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Climatic Perspectives

Monthly Review

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CLIMATIC HIGHLIGHTS

Western Canada spring water supply outlook

Prairie agriculture relies heavily on winter snowfall and spring precipitation for plant germination at the beginning of the growing season. Snowfalls on the Prairies this year, which is typical for the past few years, have been quite variable. Generally, soil moisture levels have not improved substantially over last year. Some recovery has been noticed in southern Alberta as a result of recent snowmelt, and ground water conditions are slightly better than last year at this time. In February, southern Saskatchewan and southeastern Alberta received normal to above normal precipitation, which has helped, but not enough to provide a complete soil moisture recharge.

Current low soil moisture conditions combined with little snow cover greatly reduce any potential for significant spring runoff in most of central and southern Alberta. The spring runoff forecast for Alberta streams and rivers fed locally, ranges from much below normal in the southeast to below normal for most other areas. The exceptions are the Slave Lake, Grande Prairie and High Level areas, and the northeastern part of the province, where forecasts show near normal or above normal runoff, due to heavier winter snowfalls. It should be noted however, that there are often heavy snowfalls in March

and April, which could change conditions significantly between now and when spring runoff occurs.

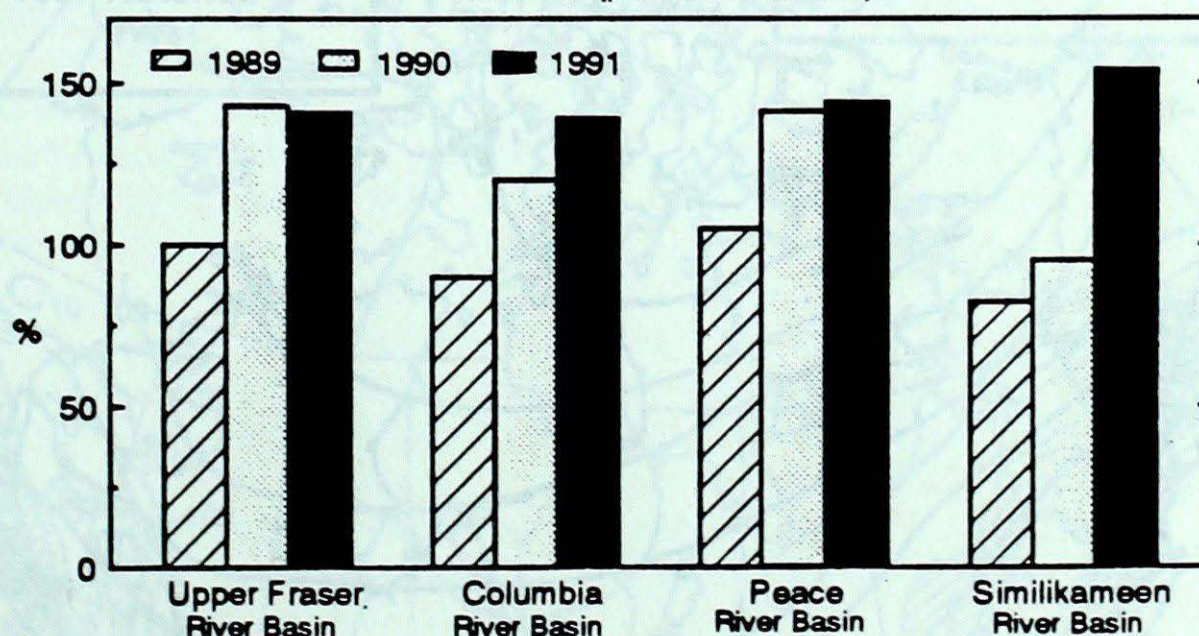
Mountain snowpack

Snow surveys show that the Rocky Mountain snowpack in Alberta is above normal in all areas. In fact, it is higher than it has been in the last 10 to 15 years. As a result, the water supply outlook for the major rivers flowing from the eastern Rockies this summer looks very good.

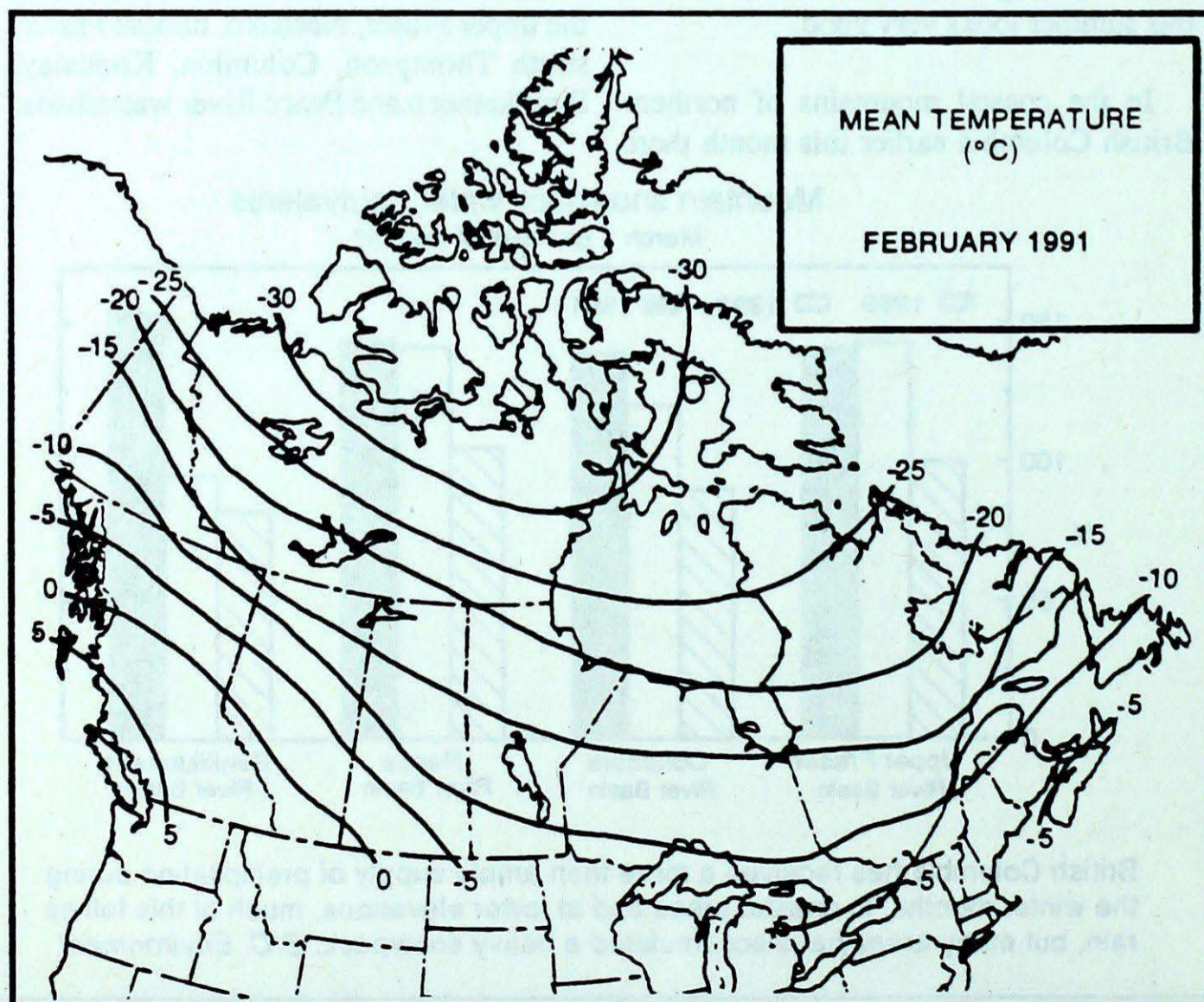
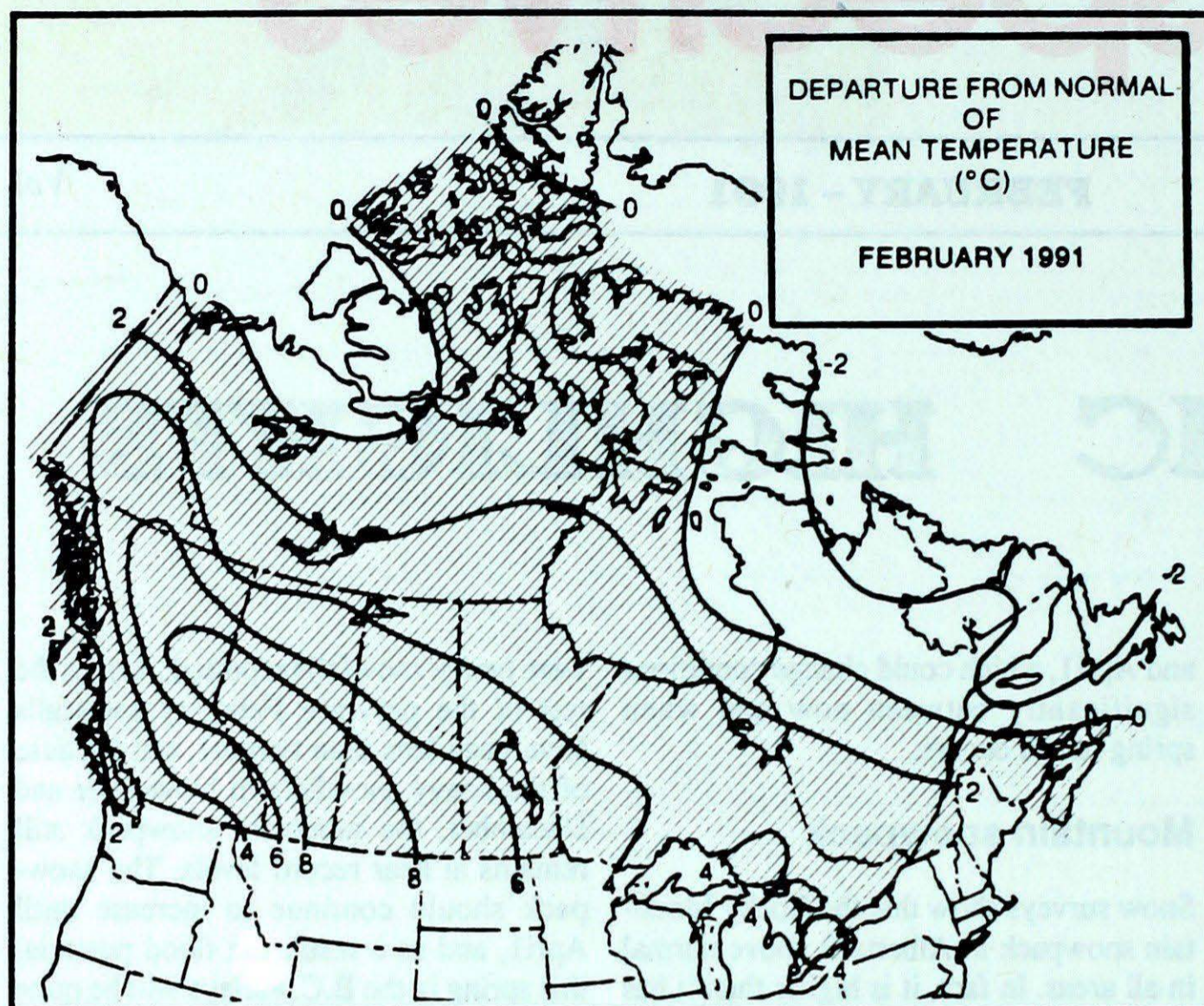
In the coastal mountains of northern British Columbia earlier this month there

were heavy snowfalls reported. Across the rest of the province February snowfalls have been less than normal, but because of the heavy snowfalls in November and December, the mountain snowpack still remains at near record levels. The snowpack should continue to increase until April, and as a result the flood potential this spring in the B.C. valleys will be quite high, especially in the Coastal and Cascade Range watersheds. Of special concern are the near record heavy snows in the upper Fraser, Nechako, middle Fraser, south Thompson, Columbia, Kootenay, Similkameen and Peace River watersheds.

Mountain snowpack water equivalents
March 1 (percent of normal)



British Columbia has received a more than ample supply of precipitation during the winter months. In coastal areas and at lower elevations, much of this fell as rain, but many areas have accumulated a heavy snowpack. *B.C. Environment.*



Across the country

Yukon and Northwest Territories

February started out cold, but after the first few days it became an unusually warm month. A series of Pacific disturbances brought southerly winds and abundant precipitation.

The highest temperature recorded this month was at Haines Junction, where the mercury climbed to 8°C. The coldest reading was -45°C, which was tied by a number of stations, during the first 9 days of the month. An upper atmospheric ridge ensured that all locations in the Yukon had above-normal temperatures this month. The warm weather certainly made it nice for participating in outdoor activities.

Snowfalls were by far the heaviest in the southern Yukon, with over 100 cm of snow being recorded on both the Haines and Skagway Passes. Fraser Summit received 218 cm, compared to a normal of 145 cm. Although Carcross only received 49 cm, this was almost three times the normal snowfall for the month. Whitehorse had its first measurable rainfall of the year, 0.2 mm falling on the 15th. Normal rainfall in February is only a trace.

For the most part, the Northwest Territories were milder than normal, with southern Baffin Island being one notable exception. The lowest temperature reported in the Arctic was -48.0°C at Eureka. Blizzards were common even though snowfalls were variable. The Great Slave Lake region and the Arctic coast had more snow than usual, while the Keewatin district had below normal snowfalls. The exception was Coral Harbour where the February snowfall of 26.2 cm was almost triple the normal.

British Columbia

A well-established southwesterly flow of mild Pacific air kept temperatures well-above average across the whole province, but Arctic air pushed across the province at month's end. Precipitation generally was above average in the vicinity of the Coastal Mountains, but below average in most inland locations.

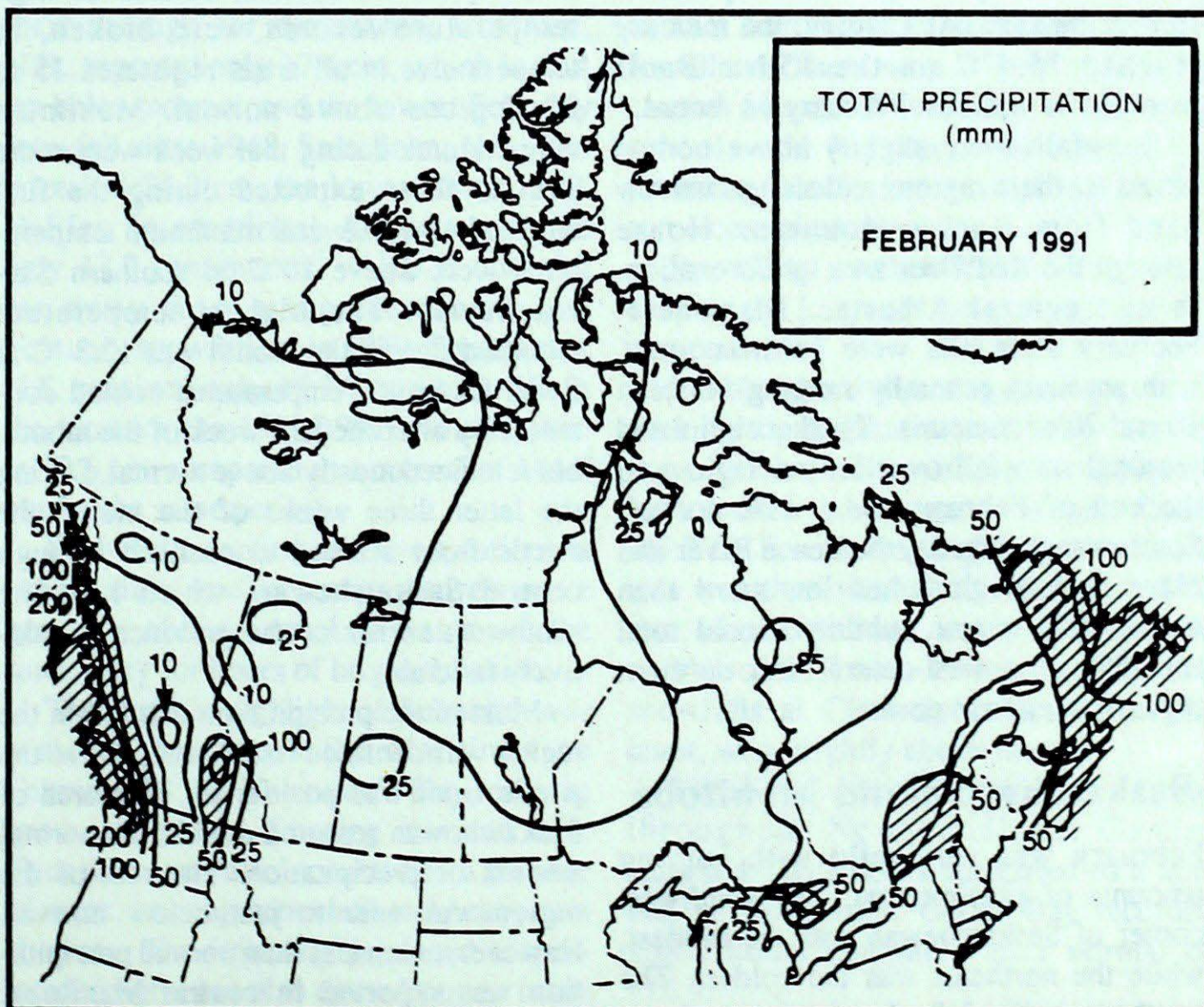
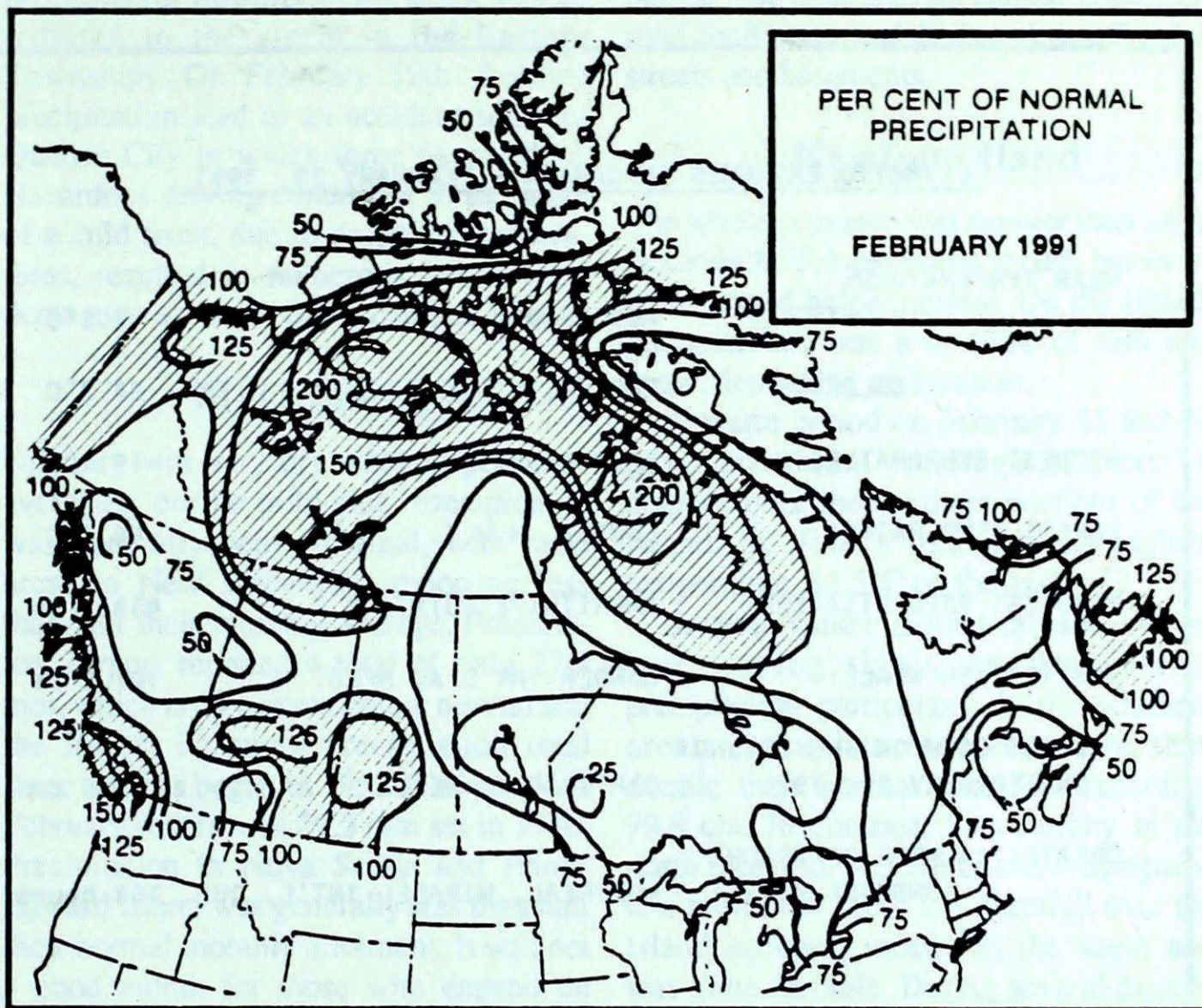
Port Alberni, Abbotsford, Hope, Penticton, Princeton, Castlegar and Cranbrook all established new record-high February mean temperatures, while Victoria tied their warmest February on record. Revelstoke, Blue River, Prince George and Mackenzie also set new record high mean temperatures for the month. Record daily maximum temperatures were set at a number of locations during the first part of the month. As well, a number of record high monthly temperatures were set in the south. Abbotsford attained the highest monthly maximum temperature, 19.1°C, just short of their all-time high value for the month of 20.6°C. The warm temperatures brought a halt to some outdoor activities in inland centres due to lack of snow and thin ice. Winter roads and logging operations were affected by the warm weather, as roads became too soft for heavy equipment.

Precipitation was above average along the coast and in the Coastal Mountains. In some cases, 50 percent more than normal. Lytton received 91.3 mm of precipitation, which is 232 percent of their long-term average. Below average precipitation was generally recorded elsewhere, including a good portion of the central interior. A dry area around Williams Lake, received only one quarter of their monthly normal.

Mild temperatures resulted in a significant lack of snow. Only the extreme northeast corner of the province reported above-average snowfall. No snow was recorded from Kamloops southward through the Thompson and Fraser Valleys to the lower mainland. In the Okanagan Valley snow cover was basically eliminated by the second week of the month. Dease Lake in the northwest, received less than one quarter of their average February snowfall.

Alberta

Although Arctic air, which generally remained anchored across the northern regions, made several brief intrusions further south, monthly temperatures averaged well above normal. Even across the north readings were unseasonably mild. Well above normal temperatures were reported across the province early in the month and between February 15 and 20, with



CLIMATIC EXTREMES IN CANADA - FEBRUARY 28, 1991

MEAN TEMPERATURE:			
HIGHEST	ABBOTSFORD A., B.C.	7.8°C	
COLDEST	EUREKA, N.W.T.	-38.2°C	
HIGHEST TEMPERATURE:			
	ABBOTSFORD A., B.C.	19.1°C	
LOWEST TEMPERATURE:			
	EUREKA, N.W.T.	-48.0°C	
HEAVIEST PRECIPITATION:			
	AMPHITRITE POINT, B.C.	454.3 mm	
HEAVIEST SNOWFALL:			
	GANDER INT'L A, NFLD.	107.2 cm	
DEEPEST SNOW ON THE GROUND ON FEBRUARY 28, 1991			
	CARTWRIGHT, NFLD.	216 cm	
GREATEST NUMBER OF BRIGHT SUNSHINE HOURS:			
	MONTREAL, MIRABEL INT'L, QUE.	168 hours	

numerous daily maximum temperature records broken. At Calgary, the mercury reached 15.4 °C on the 15th. Banff recorded its warmest February on record.

Snowfalls were slightly above normal across northern regions and along a narrow band from Rocky Mountain House through the Red Deer area to Coronation, in east-central Alberta. Elsewhere, February snowfalls were below normal, with amounts generally ranging between 10 and 20 centimetres. Total accumulated seasonal snowfall over central regions to the end of February were near normal. Southeastern Alberta, the Peace River and Slave Lake Regions had less snow than normal this winter, while seasonal total snowfall over west-central and northern regions was above normal.

Saskatchewan and Manitoba

February was very mild with varying amounts of precipitation. The southwest corner of Saskatchewan was the mildest, while the northeast was the coldest. The southern half of Saskatchewan and the southwest portion of Manitoba were at least 5 °C above normal.

Early in the month, dozens of high temperature records were broken, as temperatures in all areas registered 15 to 20 degrees above normal. Maximum temperatures during that week were more akin to those expected during the first week of April. Several maximum temperatures were above 10°C in southern Saskatchewan. The highest temperature recorded during the month was 12.3 °C at Swift Current. Temperatures cooled considerably after the first week of the month, but remained mostly above normal. During the latter three weeks of the month the Arctic front seemed to oscillate through central Saskatchewan, which kept the southwest corner of the province in relatively mild air.

Most of the precipitation that fell in the region was confined to the area, where the Arctic front was positioned. This area of Saskatchewan reported double the normal amount of precipitation. The rest of the region was near to just below normal. However, much less than normal precipitation was reported in central Manitoba. Precipitation in this area was barely more than a trace.

Sunshine amounts were very close to

normal in all areas, with the exception of southern Saskatchewan. This area, frequently referred to as the sunniest part of Canada, tallied 20 to 40 hours less than normal. Mostly cloudy skies prevented Estevan from receiving more than 82.3 hours of sunshine. This averages to about 60 percent of the normal 136.3 hours.

Ontario

February featured mild and generally dry weather conditions across Ontario. Monthly mean temperatures were several degrees above the long-term average, giving residents in southern and central Ontario their mildest February since the record warm February of 1984. Meanwhile, in the north and northwest, it was the mildest February since 1987. In particular, the first week of the month featured several record afternoon high temperatures. These combined to easily outweigh a frigid, but brief, few days during the middle of the month. The greatest above normal temperature departures occurred in northwestern Ontario.

Snowfall totals were extremely light across the north, with amounts ranging from just 2 to 15 centimetres from Lake of the Woods to Moosonee. Red Lake, Pickle Lake and Geraldton all established monthly records for their least February snowfall ever; while Moosonee's 5 cm total was their least since 1980. Across the rest of the province, snowfall totals were generally 50 to 90 percent of normal, with amounts ranging from 20 to 40 centimetres. The exceptions were in the snowbelt areas near Georgian Bay (Wiarton 84 cm, Muskoka 68 cm), as well as the cities of London 57 cm, Kitchener 49 cm and St. Catharines 30 cm, where local lake-effect flurries inflated the February totals from 10 to 20 centimetres above normal.

Overall February was a dry month province-wide, as little rain fell in southern Ontario and none in the north, much the same as in January. Total precipitation in northwestern Ontario was remarkably light, making this the driest February since 1980. Red Lake however stood out with a meagre 1.2 mm of total precipitation, which not only set a record for their driest February since records began in 1938, but may likely prove to be the driest February ever recorded anywhere in Ontario.

Total hours of bright sunshine were near normal in the south and above normal in the north. Red Lake was the sunniest site with 170 hours of February sunshine, while London's 93 hours was the provincial low.

As the winter of 1990-91 winds down, the mean temperature for the December-February period has resulted in southern Ontario's mildest winter since 1982-83, and the 8th winter in the past 10 years sporting an above normal mean temperature.

Quebec

Record-breaking warm weather dominated southwestern Quebec during the first ten days of the month, which resulted in the mildest February since 1984. Mean monthly temperature values ranged from one to five degrees above normal from Mont-Joli to Matagami, respectively. Between February 3 and 9, close to ninety new daily temperature records were set in the province. The mercury reached a maximum of 11°C at Maniwaki on the 3rd of the month.

Precipitation across the province was generally below normal, except in the north, the area between Hudson Bay and Ungava Bay. The Gaspé and the north coast of the Gulf received approximately half their normal monthly allotment. Total snowfall ranged from 25 to 50 centimetres, with a maximum value of 63.6 cm reported at Sainte-Agathe-des-Monts. At Gaspé, only 21.6 cm of new snow was reported, equalling the record for the least February snowfall at that location which was previously set in 1986.

With the exception of locations along the Lower St. Lawrence Valley, total hours of bright sunshine were slightly above normal for the month.

The mild weather at the beginning of February and minimal snowfalls greatly reduced the snow cover. Skiing conditions deteriorated to the point where ski centres in some regions had to close certain slopes. However, a storm on St. Valentine's Day quickly rectified the situation, with some 15 to 25 centimetres of new snow covering southern Quebec. Although the storm was good news for ski enthusiasts it did cause

problems for travellers. One death was attributed to the storm in the Eastern Townships. On February 19th, freezing precipitation led to an accident south of Quebec City in which three people died. Hazardous driving conditions in the wake of a cold front, due to dropping temperatures, resulted in numerous minor accidents over southern Quebec on the 22nd.

Maritimes

February was very dry with temperatures averaging on the mild side. Precipitation was generally below normal, with most areas in New Brunswick reporting less than half their monthly average. Fredericton Airport reported a total of only 27.5 mm, which is 69 percent below normal and the lowest February precipitation total since records began in 1952. The previous February record was 29.5 mm set in 1980. Precipitation in Nova Scotia and Prince Edward Island was generally less than half their normal monthly allotment. It was not a good month for those who depend on winter snow for income purposes, as snowfall totals in all areas were well below normal. Most locations reported less than half their average for the month. Chatham, N.B., reported only 17.4 cm, which is 47.4 cm below normal, and the lowest February snowfall since 1948. Saint John, N.B., had a total of 24.2 cm, the lowest since 1942. Halifax International Airport, reported only 17.2 centimetres, which is only 0.2 cm away from tying the record low February snowfall set in 1979. Shearwater, N.S. received only 15.2 cm, which brings the total for the 1990-1991 winter season to 58.6 cm, compared to a normal of 144.9 cm for the same period.

With the exception of a few locations in the region, mean temperatures were generally above normal. It was much the same story for hours of bright sunshine.

The weather highlight of the month was a storm that struck the Maritimes on February 14, St. Valentine's Day, causing snow, ice pellets, freezing rain and rain. Thunderstorms also occurred in a number of areas, causing some hail and heavy rain showers. The lightning produced a spectacular sight, but also caused power interruptions in parts of southwestern Nova

Scotia. The freezing rain caused hazardous road conditions, and the heavy rain flooded streets and basements.

Newfoundland

The whole province was sunnier than usual this month. Temperatures varied, but overall averaged below normal. On the Island, precipitation, was a mixture of rain and snow, depending on location.

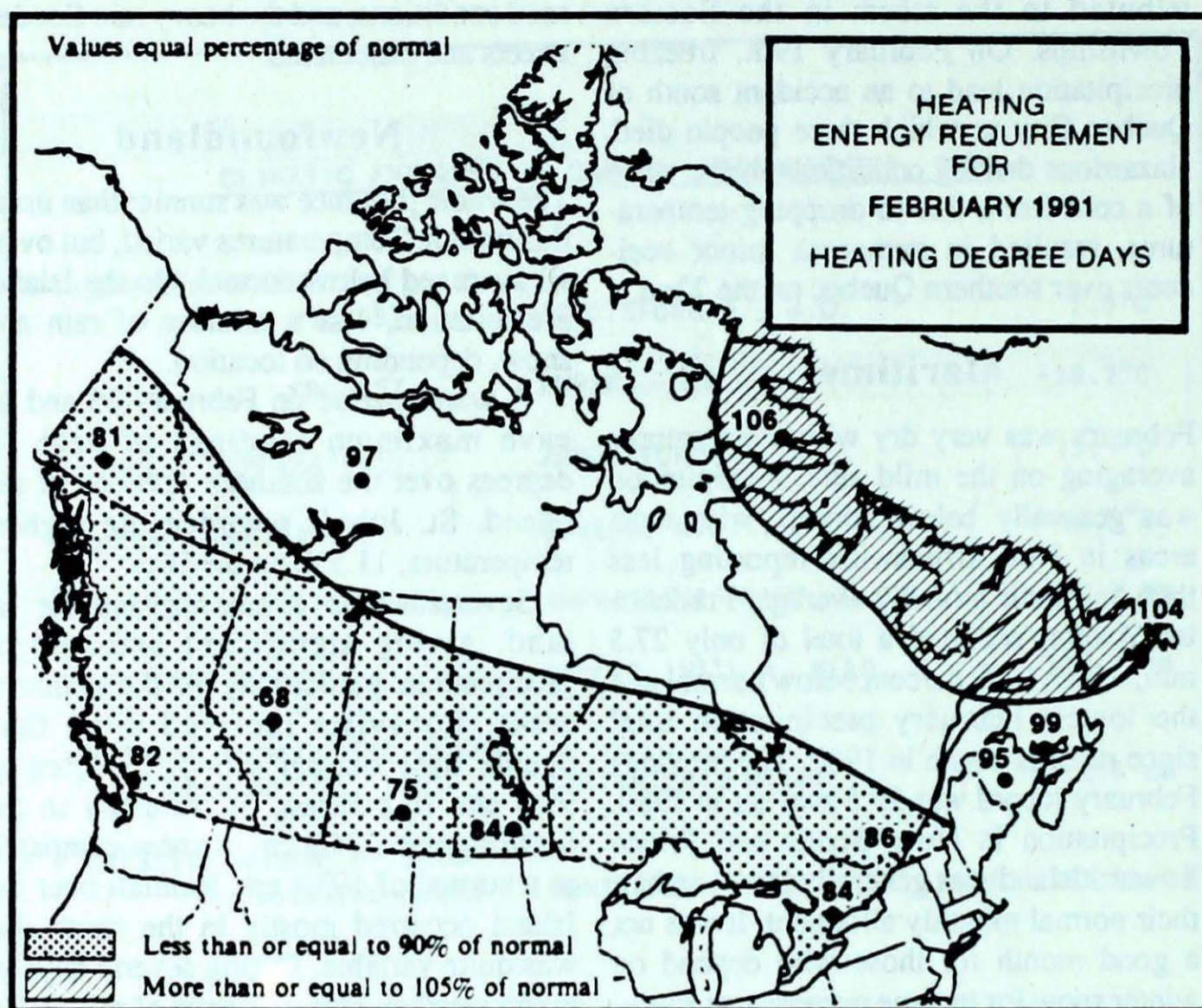
A warm period on February 15 and 16 gave maximum readings of near 10 degrees over the southern portions of the Island. St. John's recorded the highest temperature, 11.5°C on the 16th.

Several winter storms crossed the Island, giving significant amounts of precipitation particularly in the southern areas. Bonaville received more than double their normal snowfall, recording 99.8 cm. In contrast, St. Anthony in the north received 74.9 cm of snow compared to a normal of 103.4 cm. Rainfall over the Island occurred mostly in the south and was quite variable. During several days of warm weather, almost 50 mm of rain fell in the St. John's area. The heavy rain combined with melting snow caused flooding in the southeastern sections of Newfoundland. There were several storms that caused blizzard-like conditions, closing schools and highways throughout the province. Wind gusts reached 130 km/h at some coastal communities.

Prevailing winds were from the west, keeping the Labrador ice pack well off the east coast.

In Labrador it was also a sunny month, with light precipitation and below normal temperatures. The coldest temperature recorded this month was at Wabush Lake, -40.3°C. For the most part, precipitation was less than normal. Goose Bay's 24.2 mm of precipitation was well below the normal of 60.3 mm. In contrast, rain and snowfalls at Cartwright, located on the coast, were slightly above normal.

Sunshine was much above normal throughout Newfoundland. Gander recorded 130.2 hours compared to a normal of 98.7 hours. Goose Bay recorded 158.1 hours compared to a normal of 116.9.



SEASONAL TOTAL OF HEATING DEGREE-DAYS TO END OF FEBRIER

	1991	1990	NORMAL
BRITISH COLUMBIA			
Kamloops	2822	2625	2820
Penticton	2583	2390	2545
Prince George	3860	3444	3656
Vancouver	2023	1976	2074
Victoria	2094	2057	2116

YUKON TERRITORY			
Whitehorse	5173	4920	5099
NORTHWEST TERRITORIES			
Iqaluit	7049	6853	6590
Inuvik	7025	7208	6975
Yellowknife	6391	6293	6039

ALBERTA			
Calgary	3525	3376	3797
Edmonton Mun	3767	3642	3990
Grande Prairie	4402	4066	4486

SASKATCHEWAN			
Estevan	4034	3805	3986
Regina	4154	4039	4254
Saskatoon	4416	4260	4417

MANITOBA			
Brandon	4511	4396	4448
Churchill	6452	6416	6171
The Pas	4937	5128	4905
Winnipeg	4233	4343	4300

ONTARIO			
Kapuskasing	4600	4683	4557
London	2717	2936	2898
Ottawa	3235	3474	3386
Sudbury	3742	4007	3845
Thunder Bay	4130	4260	4078
Toronto	2690	2932	2899
Windsor	2401	2603	2593

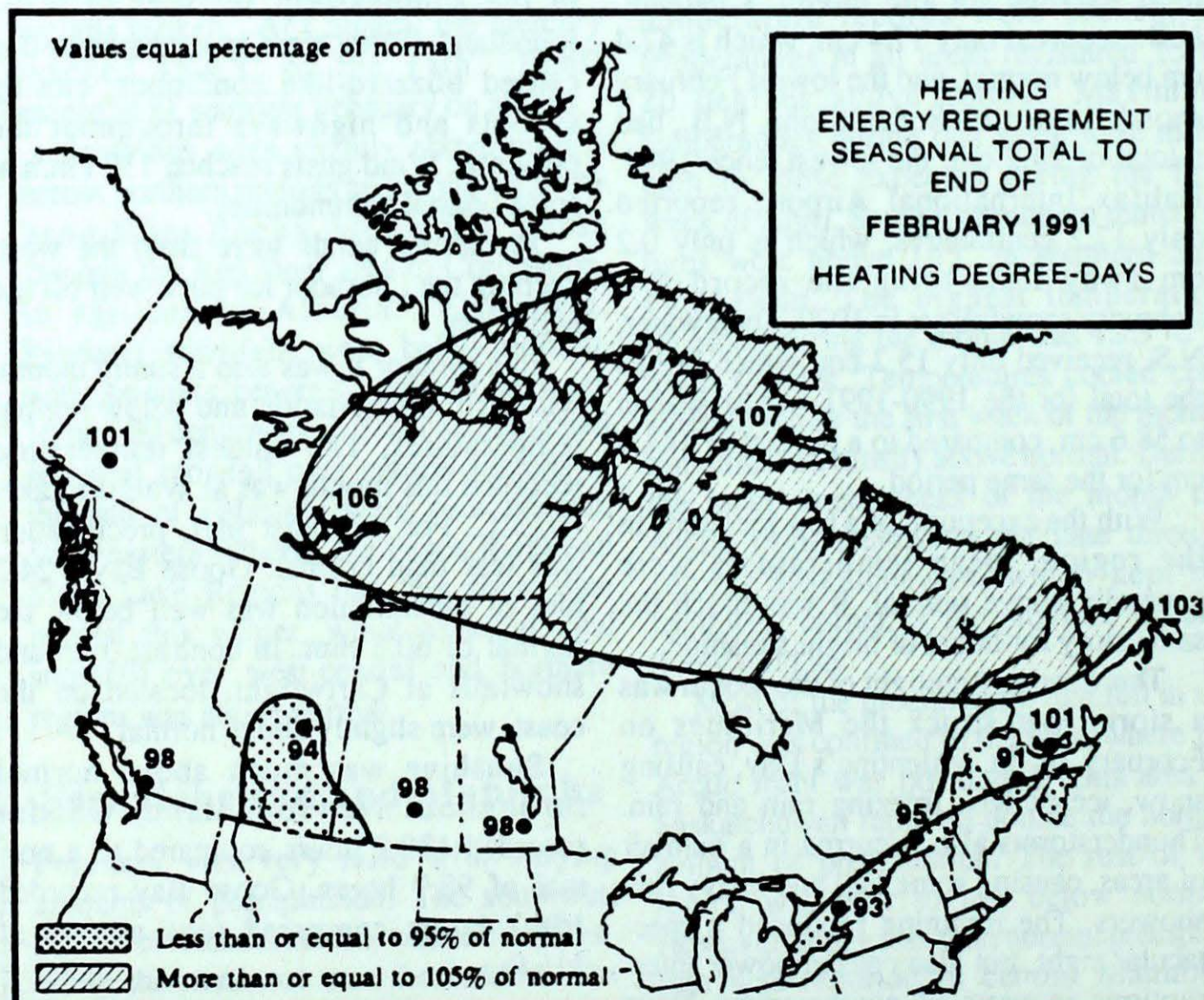
QUÉBEC			
Baie Comeau	4308	4397	4174
Montréal	3120	3362	3271
Québec	3641	3828	3662
Sept-Îles	4538	4613	4273
Sherbrooke	3439	3691	3726
Val-d'Or	4347	4568	4362

NEW BRUNSWICK			
Charlo	3921	3997	3828
Fredericton	3226	3601	3319
Moncton	3260	3490	3237

NOVA SCOTIA			
Sydney	2930	3228	2880
Yarmouth	2492	2840	2680

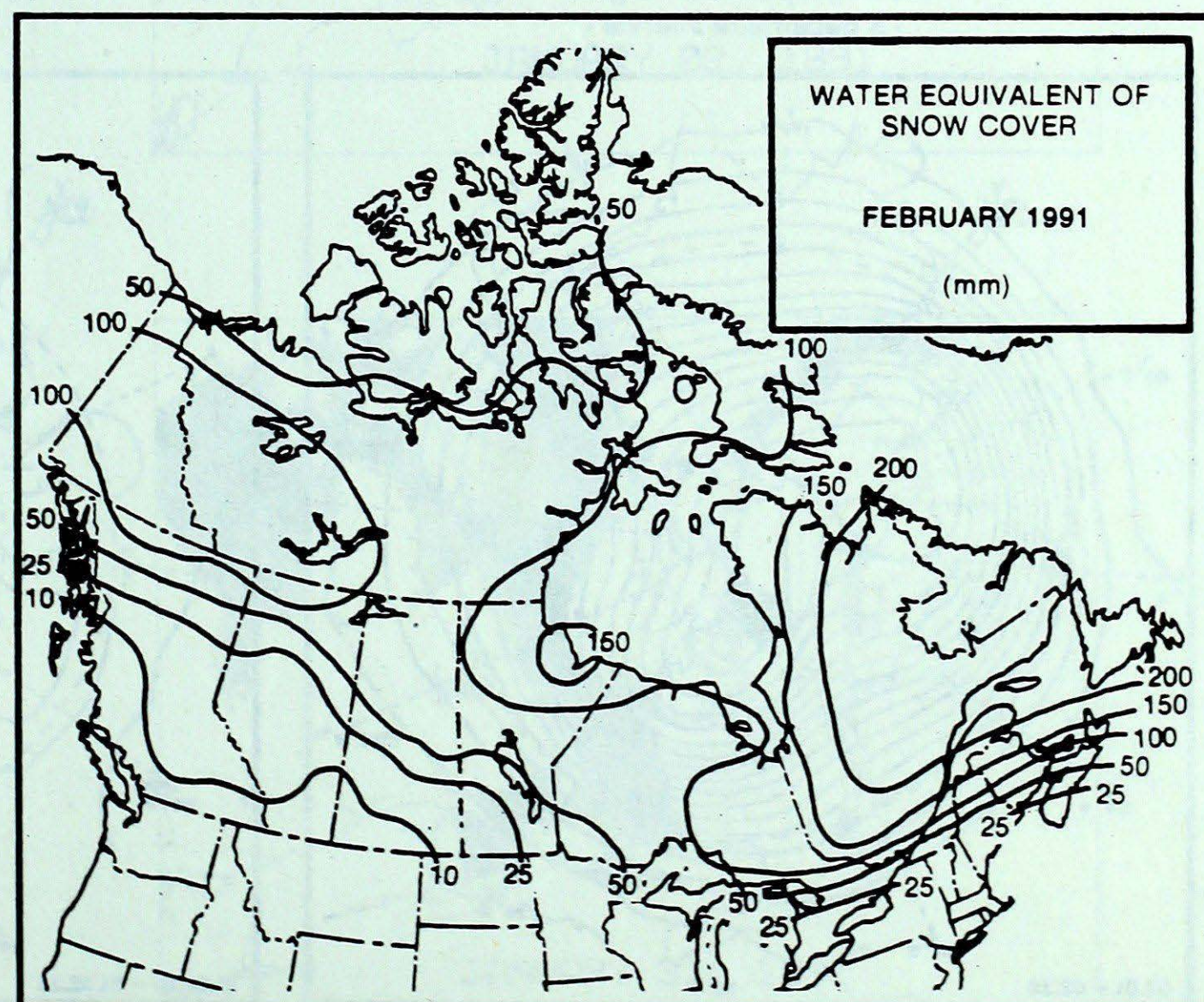
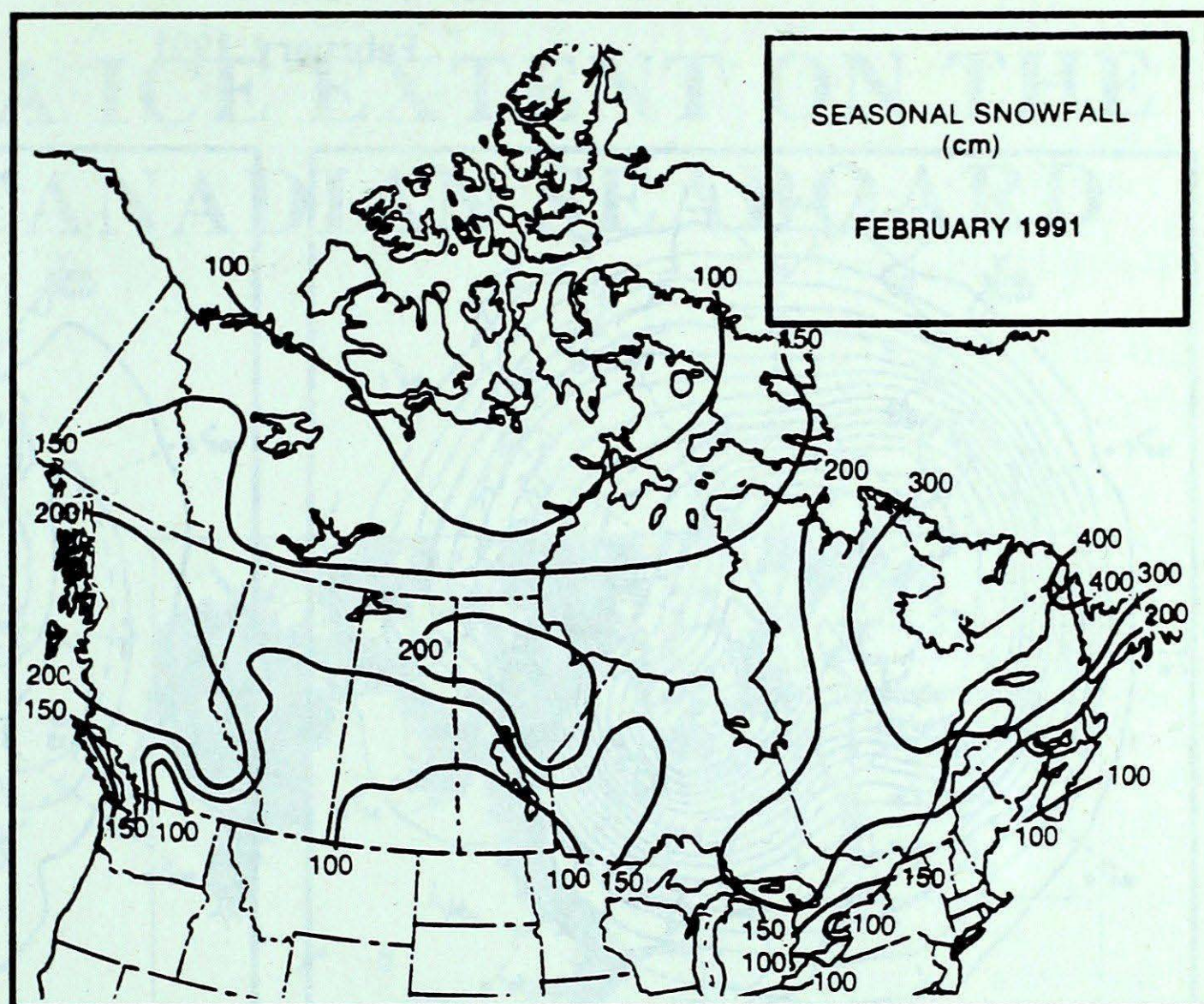
PRINCE EDWARD ISLAND			
Charlottetown	3126	3457	3093

NEWFOUNDLAND			
Gander	3492	3631	3296
St. John's	3140	3283	3053



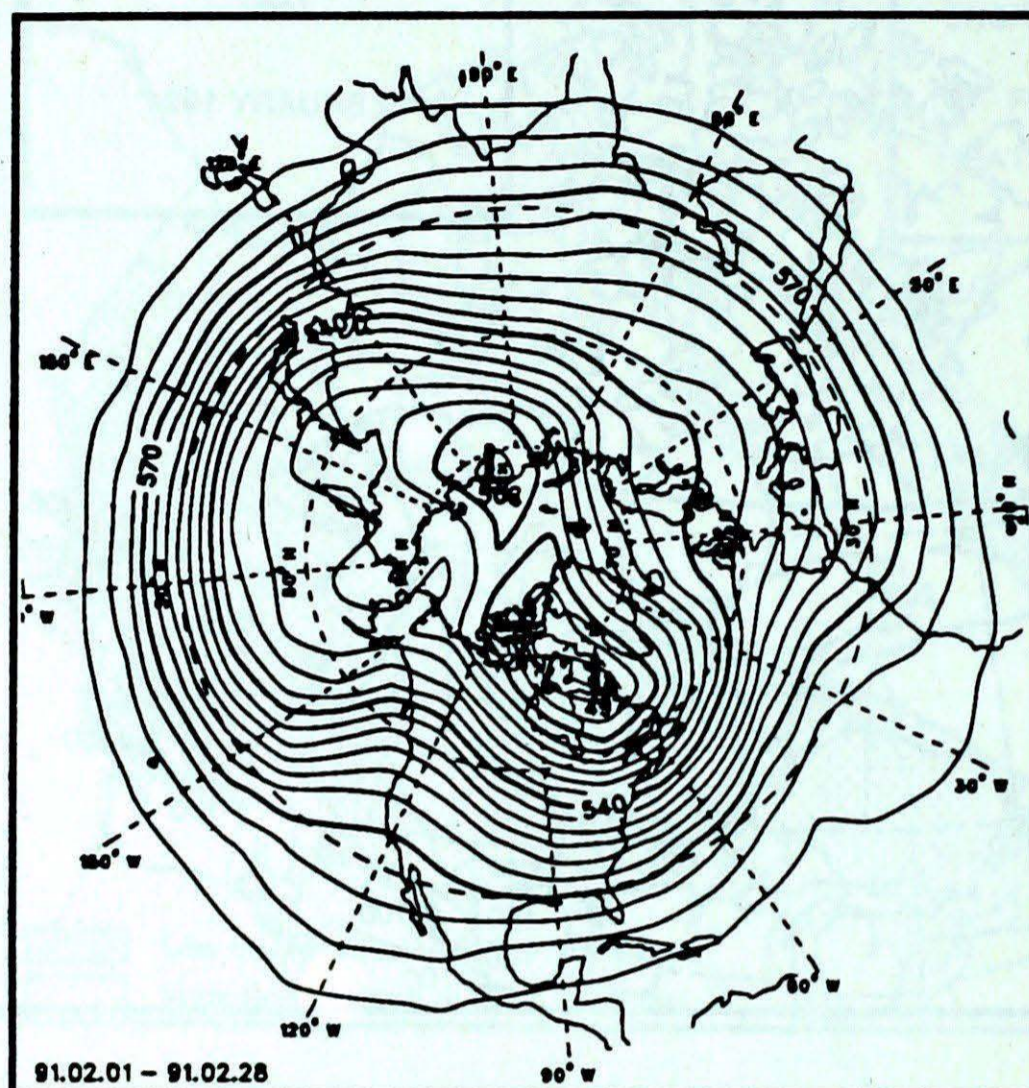
SEASONAL SNOWFALL TOTALS (cm) TO END OF FEBRUARY

	1991	1990	NORMAL
YUKON TERRITORY			
Whitehorse	161	145	106
NORTHWEST TERRITORIES			
Clyde	71	*	108
Inuvik	124	140	130
Yellowknife	143	134	107
BRITISH COLUMBIA			
Kamloops	84	51	87
Port Hardy	64	77	60
Prince George	282	222	200
Vancouver	99	51	54
Victoria	59	35	44
ALBERTA			
Calgary	86	64	96
Edmonton N. Am.	90	66	100
Grande Prairie	185	*	141
SASKATCHEWAN			
Estevan	69	125	81
Regina	47	72	83
Saskatoon	108	53	83
MANITOBA			
Brandon	81	85	84
Churchill	192	129	132
The Pas	107	114	117
Winnipeg	69	77	90
ONTARIO			
Kapuskasing	197	318	237
London	183	204	172
Ottawa	161	212	182
Sudbury	201	250	194
Thunder Bay	157	139	158
Toronto	78	74	101
Windsor	81	91	93
QUÉBEC			
Baie Comeau	330	256	277
Montréal	157	169	188
Québec	268	282	272
Sept-Îles	356	285	318
Sherbrooke	189	263	236
Val-d'Or	228	281	237
NEW BRUNSWICK			
Charlo	306	271	293
Fredericton	181	189	219
Moncton	198	291	243
NOVA SCOTIA			
Shearwater	59	150	145
Sydney	117	247	223
Yarmouth	77	217	168
PRINCE EDWARD ISLAND			
Charlottetown	156	212	240
NEWFOUNDLAND			
Gander	342	280	270
St. John's	189	214	247

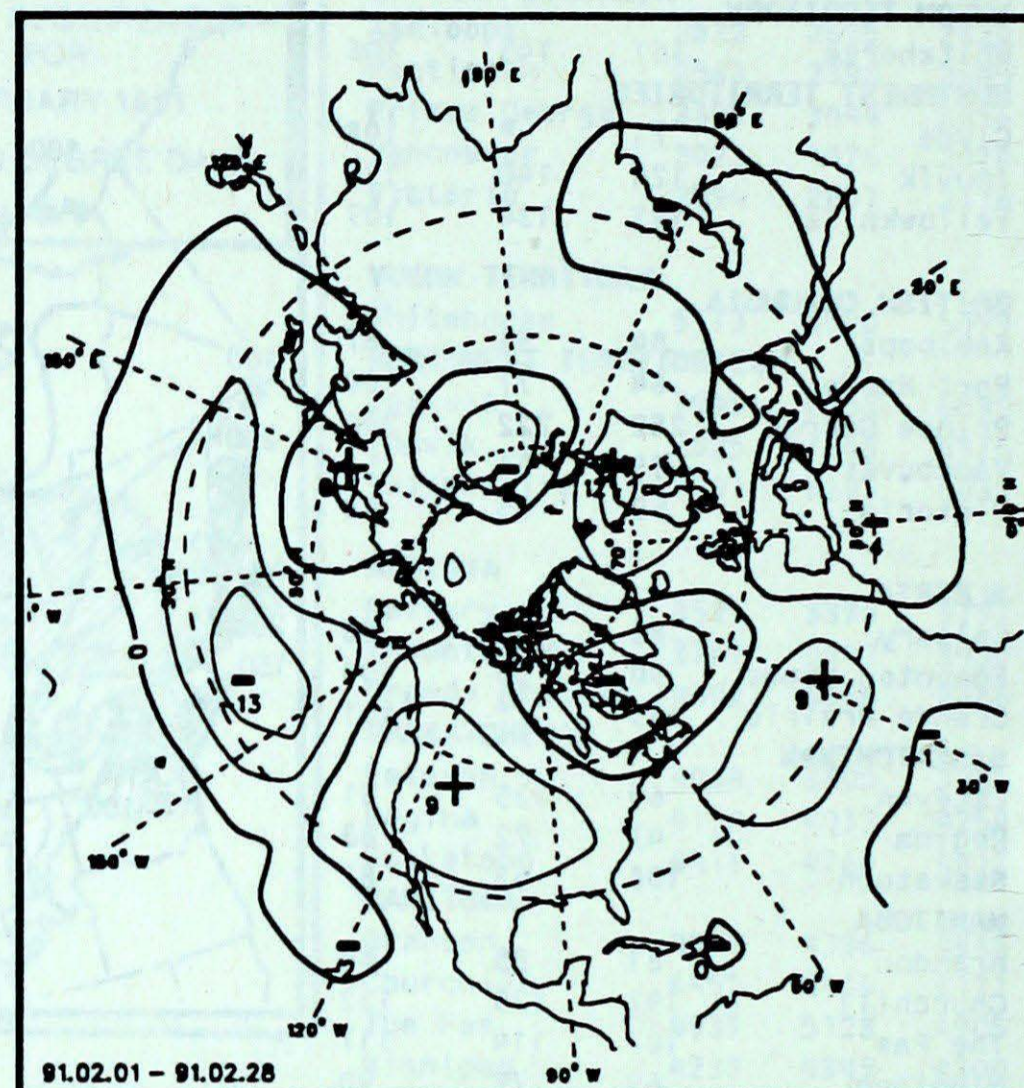


50-kPa ATMOSPHERIC CIRCULATION

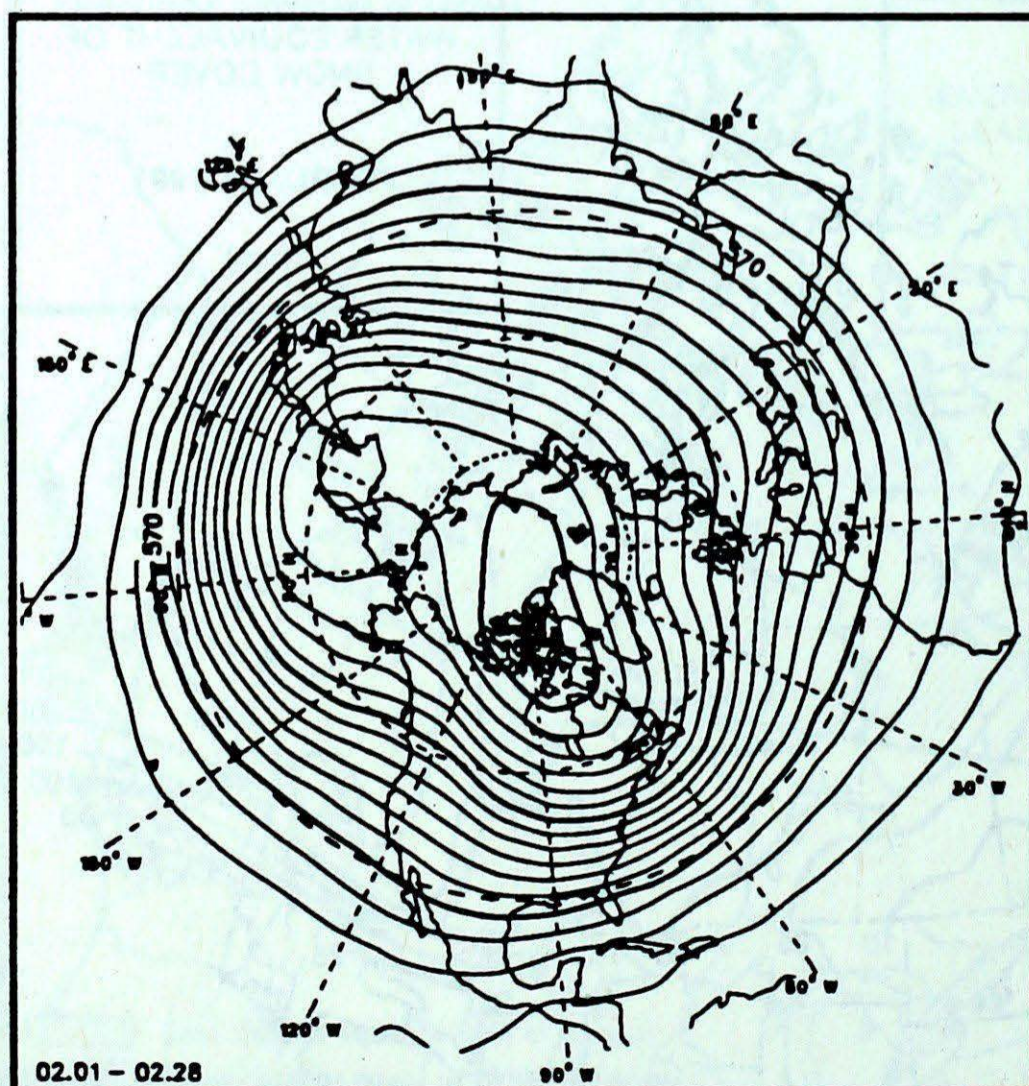
February 1991



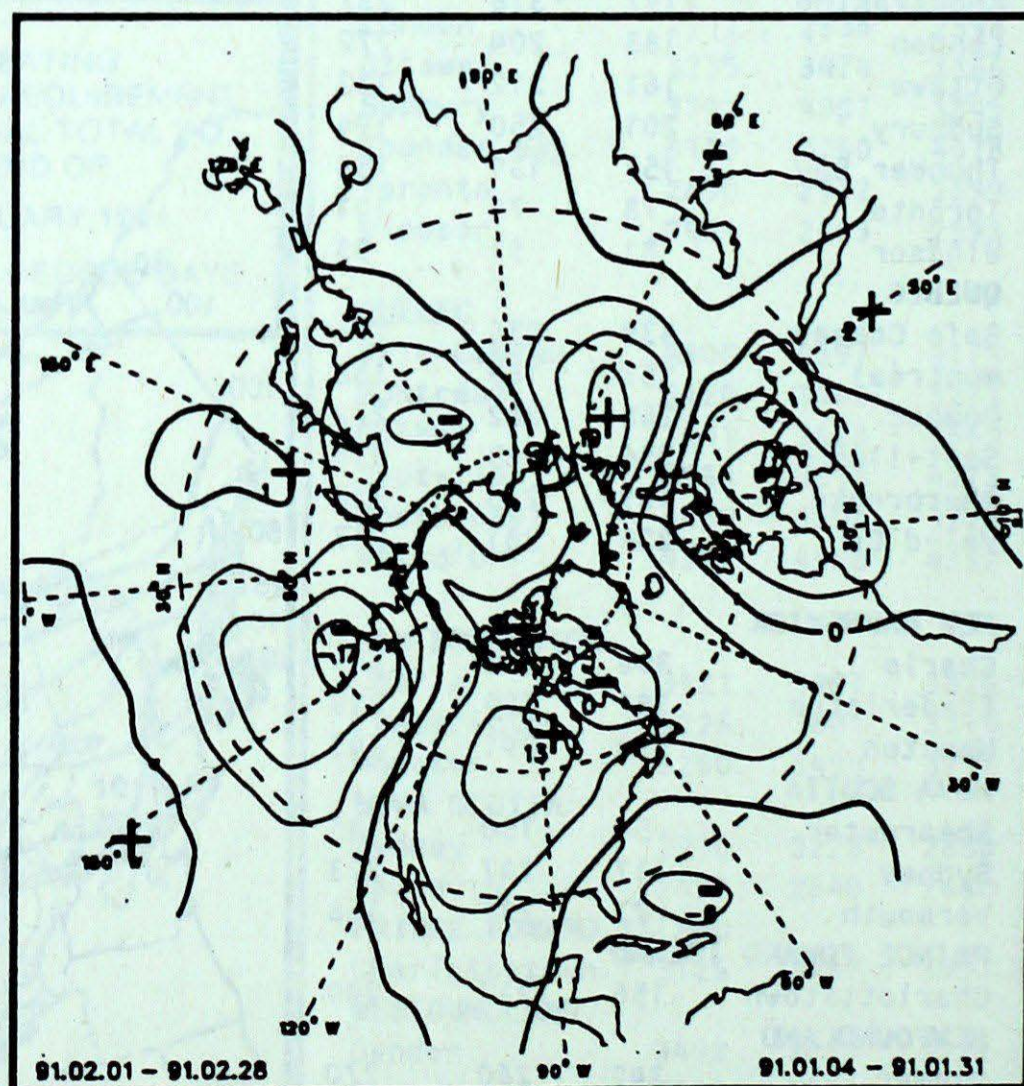
Mean geopotential heights
- 5 decametre interval -



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 -

WINTER SEA ICE EXTENT ON THE EASTERN CANADIAN SEABOARD

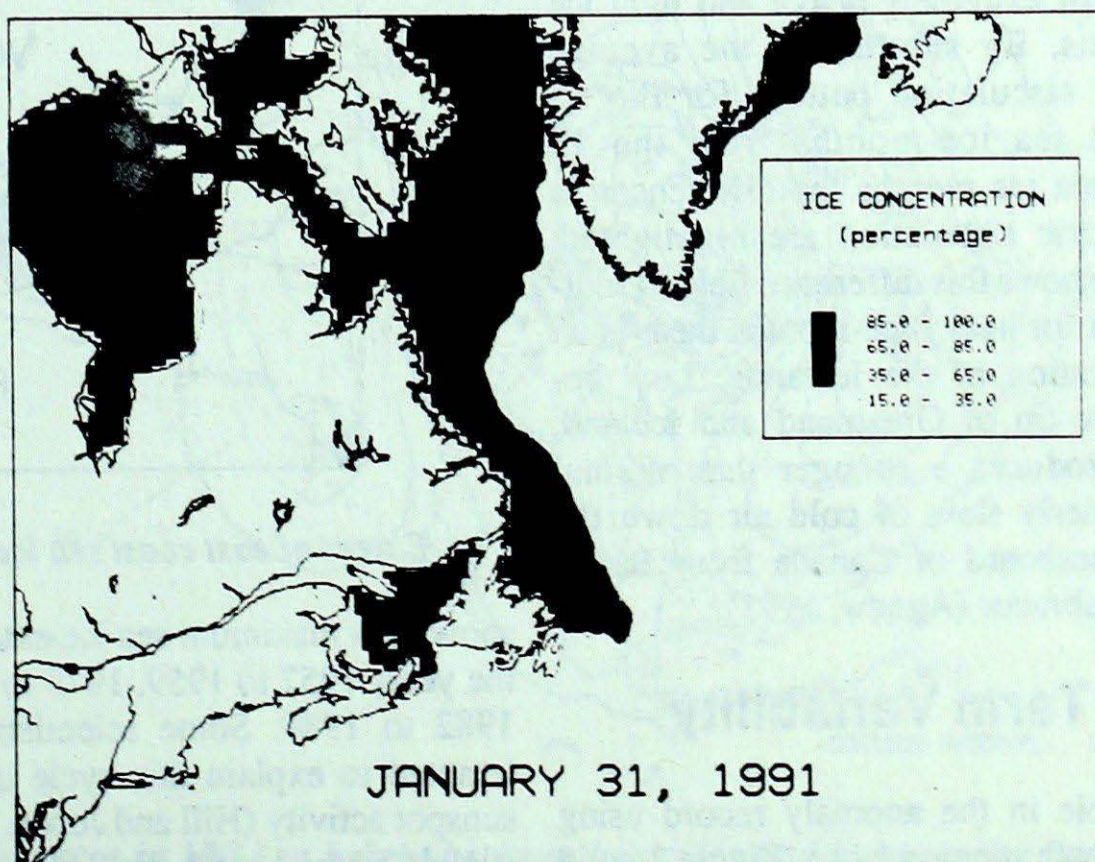
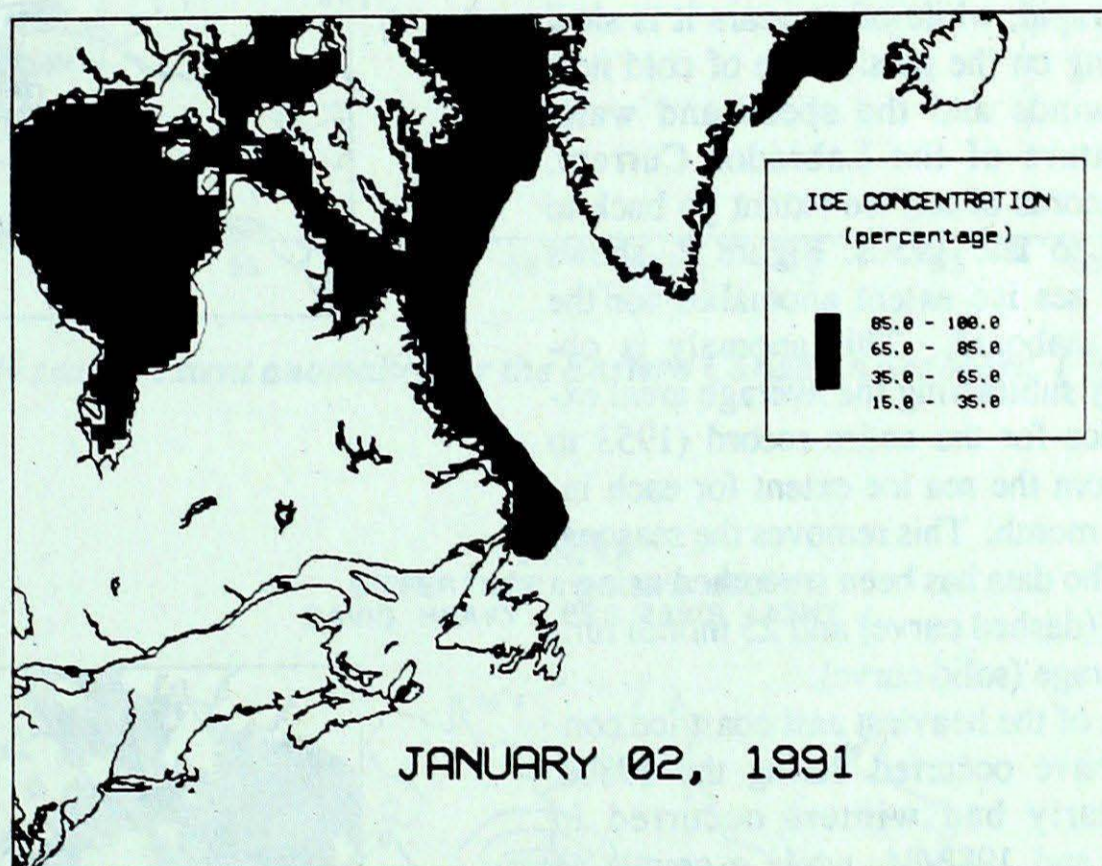
by Tom Agnew and Arvids Silis

Introduction

In Canada, one sign that the winter season has taken hold is the advance of sea ice down the eastern Canadian seaboard. Every winter, the sea ice edge makes a 2500 km trek starting from Baffin Bay, advancing to Davis Strait and then down the Labrador Coast reaching Newfoundland usually by the beginning of January. The ice is both advected by wind and current and formed locally through freezing. Figures 1A-1D show the weekly advance of the ice pack during January and February of 1991 derived from satellite passive microwave using an algorithm developed by Dr. R. Ramseier of Ice Branch. This winter, east coast ice has been more extensive than normal for January, with a slight retreat of the ice after mid-February.

Monitoring the advance of sea ice is of great importance to east coast marine shipping and oil and gas exploration, especially so, because the ice pack carries down with it icebergs. These bergs are calved off the Greenland and Ellesmere Island glaciers the previous summer. Within the ice pack, they are protected from wave erosion during their southward trek and are released into more southern open water as the ice pack retreats in the spring. These bergs, caught in the Labrador Current, continue to move down the East Coast reaching in some extreme cases as far south as Nova Scotia. It is usually in May that icebergs arrive with the greatest frequency off Newfoundland.

A large berg can weigh up to several million tons. One such berg sank the Titanic on April 14, 1912, and today they are considered the single most serious hazard to offshore oil and gas develop-



ment. Not only are these icebergs dangerous because they could collide with a drilling production platform, but icebergs can scour the seabed in shallow waters possibly ripping up pipelines, which carry oil and gas to land processing facilities.

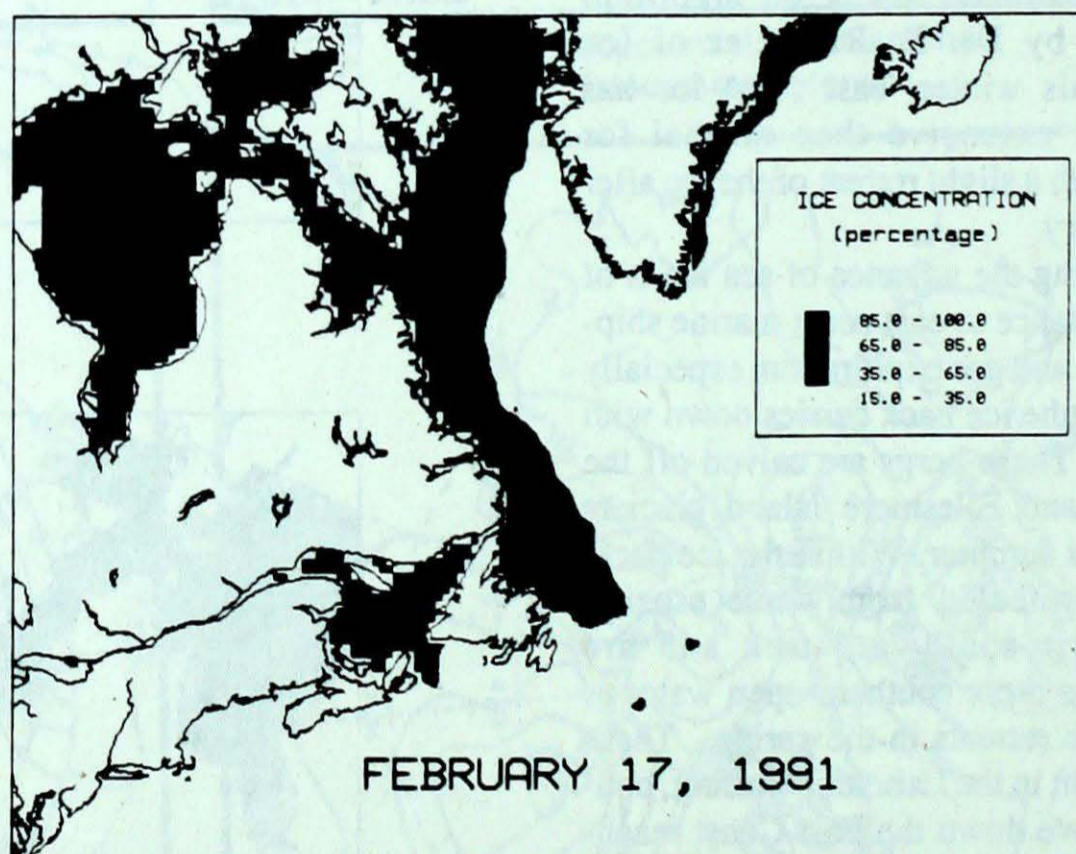
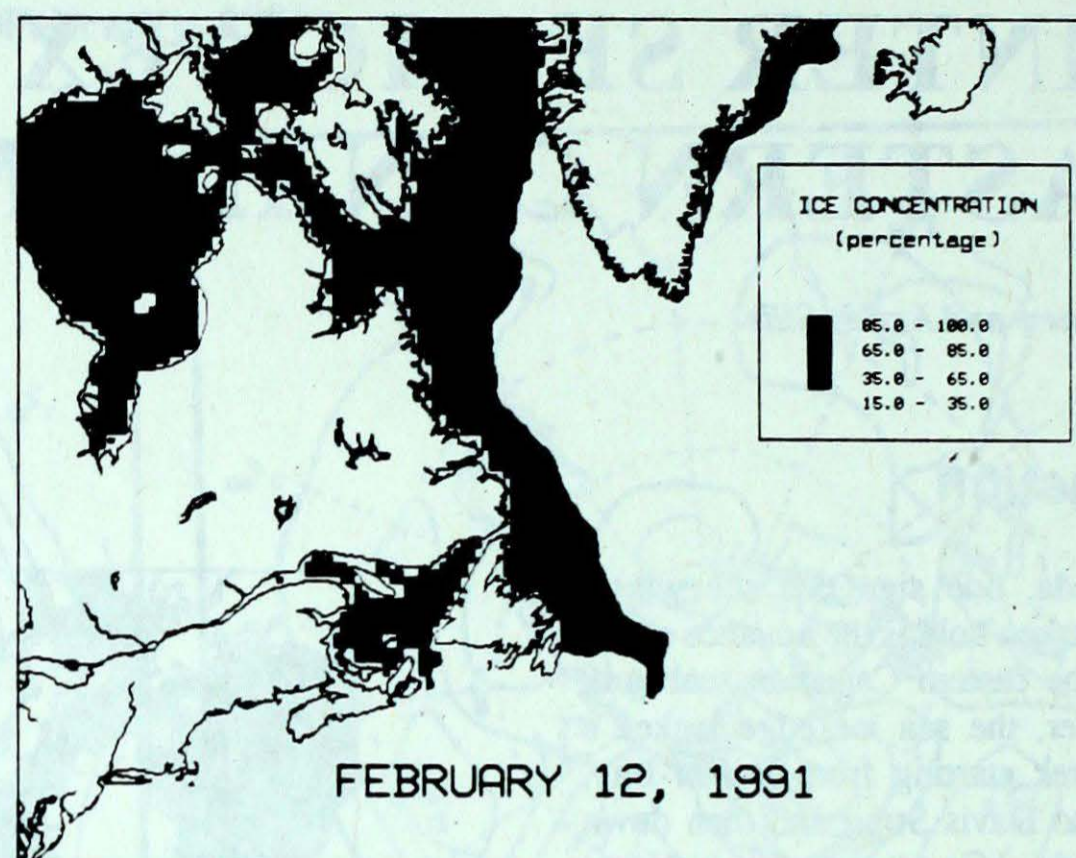
Monthly to Seasonal Variability

Some winters the advance of the ice pack is rapid, while other years it is slow depending on the persistence of cold northerly winds and the speed and water temperature of the Labrador Current. Good records of sea ice extent go back to the mid to late 1950s. Figure 2, shows monthly sea ice extent anomalies for the eastern seaboard. This anomaly is obtained by subtracting the average areal extent of ice for the entire record (1953 to 1988) from the sea ice extent for each individual month. This removes the seasonal cycle. The data has been smoothed using a 3 month (dashed curve) and 25 month running average (solid curve).

Some of the heaviest east coast ice conditions have occurred during the 1980s. Particularly bad winters occurred in 1982/83 and 1983/84, while a couple of months in the winter of 1985/86 were quite mild. Changes in atmospheric circulation over the North Atlantic have been documented for extremely heavy and light ice conditions. By subtracting the average monthly circulation pattern for the 15 heaviest sea ice-months from the 15 lightest sea ice months the differences in atmospheric circulation are highlighted. Figure 3 shows this difference field. It indicates that for heavy ice-months there is an intensification of the Icelandic Low between the tip of Greenland and Iceland, which produces a stronger than normal northwesterly flow of cold air down the eastern seaboard of Canada from Baffin Bay to Labrador (Agnew, 1991).

Long Term Variability

Discernible in the anomaly record using the 25 month running mean (Figure 2-solid curve) is an approximately decadal cycle,



Extent of east coast sea ice from satellite microwave data. Figures 1A-1D

showing a maximum sea ice extent around the years 1957 to 1959, 1970 to 1973, and 1982 to 1984. Some scientists have attempted to explain this cycle using solar sunspot activity (Hill and Jones, 1988) and cyclical long period oscillations in North Atlantic oceanic properties especially

salinity (Mysak and Manak, 1989). Of particular interest is the Great Salinity Anomaly. This is a large pool of relatively low saline water circulating the North Atlantic over the past 25 years. It is known to have passed the southern tip of Greenland, Davis Strait, Labrador Sea, and New-

foundland between 1969 to 1973, and again in the early 1980s. Origins of the anomaly are uncertain, but one theory is that it originated from a massive surge of sea ice out of the Fram Strait on the eastern side of northern Greenland during the 1960's. Eventual melt of this ice led to freshening of a large area of the North Atlantic. If true, this provides an important link between the Arctic Ocean and the Atlantic Ocean not considered before.

Long Term Trends

The sea ice extent records from 1953 to 1988 are not particularly reliable for detecting trends, because increased use of satellite data, although improving estimates of ice concentration, has introduced a technology bias. Other sources of data such as passive microwave mentioned earlier suggest a trend towards increased sea ice cover over the Eastern Canadian Seaboard; however, the length of record (15 years) is too short to show any statistically significant trend. Use of satellite remote sensing holds out the most promise for detecting trends in the future.

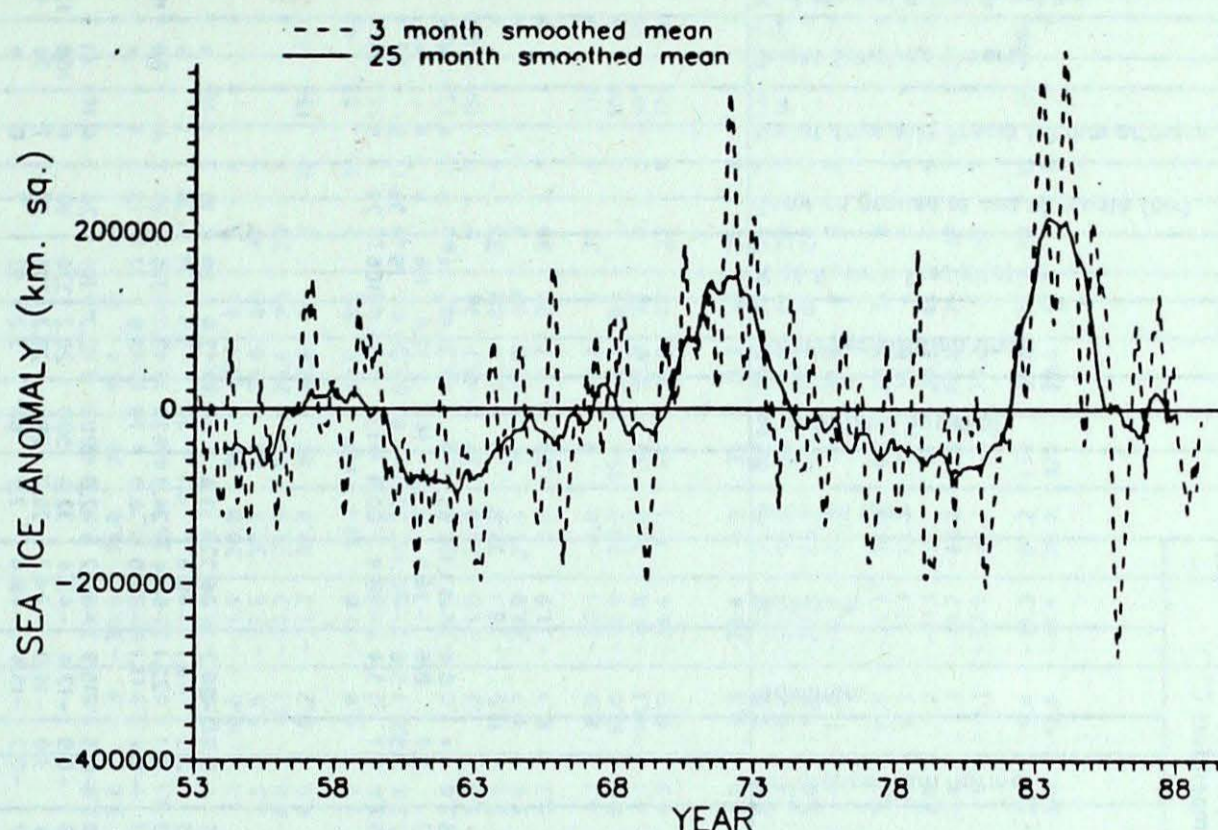
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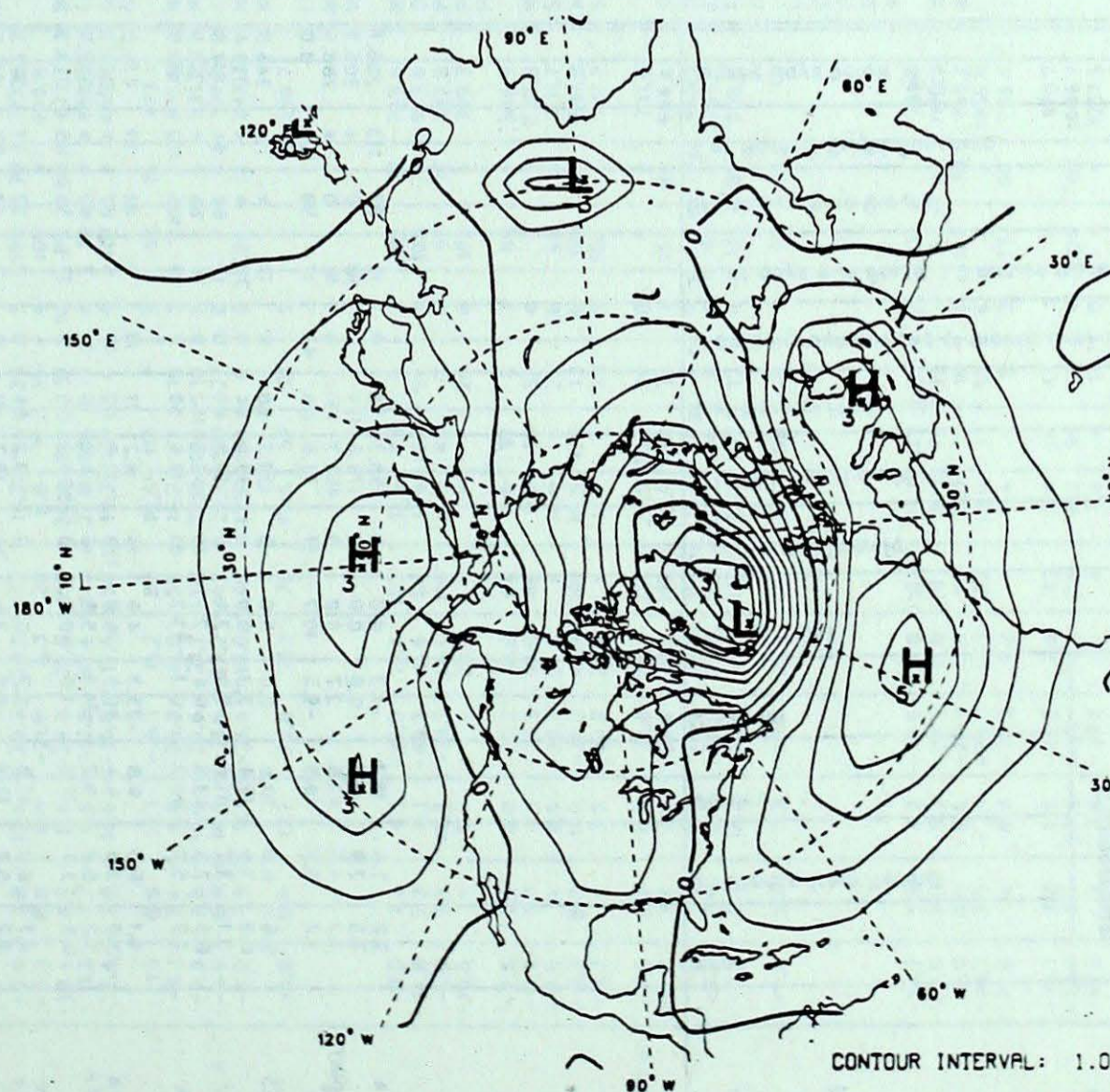
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MONTHLY DAVIS STRAIT SEA ICE ANOMALY



Monthly sea ice extent anomalies for the Eastern Canadian Seaboard. Figure 2.

WINTER DIFFERENCE 100 KPA HEIGHT DAVIS HEAVY LESS DAVIS LIGHT



Differences in 100 kpa height between heavy ice and light sea ice months along the Canadian Eastern Seaboard. Figure 3.

FEBRUARY 1991

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	7.8	3.4	19.1	-1.3	0.0	0	158.3	99	0	15	87	113	286.7
ALERT BAY	7.5	2.9	14.1	0.8	0.0	0	173.6	129	0	18	0	*	306.9
AMPHITRITE POINT	7.7	1.6	13.6	2.7	0.0	0	454.3	131	0	18	0	*	288.5
BLUE RIVER A	1.2	5.9	10.9	-9.5	10.2	17	73.6	116	43	17	58	100	0.0
CAPE ST JAMES	5.6	0.8	10.6	0.0	0.0	0	123.2	90	0	17	*	*	346.8
CAPE SCOTT	6.9	1.8	12.4	2.3	0.0	0	233.0	94	0	20	*	*	310.4
CASTLEGAR A	3.1	3.7	11.6	-5.5	2.4	6	52.5	89	0	12	64	94	417.8
COMOX A	6.5	2.5	13.3	-0.4	2.2	15	203.0	162	0	14	66	*	321.5
CRANBROOK A	1.9	5.7	10.2	-12.1	13.2	51	12.9	59	7	3	105	102	451.9
DEASE LAKE	-6.1	6.8	6.8	-23.3	4.6	15	4.2	17	71	3	81	77	676.0
FORT NELSON A	-13.0	3.9	9.4	-30.9	29.8	128	21.8	112	47	5	82	*	869.2
FORT ST JOHN A	-3.2	8.2	9.2	-24.1	5.6	18	4.8	18	17	2	90	*	592.5
HOPE A	6.8	3.4	17.8	-1.0	0.0	0	303.3	155	0	17	55	115	313.3
KAMLOOPS A	4.7	6.0	17.0	-5.2	0.0	0	10.2	64	0	2	72	77	372.3
KELOWNA A	3.2	5.2	12.3	-4.9	3.6	24	19.7	81	0	7	61	88	415.5
LYTTON	5.6	4.7	14.9	-3.2	0.0	0	91.6	209	0	7	64	73	346.7
MACKENZIE A	-1.0	9.3	8.3	-16.1	16.5	32	39.3	70	42	9	66	91	530.9
PENTICTON A	4.4	3.8	15.5	-4.8	0.6	5	17.2	87	0	5	69	92	381.2
PORT ALBERNI A	6.3	2.9	17.6	-1.4	1.0	4	324.8	130	0	17	50	*	328.5
PORT HARDY A	5.9	2.0	11.0	-0.3	0.0	0	204.5	128	0	18	50	67	337.6
PRINCE GEORGE A	1.3	7.4	9.7	-14.2	5.0	14	26.4	67	0	9	79	91	468.0
PRINCE RUPERT A	4.5	1.9	10.7	-5.2	3.7	16	255.8	111	0	20	50	79	382.0
PRINCETON A	2.3	5.3	11.6	-7.2	8.6	35	23.3	79	7	8	89	*	*
REVELSTOKE A	1.8	4.6	7.9	-5.6	16.0	21	106.6	123	9	17	42	74	455.1
SANDSPIT A	4.9	1.4	12.3	-1.8	7.6	49	143.0	126	0	15	79	97	365.0
SMITHERS A	-0.3	5.0	7.8	-9.9	18.8	61	29.8	94	6	7	52	62	508.4
TERRACE A	1.8	3.2	7.1	-4.1	37.0	52	200.1	163	0	19	58	81	454.2
VANCOUVER INT'L A	7.1	2.5	13.8	-1.0	0.0	0	143.3	125	0	15	86	99	306.4
VICTORIA INT'L A	7.3	2.5	17.1	-0.4	0.0	0	128.2	129	0	13	107	125	298.8
VICTORIA MARINE	7.6	2.1	16.1	0.6	0.0	0	205.6	151	0	16	*	*	290.9
WILLIAMS LAKE A	1.7	5.9	11.2	-14.7	3.0	12	6.8	28	1	4	90	83	455.4

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	Mean	Difference from Normal	Maximum	Minimum									
YUKON TERRITORY													
DAWSON A	-19.8	*	0.4	-43.1	35.0	*	21.9	*	*	*	*	*	*
MAYO A	-14.2	5.7	0.6	-36.5	25.7	144	19.0	116	*	*	*	*	*
WATSON LAKE A	-13.2	5.5	5.8	-30.1	22.0	68	20.1	79	59	5	77	91	872.5
WHITEHORSE A	-7.5	5.7	5.4	-28.9	20.8	137	14.1	106	29	5	81	89	712.1
NORTHWEST TERRITORIES													
ALERT	-33.9	-0.3	-20.2	46.3	3.6	64	2.6	50	16	1	*	*	1453.6
BAKER LAKE A	-30.3	2.3	-4.1	-40.6	4.1	76	3.5	71	21	1	*	*	1351.9
CAMBRIDGE BAY A	-34.3	0.1	-22.1	-44.4	24.8	539	15.0	375	29	4	86	165	1462.3
CAPE PARRY A	-30.1	-0.4	-17.1	-39.0	6.0	73	3.8	72	13	1	*	*	1373.7
CLYDE A	-28.0	-0.3	-15.9	-43.2	12.8	203	12.2	197	24	4	41	*	1288.3
COPPERMINE A	-32.0	-0.9	-13.4	-43.4	32.0	500	20.2	326	90	6	106	138	1399.3
CORAL HARBOUR A	-28.4	1.0	-14.0	-44.7	26.2	285	26.2	298	28	7	74	65	1238.7
EUREKA	-38.2	-0.2	-15.4	-48.0	2.2	85	2.2	92	7	0	*	*	1575.3
FORT SIMPSON A	-19.3	3.2	2.8	-36.8	24.5	130	21.5	134	53	7	95	99	1044.7
FORT SMITH A	-18.0	3.8	6.6	-36.9	19.6	107	14.3	90	72	5	82	*	1013.0
IGALUIT	-29.0	-3.1	-5.9	-44.7	16.0	66	15.4	66	27	5	123	128	1314.8
HALL BEACH A	-30.7	1.4	-19.5	-45.0	0.9	11	0.9	11	30	0	*	*	1362.8
HAY RIVER A	-19.3	2.4	7.0	-36.6	17.9	92	19.9	111	71	7	*	*	1045.5
INUVIK A	-28.5	0.4	-2.3	-41.4	16.0	127	13.4	128	44	3	47	73	1301.9
MOULD BAY A	-34.8	0.4	-22.8	-45.9	1.2	36	0.6	20	19	0	8	152	1479.0
NORMAN WELLS A	-25.9	0.3	-5.5	-42.3	15.9	92	11.8	73	33	3	104	137	1228.6
POND INLET A	-31.8	*	-21.7	-43.5	2.8	*	2.6	*	24	1	44	*	1394.0
RESOLUTE A	-31.6	1.6	-16.5	-43.2	1.4	45	1.4	47	17	1	24	132	1388.5
YELLOWKNIFE A	-23.8	1.3	-0.2	-42.0	19.0	145	14.1	126	52	5	111	109	1169.6
ALBERTA													
BANFF	1.5	7.8	9.0	-15.0	14.4	44	11.2	40	8	4	*	*	*
CALGARY INT'L A	0.9	8.2	15.4	-17.1	16.1	84	14.9	96	6	5	89	70	478.2
COLD LAKE A	-6.9	6.7	7.7	-30.8	20.4	113	15.8	100	20	4	88	70	673.8
CORONATION A	-2.5	9.2	9.7	-22.6	25.4	127	17.8	104	8	6	110	82	579.5

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	Mean	Difference from Normal	Maximum	Minimum									
EDMONTON INT'L A	-1.7	9.7	8.9	-20.1	21.8	102	24.3	138	7	6	90	75	550.8
EDMONTON MUNICIPAL	-0.7	8.9	9.4	-19.8	16.4	*	19.3	103	11	6	97	84	523.8
EDMONTON HAMAD A	-1.4	9.5	8.5	-20.4	17.2	80	12.0	58	8	5	*	*	542.8
EDSON A	-1.2	9.1	12.6	-23.9	17.8	59	20.6	126	23	4	94	81	536.4
FORT CHIPEWYAN A	-16.3	3.8	7.0	-18.0	22.6	124	20.4	149	*	*	*	*	*
FORT MCMURRAY A	-9.6	5.8	13.4	-30.3	23.5	107	16.2	86	23	5	100	78	773.4
GRANDE PRAIRIE A	-3.3	8.8	8.8	-21.8	5.3	20	8.8	37	35	4	109	*	600.8
HIGH LEVEL A	-13.4	4.9	8.6	-28.3	32.8	159	34.4	214	51	10	86	68	877.7
JASPER	1.2	7.7	9.8	-17.5	32.4	149	27.8	135	13	6	79	*	469.5
LETHBRIDGE A	2.4	7.8	14.0	-16.6	12.4	58	19.2	102	4	4	101	*	435.0
MEDICINE HAT A	1.1	8.8	13.1	-16.1	15.2	83	19.5	117	7	5	92	75	473.1
PEACE RIVER A	-6.1	7.4	6.9	-26.3	12.8	50	16.2	77	10	5	*	*	675.6
RED DEER A	-0.9	9.8	10.9	-20.6	21.7	111	22.9	130	10	6	*	*	531.8
ROCKY MTH HOUSE A	-0.9	6.5	14.5	-21.6	33.2	143	25.7	131	27	8	*	*	527.7
SLAVE LAKE A	-5.0	7.5	11.1	-21.4	10.0	46	13.4	66	6	6	84	74	642.7
WHITECOURT A	-1.8	8.4	12.7	-20.8	20.1	76	13.6	57	21	5	*	*	548.7
SASKATCHEWAN													
BROADVIEW	-7.2	7.7	6.1	-29.0	15.4	103	11.4	93	5	3	82	61	703.6
CREE LAKE	-14.8	5.3	8.1	-40.5	11.6	64	11.6	85	54	4	103	77	923.6
ESTEVAN A	-5.0	7.0	10.9	-21.2	20.4	116	14.0	82	7	6	97	72	642.8
HUDSON BAY A	-10.5	*	9.0	*	29.2	*	*	*	24	6	102	*	799.3
KINDERSLEY	-3.0	9.5	9.0	-20.2	10.0	64	6.0	37	5	3	85	*	588.5
LA RONGE A	-11.9	5.7	9.1	-31.3	10.8	46	9.2	59	52	4	*	*	838.8
MEADOW LAKE A	-10.0	*	6.6	-33.7	24.0	*	14.0	*	20	6	90	*	811.7
MOOSE JAW A	-3.2	8.3	11.0	-24.2	18.9	101	18.5	120	13	6	101	81	591.8
NIPAWIN A	-11.2	*	5.8	-30.2	29.2	*	17.2	*	53	6	104	*	817.2
NORTH BATTLEFORD A	-8.2	5.9	6.6	-31.0	35.2	227	29.5	203	24	8	*	*	731.0
PRINCE ALBERT A	-10.8	5.7	7.4	-32.4	31.7	192	26.9	181	32	7	103	84	804.4
REGINA A	-5.8	7.8	8.5	-24.0	14.6	80	11.3	70	9	5	84	70	665.5
SASKATOON A	-7.2	7.4	8.0	-26.7	23.6	128	14.8	90	8	6	99	*	704.5
SWIFT CURRENT A	-2.2	8.1	12.3	-21.6	21.0	117	21.8	127	13	9	101	89	568.8
YORKTON A	-9.6	5.9	5.2	-30.9	22.8	119	21.2	118	28	7	95	73	*
MANITOBA													
BRANDON A	-10.2	5.5	4.2	-31.6	21.0	107	21.2	113	26	6	131	*	791.6
CHURCHILL A	-23.0	2.9	0.2	-34.2	11.8	81	9.8	75	19	3	127	96	1178.2
DAUPHIN A	-9.0	6.6	9.6	-28.3	17.9	96	13.1	75	10	4	105	78	756.2
GILLAM A	-19.7	3.6	3.1	-34.2	18.2	82	13.0	72	55	6	*	*	1055.8
GIMLI	-10.6	*	8.0	-28.2	9.2	*	6.4	*	9	3	137	90	799.6
ISLAND LAKE	-16.7	3.2	5.6	-34.2	7.0	33	6.0	38	47	1	*	*	970.7
LYNN LAKE A	-18.0	3.7	5.5	-36.1	19.3	128	8.8	59	36	4	129	98	1006.7
NORWAY HOUSE A	-15.8	*	3.9	-32.2	2.4	*	2.4	*	12	0	*	*	1257.5

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	Mean	Difference from Normal	Maximum	Minimum									
PORTAGE LA PRAIRIE	-8.1	6.5	9.3	-26.7	23.1	97	13.9	65	6	5	*	*	729.7
THE PAS A	-12.3	5.7	7.3	-28.5	2.8	14	1.4	9	11	0	143	108	840.0
THOMPSON A	-17.8	4.0	5.1	-36.7	9.1	81	7.4	66	65	4	144	100	1002.8
WINNIPEG INT'L A	-10.0	5.6	5.9	-26.3	16.6	88	13.8	79	11	5	145	100	783.8
ONTARIO													
BIG TROUT LAKE	-17.5	3.9	5.8	-35.0	8.8	42	8.8	46	11	3	149	*	994.3
EARLTON A	-10.6	3.5	7.3	-30.6	15.0	32	14.4	31	16	7	*	*	801.9
GERALDTON A	-13.8	*	9.5	-40.8	11.2	*	10.6	*	42	2	*	*	880.7
GORE BAY A	-6.6	3.1	6.0	-22.8	35.1	94	19.4	45	17	8	*	*	687.4
HAMILTON RBG	-1.2	*	12.0	-18.5	23.2	*	30.4	*	6	7	118	*	*
HAMILTON A	-2.2	4.1	10.6	-21.9	28.8	96	27.1	56	5	6	*	*	565.4
KAPUSKASING A	-12.7	3.5	9.5	-32.6	30.5	69	25.9	60	47	5	*	*	859.1
KENORA A	-10.4	4.0	7.1	-29.2	22.6	89	20.6	90	23	5	*	*	794.4
KINGSTON A	-3.9	4.0	8.2	-21.3	32.8	92	47.8	84	2	10	134	104	611.8
LONDON A	-2.2	3.9	9.9	-17.8	57.1	147	52.0	86	2	12	93	96	566.1
MOOSONEE	-14.9	3.6	7.2	-34.5	5.0	17	5.4	18	35	3	143	117	920.2
MUSKOKA A	-6.8	2.8	10.3	-27.5	67.5	132	58.5	94	42	13	*	*	294.7
NORTH BAY A	-8.3	3.0	7.0	-26.9	55.6	110	46.2	82	60	11	132	105	734.7
OTTAWA INT'L A	-6.2	3.3	7.2	-21.8	38.8	77	45.7	76	8	8	154	128	675.0
PETAWAWA A	-8.6	3.5	11.5	-28.1	32.8	72	35.0	68	29	6	*	*	743.5
PETERBOROUGH A	-5.0	3.8	8.7	-23.9	23.4	74	24.8	52	1	5	*	*	643.7
PICKLE LAKE	-13.5	5.2	8.3	-31.9	9.0	33	7.3	29	36	5	*	*	882.0
RED LAKE A	-12.7	4.1	8.9	-30.1	2.0	9	1.2	6	34	0	170	*	859.5
ST CATHARINES A	-0.6	4.4	12.6	-16.9	30.2	134	36.1	80	5	8	106	*	521.3
SARNIA A	-1.8	4.1	10.1	-14.8	26.0	110	32.8	75	1	8	105	99	553.2
SAULT STE MARIE A	-7.2	4.3	8.0	-24.4	41.1	64	21.9	40	22	6	126	111	719.7
SIOUX LOOKOUT A	-11.9	3.8	9.3	-29.4	9.9	35	11.3	41	36	4	*	*	982.4
SUDBURY A	-9.1	3.4	6.0	-25.7	35.8	80	35.2	75	36	9	130	99	759.1
THUNDER BAY A	-9.9	3.1	9.6	-30.3	15.6	51	14.0	49	26	5	143	98	781.6
TIMMINS A	-9.8	5.8	9.8	-33.6	23.2	44	20.3	45	40	7	*	*	807.3
TORONTO	-0.8	*	11.0	-17.4	25.8	*	28.6	*	1	8	*	*	524.9
TORONTO INT'L A	-2.4	3.7	11.0	-21.3	24.0	90	23.5	51	3	7	*	*	571.8
TORONTO ISLAND A	-1.2	*	8.7	-17.1	18.3	73	19.8	*	0	7	*	*	532.8
TRENTON A	-3.9	2.6	9.2	-21.1	27.2	77	25.5	45	0	9	*	*	608.1
WATERLOO WELLINGTON	-3.5	4.4	7.7	-19.7	49.2	159	38.8	75	12	7	*	*	602.2
WAWA A	-10.7	*	5.1	-32.9	27.2	*	20.2	*	47	7	*	*	803.7
WIARTON A	-3.9	3.6	9.4	-18.3	84.2	139	55.5	87	23	11	111	108	611.1
WINDSOR A	-0.8	3.0	12.6	-14.4	28.4	125	30.5	61	0	6	*	*	525.7

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QUEBEC													
BAGOTVILLE A	-12.2	1.6	5.7	-29.2	36.3	60	40.7	73	70	10	*	*	879.6
BAIE COMEAU A	-13.1	0.0	3.8	-30.5	49.6	68	40.0	56	82	8	117	97	869.1
BLANC SABLON A	-14.1	-3.4	4.7	-30.5	63.4	62	72.8	71	66	15	126	*	895.1
CHIBOUGAMAU CHAPAIS	-15.1	*	3.8	-33.9	32.4	*	29.2	*	76	9	128	103	926.9
GASPE A	-10.3	*	6.3	-26.5	21.6	*	20.0	*	40	4	136	*	813.2
INUKJUAQ A	-25.5	-0.5	-3.5	-40.6	21.6	248	20.0	233	32	9	107	100	1218.5
KUUJJUAQ A	-25.5	-3.1	-1.3	-37.2	37.0	109	*	*	*	10	112	103	1219.9
KUUJJUARAPIK A	-21.9	0.7	0.4	-33.9	27.6	114	26.0	111	27	7	161	130	1118.3
LA GRANDE IV A	-21.1	*	1.1	-38.2	26.2	*	23.6	*	72	9	110	*	1149.5
LA GRANDE RIVIERE A	-18.2	*	0.9	-35.9	26.8	*	22.4	*	*	6	120	*	112.2
MANIWAKI	-8.4	3.8	11.1	-26.3	37.2	81	37.2	74	31	12	134	105	737.8
MATAGAMI A	*	*	6.8	-34.1	33.4	*	30.6	*	43	7	166	129	894.9
MONT JOLI A	-9.4	1.1	4.4	-22.3	40.8	54	43.0	58	35	8	90	79	768.3
MONTREAL INT'L A	-5.5	3.5	8.3	-20.7	34.2	64	50.0	77	4	8	140	109	657.8
MONTREAL MIRABEL I/	-7.6	*	7.7	-24.6	43.8	*	56.0	*	29	8	168	*	715.3
NATASHQUAN A	-14.2	-2.9	1.9	-32.6	39.4	70	39.4	50	92	10	136	104	904.2
QUEBEC A	-9.5	1.3	3.6	-26.2	45.8	65	55.0	70	86	8	123	109	769.9
SCHEFFERVILLE A	-23.2	-2.0	-0.3	-41.0	24.2	54	18.2	42	79	7	132	116	1153.9
SEPT-ILES A	-15.2	-2.7	-0.4	-31.7	48.4	65	46.8	59	52	11	137	99	965.7
SHERBROOKE A	-7.7	3.8	9.7	-29.6	34.6	61	47.6	79	30	9	110	*	772.8
STE AGATHE DES MONT	-9.0	3.3	7.7	-25.7	63.6	77	59.7	80	69	8	139	110	756.7
ST HUBERT A	-5.6	3.4	8.0	-32.2	24.6	*	40.2	56	3	7	137	*	659.4
VAL D'OR A	-11.3	3.6	6.9	-33.3	33.2	66	29.6	58	44	8	143	106	819.1
NEW BRUNSWICK													
CHARLO A	-11.3	0.1	5.3	-27.4	33.3	45	29.0	45	95	7	128	94	820.1
CHATHAM A	-9.0	-0.2	6.2	-25.2	17.4	27	25.3	29	14	6	137	105	754.6
FREDERICTON A	-7.3	1.1	8.5	-26.9	19.4	31	27.5	31	13	5	137	*	708.6
MONCTON A	-7.2	0.5	8.2	-25.3	34.2	50	37.7	38	8	7	136	110	706.0
SAINT JOHN A	-5.6	1.9	8.6	-23.7	24.2	38	41.0	35	9	7	133	106	659.4

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									
NOVA SCOTIA													
GREENWOOD A	-3.7	1.7	10.7	-16.8	35.0	56	40.9	45	6	9	*	*	608.3
HALIFAX INT'L A	-4.1	2.0	11.0	-19.6	17.2	26	52.8	40	1	9	*	*	618.6
SABLE ISLAND	-0.4	0.6	10.1	-11.3	35.9	113	110.6	94	24	13	*	*	516.1
SHEARWATER A	-3.1	1.4	10.0	-16.7	15.2	29	67.4	55	5	9	115	90	591.8
SYDNEY A	-5.8	0.1	6.9	-18.8	25.5	37	80.4	65	10	13	135	122	666.6
YARMOUTH A													
PRINCE EDWARD ISLAND	-1.6	1.6	7.8	-12.4	24.8	46	57.7	51	2	9	99	107	548.1
NEWFOUNDLAND													
CHARLOTTETOWN A	-7.2	0.3	8.1	-22.5	23.8	36	48.6	50	13	11	*	*	697.3
SUMMERSIDE A	-7.0	0.2	6.7	-22.7	27.0	48	42.8	52	18	11	127	102	699.8
NEWFOUNDLAND													
BONAVISTA	-6.2	-1.0	11.2	-19.5	99.8	221	113.6	131	67	11	*	*	677.9
BURGED	-6.6	-0.9	6.6	-22.0	33.1	65	119.2	92	31	12	*	*	683.1
CARTWRIGHT	-14.6	-2.0	-0.2	-28.0	68.6	105	74.8	110	216	8	139	131	914.0
CHURCHILL FALLS A	-21.0	-1.3	0.3	-39.6	39.4	67	36.6	67	93	9	148	119	1092.3
COMFORT COVE	-9.5	-1.8	10.0	-23.2	105.0	143	115.3	140	130	13	*	*	768.0
DANIELS HARBOUR	-11.5	-3.8	10.4	32.7	*	*	*	*	42	10	101	134	*
DEER LAKE A	-11.6	-2.4	5.3	-31.0	86.9	133	85.5	123	91	17	*	*	829.5
GANDER INT'L A	-8.7	-1.9	9.7	-23.5	107.2	141	113.9	114	75	14	130	132	748.1
GOOSE A	-16.2	-1.7	3.6	-30.4	31.0	51	24.2	40	97	6	158	135	958.8
MARY'S HARBOUR	-14.0	-3.9	5.0	-30.6	41.6	66	45.6	58	126	6	*	*	895.7
PORT AUX BASQUES	-7.2	-1.5	-3.8	-18.5	101.0	145	144.6	124	61	18	114	*	703.8
ST ANTHONY	-11.9	-0.7	3.9	-27.0	74.9	123	75.4	92	86	11	*	*	884.6
ST JOHN'S A	-5.8	-1.3	11.5	-20.0	62.4	84	107.2	77	22	15	109	131	666.1
ST LAWRENCE	-5.1	-0.6	9.2	*	*	***	127.7	118	32	17	*	*	660.8
STEPHENVILLE A	-9.5	-3.3	8.0	-24.8	70.7	93	94.2	105	52	16	115	160	764.7
WABUSH LAKE A	-21.1	-0.3	0.5	-40.3	48.7	92	35.1	73	69	9	150	137	1092.1

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
BRITISH COLUMBIA												
AGASSIZ	8.2	3.7	19.0	0.0	1.0	217.0	122	1	16	83	89.0	89.0
KAMPOOPS	8.8	3.8	19.0	0.0	1.0	217.0	122	1	16	83	89.0	89.0
SIDNEY	7.5	2.6	16.0	1.0	0.0	127.2	128	0	12	83	68.0	83.5
SUMMERLAND	4.2	4.1	13.5	-3.0	0.8	24.4	130	0	6	72	16.7	16.7
ALBERTA												
BEAVERLODGE	-3.7	6.5	8.0	-20.0	2.0	5.1	20	6	3	108	0.8	0.8
ELLERSLIE	8.8	3.8	19.0	0.0	1.0	217.0	122	1	16	83	89.0	89.0
LACOMBE	-1.6	8.9	10.0	-17.0	13.0	13.3	74	2	5	87	0.2	0.2
LETHBRIDGE	8.8	3.8	19.0	0.0	1.0	217.0	122	1	16	83	89.0	89.0
VEGREVILLE	8.8	3.8	19.0	0.0	1.0	217.0	122	1	16	83	89.0	89.0
SASKATCHEWAN												
INDIAN HEAD	-5.1	8.7	9.0	-24.0	21.2	12.3	69	17	7	88	0.0	0.0
MELFORT	-9.0	7.3	6.0	-28.5	21.4	21.4	132	51	5	79	0.0	0.0
REGINA	-6.4	7.4	8.5	-24.0	12.5	14.6	99	9	5	88	0.0	0.0
SASKATOON	-6.7	7.8	7.5	-26.0	15.6	15.6	71	11	7	99	0.0	0.0
SCOTT	-6.3	8.1	6.5	-25.0	13.7	15.8	122	7	6	77	0.0	0.0
SWIFT CURRENT	-1.9	8.5	12.0	-23.0	18.0	18.0	120	10	7	87	5.7	5.7
MANITOBA												
BRANDON	-9.0	6.2	6.4	-34.0	21.7	21.7	108	32	5	88	0.0	0.0
MORDEN	-6.8	9.6	12.0	-26.0	19.8	21.6	79	6	7	144	0.5	0.5
GLENLEA	-10.5	2.9	5.5	-30.0	14.0	14.0	73	36	8	143	0.0	0.0
ONTARIO												
DELHI	-1.9	3.5	10.0	-22.0	29.8	41.6	73	0	8	88	0.5	0.5
ELORA	-4.5	2.8	6.3	-21.3	0.0	45.1	92	11	0	88	8.8	8.8
GUELPH	-3.5	3.0	9.1	-20.3	3.2	40.5	80	0	8	97	0.0	0.0
HARROW	3.3	7.1	10.5	-16.0	37.8	42.8	81	0	2	91	0.8	0.8
KAPUSKASING	-12.8	3.5	8.5	-38.0	41.0	34.5	84	38	8	124	0.0	0.0
OTTAWA	-5.7	3.8	9.2	-22.2	33.8	38.3	70	17	9	154	0.6	0.6
SMITHFIELD	-1.8	4.8	9.7	-17.1	35.1	44.2	62	0	8	88	2.5	2.5
VINELAND	8.8	3.8	19.0	0.0	1.0	217.0	122	1	16	83	89.0	89.0
WOODSLIE	8.8	3.8	19.0	0.0	1.0	217.0	122	1	16	83	89.0	89.0

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	-8.5	1.7	4.0	-22.0	33.6	38.3	54	33	4	125	0.0	0.0
L'ASSOMPTION	-6.8	3.8	7.0	-26.0	42.8	48.4	79	13	9	140	0.0	0.0
LENNOXVILLE	8.8	3.8	19.0	0.0	1.0	217.0	122	1	16	83	89.0	89.0
NORMANDIN	-14.0	2.1	5.0	-33.5	22.0	20.8	38	42	9	132	0.0	0.0
STE. CLOTILDE	8.8	3.8	19.0	0.0	1.0	217.0	122	1	16	83	89.0	89.0
NEW BRUNSWICK												
FREDERICTON	-6.9	1.4	5.5	-27.5	12.4	33.7	39	12	9	137	0.0	0.0
NOVA SCOTIA												
KENTVILLE	-3.8	1.4	9.0	-17.0	19.6	38.0	36	3	11	105	0.0	0.0
NAPPAN	-6.2	0.7	8.0	-25.0	18.0	33.2	37	14	7	117	0.0	0.0
PRINCE EDWARD ISLAND												
CHARLOTTETOWN	-6.3	0.7	8.0	-21.0	17.6	43.8	54	14	8	118	0.0	0.0
NEWFOUNDLAND												
ST. JOHN'S WEST	-0.9	3.4	8.7	-21.0	70.0	145.6	88	24	17	103	3.8	3.8