Environment Canada | Environnement Canada

Climatic Perspectives

MONTHLY SUPPLEMENT INCLUDED

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Dry weather increases threat of forest fires

March and April have been relatively dry months in some parts of northwestern Ontario and Manitoba. In Ontario, April precipitation so far has ranged between 10 and 20 millimetres, and March 1990 saw the least amount of snow since 1973. Currently, there are 16 surface fires burning in Ontario, most of them in the Kenora-Atikokan-Thunder Bay areas, but this is not abnormal at this time of year. Officials feel it is still a little premature to get too concerned about the potential seriousness of the upcoming forest fire season, as a lot can change weather-wise in the next month or so.

On the prairies, relatively dry conditions are evident in the Interlake region and the eastern parts of Manitoba, where several early season fires have started. Currently, fire fighters are in the process of mopping up 17 surface grass fires. Officials feel that conditions are ripe for further increased fire activity. In Alberta, the forest fire season is two weeks later than last year. Fires have only burned 35 hectares so far this year, compared to 742 hectares burned at the same time last year. There are two grass fires burning in the central part of the province, but showery weather has lowered the fire hazard.

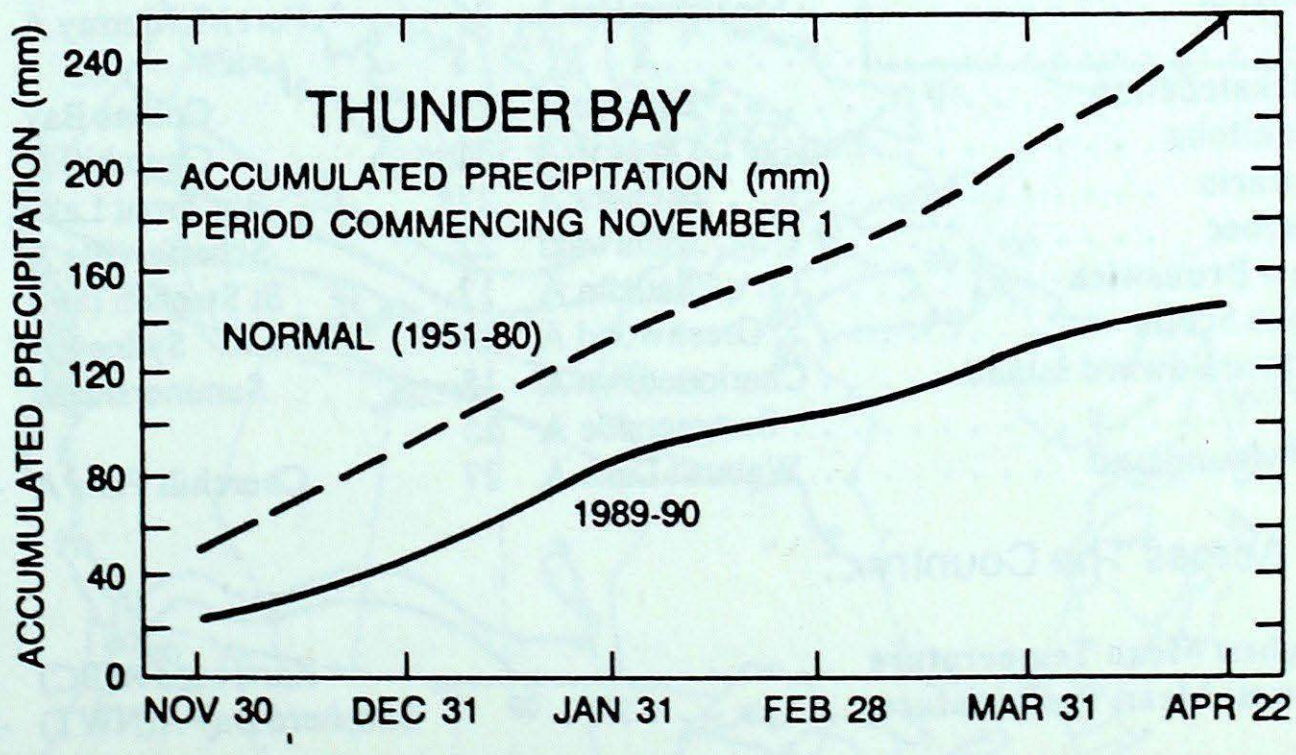
At the moment, conditions in British Columbia are fairly damp. There are a few nuisance fires burning in the province due to slash burning that got out of control. Areas to watch in the upcoming weeks are the southern interior, the far north, and the south end of Vancouver Island.

Wet spring in the Maritimes

It continues to be very wet, with the heaviest rainfalls occurring in Nova Scotia. This week alone, Shearwater has received 81.8 mm of rain, bringing their monthly precipitation total to 207.6 mm, which is 107.1 mm above the April normal, and already surpasses the 1946 April record of 194.1 mm. This total is also only 9.1 mm away from tying the April record for the Halifax-Dartmouth area set in 1920, where records date as far back as 1871. As a result of the wet weather, the forest fire hazard is minimal.

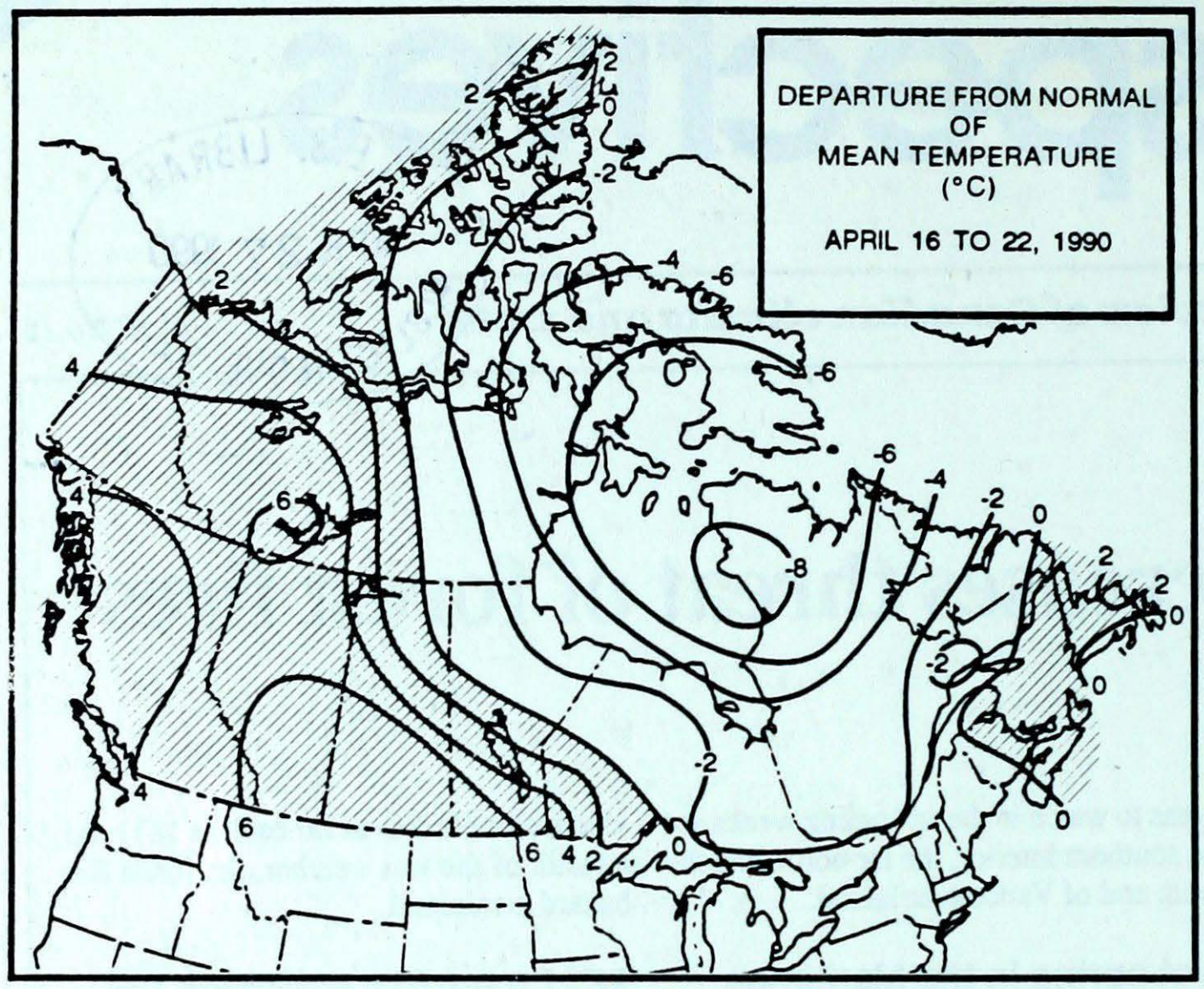
Mild weather expected for the eastern half of the country

For the week of April 30, above-normal temperatures are expected across Ontario, Quebec, Labrador and the Atlantic provinces, with temperatures 2 to 4 degrees above normal. Elsewhere, temperatures are expected to be about 2°C below normal with the Arctic Islands about 4°C below normal.



Precipitation has been considerably below normal in this part of northwestern Ontario, which could lead to a potentially severe forest fire season.

Canada



Weekly normal temperatures (°C)

	max.	min.
Whitehorse A	5.6	-4.8
Iqaluit A	-8.7	-19.0
Yellowknife A	0.0	-11.0
Vancouver Int'l A	12.6	4.7
Victoria Int'l A	12.6	3.9
Calgary Int'l A	9.1	-2.8
Edmonton Int'l A	9.1	-2.5
Regina A	10.4	-2.4
Saskatoon A	9.7	-1.8
Winnipeg Int'l A	10.4	-0.7
Ottawa Int'l A	13.4	2.1
Toronto (Pearson Int'l A)	13.9	2.2
Montréal Int'l A	13.2	2.2
Québec A	9.8	-0.3
Fredericton A	11.2	-0.7
Saint John A	9.3	-0.9
Halifax (Shearwater)	9.1	0.5
Charlottetown A	7.5	-1.1
Goose A	3.7	-5.5
St John's A	4.9	-1.8

Weekly temperature and precipitation extremes

	Maximum temperature (°C)		Minimum temperature (°C)		Heaviest precipitation (mm)	
British Columbia	Abbotsford A	27	Dease Lake	-8	Estevan Point (aut)	64
Yukon Territory	Carmacks	16	Komakuk Beach A	-26	Swift River	13
Northwest Territories	Fort Smith A	18	Shepherd Bay A	-40	Alert	7
Alberta	Medicine Hat A	25	Fort McMurray A	-9	Fort McMurray A	3
					Lloydminster A	3
Saskatchewan	Estevan A	29	Collins Bay	-18	La Ronge A	8
Manitoba	Portage La Prairie A	31	Churchill A	-21	Gimli	8
Ontario	Kenora A	27	Big Trout Lake	-21	Windsor A	18
Québec	Maniwaki	22	Schefferville A	-29	Natashquan	33
New Brunswick	Chatham A	17	St Stephen (aut)	-7	Saint John A	39
Nova Scotia	Greenwood A	17	Sydney A	-6	Shearwater A	82
Prince Edward Island	Charlottetown A	15	Summerside A	-4	Charlottetown A	42
	Summerside A	15				
Newfoundland	Wabush Lake A	27	Churchill Falls A	-19	Burgeo	59

Across The Country...

Highest Mean Temperature	Kamloops A(BC)	15
Lowest Mean Temperature	Shepherd Bay A(NWT)	-28

90/04/16-90/04/22

CLIMATIC PERSPECTIVES
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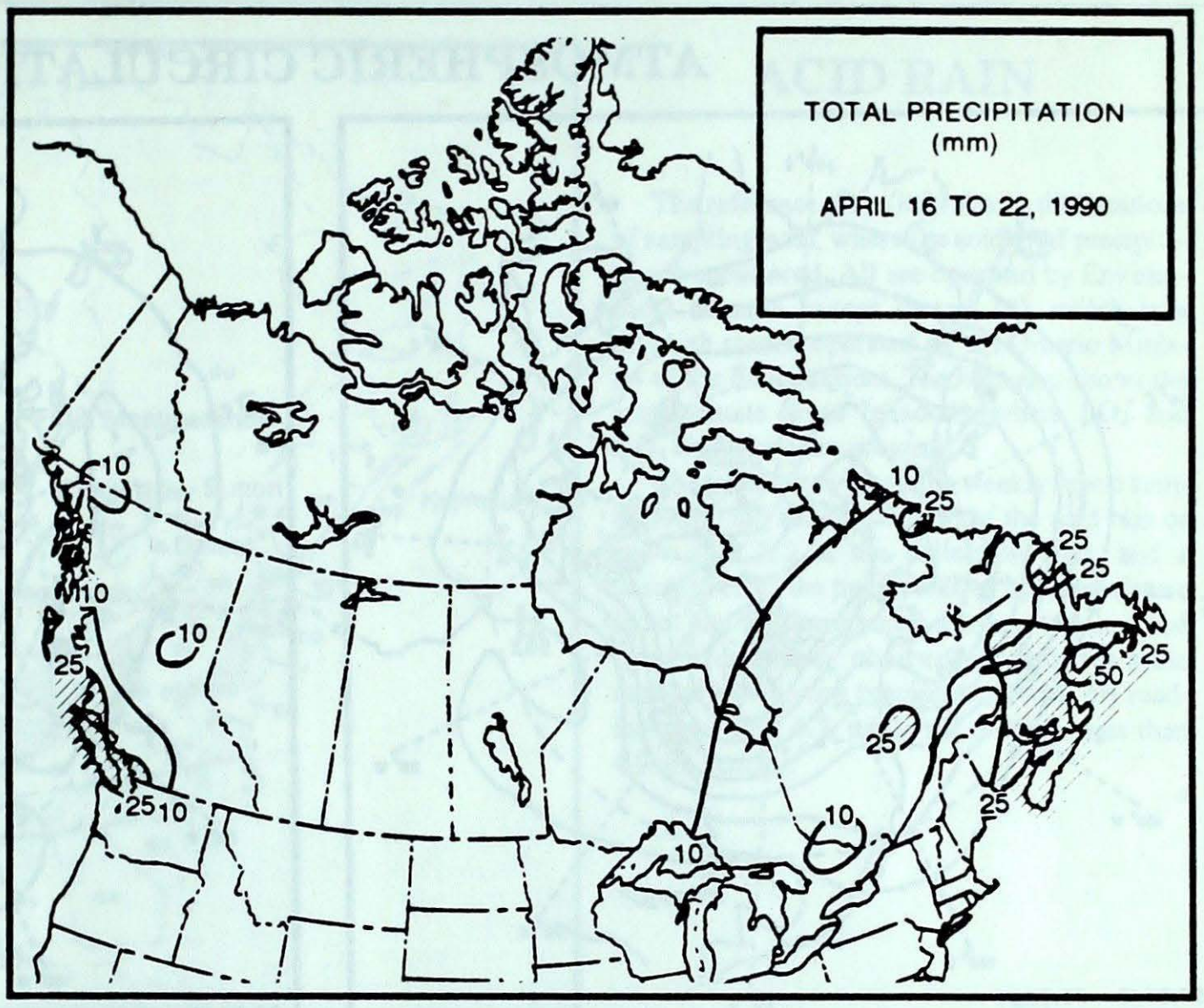
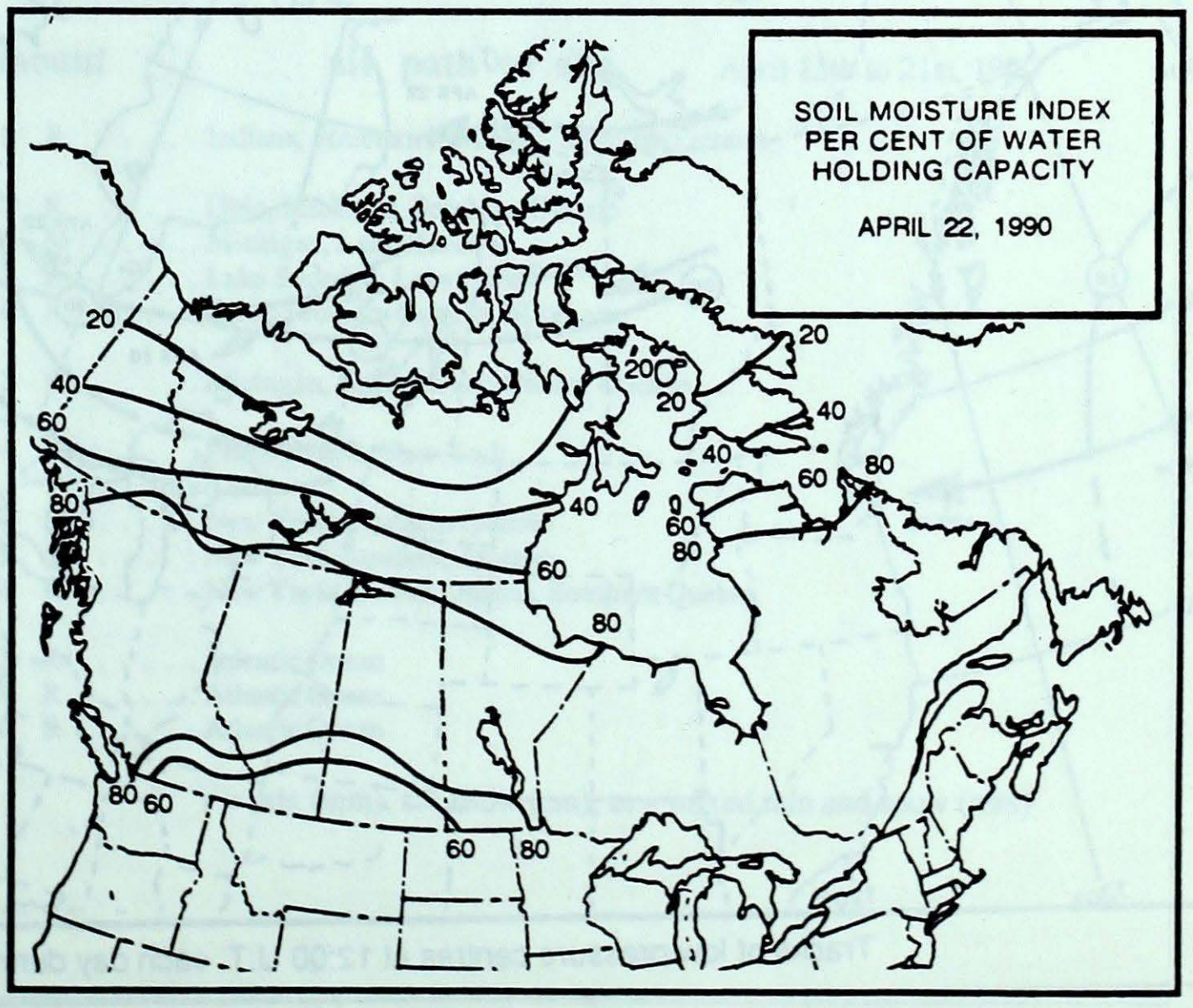
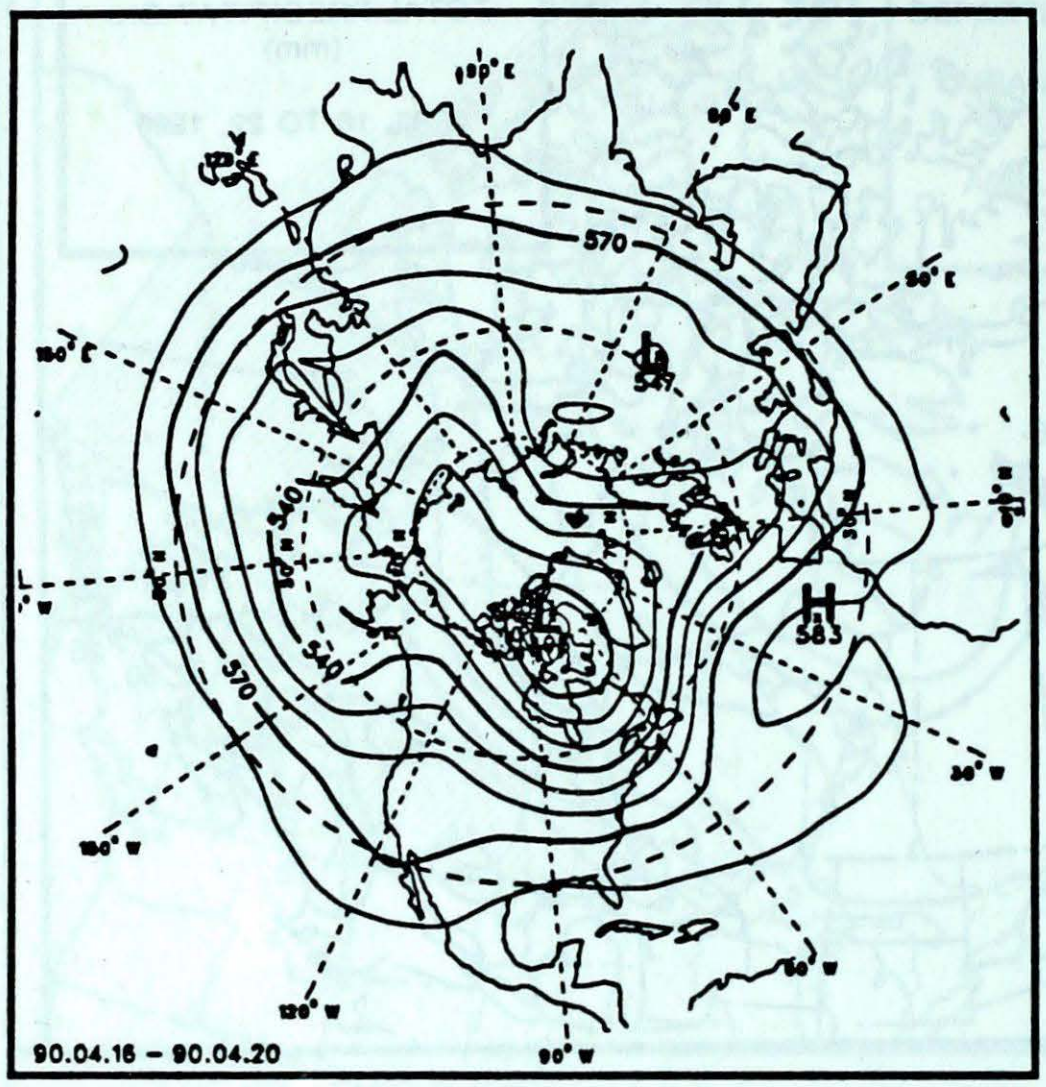
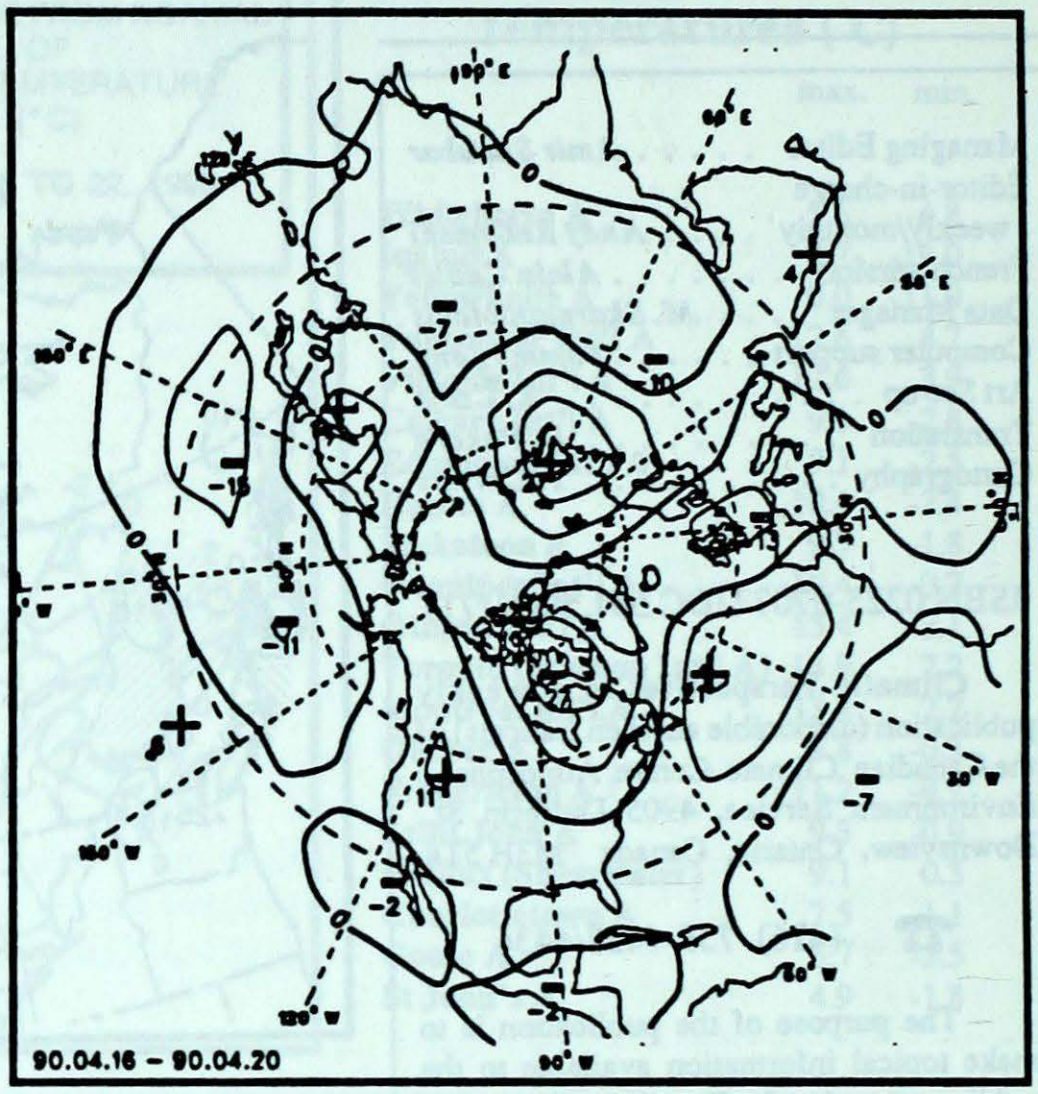




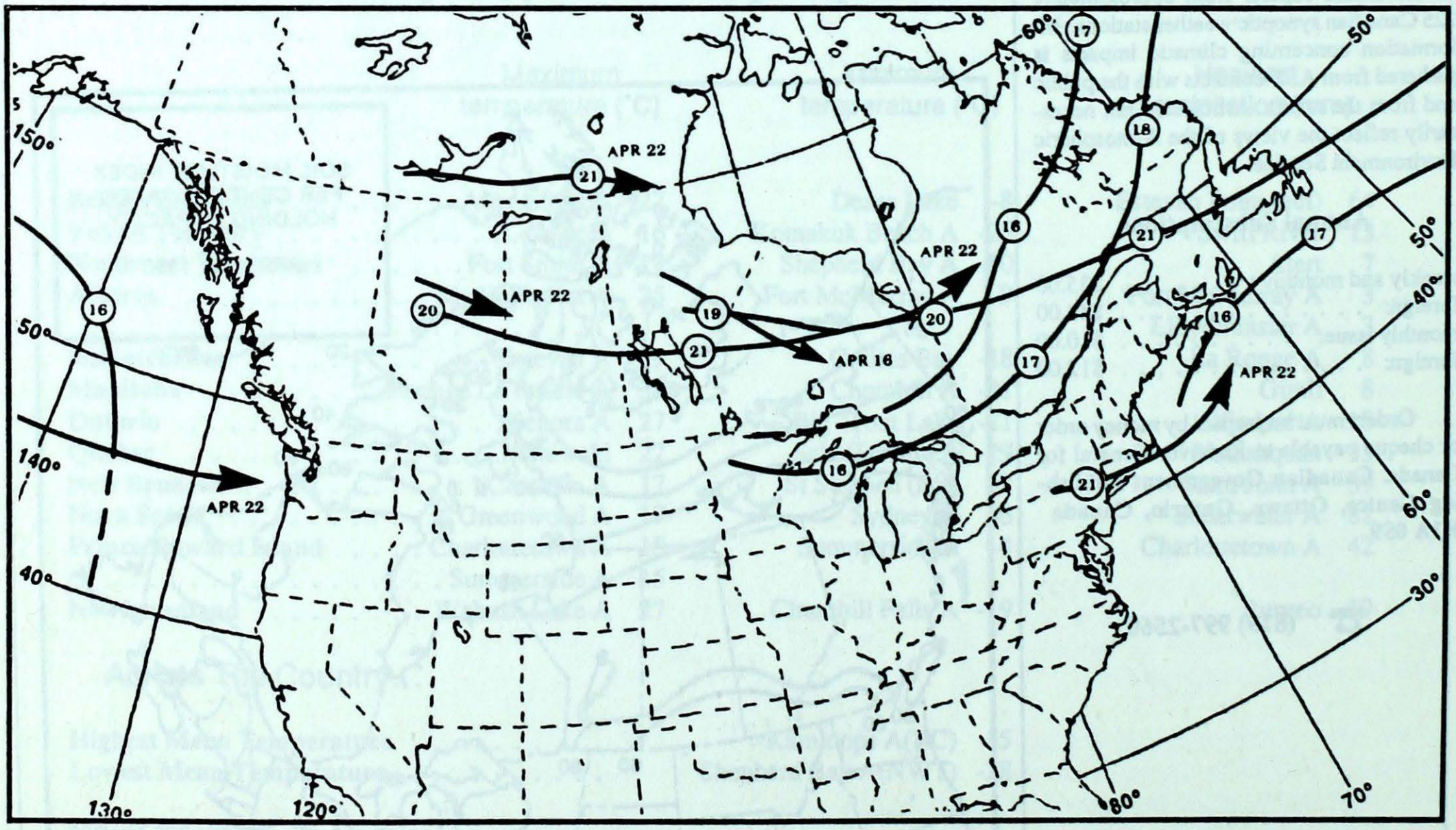
ATMOSPHERIC CIRCULATION



Mean geopotential height
50-kPa level (10-decametre intervals)

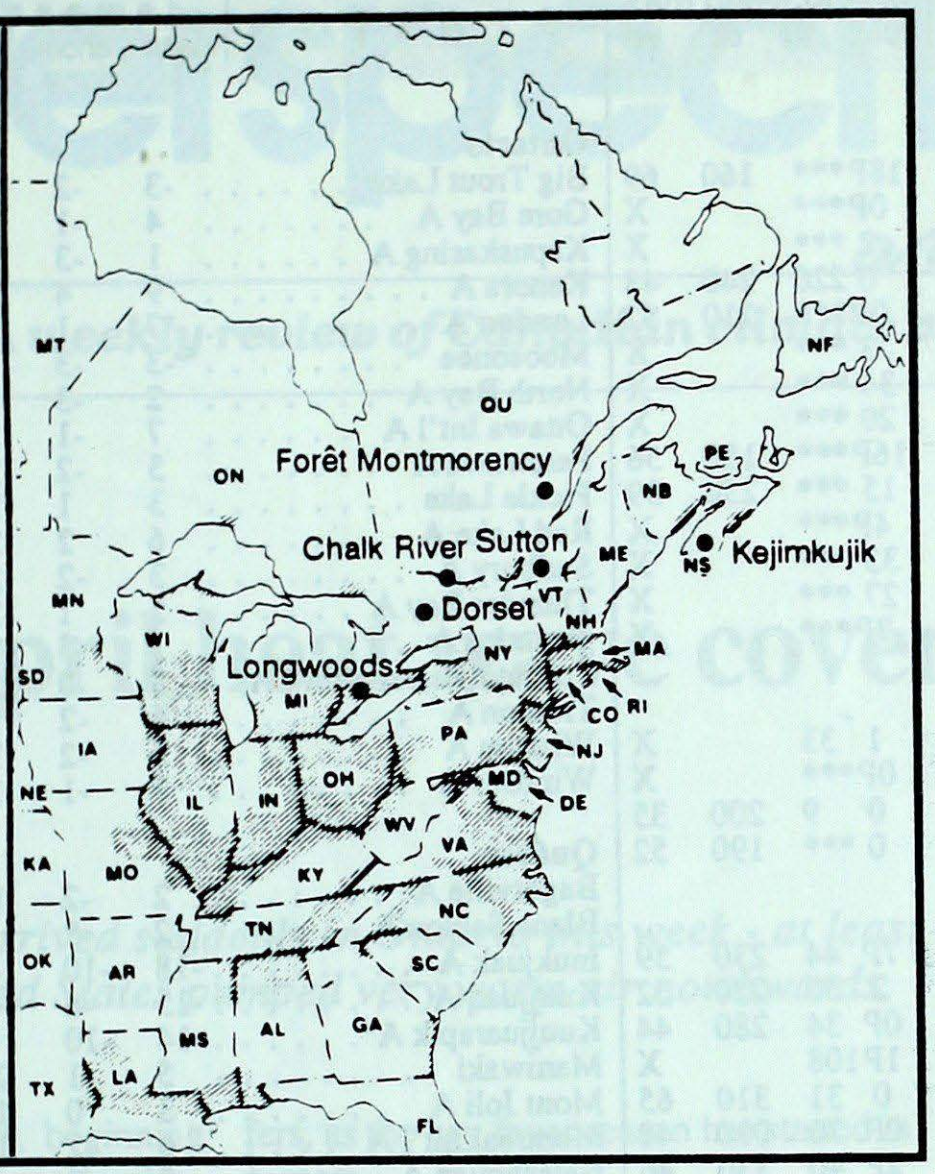


Mean geopotential height anomaly
50-kPa level (10-decametre intervals)



Tracks of low pressure centres at 12:00 U.T. each day during the period.

ALABAMA — AL
ARKANSAS — AR
CONNECTICUT — CO
DELAWARE — DE
FLORIDA — FL
GEORGIA — GA
ILLINOIS — IL
INDIANA — IN
IOWA — IA
KANSAS — KA
KENTUCKY — KY
LOUISIANA — LA
MAINE — ME
MANITOBA — MT
MARYLAND — MD
MASSACHUSETTS — MA
MICHIGAN — MI
MINNESOTA — MN
MISSISSIPPI — MS
MISSOURI — MO
NEBRASKA — NE
NEW BRUNSWICK — NB
NEWFOUNDLAND — NF
NEW HAMPSHIRE — NH
NEW JERSEY — NJ
NEW YORK — NY
NORTH CAROLINA — NC
NORTH DAKOTA — ND
NOVA SCOTIA — NS
OHIO — OH
OKLAHOMA — OK
ONTARIO — ON
PENNSYLVANIA — PA
PRINCE EDWARD ISLAND — PE
QUÉBEC — QU
RHODE ISLAND — RI
SOUTH CAROLINA — SC
SOUTH DAKOTA — SD
TENNESSEE — TN
TEXAS — TX
VERMONT — VT
VIRGINIA — VA
WEST VIRGINIA — WV
WISCONSIN — WI



ACID RAIN

The reference map (left) shows the locations of sampling sites, where the acidity of precipitation is monitored. All are operated by Environment Canada except Dorset (*), which is a research station operated by the Ontario Ministry of the Environment. The map also shows the approximate areas (shaded), where SO_2 and NO_x emissions are greatest.

The table below gives the weekly report summarizing the acidity (or pH) of the acid rain or snow that fell at the collection sites, and a description of the path travelled by the moisture laden air. Environmental damage to lakes and streams is usually observed in sensitive areas regularly receiving precipitation with pH readings less than 4.7, while pH readings less than 4.0 are serious.

Site	day	pH	amount		air path to site	April 15th to 21st, 1990
Longwoods	16	3.8	5	R	. . . . .	Indiana, Southern Michigan, Southern Ontario
Dorset *	15	4.3	2	R	. . . . .	Ohio, Michigan, Southern Ontario
	16	4.3	11	M	. . . . .	Michigan, Lake Huron
	17	4.5	3	S	. . . . .	Lake Superior, Lake Huron
	20	4.1	6	R	. . . . .	Ohio, Southern Ontario, Michigan
Chalk River	16	4.0	2	R	. . . . .	Michigan, Southern and Central Ontario
Sutton	20	3.9	14	R	. . . . .	Pennsylvania, New York
Montmorency	15	3.6	1	M	. . . . .	New York, Southern Quebec
	17	4.2	9	S	. . . . .	New York, Southern Quebec
	20	4.4	4	R	. . . . .	New York, Eastern Ontario, Southern Quebec
Kejimkujik	15	5.0	33	R	. . . . .	Atlantic Ocean
	17	4.4	24	R	. . . . .	Atlantic Ocean
	21	4.4	15	R	. . . . .	Atlantic Ocean

r = rain (mm), s = snow (cm), m = mixed rain and snow (mm)

STATION	temperature mean	anom	max	min	precip. ptot	st	wind max dir	vel
British Columbia								
Cape St James	7P	1P	10P	5P	18P	***	160	69
Cranbrook A	11P	6P	21P	-2P	0P	***		X
Fort Nelson A	9	6	18	-3	2	***		X
Fort St John A	9	6	18	-4	0	220	240	48
Kamloops A	15P	6P	25P	4P	0P	***	210	52
Penticton A	13	5	22	2	3	***		X
Port Hardy A	10	3	18	4	34	***		X
Prince George A	7	3	17	-3	20	***		X
Prince Rupert A	8P	3P	20P	5P	16P	***	150	56
Revelstoke A	11	4	20	1	15	***	230	39
Smithers A	7P	3P	18P	-3P	4P	***		X
Vancouver Int'l A	12	3	19	6	33	***		X
Victoria Int'l A	11	3	23	4	27	***		X
Williams Lake A	9P	5P	19P	0P	7P	***		X
Yukon Territory								
Komakuk Beach A	-15	2	-6	-26	1	33		X
Teslin (aut)	4P	*	13P	-6P	0P	***		X
Watson Lake A	5	5	14	-8	0	9	200	35
Whitehorse A	5	5	13	-4	0	***	190	52
Northwest Territories								
Alert	-20P	4P	-15P	-25P	7P	44	230	59
Baker Lake A	-19	-4	-11	-31	2	30	220	52
Cambridge Bay A	-20P	0P	18P	-30P	0P	34	280	44
Cape Dyer A	-20P	-5P	-14P	-31P	1P	108		X
Clyde A	-25	-7	-11	-38	0	31	310	65
Coppermine A	-14P	2P	-5P	-25P	0P	70	090	48
Coral Harbour A	-21P	-7P	-13P	-30P	2P	40	330	46
Eureka	-27	-2	-21	-36	1	23	300	54
Fort Smith A	5	6	18	-10	2	6	320	39
Hall Beach A	-27	-8	-18	-38	1	44	300	43
Inuvik A	-11	2	6	-22	3	38	160	33
Iqaluit A	-21	-7	-13	-28	1	30		X
Mould Bay A	-23	0	-17	-31	0	22	290	41
Norman Wells A	-2P	4P	11P	-10P	3P	1	300	48
Resolute A	-25	-3	-17	-32	2	31	070	48
Yellowknife A	0	6	10	-12	6	7		X
Alberta								
Calgary Int'l A	10	7	21	-4	0	***	010	80
Cold Lake A	9	5	21	-8	1	1	300	44
Edmonton Namao A	10	6	21	-6	0	***	290	61
Fort McMurray A	9	6	22	-9	3	***	270	48
High Level A	6	3	18	-6	0	1	270	35
Jasper	9	5	18	-6	1	***		X
Lethbridge A	11	6	23	-5	0	***	270	59
Medicine Hat A	13	7	25	-7	1	***	030	48
Peace River A	8P	6P	18P	-5P	2P	***	250	43
Saskatchewan								
Cree Lake	3	1	16	-13	5	1	340	48
Estevan A	11	7	29	-6	0	***	090	61
La Ronge A	5	3	20	-11	8	***	300	44
Regina A	11	7	28	-7	0	***	290	57
Saskatoon A	10	6	26	-9	0	***	290	56
Swift Current A	11	7	25	-8	0	***	170	52
Yorkton A	10	7	27	-5	0	***	200	50
Manitoba								
Brandon A	10	6	28	-4	0	***	190	56
Churchill A	-10	-2	4	-21	0	14	080	70
Lynn Lake A	0	-1	14	-20	4	2	260	24
The Pas A	5P	3P	21P	-10P	0P	***	330	43
Thompson A	0	-1	18	-17	1	1	350	46
Winnipeg Int'l A	10	5	28	-8	1'	***	200	59

STATION	temperature mean	anom	max	min	precip. ptot	st	wind max dir	vel
Ontario								
Big Trout Lake	-3	-2	13	-21	3	16	040	63
Gore Bay A	4	-1	22	-5	2	***	290	52
Kapuskasing A	1	-3	13	-14	9	4	210	83
Kenora A	9	4	27	-11	2	***	200	50
London A	7	-1	19	-4	9	***	290	67
Moosonee	-3	-3	13	-13	3	8	200	50
North Bay A	2	-3	14	-9	10	1	220	54
Ottawa Int'l A	7	-1	21	-4	11	***	270	70
Petawawa A	5	-2	21	-6	5	***	270	59
Pickle Lake	3	1	20	-15	2	1	250	54
Red Lake A	6	2	24	-13	5	1	330	48
Sudbury A	3	-2	21	-9	15	***	230	70
Thunder Bay A	5	1	21	-6	2	***	320	56
Timmins A	1	-3	16	-14	6	1	230	65
Toronto(Pearson Int'l A)	8	0	22	-2	16	***	290	67
Trenton A	6	-2	16	-2	16	***	280	69
Wiarton A	5	-2	18	-3	16	***	230	59
Windsor A	9	-1	19	-3	18	***	300	65
Québec								
Bagotville A	2	-2	15	-10	12	1	300	48
Blanc Sablon A	-2	*	4	-8	30	22	090	74
Inukjuak A	-18	-10	-6	-28	0	41	280	35
Kuujjuaq A	-15	-8	-6	-25	8	12	260	59
Kuujjuarapik A	-14	-10	2	-26	9	28	030	46
Maniwaki	5	-1	22	-7	9	***	250	54
Mont Joli A	3	0	12	-5	5	***	240	76
Montréal Int'l A	6	-2	17	-5	13	***	260	82
Natashquan A	0	0	6	-8	33	20	270	80
Québec A	4	-1	14	-6	17	***	260	74
Schefferville A	-12	-6	4	-29	19	65	330	56
Sept-Îles A	-1P	-3P	10P	-13P	14P	3	320	63
Sherbrooke A	4	-1	16	-5	18	***	280	69
Val-d'Or A	0	-3	15	-16	21	5	230	67
New Brunswick								
Charlo A	3	1	11	-6	16	2	300	69
Chatham A	4	0	17	-6	22	1	220	72
Fredericton A	5	0	15	-4	12	***	180	65
Moncton A	5P	1P	16P	-4P	14P	***	290	63
Saint John A	4	0	13	-4	39	***	220	63
Nova Scotia								
Greenwood A	6	0	17	-3	29	***	200	74
Shearwater A	5	0	16	-2	82	***	280	46
Sydney A	4	2	13	-6	37	***	170	69
Yarmouth A	4P	-1P	13P	-2P	45P	***	300	56
Prince Edward Island								
Charlottetown A	4P	1P	15P	-4P	42P	1	180	56
Summerside A	4	1	15	-4	29	***	170	63
Newfoundland								
Cartwright	-2	0	6	-10	12	***	240	69
Churchill Falls A	-8	-2	5	-19	23	93	270	72
Gander Int'l A	3	2	14	-5	10	1	240	57
Goose A	-2	-2	6	-14	12	47	240	67
Port Aux Basques	0	-1	5	-6	52	1	090	61
St John's A	4	2	13	-5	31	***	170	76
St Lawrence	2	1	14	-6	42	***		X
Wabush Lake A	-5	-1	27	-17	22	25	210	67

90/04/16-90/04/22

mean = mean weekly temperature, °C
max = maximum weekly temperature, °C
min = minimum weekly temperature, °C
anom = mean temperature anomaly, °C

ptot = weekly precipitation total in mm
st = snow thickness on the ground in cm
dir = direction of max wind, deg. from north.
vel = wind speed in km/h

— Annotations —
X = no observation
P = less than 7 days of data
* = missing data when going to printing.