful across of the province, with some areas reporting 20 to 30 percent more sunshine than normal. Several locations came close to establishing new records.

On the April 3, Prince George clocked winds gusting to 76 km/h. On the 5th, Kamloops recorded gusts to 96 km/h. A roof was blown off a building in Clinton. Strong winds were also reported in the west Kootenays the same day, with reports of minor damage in the south Slokan area.

Alberta

Temperatures this month were above normal, with the Peace River district having the greatest departures. Heaviest precipitation fell in eastern and central Alberta; Lloydminster received 94 mm of precipitation and almost 80 cm of snow, while central portions of the province received 40 to 55 millimetres, more than twice the average. Northern Alberta was the driest. The town of High Level received only 0.2 mm of precipitation for the whole month.

On April 6, a storm dumped 40 cm of snow in the Edmonton region, with a new 24-hour April precipitation record being set, 39.8 mm. On the 10th, another storm



CLIMATIC EXTREMES IN CANADA - APRIL, 1991

Mean Temperature:		
Highest	Lytton, B.C.	10.9°C
Coldest	Eureka, N.W.T.	-25.7°C
Highest Temperature:		
	Petawawa, ON.	29.0°C
Lowest Temperature:		
	Mould Bay, N.W.T.	-38.5°C
Heaviest Precipitation:		
	Amphitrite Point, B.C.	245.8 mm
Heaviest Snowfall:		
	St. Anthony, NFLD	81.8 cm
Deepest Snow on the Ground on April 30, 1991		
	Cartwright, NFLD.	191 cm
Greatest number of Bright Sunshine Hours:		
	Point Inlet A, N. W. T.	410 Hours

produced more snow; 10 cm in the Edson area and as much as 35 cm of the white stuff at Waterton on the April 11. The fourth week, saw another major spring storm move in from the Dakotas. Eastern regions of Alberta were hardest hit, with precipitation on April 27 and 28, totalling 33 mm at Medicine Hat and 83 mm at Lloydminster, the bulk of which fell as snow. The heavy precipitation was welcomed by farmers, who required this moisture in order to ensure germination of their newly seeded crops.

Saskatchewan and Manitoba

April came in like a lamb and went out like a lion. Very warm, record-breaking temperatures during the first week of the month saw daytime readings soar into the twenties across the south and into the mid to high teens in the north. During the latter half of the month, cool temperatures and cloudy skies were accompanied by drenching rains and heavy snowfalls.

Precipitation was more than double the normal across the southern half of Saskatchewan, and at few locations in southern and central Manitoba. One

weekend rain/snowstorm accounted for most of the total April precipitation in Saskatchewan. Between April 26 to 28, amounts of 40 to 80 millimetres soaked southern Saskatchewan. Lloydminster recorded the most, 83.5 mm, which includes 78.7 cm of snow. Two days later another system moved northward through eastern Manitoba, dumping 15 to 30 mm of precipitation, mostly in the form of wet snow. Storm winds frequently gusted over 80 km/h. This month, Winnipeg received 79.3 mm of precipitation, more than twice the April normal. In addition, snowfall was more than double the monthly average of 11.3 cm.

In contrast, precipitation amounts in the north were below normal. Churchill tallied only 10.4 mm, which is half of the monthly normal.

Ontario

April was a mild month featuring heavy rainfalls in the south, but relatively drier conditions across portions of the north. Generally, this was the warmest April since 1987, and the warmest ever in 20 years of records at St. Catharines. The

highest maximum readings occurred on April 7, as many localities approached the unseasonably hot 30s.

Monthly precipitation totals in southern and central Ontario, were at record high levels. Muskoka's 145 mm total made this the wettest April ever in cottage country, with weather records dating back to 1938. Flooding became a problem especially northeast of Toronto and near Peterborough. The city of Toronto, received 134 mm, making this the wettest April since 1929. Toronto's Pearson Airport, set a new April record of 115 mm. In Ottawa, it was the wettest April in 52 years of records, 131 mm. Other notable precipitation totals include: Kitchener, 134 mm - the most since 1933; and Peterborough, 114 mm - the highest April total ever recorded. Overall most cities, from Windsor to North Bay topped the 100 mm mark, compared to the more normal 60 to 80 millimetres.

The remainder of the province was quite dry, with the exception of a corridor from Geraldton to Kenora. At Thunder Bay this was the wettest April since 1974. Kapuskasing's 19 mm was the lowest April precipitation since 1972, and Red Lake and Moosonee both recorded less than 25 mm in total. The dry weather in the north was largely the result of a lack of snow. While April usually sees 20 to 30 cm across the north, this month there was less than 10 cm, with Thunder Bay's meagre trace of April snow the least in 50 years. The exception however was in the Sault Ste. Marie - Timmins area, where an early spring snowstorm dumped 15 to 30 cm of snow on April 10 and 11.

Not surprisingly, hours of bright sunshine were disappointingly low in southern and central Ontario, 20 to 50 hours below average, while northern Ontario recorded 10 to 40 hours more April sunshine than normal.

Quebec

A mild and rainy regime dominated southwestern Quebec weather during April, while colder and much sunnier weather was prevalent over eastern and northern Quebec.

During a brief warm spell between April 4 and 7, numerous daily high

temperature records were broken across southern Quebec.

Precipitation totals exceeded 100 mm in the southwest portion of the province, and new monthly rainfall records were established at Ottawa, Mirabel and Dorval Airports. Snowfalls were minimal this month, with only a trace of snow recorded at Dorval, and only 0.2 cm at Mirabel, equalling records dating back to 1945 and 1988, respectively. Sherbrooke's 1.8 cm total snowfall broke the record low amount of 3.2 cm set in 1981.

An intense low-pressure system tracking north along the New England coast on April 21 and 22, produced 25 to 40 mm of rain and strong winds over southern Quebec. Wind gusts, ranging from 65 to 106 km/h, were recorded in the St. Lawrence Valley.

There was spring flooding in a number of districts during the second week of the month. The most extensive flooding since 1957 occurred along the Chaudière River, between April 7 and 10. Beauceville was the first locality to be hit, followed by the towns of St. Joseph-de-Beauce, Vallée-Junction, Ste. Marie-de-Beauce and Scott-Junction. One thousand inhabitants had to be evacuated, and flood damage surpassed 10 million dollars.

Maritimes

The region experienced a generally sunny and warm month. On April 24 and 26, daytime temperatures soared to the twenties, approximately 10 degrees above normal.

Overall precipitation this month was near or somewhat below normal. Sydney,

N.S., recorded only half their average monthly precipitation. Total monthly snowfalls were also well below normal in most areas, with many localities receiving less than one half their normal monthly allotment. Halifax received 7 cm of snow compared to a normal April value of 24 cm. The only exception was Yarmouth, N.S., where 11 cm fell compared to a normal of 7 cm.

Sunshine was plentiful everywhere, with most locations recording 30 to 50 hours more sunshine than normal. Charlo, N.B., recorded 222.3 hours of bright sunshine compared to a normal of 162.2 hours.

Several major storms affected the region, producing a variety of weather conditions. On April 1, a significant snowfall covered Nova Scotia, Prince Edward Island and southern New Brunswick. Thunderstorms moved through Nova Scotia and Prince Edward Island on April 10, with several areas being hit by lightning strikes, which caused power outages and some damage to buildings.

During the middle of the month the ice-choked waters of the St. John river overflowed their banks. Evacuations were necessary in northwestern New Brunswick, and towns were put on alert. Highways were closed and even a stretch of rail line was swept away.

Copious amounts of rain fell on April 21 and 22, as an intense storm crossed the region. Northern New Brunswick received a mixture of freezing rain and snow. Two-day precipitation amounts ranged from 33 to 67 millimetres. Strong winds which accompanied the storm reached 95 km/h at Saint John, N.B. - the strongest gust at that location since January 1987.

Newfoundland

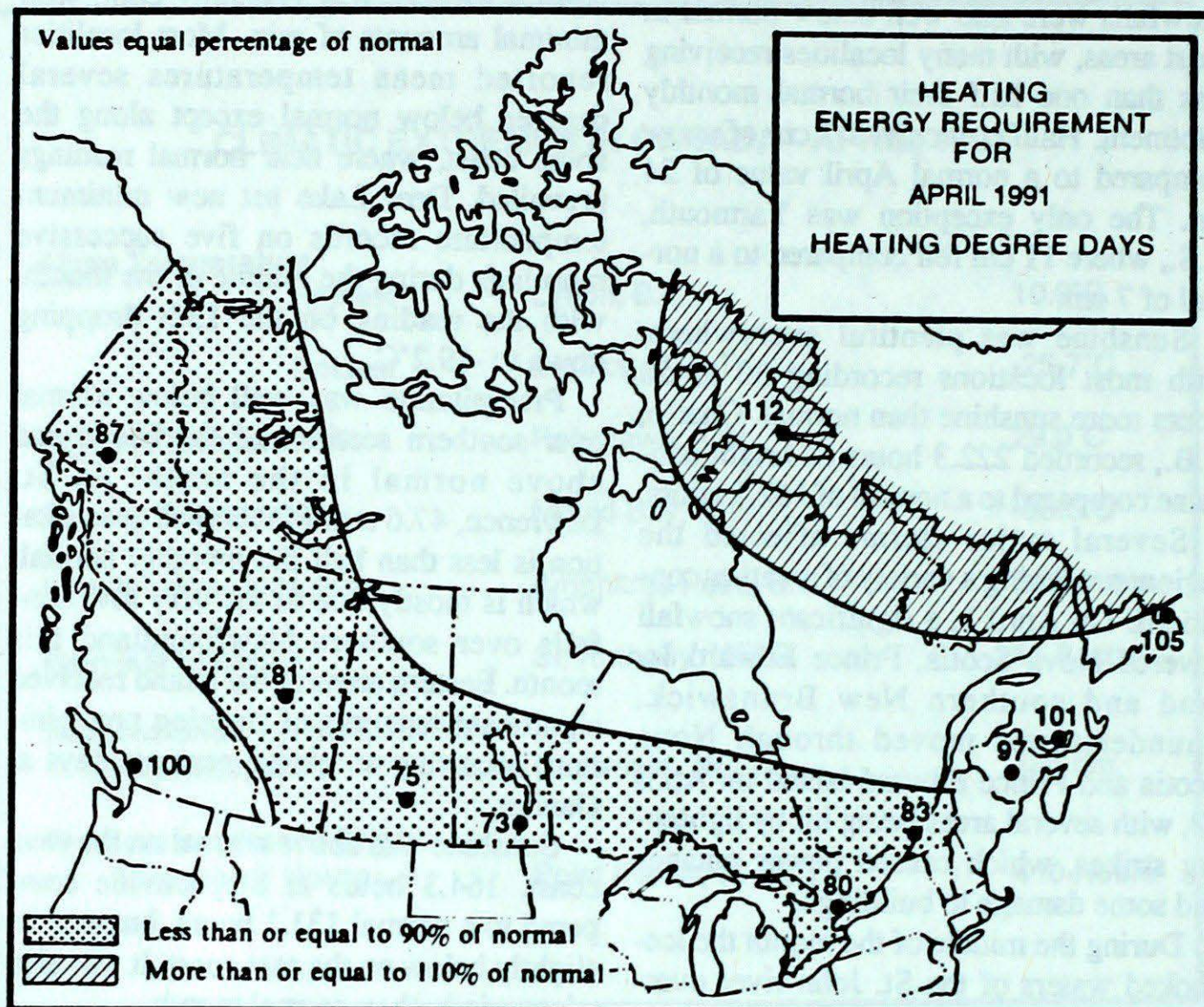
April's weather was generally cool, with minimal amounts of rain. Most localities reported mean temperatures several degrees below normal except along the south coast, where near normal readings prevailed. Deer Lake set new minimum temperature records on five successive mornings during the middle of the month, with the reading on the 13th dropping down to -19.2°C.

Precipitation was well below normal over southern sections of the Island and above normal in the north. At St. Lawrence, 47.6 mm of recorded precipitation is less than half the monthly normal, which is mostly due to the very low rainfalls over southern Newfoundland this month. Eastern areas of the Island received significant amounts of freezing precipitation, occurring on eleven separate days at Gander.

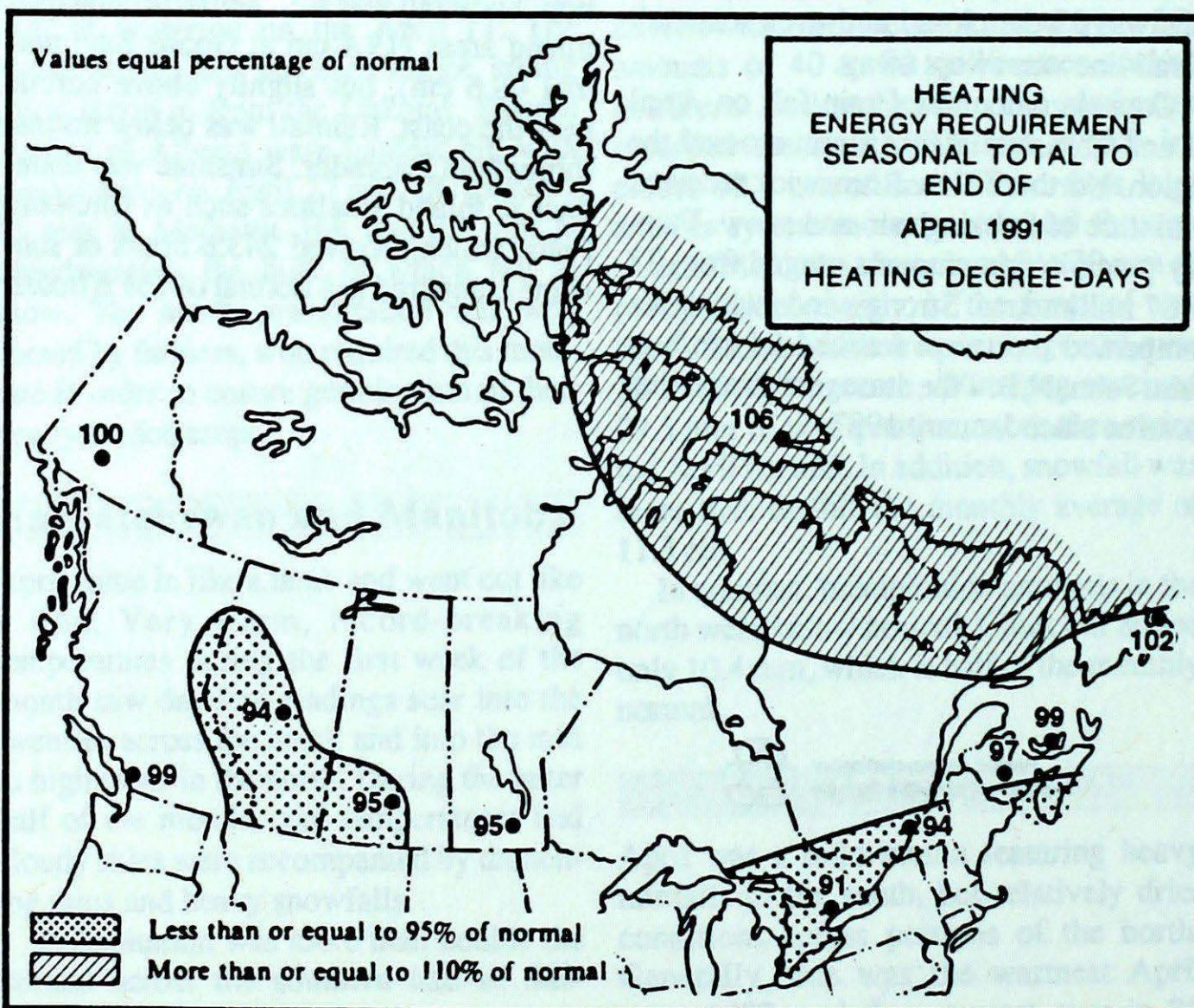
Sunshine was above normal on the west coast, 164.3 hours at Stephenville compared to a normal 131.1 hours, but near or slightly below on the east coast. It was also a less windy than normal month.

In Labrador, April was generally a sunny and cold month, with little precipitation. Snowfall was well below normal over inland areas (19.4 cm at Goose Bay; normal 48.6 cm), but slightly above normal near the coast. Rainfall was below normal throughout Labrador. Sunshine was abundant at inland localities such as Churchill Falls, which received 243.6 hours of sunshine compared to a normal of 154.6 hours.



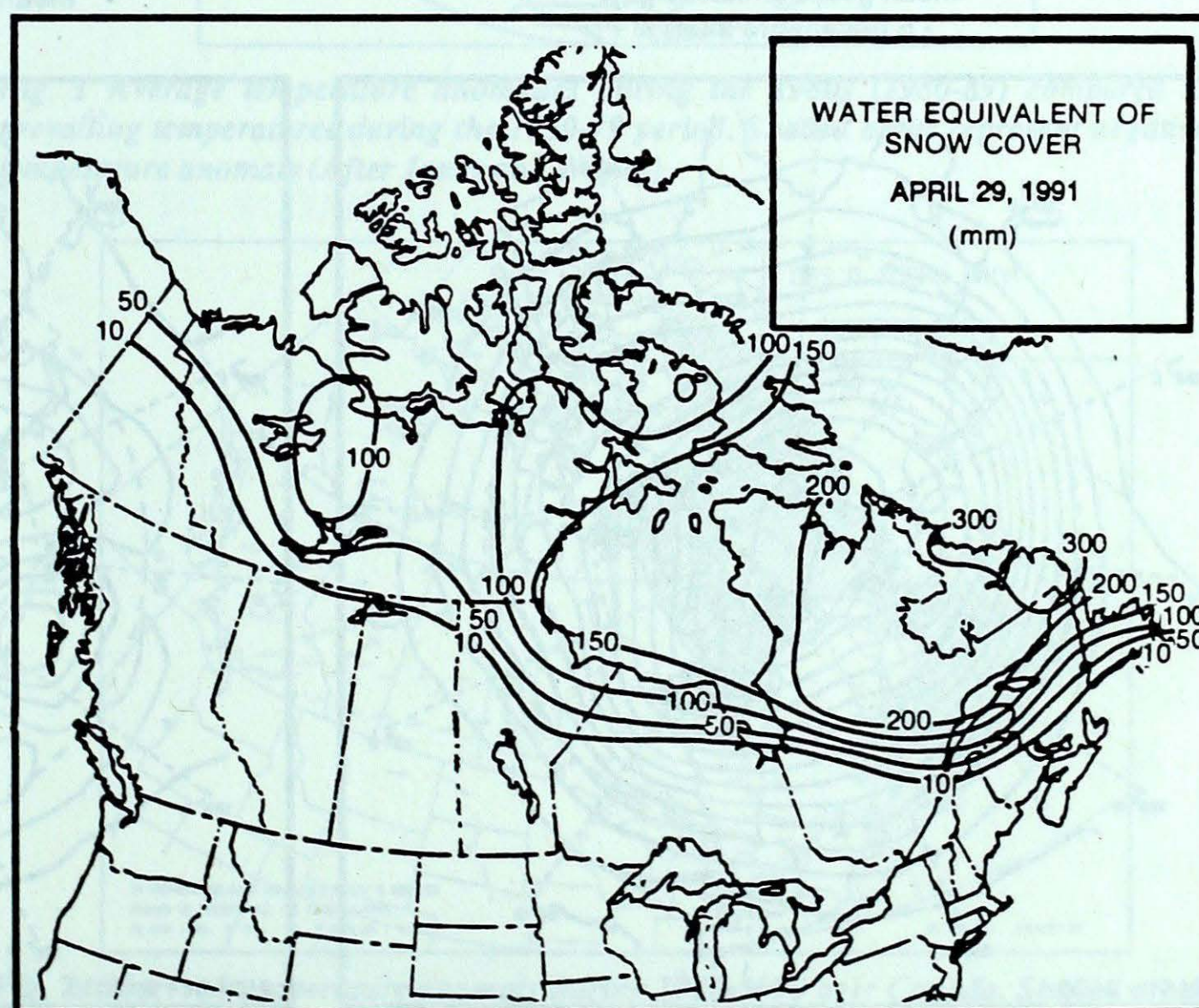
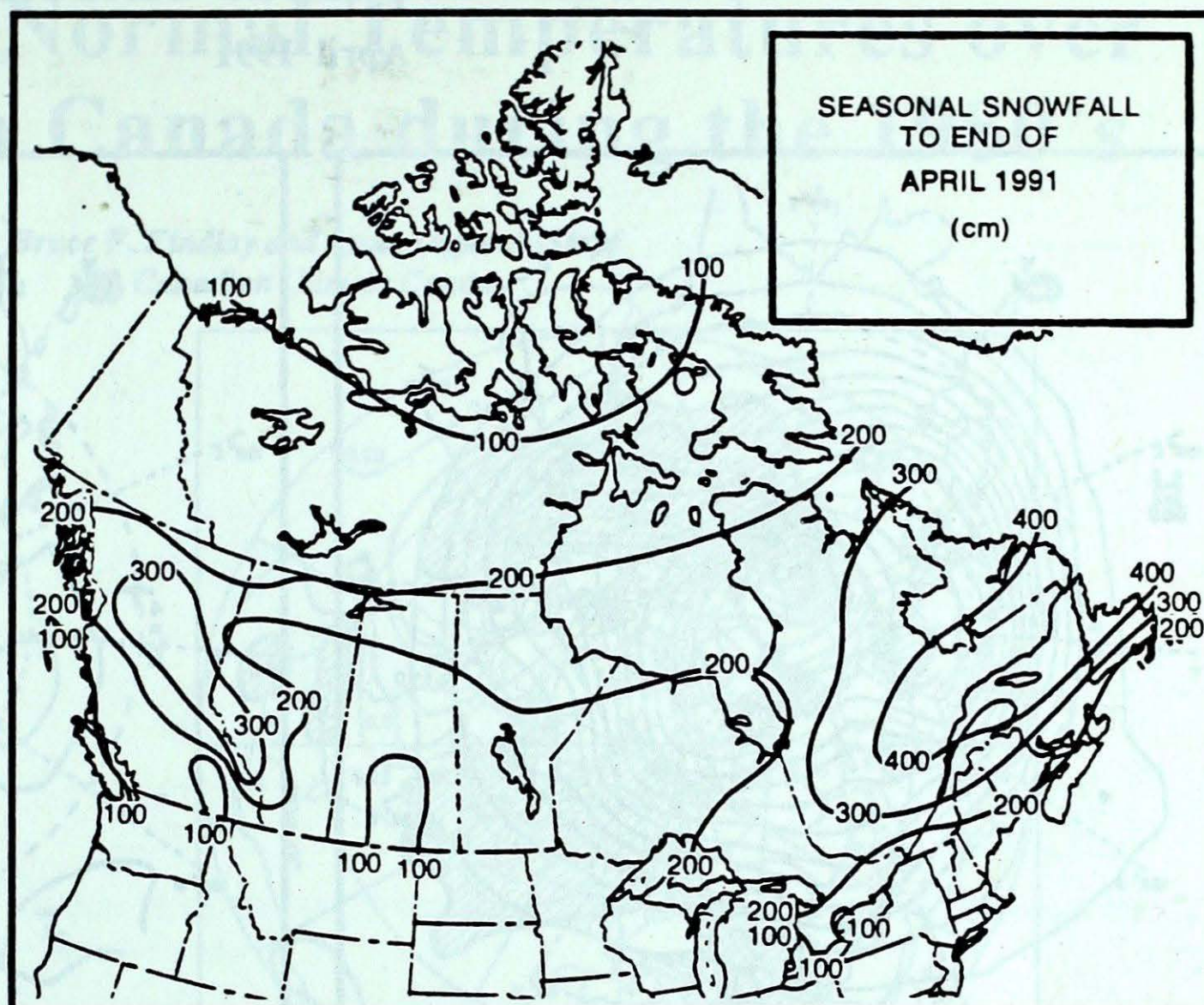
SEASONAL TOTAL OF HEATING
DEGREE-DAYS TO END OF APRIL

	1991	1990	NORMAL
BRITISH COLUMBIA			
Kamloops	3398	3237	3541
Penticton	3295	3027	3267
Prince George	4884	4397	4934
Vancouver	2694	2567	2732
Victoria	2768	2662	2789
YUKON TERRITORY			
Whitehorse	6419	6050	6441
NORTHWEST TERRITORIES			
Iqaluit	9382	9178	8821
Inuvik	9112	9042	9274
Yellowknife	8216	7951	7931
ALBERTA			
Calgary	4573	4312	4920
Edmonton Mun.	4796	4581	5117
Grande Prairie	5516	5048	5728
SASKATCHEWAN			
Eastvan	5033	4797	5145
Regina	5200	5046	5494
Saskatoon	5506	5307	5683
MANITOBA			
Brandon	5643	5548	5732
Churchill	8361	8272	8204
The Pas	6189	6426	6349
Winnipeg	5276	5489	5555
ONTARIO			
Kapuskasing	5938	5937	5931
London	3500	3766	3834
Ottawa	4128	4426	4411
Sudbury	4808	5106	5048
Thunder Bay	5249	5388	5295
Toronto	3482	3777	3842
Windsor	3075	3320	3412
QUÉBEC			
Baie Comeau	5573	5699	5471
Montréal	4006	4306	4276
Québec	4688	4979	4804
Sept-Îles	5835	6012	5576
Sherbrooke	4397	4710	4850
Val-d'or	5570	5843	5691
NEW BRUNSWICK			
Charlo	5075	5223	5071
Fredericton	4225	4620	4370
Moncton	4326	4590	4335
NOVA SCOTIA			
Sydney	4008	4385	3996
Yarmouth	3380	3782	3637
PRINCE EDWARD ISLAND			
Charlottetown	4196	4597	4218
NEWFOUNDLAND			
Gander	4701	4917	4475
St. John's	4277	4457	4188



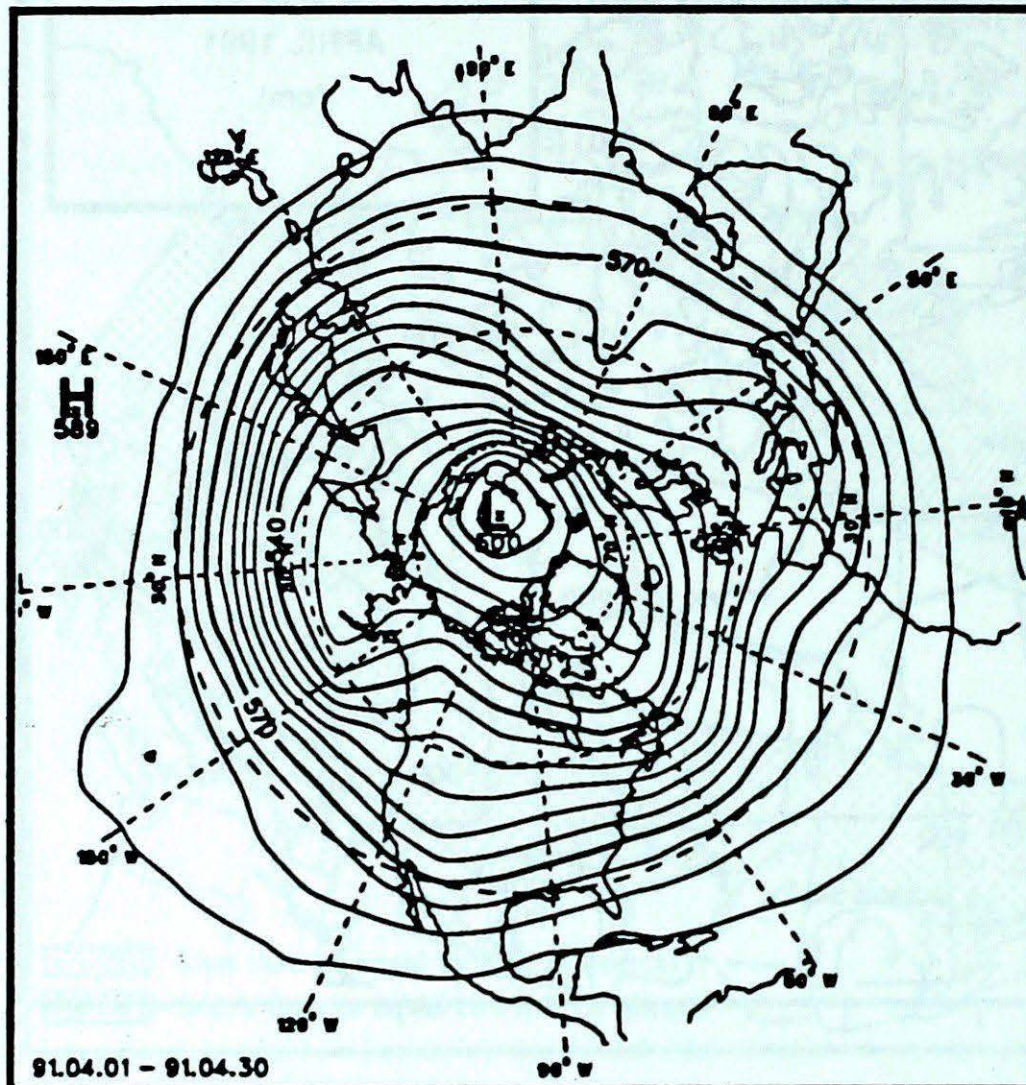
SEASONAL SNOWFALL TOTALS (cm) TO
END OF APRIL

	1991	1990	NORMAL
BRITISH COLUMBIA			
Kamloops	96	51	91
Port Hardy	72	82	72
Prince George	309	239	236
Vancouver	118	51	60
Victoria	73	36	50
YUKON TERRITORY			
Whitehorse	184	153	133
NORTHWEST TERRITORIES			
Clyde	104	*	143
Inuvik	157	178	162
Yellowknife	183	153	132
ALBERTA			
Calgary	114	103	142
Edmonton Mun.	110	99	129
Grande Prairie	190	133	176
SASKATCHEWAN			
Eastvan	114	66	114
Regina	85	110	119
Saskatoon	119	77	111
MANITOBA			
Brandon	116	135	115
Churchill	218	185	173
The Pas	134	171	164
Winnipeg	121	96	123
ONTARIO			
Kapuskasing	269	374	310
London	184	228	209
Ottawa	185	236	226
Sudbury	263	292	245
Thunder Bay	181	152	209
Toronto	88	81	131
Windsor	83	120	117
QUÉBEC			
Baie Comeau	464	294	368
Montréal	197	198	223
Québec	316	312	343
Sept-Îles	452	341	421
Sherbrooke	212	301	291
Val-d'or	291	340	307
NEW BRUNSWICK			
Charlo	396	309	411
Fredericton	273	313	289
Moncton	321	341	339
NOVA SCOTIA			
Shearwater	91	176	197
Sydney	184	280	313
Yarmouth	122	237	207
PRINCE EDWARD ISLAND			
Charlottetown	209	309	329
NEWFOUNDLAND			
Gander	431	429	389
St. John's	251	238	347

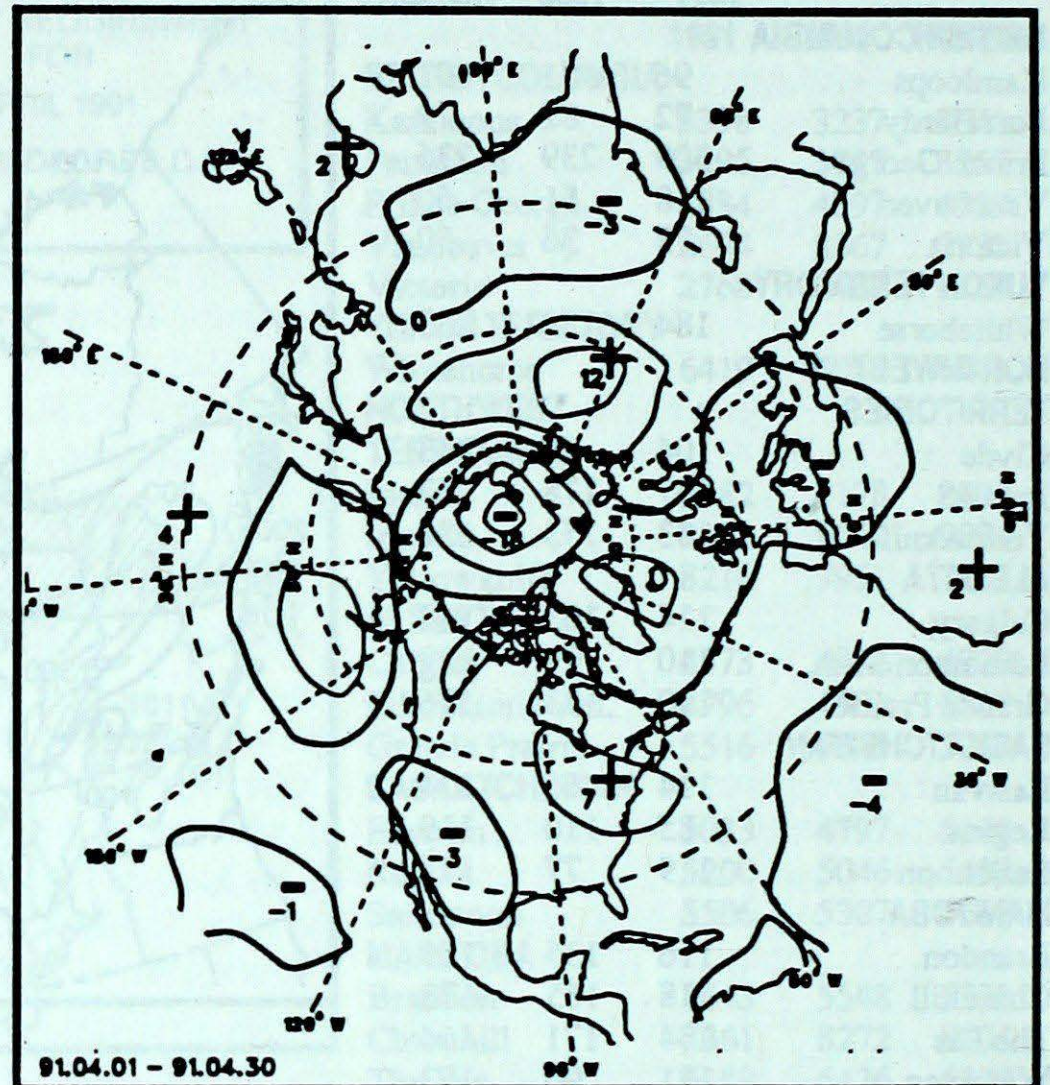


50-kPa ATMOSPHERIC CIRCULATION

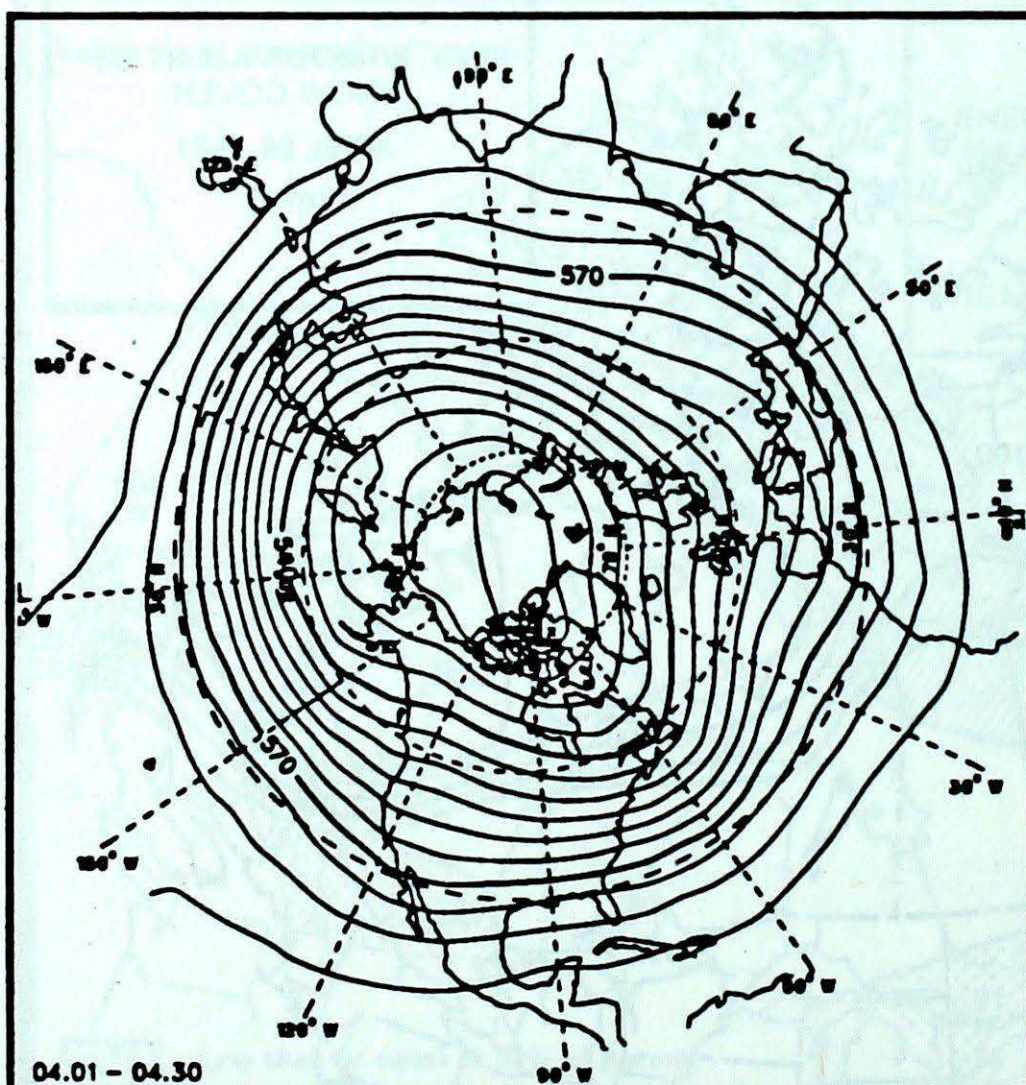
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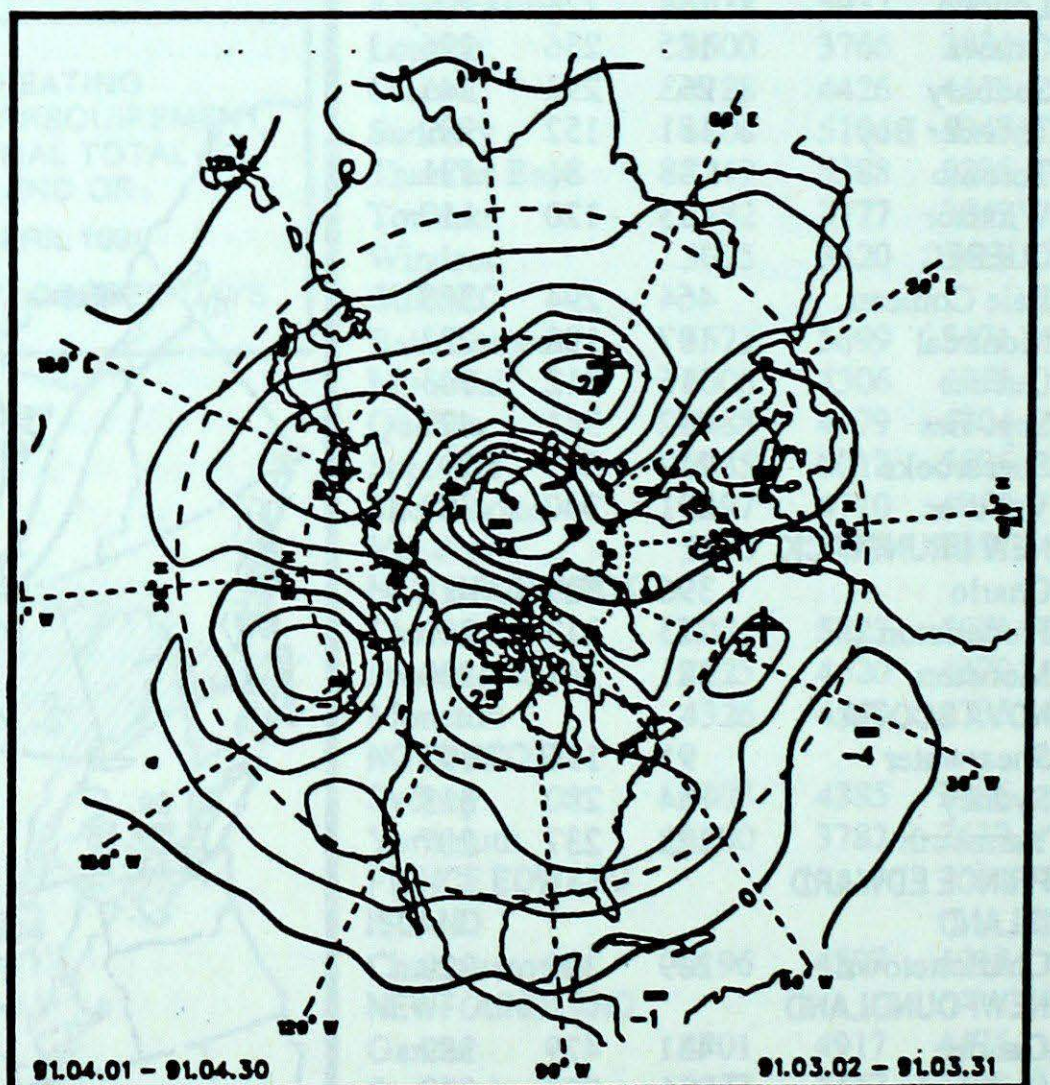
Mean geopotential heights
- 5 decametre interval -



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 -

Colder than Normal Temperatures over Northeastern Canada during the 1980's

□ Bruce F. Findlay and Anna Deptuch-Stapf
□ Canadian Climate Centre

Introduction

Recent scientific papers by Jones and Wigley (1990) and by Pearce (1991) draw attention to a number of high latitude, circumpolar areas which have experienced a net negative temperature anomaly during the 1980's. These include some of the Soviet Arctic islands, Greenland and northeastern Canada (Fig. 1). This situation is in contrast to the general global situation of higher than normal air temperatures during the decade, which included also six of the warmest years of record over extensive areas. According to the greenhouse global warming theory, warmer temperatures are to be expected, with the greatest heating over sub-polar regions. The cool areas appear to register a contradiction to this theory, though historical analogues of climatic change and some climate system models indicate that such discontinuities are not unreasonable. However, to test the validity of the apparent cool anomaly in the northeastern Canadian territory an 11-year set of tabulations was prepared by P. Lee and A. Shabbar, of the Extended Range Forecast Division of the Canadian Climate Centre. These data are compared to other available data, and correlated with sea-ice and atmospheric circulation information.

A Chilly Eastern Arctic over the Decade

Fig. 2 indicates that most of Canada west and south of Hudson Bay was nearly 1 C warmer than the long term average during the 1980's, while the northeast including most of Baffin Island, the Ungava region of Quebec, Newfoundland and Labrador, was correspondingly cool. An examination of individual years, however, shows that

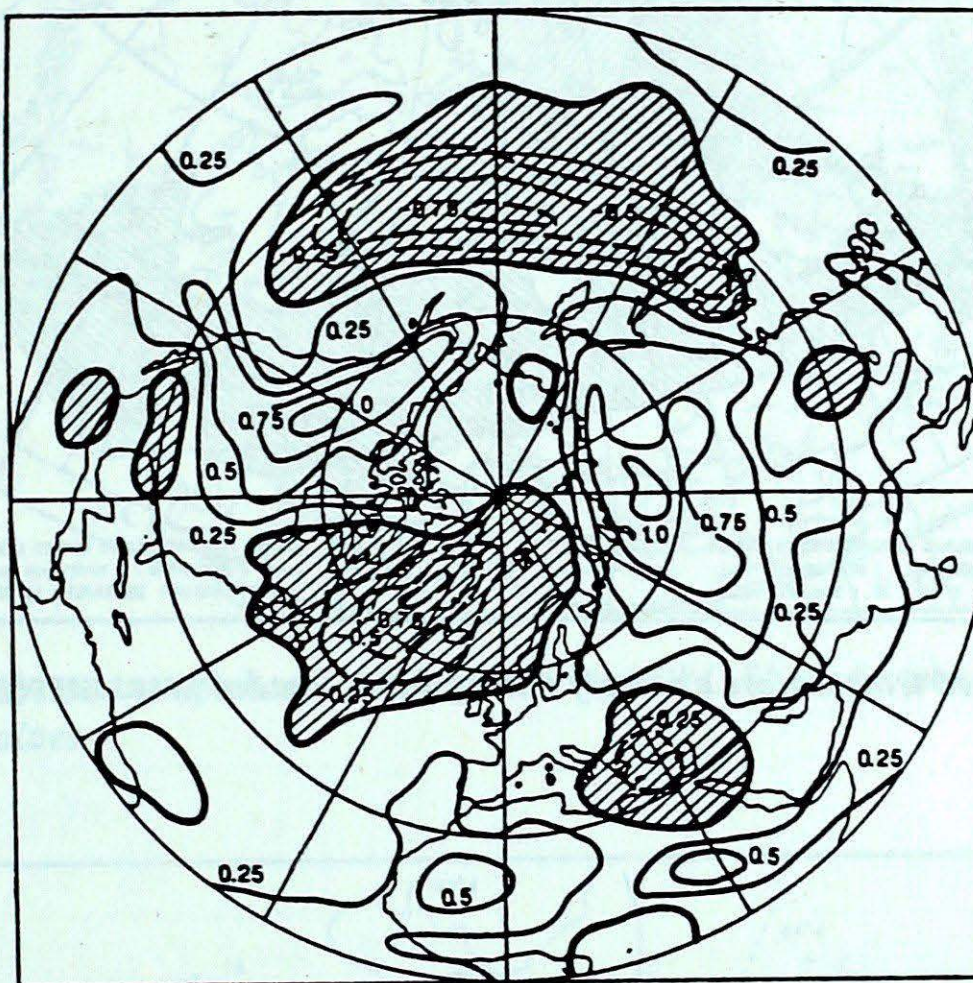


Fig. 1 Average temperature anomalies during the 1980s (1980-89) compared to prevailing temperatures during the 1950-79 period. Shaded areas represent negative temperature anomaly (After Jones and Wigley)

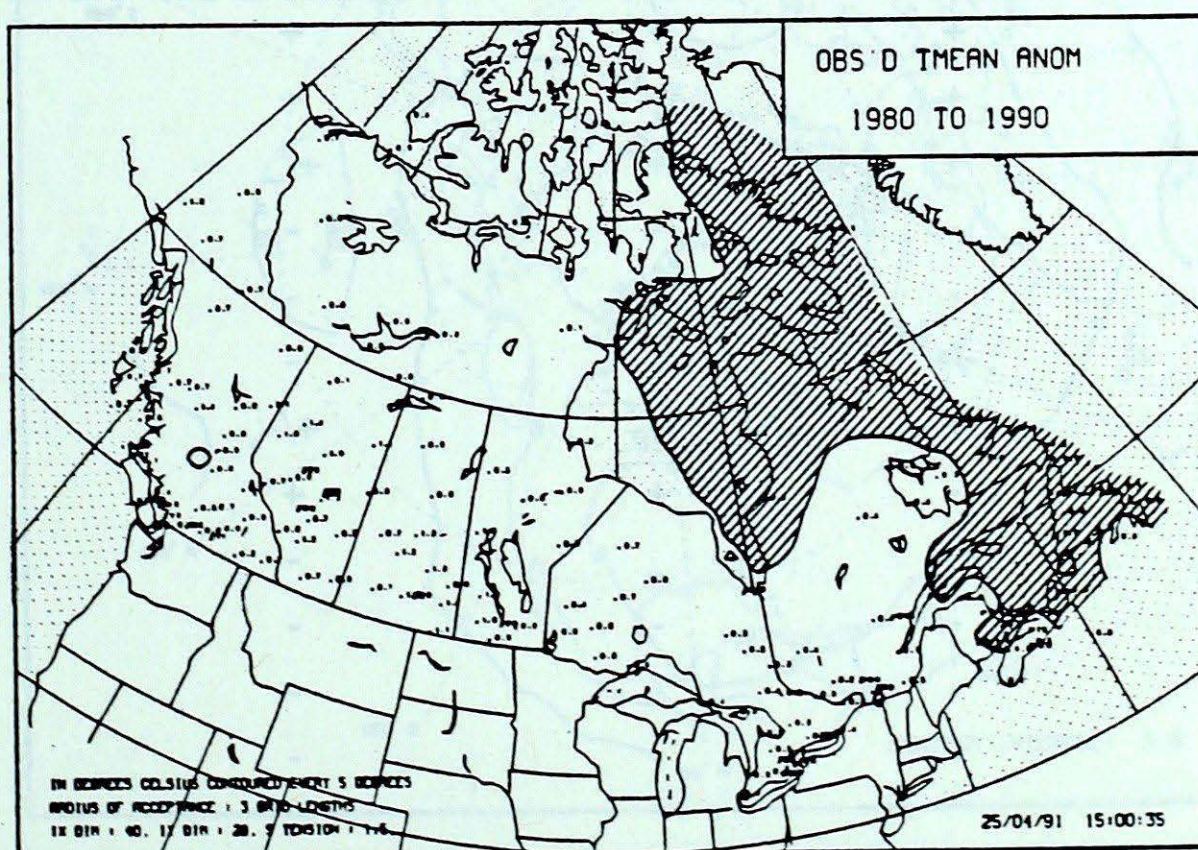


Fig. 2. Observed temperature anomaly during 1980-1990 over Canada. Shaded areas represent negative values.

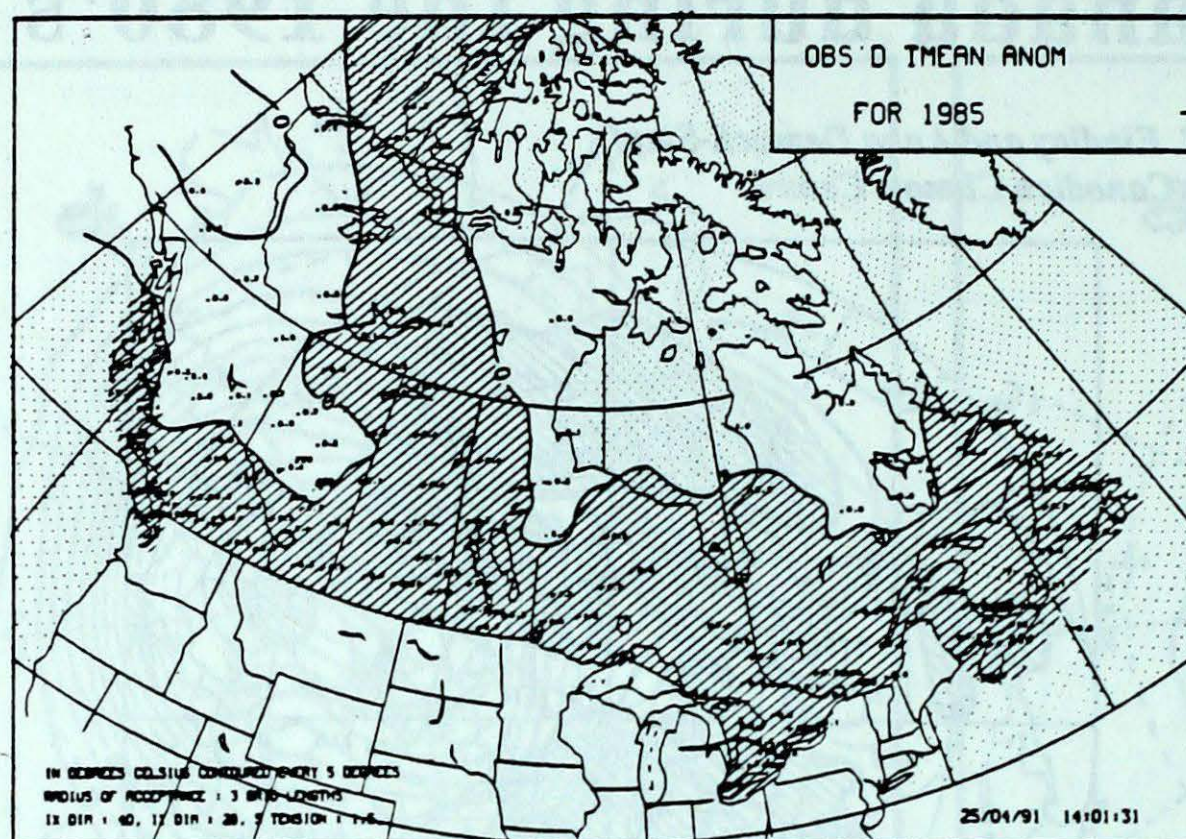


Fig. 3. Observed temperature anomaly during 1985. Shaded areas represent negative values.

the cool anomaly does not occur each year. In 1981 the entire country experienced warmer than normal conditions, which changed completely in 1982 to abnormally cool. In 1985, (Fig. 3), there is a second flip-flop, where a warm anomaly was established over the Northeast, with corresponding cool conditions over the rest of the country, except for parts of the northwest. The year 1984, by contrast, mirrored the decadal mean pattern (Fig. 4). Lee and Shabbar prepared anomaly maps similar to Figs. 3 and 4 for each year, and a second set of maps for each winter (December through February). The rest of this paper is concerned with the 1980-1990 winter maps. Table 1 expresses the regional observed surface temperature anomaly over the decade. The cold season, of course, has a temporal relation with the occurrence of maximum sea-ice distribution, and the last column of the table presents sea-ice anomaly values from the paper by Agnew and Silis published in the March issue of CP.

As Table 1 shows, the decade began with relatively mild conditions, becoming

WINTER	BAFFIN ISLAND	UNGAVA	LABRADOR	ISLAND OF NEWFOUNDLAND	DAVIS STRAIT SEA ICE ANOMALY
80	+	+	+	+	-
81	+	+	+	+	-
82	+	+	+/-	+/-	-
83	-	-	-	+	+
84	-	-	-	-	+
85	-/+	+	-	-	0
86	+	+/-	+/-	+/-	-
87	-	+	+	-	0
88	+/-	-	-	-	+
89	-	-	-	-	+
90	-	-	-	-	+
91	-	-	-	-	-

Table 1. Observed temperature anomaly for Baffin Island, Ungava region of Quebec, Labrador and Newfoundland and sea ice anomaly in Davis Strait for 1980-1991 winters compared to 1950-1979 mean.

cooler than normal by 1982. Warm temperatures resumed in 1985, lasting until the end of 1987, when an intense cold regime returned, with a corresponding increase in ice cover. It is noted that 1982/83 and 1986/87 experienced marked El Niño-Southern Oscillation (ENSO) activity.

Relations with Atmospheric Circulation

One way of highlighting atmospheric circulations responsible for cooler than normal periods is to find the difference field between a series of months with colder than normal, and warmer than normal temperatures. This was the procedure used by Agnew and Silis to identify 100 kPa patterns associated with extensive ice conditions. In this instance, we computed the 50 kPa height difference pattern between the ten coldest and ten warmest months during 1980-1990 (Fig. 5). The difference field shows a negative anomaly centred over Greenland which would induce stronger than normal northerly and northwesterly flow. This is in good agreement with the findings of Agnew and Silis.

Referring to Fig. 6, we can see that cold months, as depicted, are associated with a negative height anomaly over Baffin Bay, a feature which draws cold air from the northwest. By contrast, the composite map for the warm months (Fig. 7), shows a positive anomaly over Greenland. This would be associated with "warm" southeasterly and easterly winds from the Atlantic Ocean, impeding the southward migration of sea-ice.

Summary

The observed negative temperature anomaly in the Northeast over the 1980's decade has an apparent relationship to a frequent strong northwesterly airflow from the surface to 50 kPa. This has the effect of dislodging ice from the polar pack, and driving it south and east by the Labrador Current through Davis Strait and into the Labrador Sea. Persistently cool temperatures in northeastern Canada, though paradoxical, could be a stage in the global

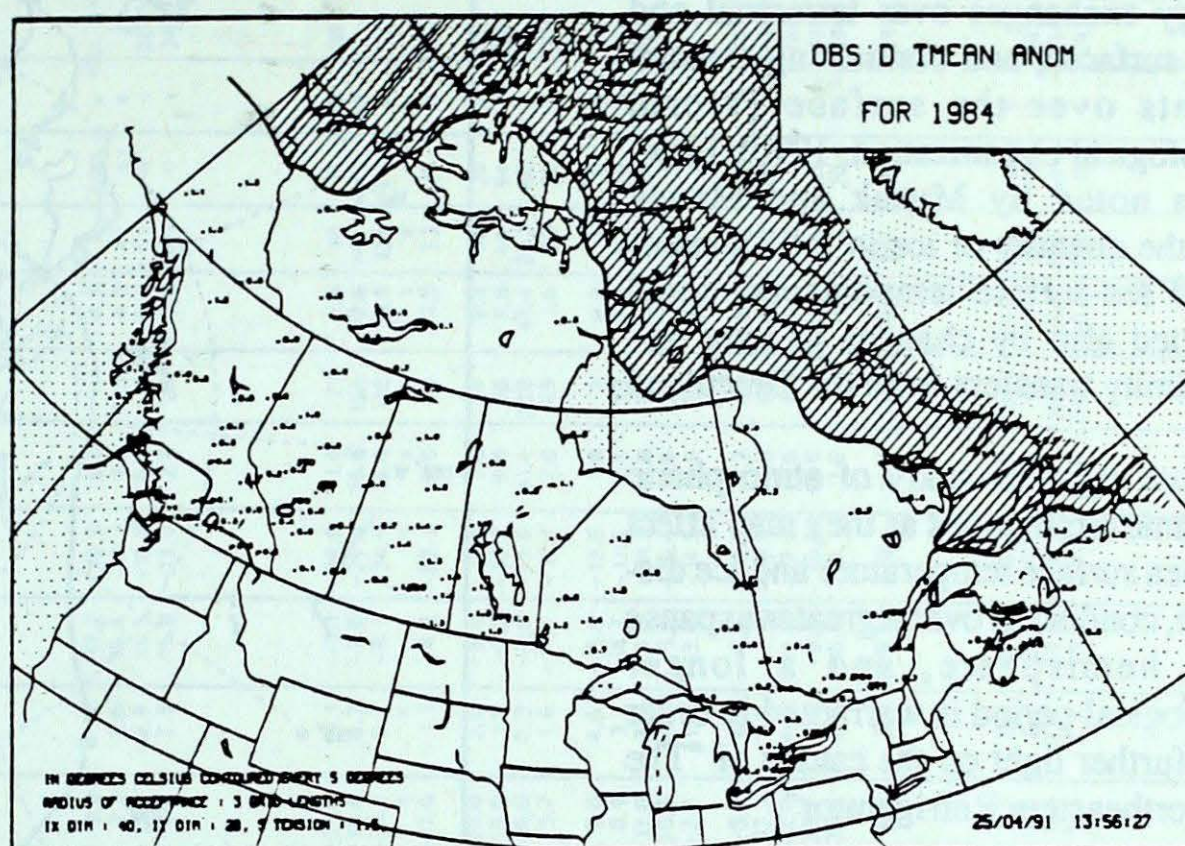


Fig. 4 . Observed temperature anomaly during 1984. Shaded areas represent negative values.

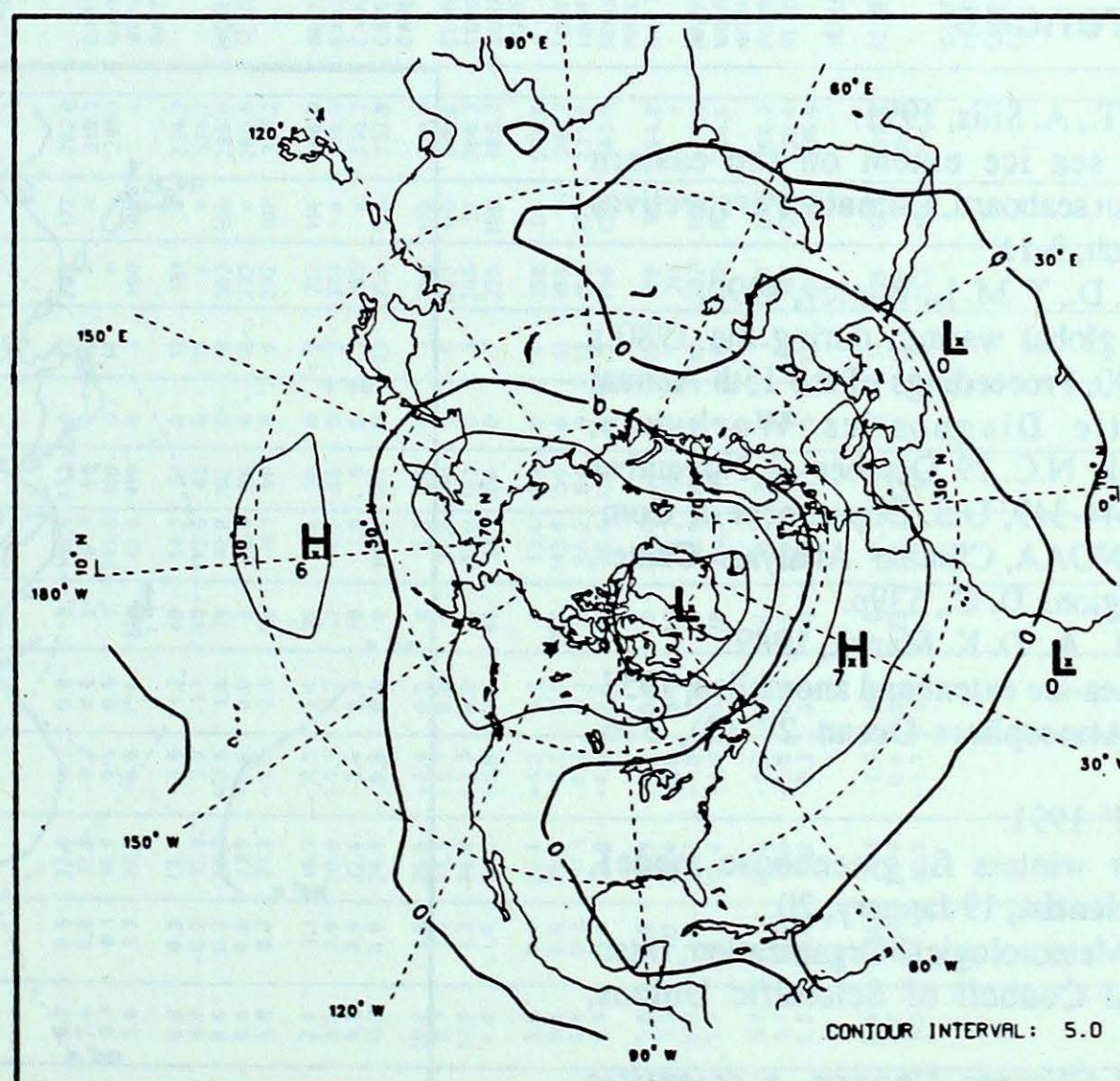


Fig. 5. Differences in 50 kPa height between cold and warm months during 1980-1990.

warming process, as the climate system adjusts to a change in forcing. These are complex matters, involving feedback processes in energy exchanges over terrestrial and oceanic surfaces, and contrasting thermal gradients over the surface (World Meteorological Organization, 1990). However, as noted by Mysak and Manak (1989), the quantity of ice in the Labrador Sea (and sea-surface temperatures) could be affected also by changes in long distance salinity transfers from the Greenland Sea.

A more rigorous study of atmospheric and oceanic circulations as they may affect air and sea surface temperature and ice distribution, conducted over a greater expanse of the hemisphere, and a longer climatological period is warranted in order to shed further light on the causes of "The Great Northeastern Refrigerator".

Acknowledgement: T. Agnew and A. Shabbar kindly commented on the manuscript.

References

- Agnew T., A. Silis, 1991:
Winter sea ice extent on the eastern Canadian seaboard, *Climatic Perspectives* 13, March, 9-11.
- Jones P. D., T. M. L. Wigley, 1990:
Recent global warmth during the 1980's and 1990, *Proceedings of the 15th Annual Climatic Diagnostics Workshop*, Asheville N.C., 29 October - 2 November 1990, 344-349, U.S. Department of Commerce, NOAA, Climate Analysis Center, Washington, D. C., 539p.
- Mysak L. A., D. K. Manak, 1989:
Arctic sea-ice extent and anomalies, 1953-1984, *Atmosphere-Ocean* 27 (2), 376-405.
- Pearce F. 1991:
Warmer winters fit greenhouse model, *New Scientist*, 19 January, 20.
- World Meteorological Organization, International Council of Scientific Unions, 1990:
Global Climate Change, a scientific review presented by the World Climate Research Programme, Geneva, 35p.

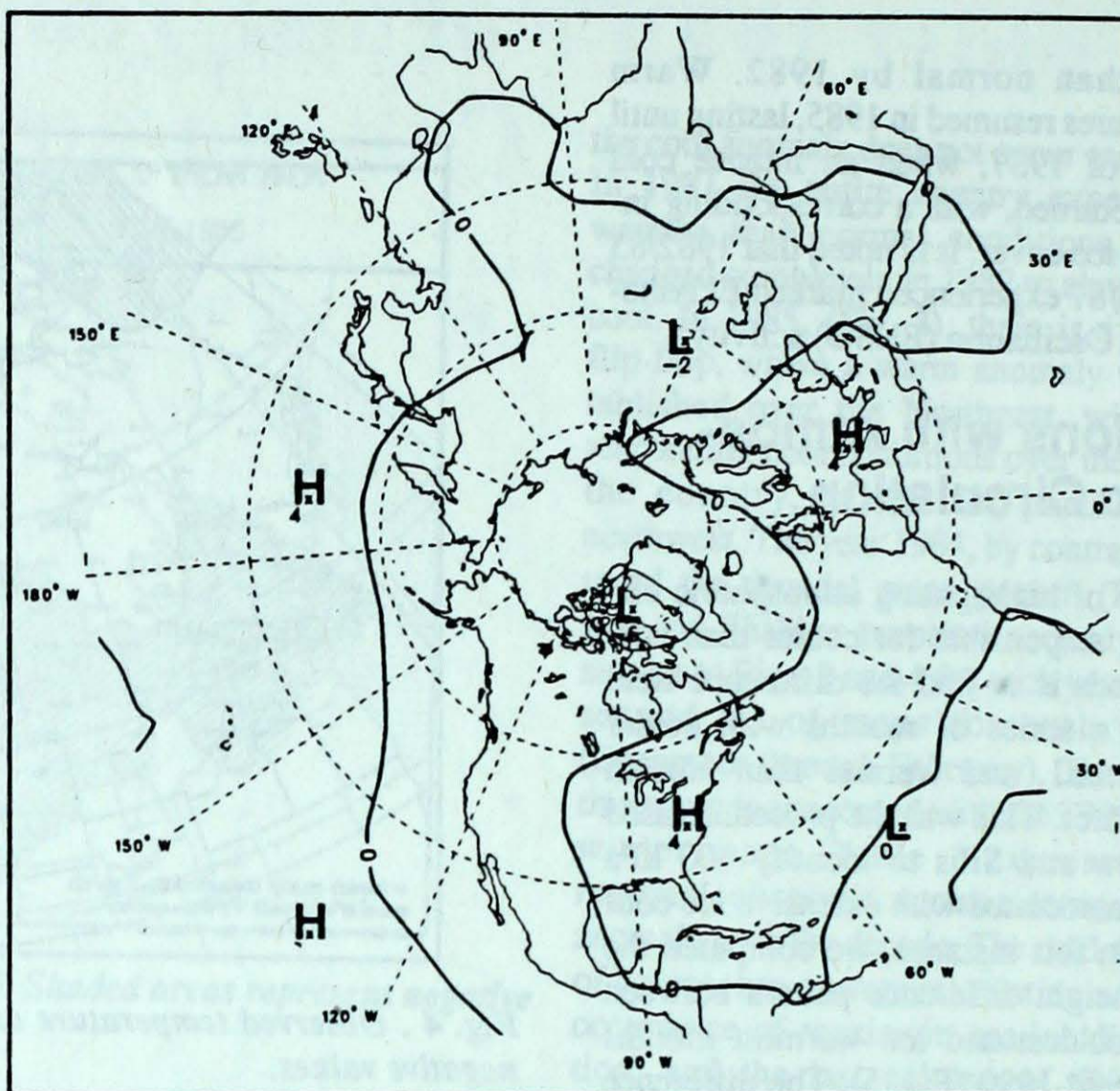


Fig. 6. 50 kPa "COLD" winters anomaly

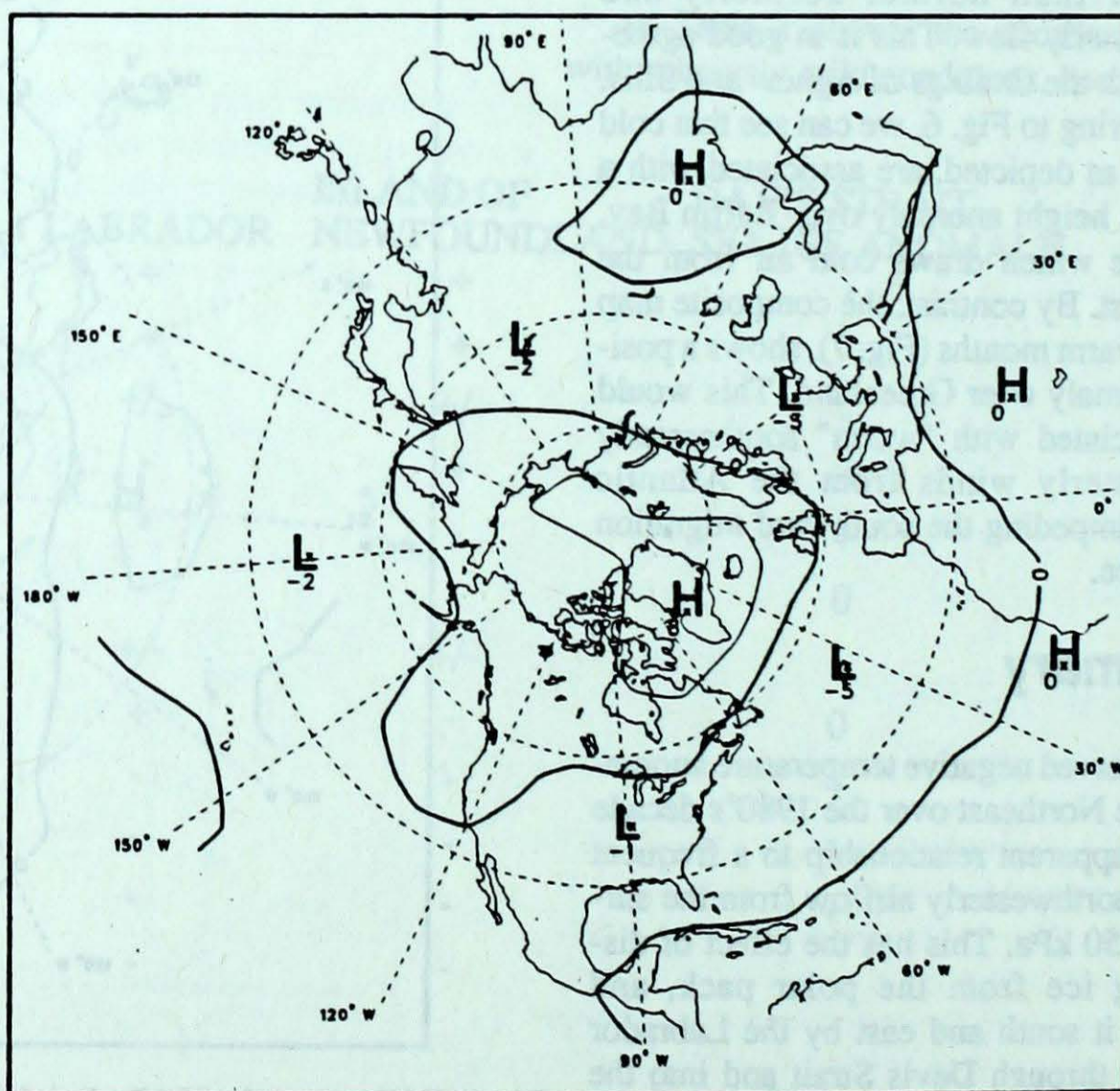


Fig. 7. 50 kPa "WARM" winters anomaly

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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									
BRITISH COLUMBIA													
ABBOTSFORD A	9.2	0.5	22.8	0.2	0.0	0	136.5	133	0	13	200	122	262.8
ALERT BAY	7.4	0.0	17.8	-0.2	0.0	0	81.7	98	0	16	*	*	318.5
AMPHITRITE POINT	8.1	0.1	16.9	0.5	0.0	0	245.8	120	0	14	*	*	295.1
BLUE RIVER A	5.6	1.3	22.2	-6.8	11.6	129	42.0	110	0	*	180	108	*
CAPE ST JAMES	6.8	0.3	13.4	2.9	1.2	48	54.2	51	0	12	151	*	336.2
CAPE SCOTT	6.7	-0.2	12.9	2.2	1.7	49	133.6	65	0	15	*	*	326.7
CASTLEGAR A	8.4	0.3	23.2	-2.5	1.6	19	47.8	102	0	8	183	106	286.6
COMOX A	8.6	0.6	21.5	-0.6	0.0	0	56.0	98	0	8	232	*	280.6
CRANBROOK A	6.0	0.2	21.2	-3.6	3.5	66	14.1	50	0	6	232	107	357.2
DEASE LAKE	2.4	2.1	15.9	-11.5	2.4	20	2.4	20	0	2	217	114	468.0
FORT NELSON A	5.5	3.9	20.6	-7.7	1.2	7	6.6	40	0	2	273	*	376.0
FORT ST JOHN A	6.8	3.9	22.4	-3.6	0.0	0	1.0	5	0	3	255	*	335.2
HOPE A	10.1	0.8	24.9	0.8	0.0	0	195.7	187	0	13	255	158	237.9
KAMLOOPS A	10.7	1.6	26.5	-2.9	0.0	0	2.6	25	0	1	256	129	219.2
KELOWNA A	8.7	1.2	24.5	-3.7	0.0	0	22.4	110	0	6	223	110	278.6
LYTTON	10.9	1.3	26.9	-2.3	0.0	0	33.8	182	0	3	200	97	386.3
MACKENZIE A	4.4	1.4	21.5	-7.8	7.4	69	17.0	104	0	7	225	109	408.7
PENTICTON A	9.0	0.4	22.4	-4.0	0.0	0	13.4	63	0	4	199	94	268.6
PORT ALBERNI A	8.5	0.6	25.3	-3.7	2.0	182	142.8	150	0	11	195	*	284.1
PORT HARDY A	6.9	0.3	17.1	-0.6	0.2	15	90.2	84	0	13	153	107	333.6
PRINCE GEORGE A	5.9	1.6	21.9	-4.8	7.4	75	33.4	122	0	5	256	126	363.5
PRINCE RUPERT A	5.8	0.5	16.2	-1.7	0.0	0	119.0	66	0	15	128	95	364.8
PRINCETON A	7.5	1.3	23.6	-5.0	5.0	143	40.2	272	0	7	211	*	*
REVELSTOKE A	8.3	1.8	23.7	-1.8	2.0	11	73.6	181	0	10	207	116	290.3
SANDSPIT A	5.8	-0.2	12.4	-1.9	0.8	38	66.7	79	0	8	170	110	366.4
SMITHERS A	5.7	1.5	20.6	-5.2	1.0	14	15.2	86	0	1	225	127	368.2
TERRACE A	6.7	1.0	19.5	-0.8	0.6	5	36.0	59	0	11	181	123	338.4
VANCOUVER INT'L A	8.8	0.0	17.2	0.2	0.0	0	111.3	187	0	12	220	121	276.9
VICTORIA INT'L A	8.4	0.0	20.1	-0.2	0.0	0	95.7	244	0	11	228	127	286.8
VICTORIA MARINE	7.8	-0.1	20.0	0.6	0.2	22	146.2	220	0	13	*	*	304.6
WILLIAMS LAKE A	5.5	-1.1	20.9	-6.7	6.5	67	11.9	55	0	4	253	121	374.4

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									
YUKON TERRITORY													
DAWSON A	2.2	*	17.2	-20.5	0.0	*	0.8	*	*	*	*	*	*
MAYO A	2.2	2.6	16.6	-15.7	9.2	123	4.0	47	*	*	*	*	*
WATSON LAKE A	2.3	2.9	16.5	-15.2	0.4	3	8.0	53	0	1	264	122	466.3
WHITEHORSE A	2.6	2.3	15.9	-13.0	2.6	25	2.0	21	0	1	248	108	461.7
NORTHWEST TERRITORIES													
ALERT	-21.8	3.1	-7.1	-34.6	1.6	21	1.4	18	15	0	387	99	1195.1
BAKER LAKE A	-16.6	0.7	-2.8	-29.5	26.6	196	22.6	164	40	10	*	*	1038.4
CAMBRIDGE BAY A	-21.2	0.7	-8.7	-34.9	14.4	178	9.0	125	44	4	275	109	1174.3
CAPE DYER A	*	*	*	*	*	*	*	*	*	*	*	*	*
CAPE PARRY A	-17.6	1.1	-4.2	-33.3	6.0	46	3.2	33	15	1	*	*	1067.4
CLYDE A	-20.0	2.0	-8.0	-32.5	7.8	56	6.8	50	20	7	295	*	1152.7
COPPERMINE A	-16.0	1.5	-2.2	-32.2	8.0	78	4.8	44	94	3	207	96	1020.2
CORAL HARBOUR A	-16.0	0.3	-2.8	-33.6	41.4	288	41.4	302	66	7	193	69	1020.8
EUREKA	-25.7	1.9	-11.4	-37.7	2.0	69	1.6	59	20	1	370	104	1310.1
FORT SIMPSON A	3.0	4.6	15.9	-13.6	1.0	9	0.8	5	0	0	272	122	451.9
FORT SMITH A	0.9	3.1	14.7	-12.4	4.4	33	8.6	53	40	2	244	*	514.7
IQUALUIT	-17.8	-3.5	-3.4	-31.2	19.8	69	18.4	70	34	6	260	110	1075.3
HALL BEACH A	-20.5	0.4	-5.9	-35.4	3.6	28	3.4	32	3	1	*	*	1182.8
HAY RIVER A	-2.4	1.8	13.4	-14.5	7.6	58	17.4	110	2	1	*	*	610.5
INUVIK A	-8.2	6.1	9.6	-30.3	7.2	42	6.0	41	17	1	298	120	785.7
MOULD BAY A	-22.2	1.9	-7.8	-38.5	4.0	69	4.0	80	21	2	304	106	1206.1
NORMAN WELLS A	-3.0	4.2	14.0	-22.4	7.0	46	4.6	30	1	2	280	118	627.7
POND INLET A	-23.7	*	-8.9	-36.5	2.0	*	1.4	*	25	0	410	*	1249.8
RESOLUTE A	-22.5	0.6	-8.6	-37.3	2.0	31	1.6	27	20	1	376	136	1215.5
YELLOWKNIFE A	-4.8	2.1	9.4	-18.1	16.2	165	10.4	101	18	3	247	93	685.2
ALBERTA													
BANFF	3.9	1.5	18.5	-8.0	17.0	54	24.0	64	*	6	*	*	*
CALGARY INT'L A	5.4	2.1	21.2	-7.5	3.2	12	7.1	22	0	3	245	120	376.1
COLD LAKE A	5.8	2.9	20.2	-4.3	13.4	108	42.8	198	4	6	234	103	320.9
CORONATION A	5.3	2.3	23.2	-7.3	45.6	294	60.0	252	0	6	242	105	380.0

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	Mean	Difference from Normal	Maximum	Minimum									
EDMONTON INT'L A	6.1	2.9	22.1	-6.3	40.6	315	53.5	265	0	5	236	101	357.1
EDMONTON MUNICIPAL	7.1	2.9	22.3	-3.3	35.6	*	44.6	206	0	9	249	109	328.0
EDMONTON NAMAO A	6.5	2.6	21.9	-4.2	16.1	138	14.6	81	0	1	*	*	344.1
EDSON A	4.9	1.7	22.0	-8.3	27.7	187	77.6	326	0	7	195	96	392.6
FORT CHIPEWYAN A	1.4	1.3	17.0	-10.5	0.0	0	10.2	52	*	*	*	*	507.0
FORT MCMURRAY A	5.9	3.8	19.7	-6.7	0.0	0	1.2	6	0	1	277	119	362.4
GRANDE PRAIRIE A	6.8	4.1	23.0	-3.6	0.0	0	22.0	113	0	4	258	*	335.2
HIGH LEVEL A	4.5	2.3	18.9	-7.8	0.0	0	0.2	1	0	0	291	119	406.2
JASPER	5.1	1.8	19.8	-7.0	15.6	143	30.0	133	0	8	228	*	386.9
LETHBRIDGE A	6.8	1.9	22.0	-7.4	0.4	1	20.2	47	0	5	247	*	336.8
MEDICINE HAT A	7.6	2.0	24.1	-4.6	7.5	41	49.1	163	0	3	240	119	313.5
PEACE RIVER A	6.6	4.5	22.2	-5.4	0.8	8	4.7	33	0	1	*	*	341.9
RED DEER A	5.4	2.3	21.1	-6.8	0.8	5	17.4	66	0	4	*	*	377.8
ROCKY MTN HOUSE A	4.8	1.8	20.6	-6.7	12.8	44	35.4	103	0	8	*	*	395.2
SLAVE LAKE A	5.6	2.5	20.0	-5.4	0.0	0	0.0	0	0	0	249	107	372.7
SUFFIELD A	7.8	*	24.1	-4.4	2.8	*	23.8	*	0	3	232	*	306.3
WHITECOURT A	6.0	3.3	22.0	-5.0	15.4	88	84.4	313	0	8	*	*	359.1
SASKATCHEWAN													
BROADVIEW	6.0	3.4	24.7	-7.7	8.8	62	39.8	128	0	7	202	97	361.8
CREE LAKE	0.9	2.7	15.0	-13.8	11.2	60	11.6	60	2	3	218	90	514.2
ESTEVAN A	7.1	3.0	26.8	-4.9	12.6	78	52.4	141	0	9	158	75	328.0
HUDSON BAY A	4.1	*	19.0	-10.4	6.6	*	34.6	*	0	9	173	*	416.2
KINDERSLEY	5.6	1.8	23.1	-7.9	18.0	165	22.2	104	5	3	211	*	374.6
LA RONGE A	3.3	2.3	20.5	-7.6	13.0	94	57.4	291	0	4	*	*	441.1
MEADOW LAKE A	4.8	*	21.4	-7.8	24.6	*	41.2	*	4	6	238	*	395.1
MOOSE JAW A	7.2	3.0	25.1	-5.0	6.3	47	78.8	263	0	8	181	83	324.4
NIPAWIN A	3.9	*	17.9	-9.8	4.2	*	45.8	*	0	8	190	*	418.9
NORTH BATTLEFORD A	5.7	2.7	22.4	-7.3	17.8	165	60.8	288	5	5	*	*	369.1
PRINCE ALBERT A	4.7	2.8	18.8	-7.1	0.2	2	57.9	263	0	7	196	87	397.7
REGINA A	7.0	3.7	25.4	-5.6	1.2	11	54.1	228	0	8	190	91	329.0
SASKATOON A	6.3	3.0	21.2	-4.1	1.6	17	69.2	326	0	7	*	*	350.6
SWIFT CURRENT A	5.7	2.2	22.7	-6.1	31.7	207	54.3	192	7	7	202	97	367.2
YORKTON A	5.1	2.9	25.0	-7.4	1.0	8	48.8	220	0	6	201	90	388.2
MANITOBA													
BRANDON A	6.2	3.4	22.9	-6.9	9.0	80	46.3	137	0	7	197	*	352.9
CHURCHILL A	-8.3	1.8	4.8	-21.3	14.2	64	10.4	45	16	4	187	92	765.7
DAUPHIN A	5.6	3.3	22.1	-10.3	7.2	44	37.9	119	0	5	196	88	372.7
GILLAM A	-2.7	1.4	11.9	-15.0	43.2	113	36.0	146	8	5	*	*	621.1
GIMLI	8.5	*	21.9	-8.9	24.0	*	51.8	*	0	5	224	90	412.6
ISLAND LAKE	2.5	5.7	18.7	-11.1	5.1	18	30.6	114	*	7	*	*	462.6
LYNN LAKE A	-0.4	3.1	15.3	-16.0	14.8	62	15.0	88	3	5	199	86	570.1

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	Mean	Difference from Normal	Maximum	Minimum									
NORWAY HOUSE A	2.4	*	18.7	-14.6	10.6	*	54.6	*	0	6	*	*	468.5
PORTAGE LA PRAIRIE	6.6	3.4	23.6	-6.5	27.8	167	65.1	153	0	7	*	*	344.5
THE PAS A	3.3	3.3	15.8	-10.7	16.2	84	49.9	182	0	7	211	94	443.5
THOMPSON A	-0.7	1.6	14.4	-15.4	69.8	230	69.8	313	1	7	192	83	561.2
WINNIPEG INT'L A	7.2	3.8	25.7	-7.9	23.4	207	79.3	206	0	7	225	102	323.6
ONTARIO													
BIG TROUT LAKE	0.0	3.8	17.2	-27.0	1.0	4	*	*	0	4	195	*	535.1
EARLTON A	4.6	2.7	24.9	-10.1	24.7	127	67.1	134	0	8	*	*	400.4
GERALDTON A	3.5	*	21.4	-19.2	2.2	*	57.0	*	0	5	*	*	434.3
GORE BAY A	6.1	2.4	21.3	-5.4	10.2	95	75.6	116	0	9	*	*	358.2
HAMILTON RBG	8.6	*	26.8	-4.9	0.0	*	102.2	*	0	11	163	*	*
HAMILTON A	8.2	2.1	24.8	-5.7	2.8	44	95.0	121	0	11	*	*	296.8
KAPUSKASING A	3.7	3.2	24.5	-23.2	9.2	37	19.4	36	0	7	*	*	430.1
KENORA A	6.5	3.8	24.5	-7.5	23.0	114	60.6	145	0	7	*	*	345.6
KINGSTON A	7.4	2.1	20.2	-5.0	0.8	11	117.0	153	0	10	153	76	*
LONDON A	8.8	2.4	26.1	-5.0	3.6	40	81.0	100	0	12	128	77	276.7
MOOSONEE	-0.3	2.0	18.8	-21.5	2.0	9	23.3	55	0	3	235	136	549.3
MUSKOKA A	6.8	2.3	24.3	-7.6	7.5	63	144.8	198	0	14	*	*	337.5
NORTH BAY A	6.0	2.8	25.1	-7.6	12.0	73	91.6	147	0	15	153	78	362.4
OTTAWA INT'L A	8.3	2.7	25.7	-3.9	0.0	0	130.6	189	0	11	*	*	292.4
PETAWAWA A	6.4	2.7	29.0	-10.1	3.0	50	85.6	134	0	11	*	*	347.2
PETERBOROUGH A	7.7	2.1	26.3	-6.9	2.6	40	114.2	164	0	13	*	*	307.7
PICKLE LAKE	3.6	4.1	21.1	-18.1	0.2	1	43.7	100	0	7	*	*	431.3
RED LAKE A	5.8	4.3	24.6	-10.3	0.6	3	21.8	58	0	6	264	*	367.0
ST CATHARINES A	9.1	2.4	25.2	-4.1	0.4	12	104.6	132	0	11	149	*	272.0
SARNIA A	9.0	2.7	28.4	-4.5	1.2	20	65.7	85	0	12	158	83	275.0
SAULT STE MARIE A	5.4	2.5	22.1	-10.1	31.0	310	91.6	141	0	9	184	94	378.7
SIoux LOOKOUT A	3.6	2.2	25.2	-14.3	11.0	43	76.8	170	0	6	*	*	359.8
SUDBURY A	5.3	2.6	23.9	-8.5	32.6	208	72.0	118	0	8	173	84	381.0
THUNDER BAY A	4.8	2.3	23.8	-9.2	0.0	0	68.8	136	0	6	225	105	397.2
TIMMINS A	3.9	2.9	24.6	-20.5	28.5	126	38.5	79	0	9	*	*	422.8
TORONTO	9.3	*	23.2	-1.8	4.0	*	133.8	*	0	10	*	*	261.5
TORONTO INT'L A	8.7	2.5	27.6	-4.6	0.4	5	115.4	165	0	11	*	*	283.4
TORONTO ISLAND A	7.1	*	18.8	-1.6	0.6	9	120.0	*	0	12	*	*	305.9
TRENTON A	8.0	2.6	24.2	6.5	0.0	0	90.3	119	0	12	*	*	301.3
WATERLOO WELLINGTON	8.1	2.8	25.5	-5.4	1.8	26	132.1	161	0	11	*	*	297.3
WAWA A	3.9	*	10.7	-2.9	4.8	*	45.2	*	0	9	*	*	421.5
WIARTON A	7.3	2.6	24.5	-4.0	13.7	127	102.1	148	0	11	145	75	321.7
WINDSOR A	10.4	2.3	27.8	-3.5	0.0	0	101.0	122	0	11	*	*	231.2

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	Mean	Difference from Normal	Maximum	Minimum									
QUEBEC													
BAGOTVILLE A	3.2	1.0	19.0	-9.7	28.0	141	62.7	131	0	12	*	*	444.1
BAIE COMEAU A	0.1	-0.1	10.7	-12.5	29.6	101	64.4	91	8	8	225	130	536.5
BLANC SABLON A	-4.2	-2.7	4.2	-15.8	30.4	76	39.6	55	15	7	157	*	661.2
CHIBOUGAMAU CHAPAIS	0.8	*	18.1	-17.3	31.6	*	52.6	*	0	9	196	104	514.7
GASPE A	-0.1	*	16.7	-13.8	49.2	*	88.9	*	0	8	226	*	542.9
INUKJUAK A	-13.0	-2.1	5.7	-25.4	7.6	57	7.4	51	36	***	*	*	930.0
KUUJJUAQ A	-11.7	-2.5	9.4	-26.4	12.8	59	13.8	59	19	5	242	123	891.8
KUUJJUARAPIK A	-8.7	-1.9	11.9	-26.8	11.2	51	14.2	53	15	6	224	121	800.7
LA GRANDE IV A	-5.9	*	15.4	-24.3	20.6	*	33.4	*	14	6	214	*	733.9
LA GRANDE RIVIERE A	-5.0	*	0.0	*	22.0	*	42.6	*	9	4	233	*	709.5
MANIWAKI	6.1	2.5	27.0	-10.0	4.0	33	91.8	153	0	11	140	73	357.8
MATAGAMI A	2.0	*	22.8	-16.6	12.6	*	22.8	*	0	5	183	100	481.5
MONT JOLI A	1.5	-0.1	14.6	-10.0	23.2	83	38.8	69	0	40	216	140	491.6
MONTREAL INT'L A	7.8	2.1	21.5	-4.4	0.0	0	122.4	165	0	12	163	86	305.0
MONTREAL MIRABEL I/	6.8	*	21.7	-5.4	0.2	*	130.4	*	0	10	177	*	337.5
NATASHOUAN A	-2	*	9.6	-15.9	22.2	*	49.6	*	19	8	234	*	611.9
QUEBEC A	4.6	1.3	21.1	-7.2	2.0	12	79.8	110	0	10	171	99	399.2
ROBERVAL A	3.7	2.0	21.0	-9.4	24.8	112	72.8	154	0	12	166	*	428.4
SCHEFFERVILLE A	-10.1	-2.9	6.7	-30.5	27.6	68	21.8	48	62	9	257	145	841.8
SEPT-ILES A	-0.8	-0.8	10.1	-10.5	30.8	93	58.4	74	50	8	226	121	563.9
SHERBROOKE A	6.5	3.2	24.1	-6.9	1.8	8	120.8	167	0	11	168	*	346.3
STE AGATHE DES MONT	4.9	2.7	21.2	-9.0	8.2	41	106.0	133	0	11	152	79	393.7
ST HUBERT A	7.3	1.6	21.8	-5.8	0.0	*	118.5	158	0	11	169	*	321.3
VAL D'OR A	3.6	2.7	22.8	-12.8	25.8	120	51.8	102	0	8	176	96	431.7
NEW BRUNSWICK													
CHARLO A	1.7	0.8	16.4	-12.7	17.2	50	53.8	64	0	7	222	137	488.2
CHATHAM A	2.9	-0.1	21.3	-9.9	16.6	50	92.5	109	0	10	197	114	453.4
FREDERICTON A	4.5	0.4	22.6	-7.8	9.4	44	86.6	108	0	9	185	*	404.7
MONCTON A	3.0	0.0	20.3	-9.1	16.9	60	68.5	76	0	7	208	130	451.1
SAINT JOHN A	3.8	0.6	17.6	-7.9	14.6	71	113.6	106	0	9	198	125	426.3

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	5.0	0.4	19.5	-5.7	17.2	99	80.6	107	0	8	*	*	388.7
HALIFAX INT'L A	4.2	0.9	19.0	-7.2	7.0	29	84.6	74	0	9	*	*	414.8
SABLE ISLAND	3.6	0.3	10.9	-3.3	2.0	33	71.7	73	0	7	154	113	432.8
SHEARWATER A	4.1	0.1	16.6	-6.0	7.8	60	91.8	91	0	8	209	127	422.4
SYDNEY A	1.9	-0.1	19.9	-7.3	12.1	48	51.2	50	0	8	192	122	483.4
YARMOUTH A													
YARMOUTH A	5.4	0.7	17.2	-4.6	10.8	166	100.4	104	0	8	201	113	375.4
PRINCE EDWARD ISLAND													
CHARLOTTETOWN A	2.3	0.0	17.4	-8.1	20.8	76	50.0	61	0	8	*	*	472.0
SUMMERSIDE A	4.1	1.5	17.5	-8.2	11.8	49	50.6	67	0	8	206	128	474.5
NEWFOUNDLAND													
BONAVISTA	-0.5	-1.1	10.1	-8.0	31.2	139	69.2	107	1	12	*	*	553.4
BURGED	1.1	-0.2	11.9	-9.5	31.4	132	56.5	48	0	7	*	*	508.9
CARTWRIGHT	-5.2	-2.6	8.8	-19.2	69.0	120	72.6	90	191	9	142	111	695.1
CHURCHILL FALLS A	-7.2	-1.2	9.7	-23.2	18.8	36	19.3	30	75	7	244	157	757.0
COMFORT COVE	-1.5	-2.1	12.0	-13.4	53.2	115	82.9	96	14	13	*	*	591.0
DANIELS HARBOUR	-1.9	-2.2	9.2	-15.0	43.4	152	54.6	105	0	11	141	106	603.5
DEER LAKE A	-0.1	-0.9	14.1	-19.2	24.0	81	47.8	89	0	10	*	*	575.7
GANDER INT'L A	-0.8	-1.7	13.2	-13.0	50.1	106	74.7	80	1	14	124	107	563.5
GOOSE A	-3.8	-2.1	11.8	-19.6	19.4	40	15.2	25	13	6	219	156	652.3
MARY'S HARBOUR	-4.8	-2.8	7.1	-20.0	58.2	114	65.6	86	54	9	*	*	771.7
PORT AUX BASQUES	0.9	0.1	12.3	-6.5	29.2	122	62.2	67	0	10	197	*	513.9
ST ANTHONY	-4.0	-2.1	7.0	-15.5	81.8	189	89.4	95	43	15	*	*	658.9
ST JOHN'S A	0.4	-0.8	12.9	-6.4	20.0	58	62.3	54	0	11	102	88	527.9
ST LAWRENCE	1.7	0.6	17.5	-7.9	13.1	71	47.6	45	0	7	*	*	489.5
STEPHENVILLE A	0.6	-1.2	14.0	-10.8	21.9	100	40.1	67	0	9	164	125	521.1
WABUSH LAKE A	-5.8	-0.2	9.4	-23.1	29.5	60	30.8	59	4	9	237	166	717.3

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Climatic Perspectives

Vol. 13 - April 1991

AGROCLIMATOLOGICAL STATIONS

APRIL 1991

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	10.5	1.0	23.5	2.0	0.0	164.4	149	0	13	197	164.8	311.6
KAMLOOPS	8.8	0.3	19.0	1.0	0.0	97.4	252	0	10	196	108.1	230.1
SIDNEY	8.7	0.3	19.0	1.0	0.0	97.4	252	0	10	196	108.1	230.1
SUMMERLAND	9.1	0.4	21.5	-2.5	0.0	21.0	107	0	8	217	122.3	158.4
ALBERTA												
BEAVERLODGE	6.4	3.8	22.5	-4.0	0.0	15.0	78	0	2	254	58.5	61.0
ELLERSLIE	8.8	0.3	19.0	1.0	0.0	97.4	252	0	10	196	108.1	230.1
LACOMBE	6.0	2.9	22.0	-5.5	1.5	32.9	139	0	3	232	47.6	51.0
LETHBRIDGE	8.8	0.3	19.0	1.0	0.0	97.4	252	0	10	196	108.1	230.1
VEGREVILLE	8.8	0.3	19.0	1.0	0.0	97.4	252	0	10	196	108.1	230.1
SASKATCHEWAN												
INDIAN HEAD	6.4	3.3	25.0	-6.0	2.1	48.4	171	0	8	227	55.2	58.2
MELFORT	4.7	3.4	18.5	-7.5	7.8	66.5	352	0	9	149	22.5	22.5
REGINA	6.6	3.6	25.0	-8.0	2.0	53.3	224	0	7	200	67.5	69.5
SASKATOON	6.3	2.9	22.0	-4.5	0.0	55.8	261	0	5	200	67.5	69.5
SCOTT	5.6	2.9	22.5	-7.0	17.9	36.5	153	2	4	227	55.2	58.2
SWIFT CURRENT	5.8	1.8	23.0	-5.5	29.8	50.3	196	12	5	168	62.3	75.2
MANITOBA												
BRANDON	7.0	3.7	24.8	-6.6	11.4	49.4	134	0	9	227	55.2	58.2
MORDEN	7.2	3.8	27.0	-6.0	14.2	53.6	143	2	10	189	61.5	108.0
GLENLEA	7.1	3.1	26.5	-6.0	29.6	54.2	131	19	9	215	91.5	92.5
ONTARIO												
DELHI	9.2	2.5	28.0	-7.0	0.0	103.5	111	0	14	227	55.2	58.2
ELORA	6.7	1.6	23.7	-5.3	0.0	105.5	150	0	8	227	55.2	58.2
GUELPH	7.9	2.1	25.9	-8.0	0.0	101.3	137	0	11	126	112.9	127.6
HARROW	10.3	2.4	26.5	-4.0	0.0	89.0	110	0	9	147	61.5	69.5
KAPUSKASING	3.4	2.9	23.5	-24.5	4.6	13.8	28	0	5	181	50.3	50.3
OTTAWA	8.5	2.8	26.5	-4.0	0.0	131.0	203	0	12	153	61.5	119.3
SMITHFIELD	8.8	0.3	19.0	1.0	0.0	97.4	252	0	10	196	108.1	230.1
VINELAND	8.8	0.3	19.0	1.0	0.0	97.4	252	0	10	196	108.1	230.1
WOODSLIE	8.8	0.3	19.0	1.0	0.0	97.4	252	0	10	196	108.1	230.1

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 POCAIERE	3.2	0.4	17.5	-7.0	5.7	76.4	121	0	10	176	14.1	14.1
L'ASSOMPTION	6.8	1.8	22.0	-4.5	0.0	102.8	143	0	9	158	14.1	14.1
LENNOXVILLE	8.8	0.3	19.0	1.0	0.0	97.4	252	0	10	196	108.1	230.1
NORMANDIN	2.5	2.0	19.0	-16.5	22.4	55.7	114	0	8	169	10.9	10.9
STE. CLOTILDE	8.8	0.3	19.0	1.0	0.0	97.4	252	0	10	196	108.1	230.1
NEW BRUNSWICK												
FREDERICTON	8.8	0.3	19.0	1.0	0.0	97.4	252	0	10	196	108.1	230.1
NOVA SCOTIA												
KENTVILLE	8.8	0.3	19.0	1.0	0.0	97.4	252	0	10	196	108.1	230.1
NAPPAN	3.6	0.3	18.5	-8.5	21.9	76.1	101	0	9	195	28.0	28.5
PRINCE EDWARD ISLAND												
CHARLOTTETOWN	3.0	0.2	17.5	-8.0	11.8	41.0	53	0	5	200	24.5	25.3
NEWFOUNDLAND												
ST. JOHN'S WEST	8.8	0.3	19.0	1.0	0.0	97.4	252	0	10	196	108.1	230.1