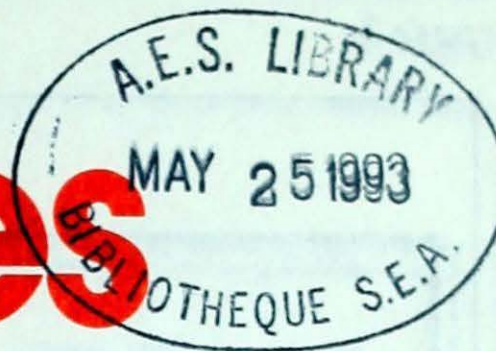


Climatic Perspectives



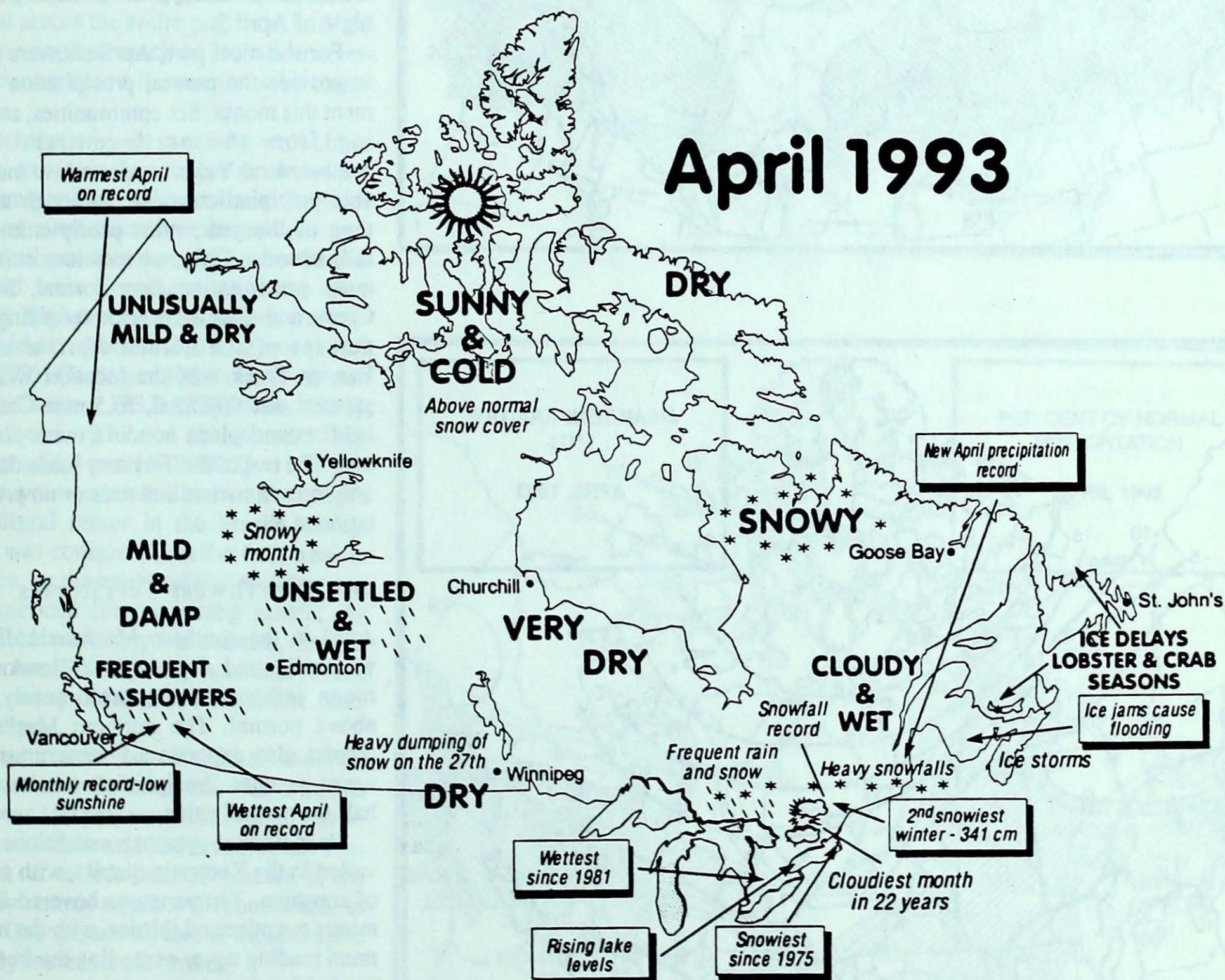
Monthly Review

April 1993

Vol. 15

CLIMATIC HIGHLIGHTS

April 1993



Across the country

Yukon

Spring has sprung across the Yukon, with the whole Territory averaging above normal, temperature-wise. Whitehorse set a new April record for the warmest mean temperature ever, 3.5°C.

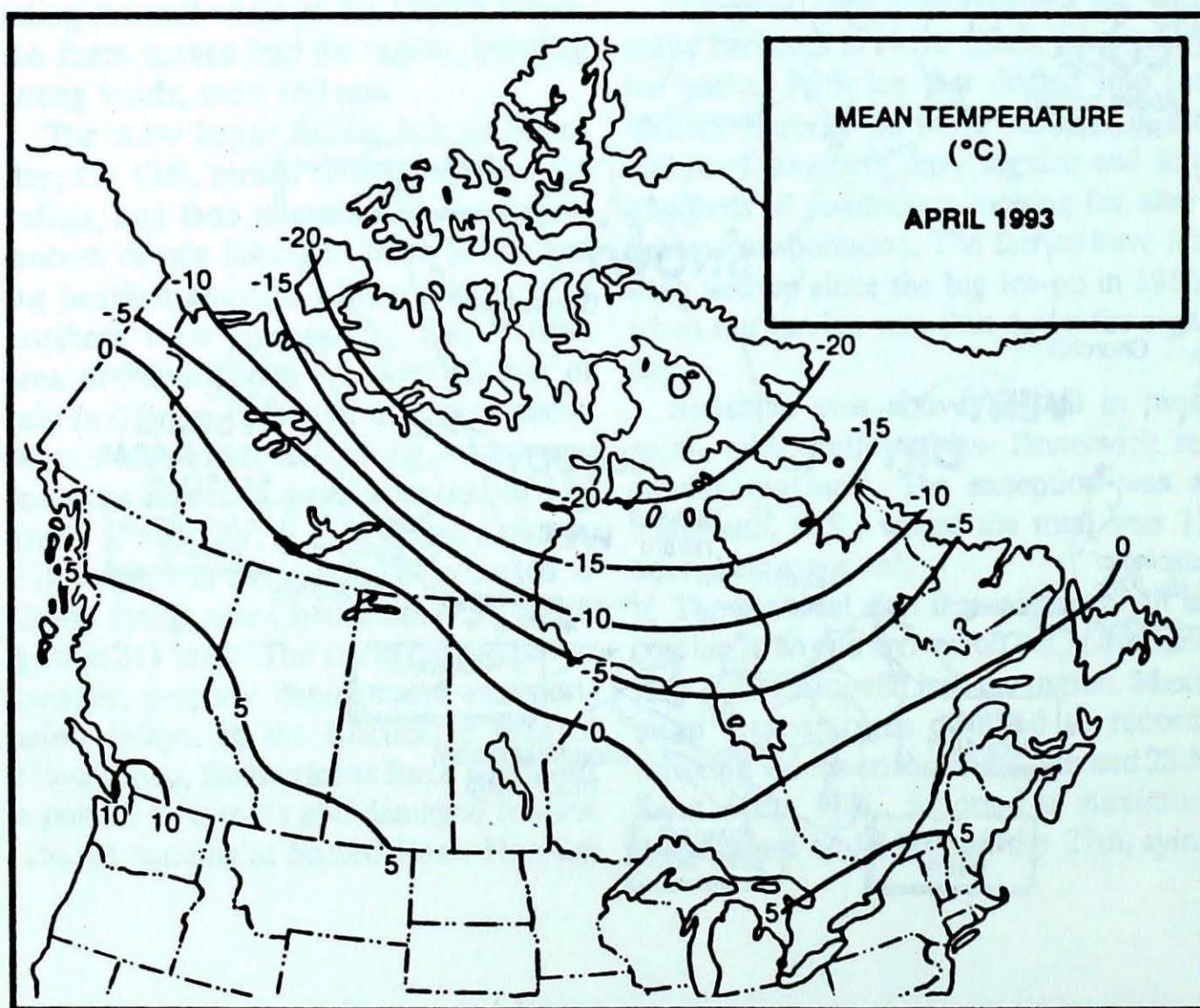
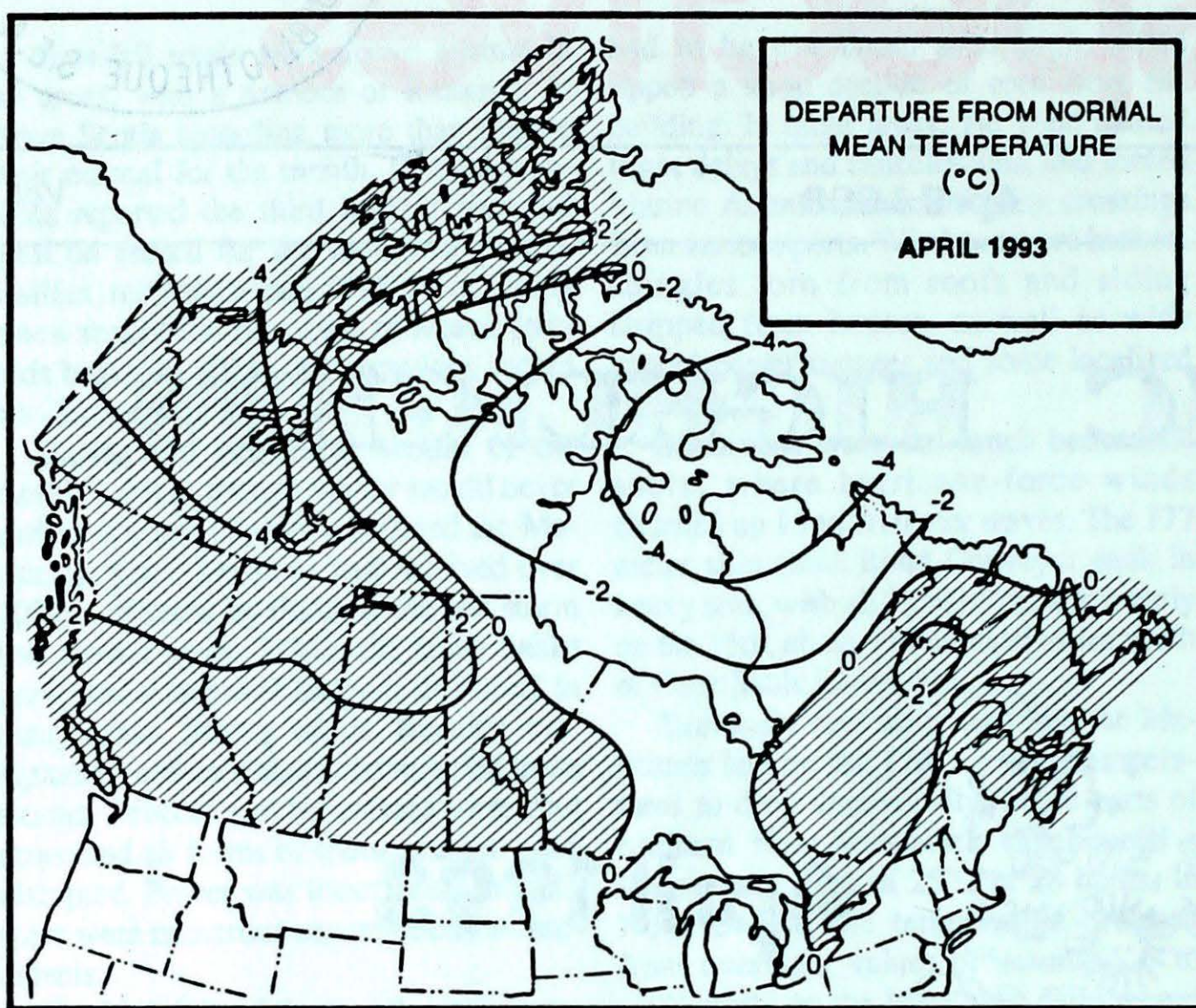
With a few exceptions, all stations in the Yukon managed to register a double digit maximum temperature this month. The hot spot was Stewart Crossing, 17°C on the 19th. In contrast, the temperature at Komakuk Beach failed to climb above the freezing mark, while Ogilvie registered the lowest temperature, a -27°C reading on the night of April 5.

For the most part, April showers failed to provide the normal precipitation allotment this month. Six communities, stretching from the north-central to the south-central Yukon, reported no measurable precipitation at all, although at this time of the year, most precipitation still falls as snow. Only two locations collected more precipitation than normal, Beaver Creek and Carcross, both recording 120 percent of the normal April average. Beaver Creek was the location with the greatest monthly total, 16.5 mm. Carcross held second place honours, with just 6.5 mm. The rest of the Territory made do with only one or two millimetres or no precipitation at all.

Northwest Territories

April in the southern Mackenzie district was mild and dry, with Yellowknife's mean temperature approximately 3°C above normal. The northern Mackenzie district also experienced some unusually warm weather. Precipitation was less than half the normal value.

Near-normal weather conditions prevailed in the Keewatin district, with plenty of sunshine. Temperatures hovered in the minus twenties and thirties, with the maximum reading never exceeding the freezing mark. Month-end snow depths were significantly above average at Baker Lake, (76 cm of snow on the ground compared to a



normal of 50 cm) and at Hall Beach (57 cm compared to a normal of 43 cm).

Sunny and cold conditions dominated the high Arctic. Sunshine totals were above average, ranging from 258.6 hours at Baker Lake to 382.1 hours at Eureka. Resolute Bay tallied 48.8 hours more sunshine than during an average April, with a total of 330.1 hours.

British Columbia

Frequent April showers were the rule for many areas in the southern two thirds of British Columbia. In fact, it seemed that the showery weather would never end.

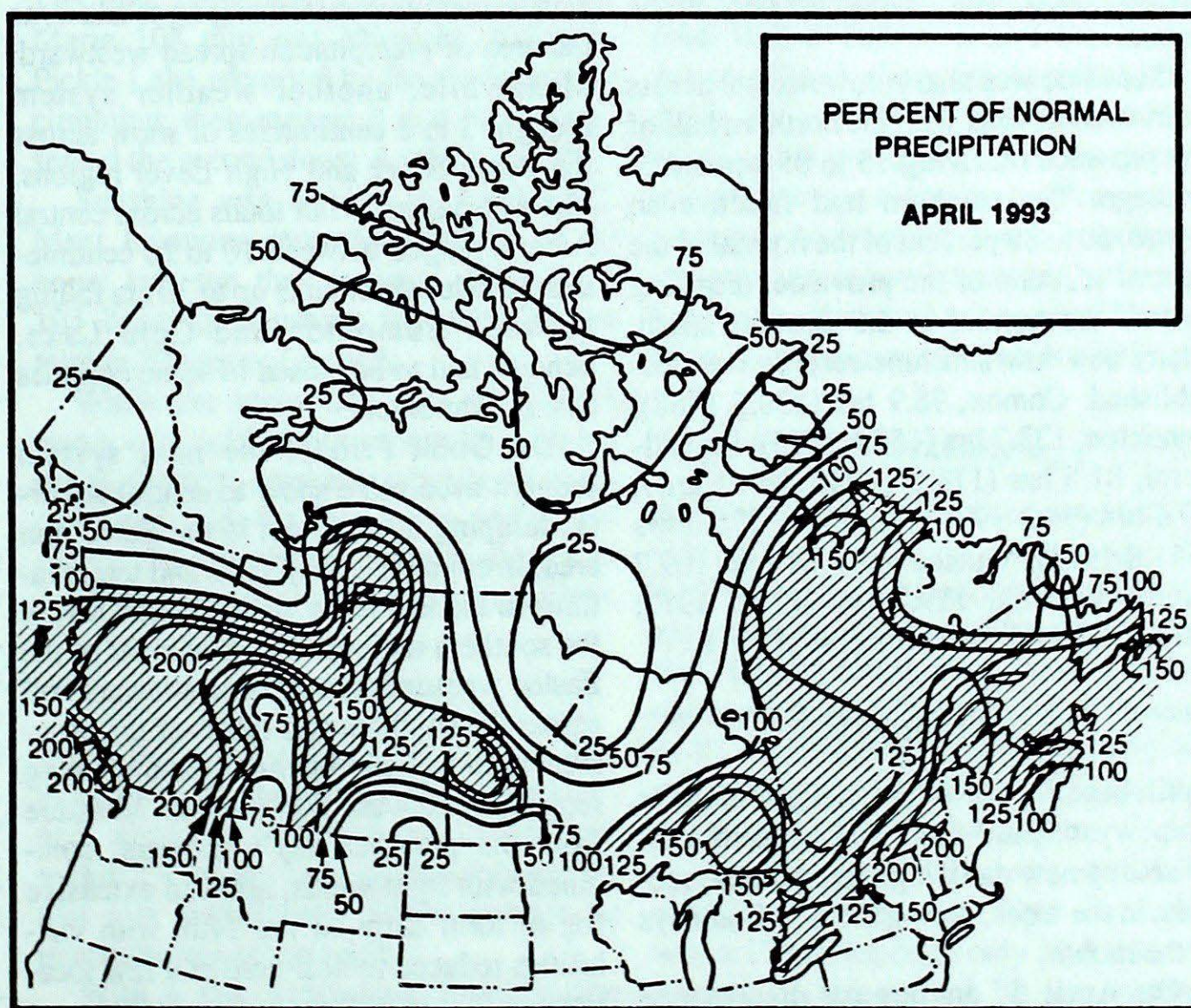
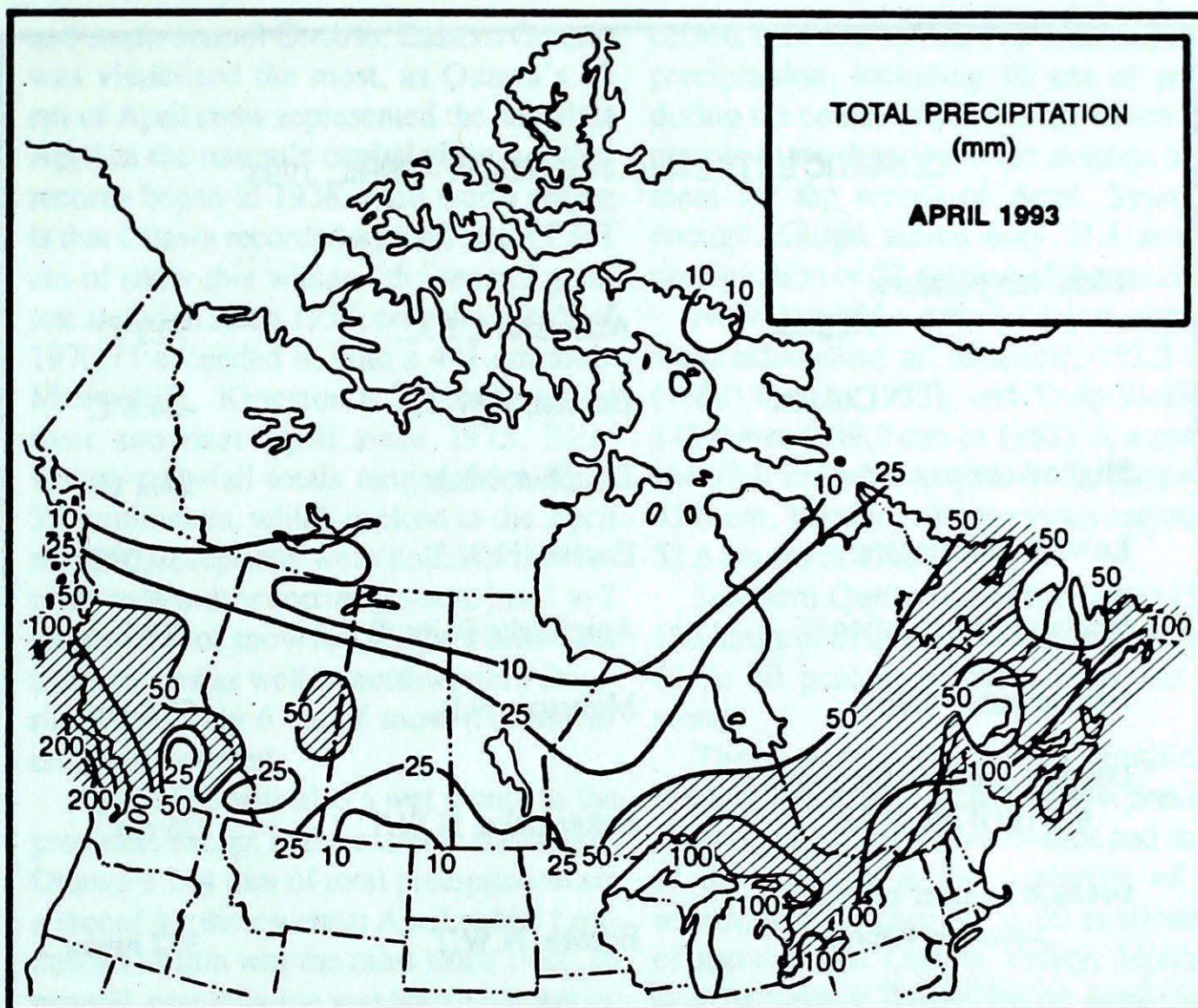
Mean monthly temperatures were above normal across the entire province, with the extreme north as much as 3°C above average; but no monthly records were established.

Precipitation was generally well-above normal except in the extreme southeast and northern portions of the province. Smithers received more than three times their normal April precipitation, while the Okanagan and west Kootenays got twice their normal. High precipitation records were established at: Abbotsford, 195.0 mm (188.7 mm 1972); Castlegar, 100.3 mm (99.5 mm 1980); Comox, 133.8 (122.9 mm 1950); Port Alberni, 197.7 mm (191.4 mm 1984); Smithers, 64.4 mm (49.0 1953).

The wet weather had some effect on the agricultural sector in the Fraser Valley. There was concern about the fruit trees in the area, as the cool and wet weather was not beneficial for pollinating insects. As well, fields were very wet and soft, restricting the use of heavy farm machinery. As a result, many field crops have not been planted yet.

Some reminders of winter touched northeastern B.C., where snowfall amounts were near 150 percent of the monthly average from Mackenzie to Fort St. John. This tapered off to less than 18 percent of the monthly normal as one went southwards to Prince George, and nil east of Smithers. No monthly records were broken.

Although precipitation was plentiful, mild temperatures did not allow for any substantial improvement in the mountain snowpack, and concern was being ex-



CLIMATIC EXTREMES IN CANADA - APRIL, 1993

Mean temperature:			
Highest	Abbotsford, B.C.	10.1°C	
Coldest	Eureka, N.W.T.	-24.6°C	
Highest temperature:			
	Dauphin, Man.	24.2°C	
Lowest temperature:			
	Eureka, N.W.T.	-39.0°C	
Heaviest precipitation:			
	Amphitrite Point, B.C.	427.1 mm	
Heaviest snowfall:			
	Moncton, N.B.	50.4 cm	
Deepest snow on the ground on April 30, 1993			
	Baker Lake, N.W.T.	76 cm	
Greatest number of bright sunshine hours:			
	Eureka, N.W.T.	382 hours	

pressed about water shortages later in the summer.

Sunshine was also below normal across British Columbia, with the northern half of the province receiving 75 to 85 percent of average. The southern half fared even worse, 60 to 80 percent of the normal in the central sections of the province, dropping to half the normal in the extreme south. Many new low sunshine records were established: Comox, 96.9 hrs (170.5 1988); Penticton, 133.7 hrs (153.6 1978); Port Alberni, 81.5 hrs (118.5 1978); Port Hardy, 89.6 hrs (94.2 1974); Smithers, 126.0 hrs (141.8 1978); Vancouver, 83.4 hrs (109.7 1969); Victoria, 119.7 hrs (125.6 1917); Williams Lake, 142.7 hrs (147.5 1978).

Alberta

April began on a warm note, with Fort Chipewyan, Cold Lake and Lloydminster all setting new daily high temperature records, in the teens, during the first four days of the month.

On April 5, an intense disturbance moved north along the Alberta-Saskatche-

wan border, with rain changing to snow, as the area of precipitation spread westward. Meanwhile, another weather system brought 3 to 8 centimetres of snow across the Peace River and High Level regions. The two-day snowfall totals across central Alberta ranged between 10 to 20 centimetres, with local amounts up to 30 cm falling between Edmonton and Cold Lake. Schools had to be closed in some counties east of Edmonton.

On Good Friday, the next system brought even more snow to central Alberta, dumping up to 15 cm in the Edmonton area. In contrast, sunny skies and temperatures in the low teens were enjoyed across the southern regions. The remainder of the Easter weekend saw thundershowers roll across the southern two thirds of the province, with hail and intense lightning being reported northwest of Edmonton. Moisture from the previous day's showers, combined with light winds, allowed extensive fog to form early on the 14th, with visibilities reduced to near zero at a few locations.

More typical April weather was finally enjoyed by mid-month, with sunshine and warm afternoon temperatures prevailing, while afternoon thundershowers developed near the foothills. Overnight temperatures continued to dip below freezing each night.

On April 17 and 18, colder air pushing southwards collided with warm, moist air moving north to produce a band of snow over the central part of the province. Drayton Valley reported 25 cm, while Edmonton City received 10 cm of wet snow. Most of the snow melted as it fell, but several centimetres covered the ground on Sunday morning. Meanwhile, sunshine continued across the north. Cool, damp weather lingered during most of the third week of the month except in the north, where a ridge of high pressure gave sunshine and record high temperatures on the 21st. Later in the week, colder air slipped into northern Alberta, where under clear skies the temperature dropped to record-low values.

A disturbance that tracked across southern Alberta on the 25th, and pushed north along the Alberta-Saskatchewan border, produced a mixed bag of rain and snow in the eastern regions of the province. Lloydminster received a total of 43 mm of mixed rain and snow on April 26 and 27.

Frequent cloudy skies, resulted in the central areas receiving only 75 percent of normal April sunshine. On the other hand, northern and southern regions of the province had near normal sunshine.

Manitoba and Saskatchewan

Mean temperatures averaged close to normal throughout much of the region, although most areas were slightly warmer than the long term average. The few areas with slightly below normal temperatures were situated near the Hudson Bay coast. The northwest corner of Manitoba and the northern third of Saskatchewan were above normal by 2 to 3 degrees. Although mean temperatures were, for the most part, above normal, extreme maximum readings for the month were on the cool side. Several areas did not exceed the 20°C mark during April, and the highest temperature in the region was only 23.5°C set at Re-

gent, in southwestern Manitoba. Total precipitation amounts were variable, ranging from only a few millimetres or less in the northeast to more than twice the average, over 60 mm, in central Saskatchewan near the Alberta border. Less than half the monthly average was recorded in the northeast quadrant and across the southern agricultural districts. Some communities received less than 10 mm of precipitation during the whole month. The driest area, however, was northeastern Manitoba, where Gillam, Churchill and Island Lake reported only 4.2 mm, 0.4 mm and 0.0 mm, respectively. If not for some significant precipitation toward the end of the month, the January through April period might have been the driest on record in parts of the region.

One of the more significant precipitation events that occurred during the period was a heavy dumping of 20 to 30 centimetres of snow north of Dauphin, Man, on the 27th.

Ontario

If Ontario residents were anticipating a warm and sunny April, then there must have been a lot of disappointment. Spring did not come easily into Ontario this year. While monthly mean temperatures managed to approach seasonal normals, those enjoyable sunny, warm days that April normally offers as a foretaste of summer, failed to materialize. Moreover, frequent cold rains and snowfalls lingered throughout the month, as winter refused to abandon its hold on the province.

April's monthly mean temperature, although much milder than last year, ended up within a half of a degree of the long-term average. Locations near the shores of Lake Superior and Lake Huron, however, were particularly cool, with Thunder Bay, Sault Ste. Marie and Sarnia all recording an April mean close to a full degree cooler than normal. Several outbreaks of cold Arctic air towards the end of the month, resulted in many sites recording their lowest temperatures at the end, rather than at the beginning of the month.

Snowfall was relatively abundant during April in all locales except southwestern

and south-central Ontario. Eastern Ontario was victimized the most, as Ottawa's 42 cm of April snow represented the snowiest April in the nation's capital since weather records began in 1938. Also worth noting is that Ottawa recorded a grand total of 341 cm of snow this winter - the second greatest snowfall since 1938; only the winter of 1970/71 exceeded it, with a 441 cm total. Meanwhile, Kingston's 30 cm made it their snowiest April since 1975. Elsewhere, snowfall totals ranged from 15 to 35 centimetres, which is close to the April normal. Exceptions were noted in the Toronto to Windsor corridor, where just 1 to 7 centimetres of snow fell, slightly below the average, and as well in northwestern Ontario, where only 6 cm of snow (normal 27 cm) was recorded.

April 1993 was also a wet month in the province, except in the extreme northwest. Ottawa's 144 mm of total precipitation set a record for their wettest April, while London's 114 mm was the most since 1981. In general, precipitation was above normal by 10 to 110 percent. The following sites also topped 100 mm: Wawa 138 mm, Kingston 116 mm, Gore Bay 122 mm, Sault Ste. Marie 104 mm and Muskoka 101 mm. Pickle Lake recorded by far the least precipitation; their meagre 6 mm total represented the second driest April since 1938.

Sunshine was lacking in April 1993. Most locations reported from 20 to 50 hours less sun than is usual. Kingston's 103 hours of sunshine was their lowest total in 22 years of records.

While the perception that April 1993 was a very cold month cannot be substantiated, the near-normal temperatures when combined with the rain, snow and a persistent cloud cover certainly produced an April with few, if any, redeeming qualities.

Quebec

April left a bitter taste of winter. The month was wetter and cloudier than average, although temperatures did remain within 2°C of the normal. The only region that was significantly below average in temperature was the north.

With a few exceptions, precipitation was above normal. The Montreal area re-

ceived between 150 to 175 millimetres of precipitation, including 40 cm of snow, during the course of the month, which represents more than twice the average allotment for the month of April. Strangely enough, Gaspé tallied only 21.1 mm of precipitation or 21 percent of the normal.

New monthly precipitation records were established at: Montreal, 152.2 mm (150.0 mm in 1983); and Trois-Rivières, 143.4 mm (139.3 mm in 1983). A monthly snowfall record was also set at Montreal, 41.6 cm, breaking the previous record of 33.6 cm set in 1983.

Southern Quebec recorded only 115 to 135 hours of bright sunshine, which is only 60 to 80 percent of the normal for the month.

There were a number of significant weather events this month. A low pressure system, which tracked eastwards and south of the province at the beginning of the month, left between 30 to 40 centimetres of snow in the Ottawa Valley, Montreal and the Eastern Townships on April Fools Day.

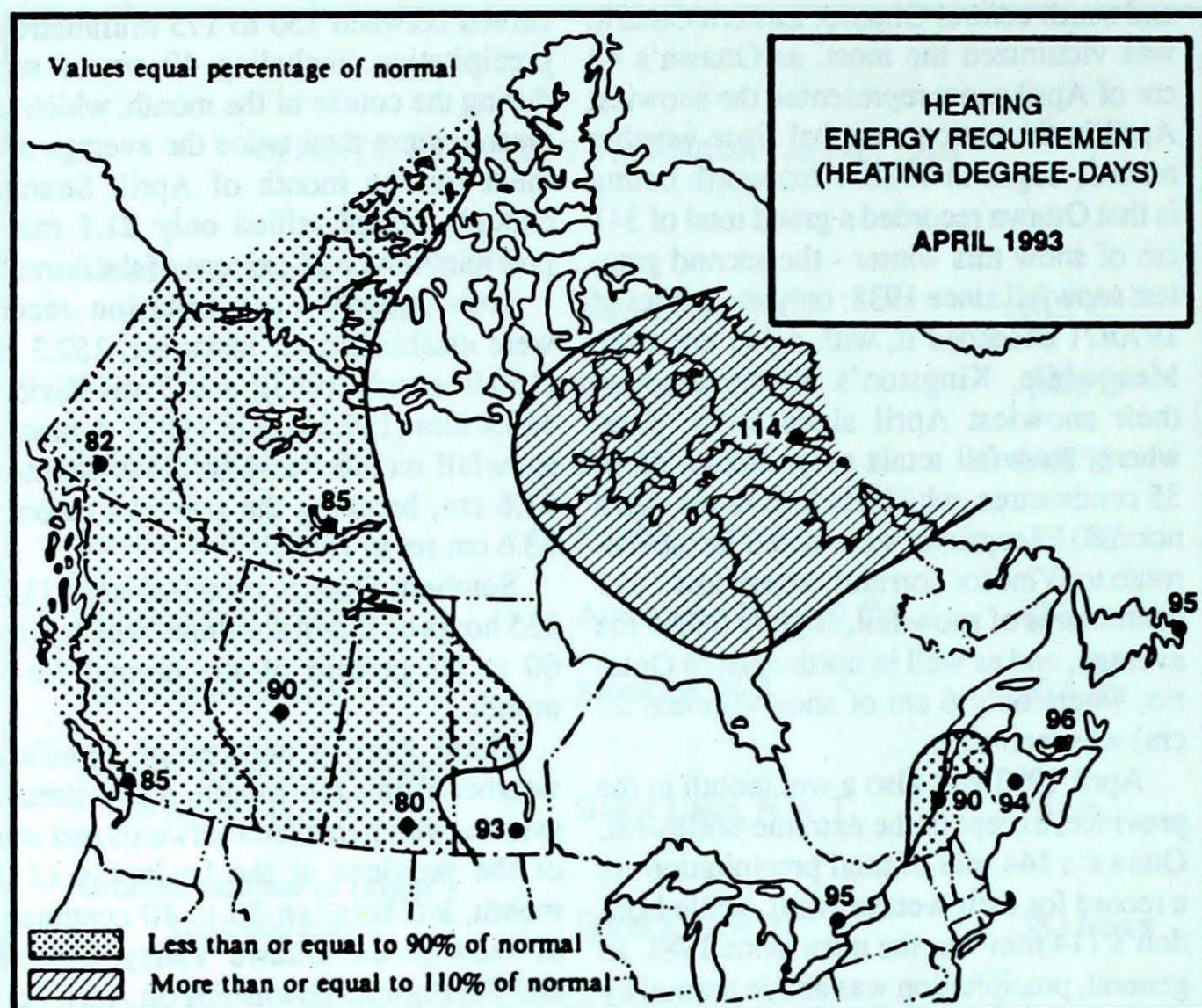
A few days later, 20 to 35 millimetres of rain fell north of the St. Lawrence River, from Hull to Roberval, as a low pressure system moved along the Appalachians on April 10 and 11. Winter-like weather struck again on April 22, as a low pressure system, moving along the eastern seaboard produced between 15 and 20 centimetres of snow across southwestern Quebec. The Laurentian Park had to be closed, because of snowfall amounts in excess of 25 cm.

Maritimes

April was mild, but a little on the cloudy side. It was extremely cool on the 27th, with most locations setting new daily low maximum temperature records. Both Truro and Halifax, broke long-standing records, dating back to 1898, with low maximums of 1°C and 3°C degrees, respectively. Normal maximums for this time of year are in the 10°C to 13°C degree range.

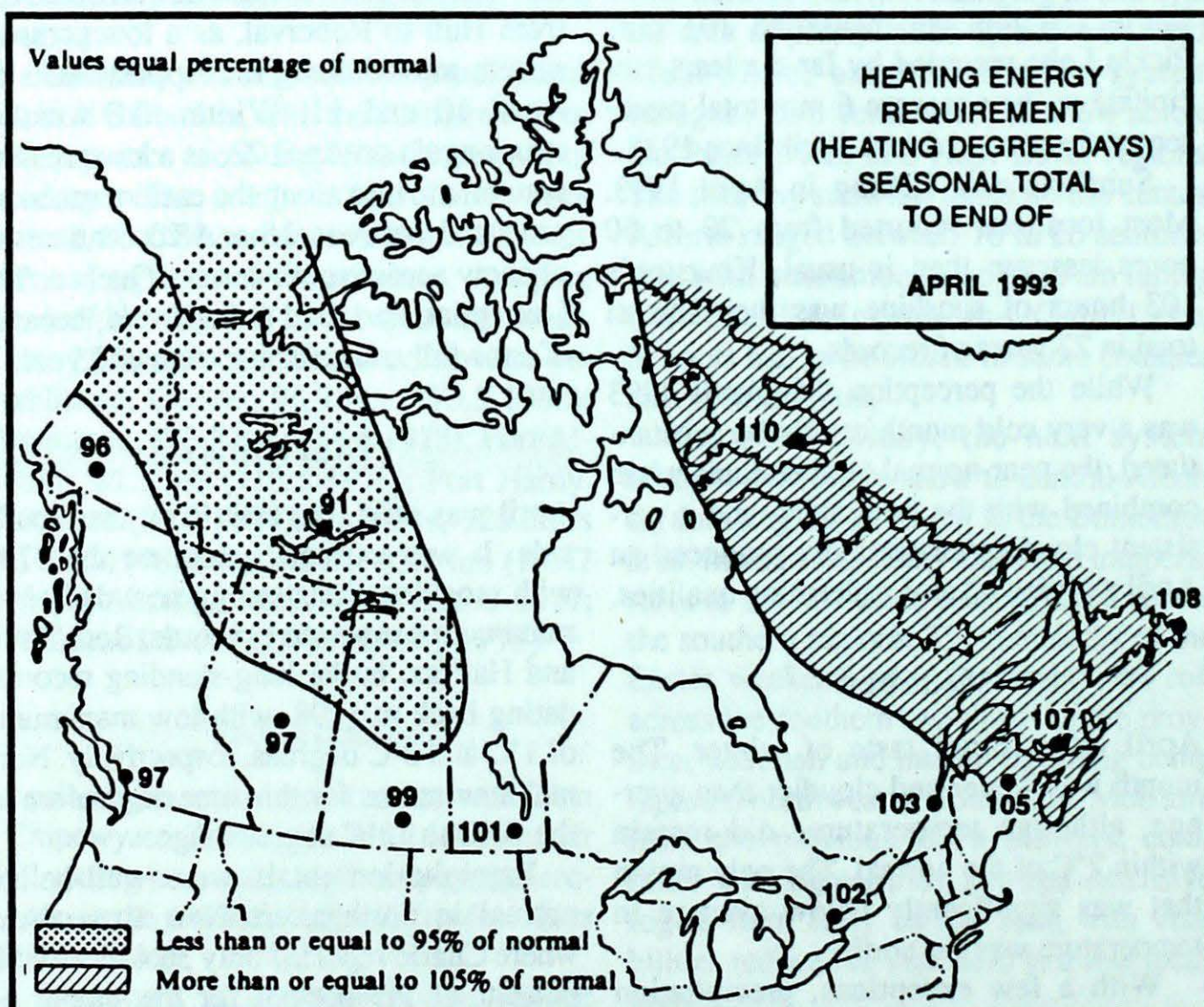
Precipitation totals were well-below normal in northeastern New Brunswick, where Charlo reported only 36.4 mm, or 58 percent of the normal for the month of April. Totals in the remaining areas ranged

...continued on page 16



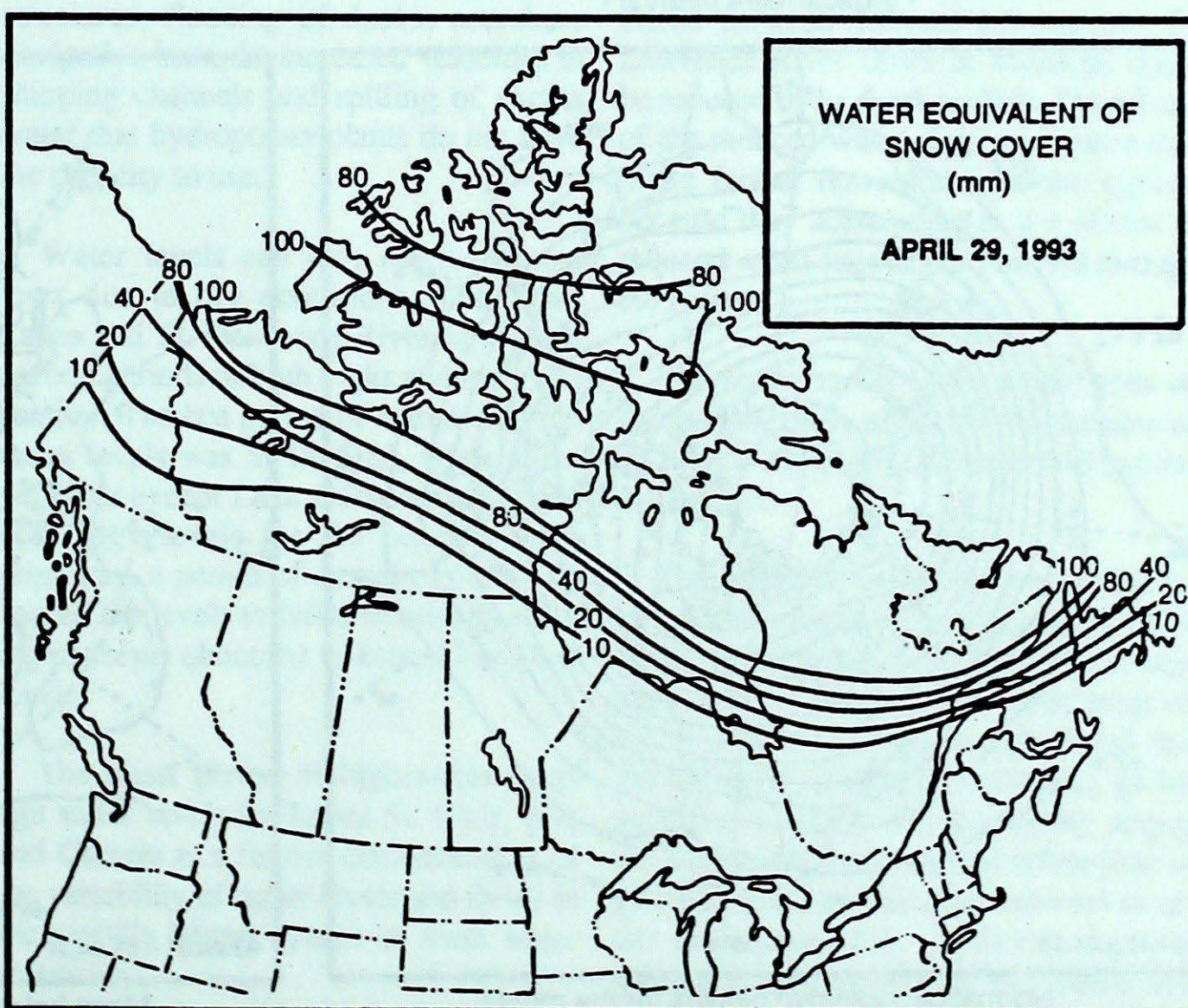
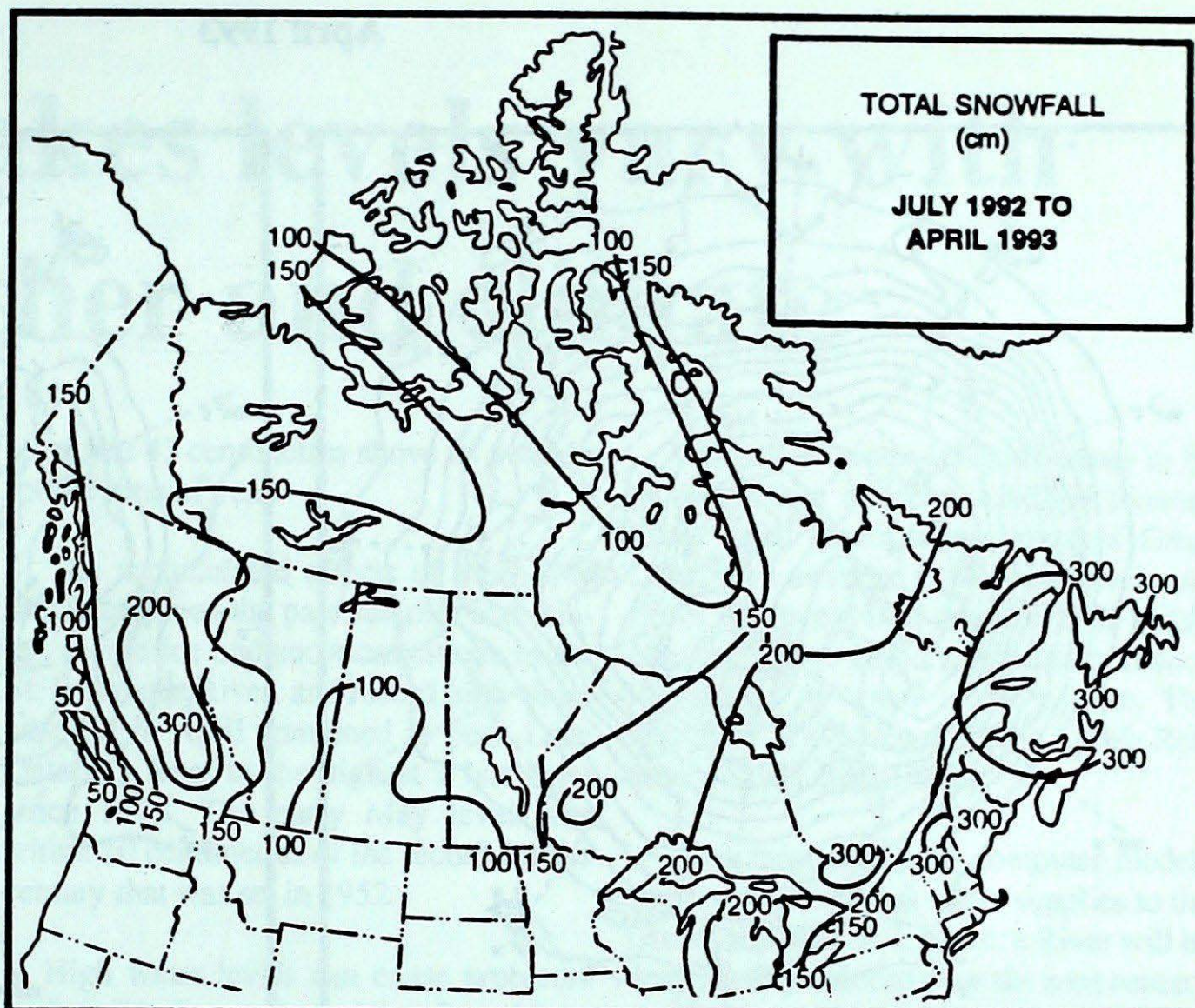
SEASONAL TOTAL OF HEATING DEGREE-DAYS TO END OF APRIL

	1993	1992	NORMAL
BRITISH COLUMBIA			
Kamloops	3842	2908	3540
Penticton	3469	2840	3267
Port Hardy	3083	2812	3222
Vancouver	2713	2366	2732
Victoria	2766	2446	2789
YUKON TERRITORY			
Whitehorse	6211	5848	6441
NORTHWEST TERRITORIES			
Iqaluit	9714	9184	8821
Inuvik	8517	9222	9274
Yellowknife	7241	8001	7930
ALBERTA			
Calgary	4929	4062	4920
Edmonton Mun.	4970	4468	5117
Grande Prairie	5631	5037	5728
SASKATCHEWAN			
Estevan	5354	4695	5146
Regina	5429	4913	5494
Saskatoon	5642	5149	5682
MANITOBA			
Brandon	5819	5635	5732
Churchill	8176	5450	8203
Dauphin	5523	5483	5738
Winnipeg	5596	5506	5555
ONTARIO			
Kapuskasing	5996	6129	5930
London	3930	3802	3834
Ottawa	4523	4595	4411
Sudbury	5148	5185	5049
Thunder Bay	5363	5362	5295
Toronto	3914	3767	3843
Windsor	3416	3337	3412
QUEBEC			
Baie Comeau	5738	5722	5471
Montréal	4452	4502	4276
Québec	4955	5095	4804
Sept-Îles	6035	5940	5576
Sherbrooke	4885	4938	4850
Val d'Or	5922	5993	5690
NEW BRUNSWICK			
Fredericton	4584	4593	4370
Moncton	4643	4629	4335
NOVA SCOTIA			
Sydney	4319	4304	3996
Yarmouth	3903	3790	3637
PRINCE EDWARD ISLAND			
Charlottetown	4526	4448	4218
NEWFOUNDLAND			
Gander	5014	4924	4475
St. John's	4525	4554	4188



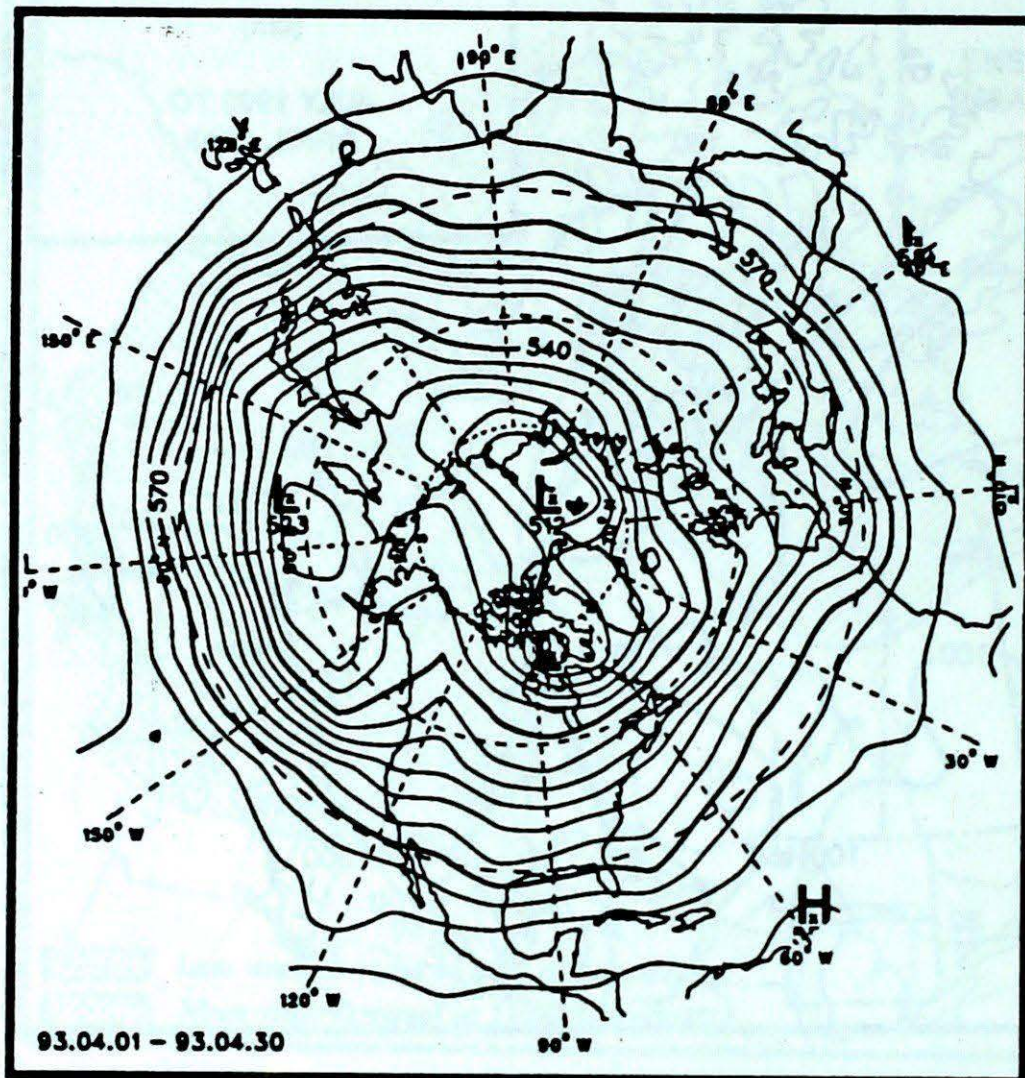
SEASONAL SNOWFALL TOTALS (cm)
TO END OF APRIL

	1993	1992	NORMAL
BRITISH COLUMBIA			
Kamloops	91	32	91
Port Hardy	37	1	72
Prince George	234	208	236
Vancouver	68	2	60
Victoria	46	5	50
YUKON TERRITORY			
Whitehorse	184	218	133
NORTHWEST TERRITORIES			
Iqaluit	155	155	222
Inuvik	193	170	162
Yellowknife	128	191	132
ALBERTA			
Calgary	138	80	142
Edmonton Namao	118	146	129
Grande Prairie	117	170	176
SASKATCHEWAN			
Estevan	100	83	114
Regina	104	88	119
Saskatoon	76	109	111
MANITOBA			
Brandon	77	155	115
Churchill	129	228	173
The Pas	129	188	164
Winnipeg	112	109	123
ONTARIO			
Kapuskasing	280	258	310
London	216	218	209
Ottawa	544	268	226
Sudbury	208	265	245
Thunder Bay	179	206	209
Toronto	138	96	131
Windsor	134	32	117
QUEBEC			
Baie Comeau	290	310	368
Montréal	238	225	223
Québec	231	238	343
Sept-Îles	319	311	421
Sherbrooke	238	295	291
Val d'or	203	288	307
NEW BRUNSWICK			
Charlo	378	340	411
Fredericton	237	198	289
Moncton	371	455	339
NOVA SCOTIA			
Sydney	392	409	313
Yarmouth	256	252	207
PRINCE EDWARD ISLAND			
Charlottetown	400	348	329
NEWFOUNDLAND			
Gander	440	437	389
St. John's	275	360	347

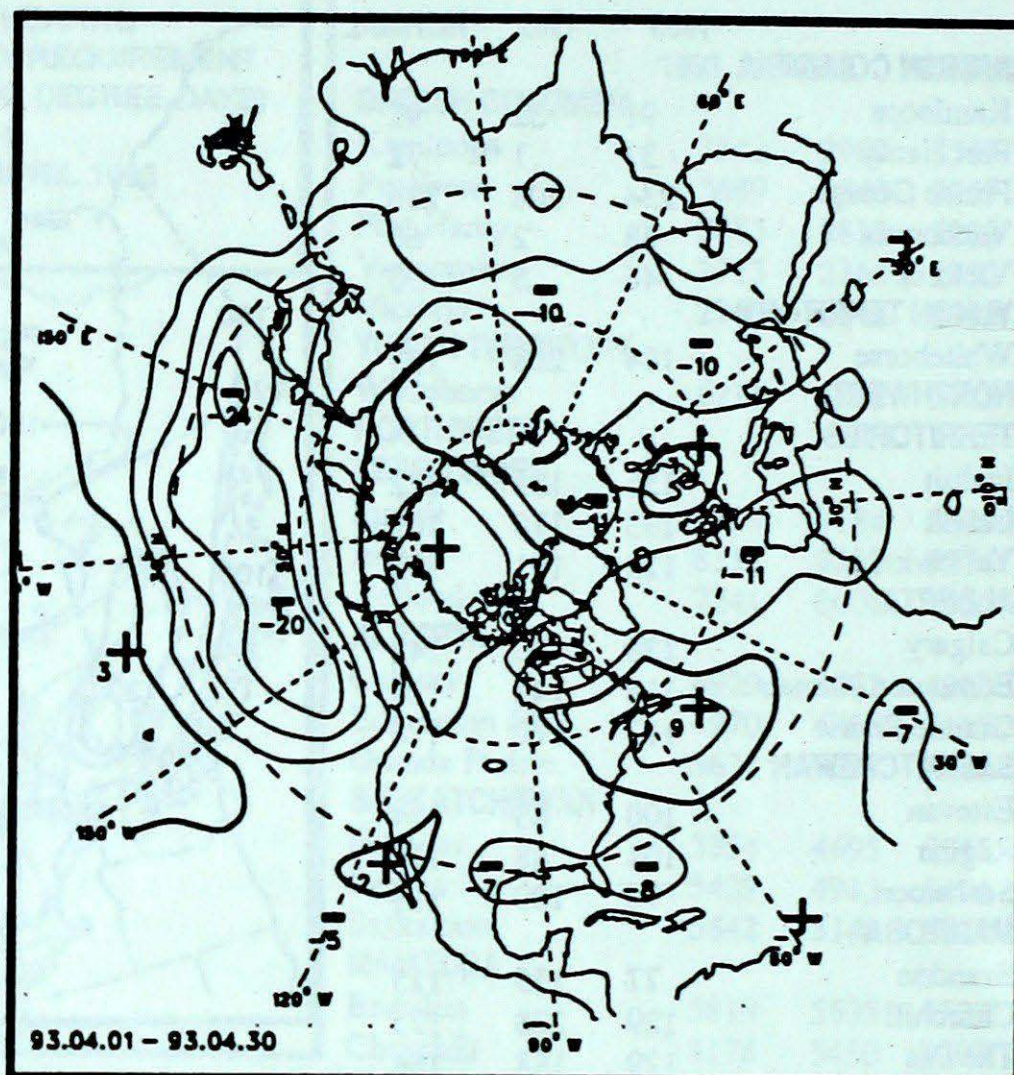


50-kPa ATMOSPHERIC CIRCULATION

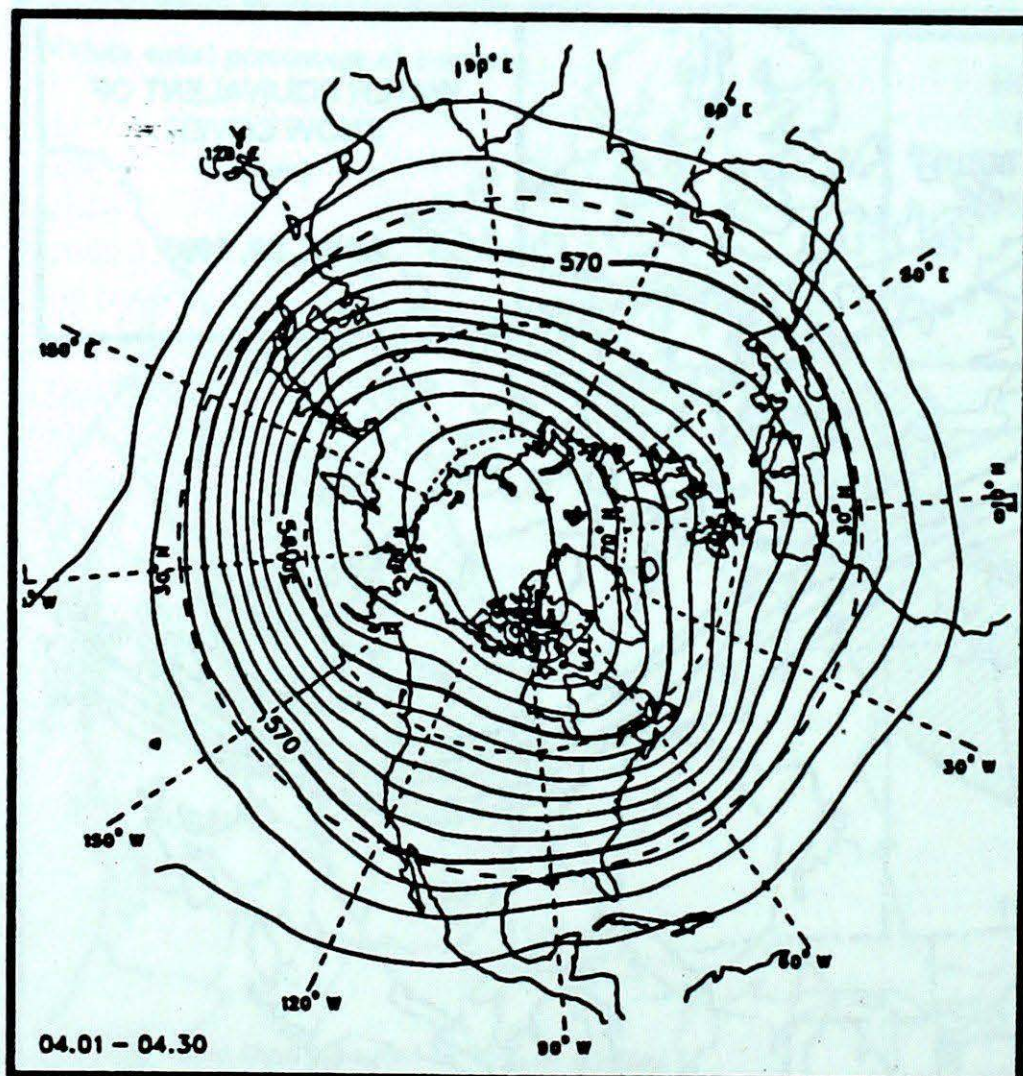
April 1993



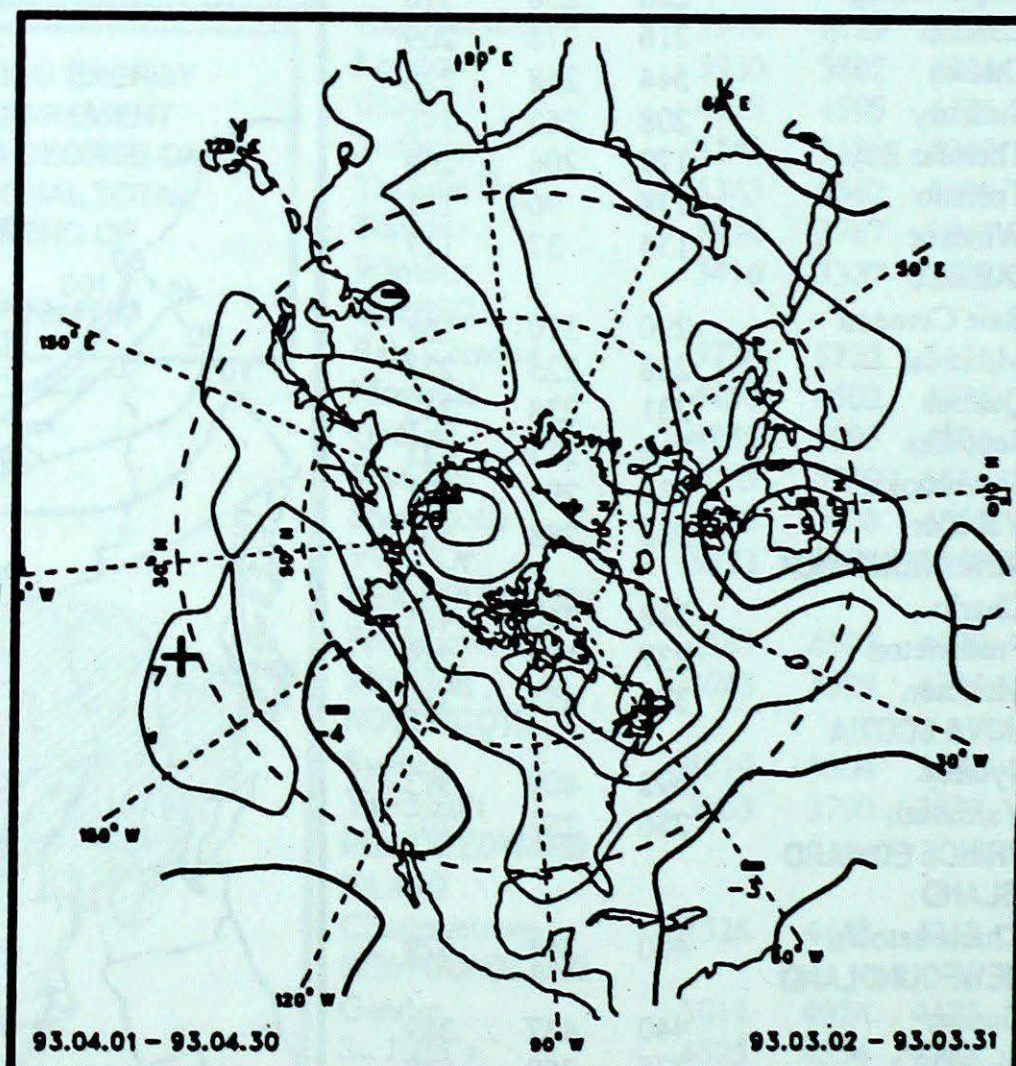
Mean geopotential heights
- 5 decametre interval -



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 -

Great Lakes levels vary with weather and climate

The constantly changing levels and flows of the Great Lakes and St. Lawrence River can be a recurring cause of concern for the millions of people who depend on the system for a wide range of purposes.

Whether they live on, or make their living from, Great Lakes - St. Lawrence shorelines; whether they sail the system for pleasure or to transport commercial goods; whether they produce or consume hydroelectricity; or, whether they simply enjoy the lakes for their scenic beauty and abundant plant and animal life, these people are directly or indirectly affected by changing water levels and flows.

Because of their large size and storage capacities, the lakes respond slowly to changes in water supply. Short-term variations in supplies usually have relatively minor effects on water levels. However, periods of six months or longer of consistently high or low supplies can cause noticeable changes in lake levels.

Since last summer, the lower Great Lakes and St. Lawrence River area have received generally heavy precipitation. As a result, the levels of Lakes St. Clair, Erie and Ontario have risen significantly above their long-term (1900-1991) averages.

At 70 centimetres above average at the beginning of May, Lake Ontario has been the most severely affected. Lake Erie began May at 51 centimetres above average, while Lake St. Clair's beginning-of-May

level was 43 centimetres above its average for the time of year.

The accumulated effects of the heavy precipitation of the past summer and winter, severe ice and snow conditions in the St. Lawrence River, and record high water supplies in April combined to push Lake Ontario's level to the highest it had been since 1973. The early May level was within 10 centimetres of the record for the century that was set in 1952.

High water levels can cause problems such as flooding and accelerated erosion to shoreline properties, decreased clearances for boats passing under bridges or other structures, flooding of docks, nearshore navigation hazards, increased velocities in shipping channels and spilling of excess water that hydropower plants do not have the capacity to use.

Water levels can also reach extreme lows due to dry conditions. The Great Lakes and St. Lawrence River have seen several periods of both highs and lows this century. The last period of extremely high water levels was in 1985-86, when all of the lakes except Lake Ontario reached record high levels for the century. Subsequently, a period of drought in 1987-88 caused the levels to fall dramatically, raising concerns about the effects of very low levels.

The latest period of higher-than-average water levels for Lakes St. Clair, Erie and Ontario is a further demonstration of the variability of water levels and flows in the world's largest system of fresh water reservoirs.

While high water levels continue to be an immediate concern, a recent International Joint Commission study of Great Lakes-St. Lawrence River water levels and flows points out that the effects of global climate change could substantially reduce the supply of water to the system. The March 31, 1993, report of the Levels Reference Study Board notes:

"The most advanced computer models currently predict that water supplies to the Great lakes and St. Lawrence River will be dramatically reduced over the next century - possibly to the extent that Lake Superior's level could drop by one third of a metre...and the other lakes could be reduced between 1.2 and 1.5 metres... St. Lawrence River flows at Montreal could be reduced by as much as 40%. The effects of the reduced water supply are more dramatic farther downstream in the system, because they accumulate as the effects of reduced water supplies are carried through the system."

The report to the Commission goes on to note that these projections are estimates only and cannot be considered as precise predictions.

The Study Board recommends that future management of the Great Lakes-St. Lawrence River resource take into account the potential for reduced water supplies due to climate change. In recognition that modelling of the potential effects of global warming is still in the developing stages, the Board recommends that refinement of global climate models be continued in order to improve their predictive capacity and use as a planning tool. The Board also recommends continuation of efforts to develop a binational assessment of the poten-

tial impacts of climate change on the Great Lakes-St. Lawrence River system, and of efforts to coordinate responses to expected changes in climatic conditions.

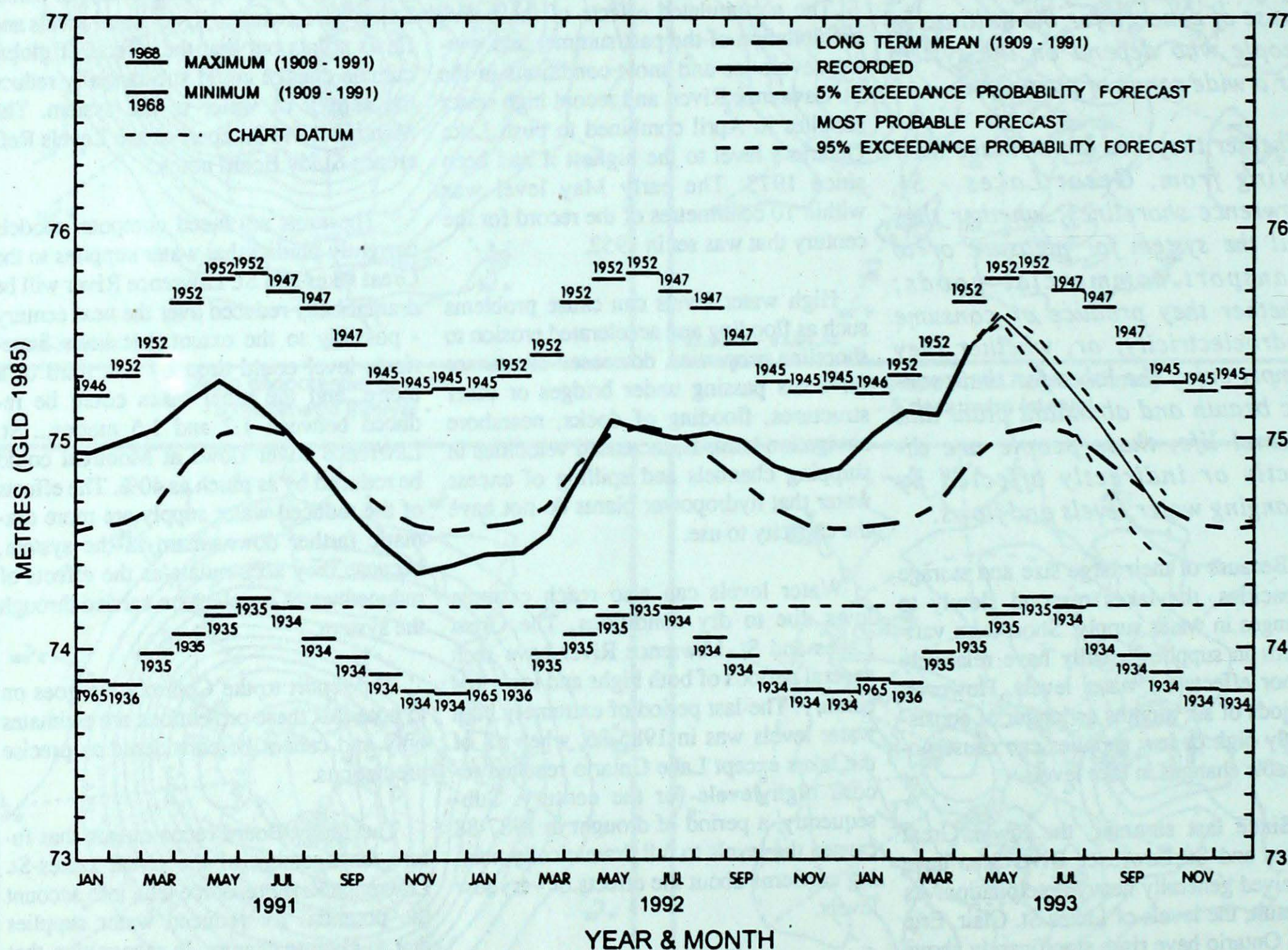
The purpose of the report is to provide advice to the Canadian and U.S. Governments on how to deal with the changing levels of the Great Lakes and St. Lawrence

River. It also contains recommendations for land use and shoreline management initiatives to help reduce the risks associated with living on the shorelines, and it recommends against additional regulation of lake levels and flows. The International Joint Commission will review the report before making its own report to the Governments. For further information: Great Lakes

Water Level Communication Centre Inland Waters Directorate - Ontario Region

For further information contact:
Great Lakes Water Level
Communications Centre
Inland Waters Directorate
Ontario Region
Tel: (416) 336-4581

LAKE ONTARIO AT KINGSTON



Forecast almost as good as observations?

Total forecast precipitation for April 1993. (RFE model, 24-48 hour forecast)

This map has been produced by the Canadian Meteorological Center (CMC) in Montreal, using an experimental version of their Regional Finite Element (RFE) forecast model. It represents the monthly total of the 24-hour precipitation amount forecast by the regional numerical model, a day ahead of the events, that is to say, from the 24-48 hour part of the forecast. This is pre-

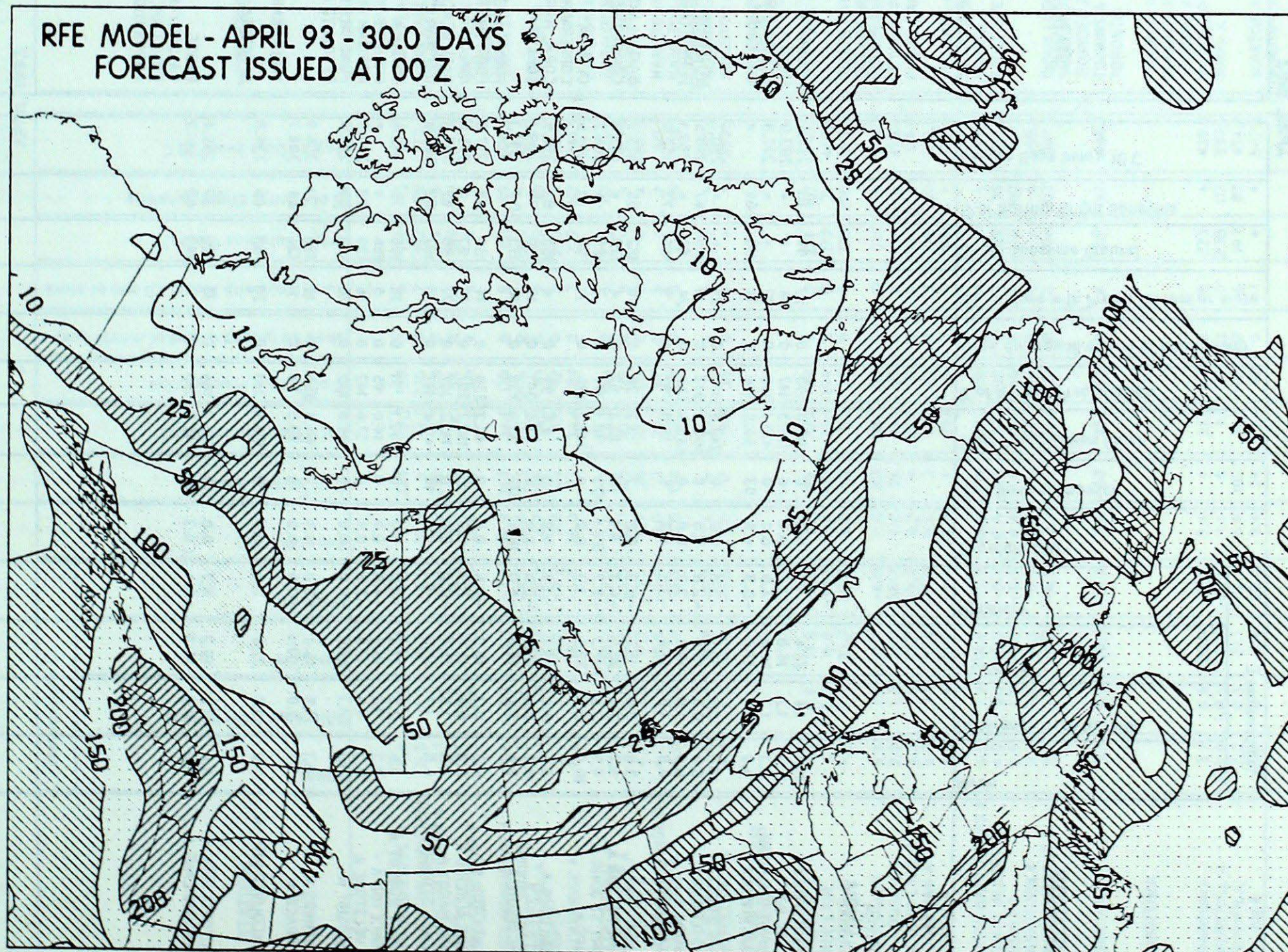
sented to compare with the total precipitation amount observed for the month.

Although the RFE model slightly over-forecast accumulated precipitation amounts on the west coast and in eastern Canada, the model results are excellent elsewhere. The total precipitation forecast by this model could be used as an estimate of monthly precipitation in data sparse areas, particularly in the north.

Readers should also be aware that the analysis appearing in *Climatic Perspectives* is of observed or measured precipitation, which has not been generally corrected for gauge "undercatch" due to wind. This measurement error can be very significant, particularly during snowfall events associated with high winds.

It should be noted that this model's output is not yet a regular CMC product, and is still a developmental tool.

TOTAL FORECAST PRECIPITATION (MM) (24 - 48 H)



APRIL 1993

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	10.1	1.4	22.4	1.1	0.0	0	195.0	190	0	22	99	61	237.4
ALERT BAY	8.6	1.2	14.8	1.2	0.0	0	122.3	147	0	24	*	*	282.0
AMPHITRITE POINT	9.3	1.3	14.4	4.0	0.0	0	427.1	209	0	27	*	*	277.8
BLUE RIVER A	5.9	1.6	17.0	-8.3	4.8	53	66.8	174	0	14	115	69	*
CAPE SCOTT	8.1	1.2	14.7	3.8	0.0	0	242.8	118	0	25	*	*	298.7
CASTLEGAR A	8.6	0.5	18.0	-2.8	0.0	0	100.3	213	0	19	116	67	281.5
COMOX A	9.0	1.0	13.9	2.2	0.0	0	133.8	234	0	24	97	*	269.1
CRANBROOK A	6.8	1.0	16.4	-2.5	0.2	4	14.8	52	0	5	159	73	352.8
DEASE LAKE	3.8	3.5	15.2	-8.3	0.8	7	3.2	26	0	0	162	85	425.3
FORT NELSON A	5.2	3.6	20.5	-6.3	8.1	50	10.3	62	0	4	229	*	513.9
FORT ST JOHN A	4.9	2.0	17.3	-5.3	20.1	123	38.1	177	0	7	188	*	393.2
HOPE A	10.0	0.7	22.8	1.3	0.0	0	142.2	136	0	21	98	61	241.5
KAMLOOPS A	9.5	0.4	19.7	-1.5	0.0	0	9.8	94	0	4	163	82	256.5
KELOWNA A	8.4	0.9	18.0	-2.0	0.0	0	61.4	301	0	16	150	74	289.1
MACKENZIE A	6.4	3.4	15.6	-6.0	18.4	172	55.6	339	0	10	173	84	397.1
PENTICTON A	8.8	0.2	18.2	-2.6	0.0	0	49.2	230	0	14	134	63	277.8
PORT ALBERNI A	8.8	0.9	15.6	0.9	0.0	0	197.7	207	0	19	82	*	275.6
PORT HARDY A	8.1	1.5	15.4	-0.4	0.0	0	115.2	107	0	22	90	62	297.3
PRINCE GEORGE A	6.0	1.7	18.2	-5.1	1.6	16	40.4	147	0	11	167	82	360.8
PRINCE RUPERT A	7.6	2.3	17.3	-1.0	0.0	0	92.1	51	0	18	105	78	312.4
PRINCETON A	7.3	1.1	18.5	-4.8	0.0	0	14.0	95	0	5	166	*	*
REVELSTOKE A	8.3	1.8	17.9	-2.6	0.0	0	57.6	142	0	16	130	73	290.0
SANDSPIT A	7.1	1.1	13.0	0.0	0.0	0	109.8	130	0	20	132	85	325.8
SMITHERS A	6.1	1.9	16.4	-5.0	0.0	0	64.4	366	0	16	126	71	356.9
TERRACE A	7.7	2.0	17.1	-1.8	0.0	0	33.0	54	0	11	124	84	308.7
VANCOUVER INT'L A	10.0	1.2	21.4	2.8	0.0	0	126.9	213	0	20	83	46	239.8
VICTORIA INT'L A	9.4	1.0	18.2	0.7	0.0	0	65.3	166	0	16	120	67	259.4
WILLIAMS LAKE A	5.0	0.6	14.3	-5.4	0.2	2	42.8	199	0	9	143	68	391.2
YUKON TERRITORY													
DAWSON A	3.0	*	15.6	-13.6	0.6	*	1.2	*	*	*	*	*	*
MAYO A	4.1	4.5	16.1	-8.6	3.4	45	2.8	33	0	0	*	*	*
WATSON LAKE A	2.6	3.2	*	*	*	*	4.3	28	*	*	*	*	*
WHITEHORSE A	3.5	3.2	14.0	-10.0	1.2	11	1.2	13	0	0	247	107	434.7
NORTHWEST TERRITORIES													
BAKER LAKE A	-20.0	-2.7	-3.6	-30.6	7.6	56	6.9	50	76	1	259	110	1139.3
CAMBRIDGE BAY A	-23.6	-1.7	-13.4	-33.3	6.2	77	2.0	28	51	0	315	125	1248.1
CLYDE A	-20.7	-2.3	-9.1	-30.7	12.2	89	10.8	79	50	3	264	106	1161.2
COPPERMINE A	-19.3	-1.8	-6.5	-33.1	1.0	10	0.8	7	95	0	258	119	1119.8
CORAL HARBOUR A	-20.4	-4.1	-4.4	-32.2	9.4	65	9.4	69	32	3	281	101	1152.4
EUREKA	-24.6	3.0	-13.5	-39.0	1.6	55	1.6	59	16	1	382	108	1279.7
FORT SIMPSON A	2.4	4.0	18.8	-12.5	2.0	17	3.1	21	0	1	280	126	445.3
FORT SMITH A	2.5	4.7	15.3	-11.8	13.0	96	49.9	308	0	9	191	79	461.1
IQUALUIT	-19.0	-4.7	-6.7	-28.9	8.6	30	4.2	16	17	2	316	135	1108.9
HALL BEACH A	-23.6	-2.7	-12.0	-34.6	9.4	82	8.0	73	57	2	*	*	1249.9
HAY RIVER A	-2.7	1.5	11.7	-15.2	4.2	32	10.2	65	0	2	*	*	619.6
INUVIK A	-10.0	4.3	5.4	-26.1	7.4	44	5.6	38	46	1	289	116	838.7
MOULD BAY A	-21.0	3.1	-13.4	-31.4	5.0	86	4.4	88	16	1	300	105	1168.8
NORMAN WELLS A	*	*	*	*	*	*	*	*	*	*	*	*	*
POND INLET A	-22.0	*	-7.7	-30.6	10.0	*	8.0	*	18	2	253	*	1194.0
RESOLUTE A	-21.1	2.0	-12.7	-29.8	5.6	86	5.6	95	13	1	330	120	1176.0
YELLOWKNIFE A													
ALBERTA													
BANFF	3.8	1.4	14.5	-5.5	43.0	136	67.6	180	0	7	*	*	425.4
CALGARY INT'L A	4.8	1.5	17.0	-7.5	1.7	7	6.5	20	0	2	198	97	395.7
COLD LAKE A	4.9	2.0	19.3	-4.0	9.8	79	50.2	232	0	8	162	71	389.4
CORONATION A	4.4	1.4	16.9	-4.8	33.2	214	50.2	211	0	9	178	77	425.7

APRIL 1993

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									
EDMONTON INT'L A	5.0	1.8	18.2	-4.0	30.8	239	38.2	189	0	6	174	75	391.2
EDMONTON MUNICIPAL	5.5	1.3	18.6	-4.5	29.8	*	47.8	220	0	7	182	80	373.7
EDMONTON NAMAQ A	5.1	1.2	19.2	-5.7	29.2	250	37.5	208	0	7	*	*	386.1
EDSON A	4.7	1.5	17.5	-6.5	3.3	22	20.1	84	0	8	187	92	*
FORT CHIPEWYAN A	2.9	2.8	17.5	-9.5	12.6	54	8.0	40	*	*	*	*	*
FORT MCMURRAY A	4.4	2.3	19.1	-7.2	19.3	143	34.8	170	0	8	151	65	408.4
GRANDE PRAIRIE A	5.3	2.6	18.3	-4.7	20.6	173	40.2	206	0	4	222	*	380.8
HIGH LEVEL A	4.1	1.9	20.3	-9.2	6.7	46	6.7	41	0	2	222	90	417.0
JASPER	5.3	2.0	16.4	-6.2	3.8	35	9.4	42	0	5	209	*	381.9
LETHBRIDGE A	6.6	1.7	18.7	-4.8	20.0	73	34.4	81	0	7	222	112	341.4
MEDICINE HAT A	7.6	2.0	18.2	-2.3	4.0	22	44.0	146	0	5	235	117	314.3
PEACE RIVER A	5.1	3.0	19.6	-5.5	16.1	169	30.8	215	0	9	*	*	387.4
RED DEER A	4.6	1.5	17.2	-5.5	4.4	26	30.4	115	0	6	*	*	401.8
ROCKY MTN HOUSE A	4.3	1.3	16.5	-6.0	1.0	3	23.2	67	0	5	*	*	411.7
SLAVE LAKE A	4.0	0.9	16.9	-7.5	13.8	150	40.2	228	0	8	177	76	419.1
SUFFIELD A	7.0	*	18.8	-3.9	11.4	*	37.9	*	0	5	222	*	330.0
WHITECOURT A	4.9	2.2	18.0	-4.8	3.0	17	9.4	35	0	4	*	*	393.7
SASKATCHEWAN													
BROADVIEW	3.2	0.6	19.9	-17.0	6.2	44	12.0	38	0	3	224	107	445.1
CREE LAKE	1.5	3.3	16.5	-13.2	38.6	205	37.4	194	0	6	173	72	496.6
ESTEVAN A	4.8	0.7	22.2	-6.8	0.0	0	9.0	24	0	3	229	108	393.8
KINDERSLEY	5.6	1.8	17.3	-4.8	11.0	101	33.3	156	0	8	211	*	374.9
LA RONGE A	2.8	1.8	18.1	-10.2	7.4	54	17.8	90	0	6	*	*	456.4
MEADOW LAKE A	4.2	*	19.7	-5.9	9.2	*	23.6	*	0	6	144	*	414.2
MOOSE JAW A	5.3	1.1	20.6	-5.8	0.4	3	13.7	46	0	3	219	100	382.6
NIPAWIN A	3.9	*	18.5	-6.9	18.4	*	21.8	*	0	4	166	*	422.6
NORTH BATTLEFORD A	4.9	1.9	18.4	-5.8	16.8	156	37.2	176	0	11	*	*	393.5
PRINCE ALBERT A	4.0	2.1	19.3	-8.2	12.6	113	22.5	102	0	7	168	75	422.3
REGINA A	4.6	1.3	20.2	-5.9	0.4	4	15.6	66	0	6	214	102	401.1
SASKATOON A	4.7	1.4	19.5	-7.2	8.6	91	27.5	130	0	7	*	*	399.5
SWIFT CURRENT A	5.0	1.5	19.3	-6.8	2.2	14	10.4	37	0	5	214	103	397.5
YORKTON A													
MANITOBA	3.1	0.9	20.1	-12.9	5.6	43	16.2	73	0	4	217	97	446.1
BRANDON A	3.7	0.9	20.8	-8.4	0.4	4	31.4	93	0	5	223	*	429.5
CHURCHILL A	-10.6	-0.5	8.5	-22.7	1.4	6	1.9	29	3	0	238	117	857.5
DAUPHIN A	2.8	0.5	21.1	-19.7	16.6	102	47.2	148	0	6	193	87	454.7
GILLAM A	-3.4	0.7	3.9	-20.4	9.4	24	4.4	18	0	1	*	*	642.5

STATION	Temperature C				Snowfall (cm)	% of Normal Snowfall	Total Precipitation (mm)	% of Normal Precipitation	Snow on ground at end of month (cm)	No. of days with Precip 1.0 mm or more	Bright Sunshine (hours)	% of Normal Bright Sunshine	Degree Days below 18 C
	Mean	Difference from Normal	Maximum	Minimum									
ISLAND LAKE	0.7	3.9	14.6	-14.7	*	*	*	*	*	*	*	*	517.9
LYNN LAKE A	0.3	3.8	16.6	-18.6	11.2	47	11.0	65	1	2	241	104	532.2
NORWAY HOUSE A	1.6	*	15.6	-13.4	14.4	*	13.2	*	0	3	*	*	493.1
THE PAS A	1.8	1.8	15.3	-16.2	41.8	215	34.7	127	0	4	220	97	485.9
THOMPSON A	-0.6	1.7	15.8	-24.5	15.4	51	15.5	70	0	2	283	122	556.5
WINNIPEG INT'L A	4.3	0.9	19.9	-10.0	0.0	0	24.2	63	0	3	232	105	411.4
ONTARIO													
EARLTON A	2.1	0.2	16.6	-10.4	23.1	119	59.2	118	0	12	*	*	476.7
GERALDTON A	-0.8	*	17.6	-16.3	27.4	*	61.2	*	4	6	*	*	562.1
GORE BAY A	3.4	-0.3	14.9	-5.6	30.8	288	121.6	186	0	12	*	*	437.9
HAMILTON RBG	6.3	*	22.5	-5.0	2.2	*	89.6	*	0	11	149	*	*
HAMILTON A	6.2	0.1	20.6	-3.2	3.8	59	86.0	110	0	11	*	*	355.2
KAPUSKASING A	0.2	-0.3	15.8	-16.6	28.6	115	69.2	130	0	11	*	*	534.9
KENORA A	3.5	0.8	17.8	-10.2	16.2	80	34.2	82	2	4	*	*	434.6
KINGSTON A	5.4	0.1	19.1	-5.7	30.4	400	115.6	151	0	14	103	51	379.6
LONDON A	6.4	0.0	24.3	-4.4	2.0	22	114.3	141	0	13	132	79	347.9
MOOSONEE	-2.3	0.0	13.8	-16.2	18.0	85	32.8	78	*	7	181	105	628.2
MUSKOKA A	5.2	0.7	20.3	-6.2	18.1	151	101.4	138	0	14	*	*	384.4
NORTH BAY A	3.9	0.7	17.1	-7.0	20.4	124	58.8	94	0	12	165	84	422.6
OTTAWA INT'L A	5.6	0.0	22.1	-3.8	41.6	507	144.1	209	0	12	124	70	371.9
PETAWAWA A	4.5	0.8	23.4	-8.3	38.1	635	59.9	94	0	11	*	*	403.6
PETERBOROUGH A	5.8	0.2	19.2	-5.2	9.2	142	87.8	126	0	13	*	*	367.0
PICKLE LAKE	0.5	1.0	17.9	-19.4	6.2	21	6.2	14	*	3	*	*	526.3
RED LAKE A	1.7	0.2	17.1	-14.4	20.6	110	36.0	95	*	5	216	*	489.1
ST CATHARINES A	7.4	0.7	21.8	-2.9	2.8	85	65.6	83	0	10	142	*	318.4
SARNIA A	5.9	-0.4	22.3	-4.8	7.2	118	85.2	111	0	11	130	68	362.0
SAULT STE MARIE A	2.4	-0.5	16.1	-6.9	20.8	208	103.5	159	0	9	152	78	468.9
SIOUX LOOKOUT A	2.0	0.6	17.3	-14.1	26.8	105	35.2	78	10	3	*	*	479.7
SUDBURY A	2.9	0.2	15.2	-9.3	17.8	113	92.2	151	0	10	160	77	452.7
THUNDER BAY A	1.6	-0.9	17.3	-11.1	9.4	58	72.0	142	1	7	185	86	492.1
TIMMINS A	0.9	-0.1	14.7	-16.9	31.0	137	90.0	184	0	9	*	*	514.6
TORONTO	7.8	*	20.4	0.0	1.8	*	70.6	*	0	10	*	*	305.4
TORONTO INT'L A	6.6	0.4	19.8	-2.1	1.6	22	85.8	123	0	11	*	*	343.5
TORONTO ISLAND A	6.1	*	16.6	-1.0	1.8	26	76.8	*	0	10	*	*	356.7
TRENTON A	5.9	-0.5	20.0	-5.2	13.6	219	86.4	114	0	12	*	*	361.9
WATERLOO WELLINGTON	5.9	0.6	19.9	-4.0	3.0	43	83.2	101	0	11	*	*	362.4
WAWA A	0.2	*	12.1	-14.1	35.4	*	138.0	*	*	12	*	*	525.3
WIARTON A	4.6	-0.1	17.4	-4.9	34.2	317	86.3	125	0	11	152	79	402.2
WINDSOR A	7.8	-0.3	22.5	-2.4	3.2	76	88.6	107	0	9	*	*	306.9

APRIL 1993

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									
QUEBEC													
BAGOTVILLE A	3.5	1.3	18.0	-12.0	29.9	151	55.5	116	0	8	*	*	433.5
BAIE COMEAU A	1.1	0.9	10.0	-10.3	21.8	74	138.6	195	0	10	170	98	507.3
BLANC SABLON A	*	*	9.0	*	11.7	29	*	*	0	6	157	*	611.1
CHIBOUGAMAU CHAPAIS	0.0	*	14.1	-18.0	*	*	68.6	*	*	10	*	*	539.2
GASPE A	2.0	*	13.6	-8.7	10.3	*	21.1	*	0	5	157	*	478.0
INUKJUAQ A	-15.0	-4.1	-1.2	-27.5	10.4	78	6.6	45	28	2	221	124	990.0
KUUJJUAQ A	-12.0	-2.8	8.6	-25.9	40.0	184	44.6	192	39	8	226	115	899.3
KUUJJUARAPIK A	-9.9	-3.1	7.0	-25.2	27.8	126	33.4	124	20	7	175	95	835.4
LA GRANDE IV A	-5.3	*	9.5	-28.3	21.8	*	46.2	*	1	8	224	*	699.0
LA GRANDE RIVIERE A	-4.9	*	11.2	-24.9	8.4	*	34.6	*	23	6	234	*	703.3
MANIWAKI	4.1	0.5	22.4	-7.2	27.4	228	73.4	122	0	11	137	71	418.8
MONT JOLI A	3.1	1.5	17.3	-8.5	9.2	33	89.0	159	0	9	152	99	448.1
MONTREAL INT'L A	5.9	0.2	22.2	-6.4	37.2	384	152.2	205	0	14	114	61	364.3
MONTREAL MIRABEL I/	5.0	*	22.2	-5.1	39.2	*	160.8	*	0	13	136	*	389.3
NATASHQUAN A	-0.9	-0.4	9.3	-19.5	5.6	19	75.0	99	0	9	186	114	587.1
QUEBEC A	4.5	1.2	22.3	-4.0	14.6	90	138.2	190	0	14	127	74	404.9
ROBERVAL A	3.3	1.6	19.4	-11.0	12.8	58	47.8	101	0	8	131	*	443.0
SCHIEFFERVILLE A	-5.8	1.4	8.0	-23.0	18.8	46	38.6	85	4	6	204	115	714.8
SEPT-ILES A	0.2	0.2	8.9	-13.8	15.0	45	121.0	154	0	11	181	97	534.2
SHERBROOKE A	4.9	1.6	23.5	-9.6	44.4	190	120.7	166	0	12	117	*	393.4
ST HUBERT A	5.6	-0.1	22.2	-5.2	37.6	*	175.3	234	0	12	115	*	372.5
VAL D'OR A	1.9	1.0	17.0	-11.5	7.4	34	58.8	116	0	11	172	93	482.6
NEW BRUNSWICK													
CHARLO A	1.9	1.0	15.2	-10.1	*	*	*	*	1	9	142	88	483.3
FREDERICTON A	4.8	0.7	19.5	-8.0	31.0	144	106.2	133	0	11	*	*	394.8
MONCTON A	3.1	0.1	21.2	-10.3	50.4	177	99.8	111	0	11	140	88	446.5
SAINT JOHN A	4.1	0.9	16.4	-7.3	28.8	139	116.2	108	0	13	152	97	417.8

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	5.5	0.9	23.0	-6.8	32.4	186	63.1	84	0	10	*	*	376.3
HALIFAX INT'L A	4.4	1.1	17.6	-8.9	20.0	83	84.5	74	0	12	*	*	407.8
SABLE ISLAND	4.6	1.3	13.2	-4.5	1.0	16	128.8	131	0	14	154	113	401.9
SHEARWATER A	4.2	0.2	14.6	-7.4	15.8	122	102.2	102	0	15	147	89	415.3
SYDNEY A	2.7	0.7	17.8	-9.7	36.6	144	140.6	138	3	11	133	85	459.5
YARMOUTH A													
PRINCE EDWARD ISLAND	5.8	1.1	17.3	-3.9	12.8	197	84.2	87	0	11	151	85	364.0
CHARLOTTETOWN A													
NEWFOUNDLAND	2.8	0.5	19.3	-9.6	36.0	132	103.2	126	0	13	*	*	456.0
BONAVISTA	1.4	0.8	16.2	-9.6	3.8	17	125.0	193	0	11	*	*	498.3
BURCEO	1.9	0.6	9.5	-8.0	4.6	19	160.4	135	0	14	*	*	483.3
CARTWRIGHT	-2.8	-0.2	2.1	-7.7	41.3	72	78.9	98	60	14	176	137	626.0
COMFORT COVE	0.8	0.2	16.0	-13.1	15.2	33	83.0	96	0	12	*	*	515.9
DANIELS HARBOUR	0.4	0.1	17.8	-12.5	16.8	59	49.8	95	0	7	167	125	528.3
DEER LAKE A	1.2	0.4	16.4	-4.1	3.4	11	39.6	73	0	8	*	*	500.6
GANDER INT'L A	1.3	0.4	15.4	-12.8	20.2	43	85.8	92	3	13	122	105	500.7
GOOSE A	-1.5	0.2	16.9	-16.7	43.0	88	61.3	100	0	8	200	143	585.3
MARY'S HARBOUR	-2.1	-0.1	9.5	-13.9	9.2	18	31.8	42	69	6	*	*	560.8
PORT AUX BASQUES	*	*	*	*	*	*	*	*	*	*	*	*	*
ST ANTHONY	-2.0	-0.1	7.0	-13.6	32.2	75	48.8	52	5	8	*	*	604.0
ST JOHN'S A	*	*	*	*	*	*	*	*	*	*	*	*	*
ST LAWRENCE	2.5	1.4	10.9	-9.0	8.2	44	174.1	169	0	9	*	*	475.9
STEPHENVILLE A	2.8	1.0	15.5	-10.0	0.2	1	88.2	148	0	10	165	*	455.8
WABUSH LAKE A	-3.0	2.6	11.7	-22.5	34.7	*	55.0	105	18	10	186	*	630.3

AGROCLIMATOLOGICAL STATIONS

APRIL 1993

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	10.1	0.6	22.0	-1.0	0.0	142.8	129	0	21	111	153.8	309.1
SUMMERLAND	8.5	-0.2	17.0	-1.5	0.0	51.0	260	0	13	144	104.2	120.3
ALBERTA												
BEAVERLODGE	5.0	2.4	17.5	-4.0	26.7	41.4	215	0	5	217	33.7	43.0
LACOMBE	5.0	1.9	18.0	-5.0	0.0	22.9	97	0	6	187	28.7	31.6
SASKATCHEWAN												
INDIAN HEAD	4.2	1.1	20.5	-12.0	0.0	5.8	20	0	3	**	28.0	38.3
MELFORT	3.6	2.3	19.0	-7.0	34.3	39.5	209	0	6	149	23.5	35.5
REGINA	3.7	0.7	20.5	-11.5	0.0	25.9	109	0	6	**	16.5	25.8
SCOTT	4.0	1.3	17.0	-7.0	23.0	44.5	186	0	11	195	23.9	24.7
SWIFT CURRENT	5.5	1.5	19.0	-6.0	1.4	12.1	47	0	3	183	40.1	55.5
MANITOBA												
BRANDON	4.4	1.1	21.7	-8.6	1.6	25.6	70	0	5	**	25.1	28.5
MORDEN	4.7	1.3	21.0	-8.0	0.0	12.6	34	0	2	205	**	34.5
GLENLEA	4.0	0.0	20.0	-12.0	0.0	22.8	55	0	4	225	27.0	27.0
ONTARIO												
DELHI	7.2	0.5	25.0	-4.0	0.0	96.9	104	0	11	**	97.2	108.6
ELORA	5.8	0.7	19.5	-4.6	0.0	54.0	77	0	***	72	**	**
GUELPH	5.9	0.1	20.4	-5.9	2.7	83.5	113	0	10	146	62.0	71.6
HARROW	8.0	0.1	21.6	-2.5	0.0	64.1	79	0	10	**	105.8	120.1
KAPUSKASING	-0.1	-0.6	14.5	-16.5	30.2	93.0	191	0	11	161	5.3	7.1
OTTAWA	5.6	-0.1	22.1	-5.8	15.8	134.9	209	0	12	124	57.1	63.6
SMITHFIELD	7.2	1.1	19.8	-3.3	6.8	86.5	106	0	15	**	80.0	95.0

Courtesy of Agriculture Canada

STATION	Temperature C				Snowfall (cm)	Total Precipitation (mm)	% of Normal Precipitation	Snow on ground at end of month (cm)	No. of days with Precip 1.0 mm or more	Bright Sunshine (hours)	Degree days above 5 C	
	Mean	Difference from Normal	Maximum	Minimum							This month	Since Jan. 1st
QUEBEC												
LA POCATIERE	3.8	1.0	19.0	-8.0	14.0	113.3	179	0	10	153	33.3	35.1
L'ASSOMPTION	5.3	0.3	22.0	-5.5	28.5	168.2	235	0	14	116	50.4	53.7
NORMANDIN	2.3	1.8	14.5	-13.7	**	59.0	121	0	11	146	9.9	9.9
NEW BRUNSWICK												
FREDERICTON	5.4	1.4	20.5	-7.5	34.8	103.3	125	0	11	154	52.0	62.3
NOVA SCOTIA												
KENTVILLE	5.2	0.8	23.0	-8.5	26.5	71.8	87	0	11	154	69.0	81.7
NAPPAN	4.4	1.1	22.0	-9.5	32.7	99.3	132	0	13	131	49.5	54.8
PRINCE EDWARD ISLAND												
CHARLOTTETOWN	**	**	**	**	**	**	**	***	***	**	**	**
NEWFOUNDLAND												
ST. JOHN'S WEST	2.4	0.8	17.5	-10.0	0.0	92.7	73	0	11	96	26.4	29.7

Courtesy of Agriculture Canada

...continued from page 5

from 28 percent above normal at Sable Island, to 32 percent above normal at Halifax.

Snowfall totals were well-below normal in northern New Brunswick. Both Charlo and St. Leonard N.B., reported snowfall totals of less than 10 cm. In Nova Scotia and Prince Edward Island, on the other hand, snowfall was generally above average, with two snowfall events, one near the beginning and the other at the end of the month accounting for most of this month's totals.

Sunshine hours were generally below normal with the exception of Sable Island.

The month began with a couple of slow moving disturbances tracking south of Nova Scotia, which produced some snow, freezing rain and rain. Shearwater, N.S. received 14.4 cm of snow during the first four days of the month, which is 0.2 cm above their April normal. Moncton, N.B. received 27.4 cm in the first three days. Lots of freezing precipitation was also reported, and on the 3rd the highway from Saint John to St. Stephen, N.B. had to be closed, when hydro towers supporting high-voltage power lines collapsed due to a heavy ice buildup caused by the freezing precipitation.

Ice jams along the Saint John River and its tributaries caused flooding in some low

lying areas of New Brunswick early in the month. On the 12th, some roads were reported washed out and some highways were closed. One of the hardest hit areas was at Perth-Andover, where about 230 people were evacuated.

Just when it seemed that spring had arrived, a winter-like storm dumped a mixture of snow, freezing rain, ice pellets and rain over the southern areas of the Maritimes on the 27th. Greenwood, N.S., reported 18 cm of snow. There were a number of weather related accidents, including three deaths. Early on the 28th, a transport truck carrying hazardous chemicals overturned near Shubenacadie, N.S. forcing the evacuation of local residents and a school. The highway from Halifax to Truro was closed for approximately 12 hours.

Newfoundland and Labrador

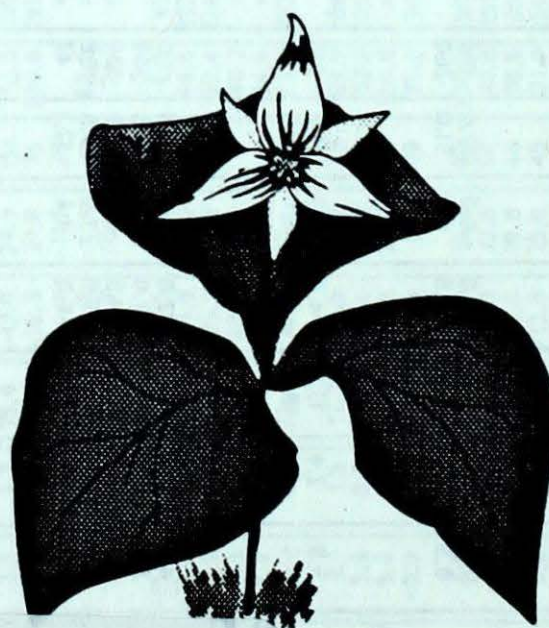
Near-normal temperatures and below-normal snowfall prevailed across the Island in April. In the first two weeks of the month, double digit highs were recorded on several days. The highest temperature for the month was reported at Deer Lake, with a 16.4°C reading. At the other extreme, St. Anthony reported -13.6°C, as the lowest temperature.

There was less snow and more rain this month, especially along the south coast and portion of the west coast. Stephenville recorded 37.2 mm of rain on the twenty-third.

All stations in the province reported above-normal hours of bright sunshine, except St. John's, where there was 11 hours less sunshine than average. The areal extent of the ice pack was greater than normal for this time of year, although the prevailing wind direction from the west was favourable in keeping the pack ice offshore.

Temperatures averaged near normal across most of Labrador, except in the western regions, where temperatures were as much as 2°C above normal. Goose Bay reported a maximum reading of 16.9°C on the 12th. In contrast, a -22.4°C reading was recorded at Nain, as the lowest value this month.

While snowfall in Labrador during April was below normal, hours of bright sunshine were above normal. Mary's Harbour had 44 cm less snow than the average, while Goose Bay reported 60.2 hours more sunshine than normal in April. By the end of the month there was still a very large area of sea ice lying off the coast of Labrador.



Environment Canada Environnement

CLIMATIC PERSPECTIVES (MONTHLY REVIEW)

Vol: 15 Date: 930400

OTM

1202634E
REF # 1