

Climatic Perspectives

A WEEKLY REVIEW OF CANADIAN CLIMATE



MONTHLY SUPPLEMENT INCLUDED

Canadian Climate Centre

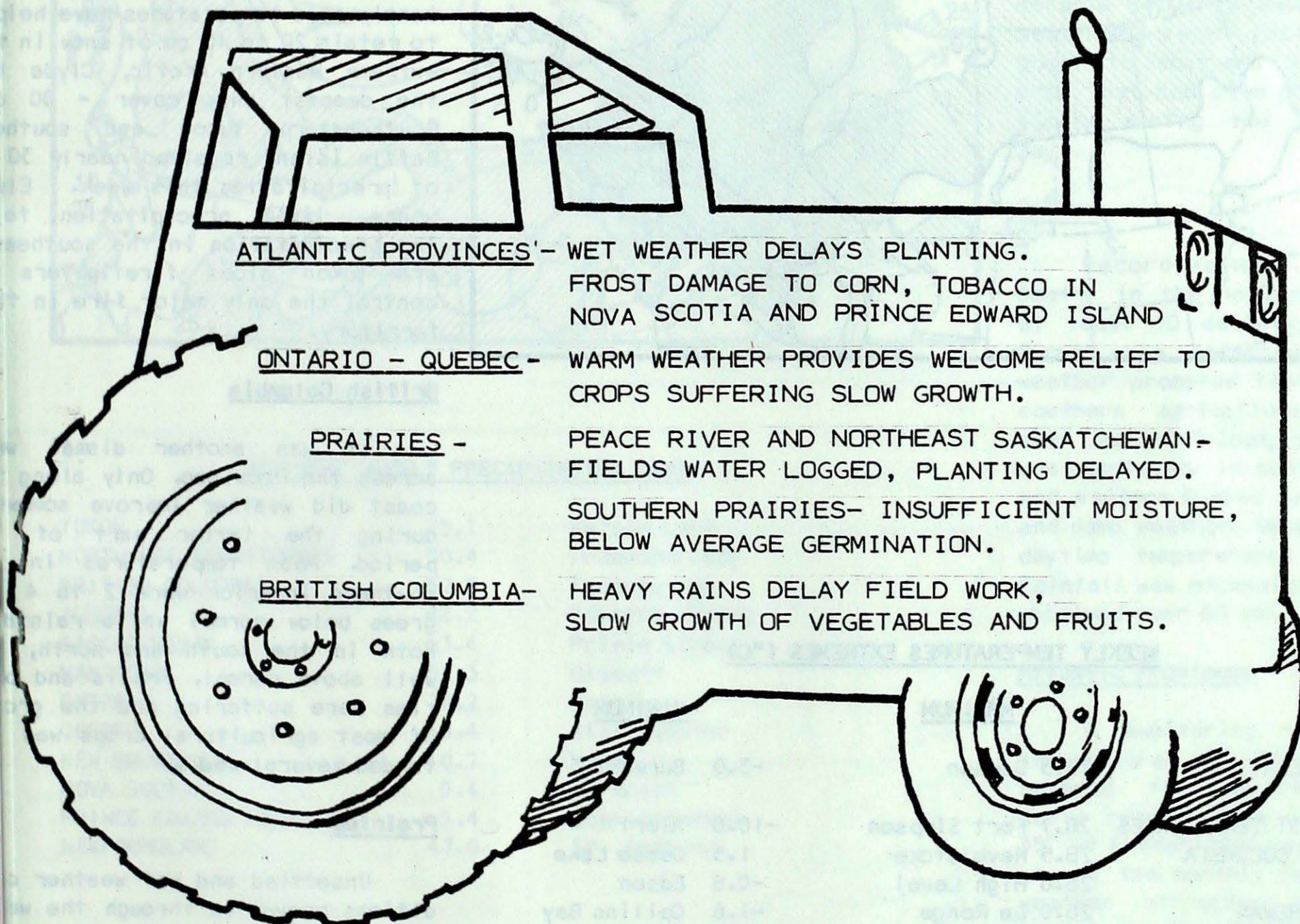
JUNE 15, 1984

(Aussi disponible en français)

VOL. 6 NO. 23

FOR THE PERIOD JUNE 5 TO 11, 1984

● Update: Agriculture across Canada



ATLANTIC PROVINCES - WET WEATHER DELAYS PLANTING. FROST DAMAGE TO CORN, TOBACCO IN NOVA SCOTIA AND PRINCE EDWARD ISLAND

ONTARIO - QUEBEC - WARM WEATHER PROVIDES WELCOME RELIEF TO CROPS SUFFERING SLOW GROWTH.

PRAIRIES - PEACE RIVER AND NORTHEAST SASKATCHEWAN - FIELDS WATER LOGGED, PLANTING DELAYED. SOUTHERN PRAIRIES - INSUFFICIENT MOISTURE, BELOW AVERAGE GERMINATION.

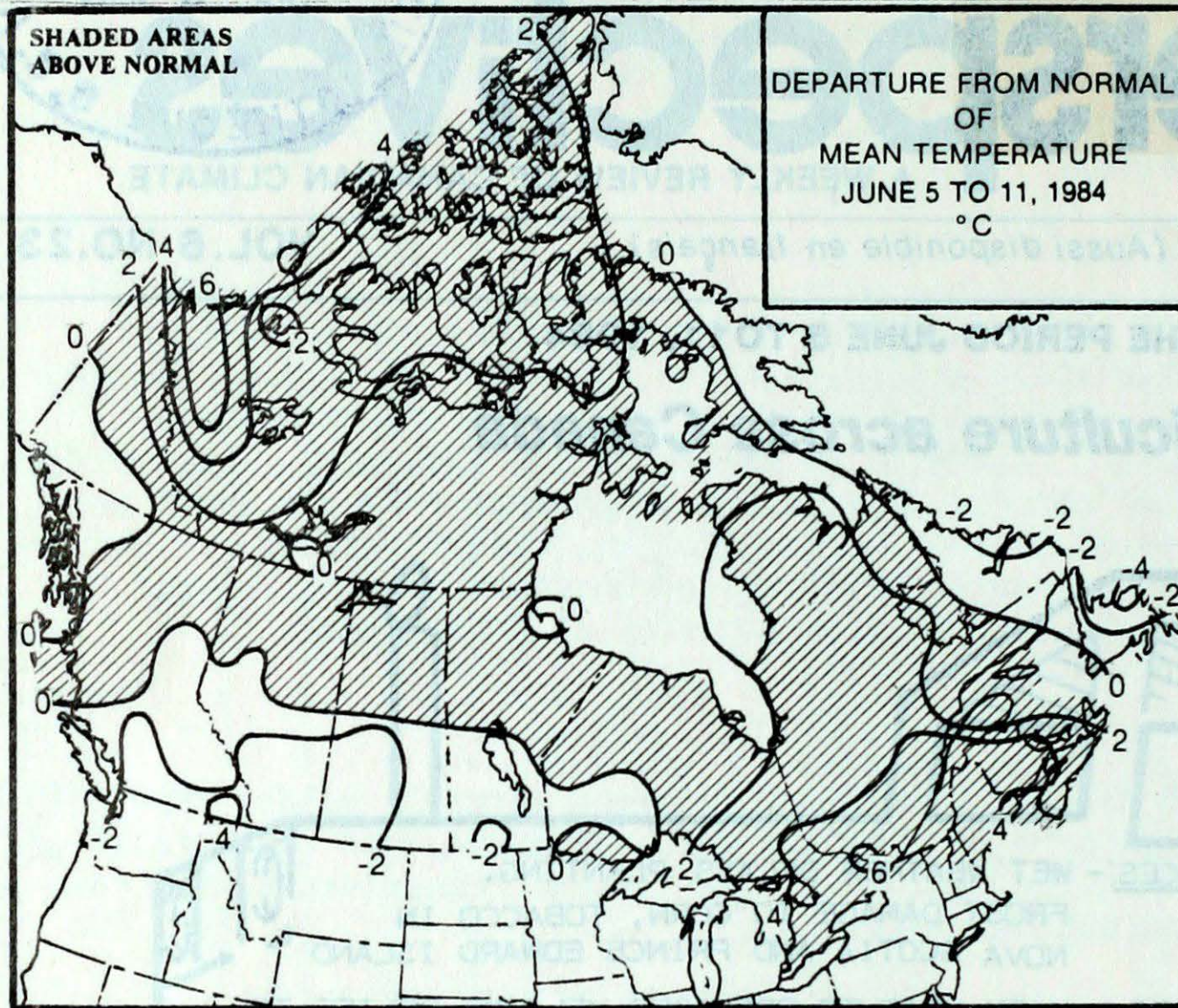
BRITISH COLUMBIA - HEAVY RAINS DELAY FIELD WORK, SLOW GROWTH OF VEGETABLES AND FRUITS.

INSIDE THE MAY MONTHLY SUPPLEMENT

CORN HEAT UNITS IN CANADA

A REVIEW OF SPRING WEATHER - 1984

CROP PROSPECTS FOR 1984



ACROSS THE COUNTRY...

Yukon and Northwest Territories

To the delight of most of the Yukon residents, summer weather arrived. Daytime temperatures in the low twenties were common - place across the eastern half of the Arctic, and the readings climbed to 29° at Fort Simpson on June 9. Weekly temperatures were 2 to 7 degrees above normal almost everywhere, only Baffin Island experienced cold weather. Consistently cold temperatures have helped to retain 20 to 40 cm of snow in the extreme eastern Arctic, Clyde had the deepest snow cover - 80 cm. Southeastern Yukon and southern Baffin Island received nearly 30 mm of precipitation this week. Elsewhere, light precipitation fell. The precipitation in the southeastern Yukon aided firefighters to control the only major fire in that territory.

British Columbia

It was another dismal week across the Province. Only along the coast did weather improve somewhat during the latter part of the period. Mean temperatures in the southern interior were 2 to 4 degrees below normal while rainfall, both in the south and north, was well above normal. Fruits and berries were suffering and the growth of most agricultural crops was retarded several weeks.

Prairies

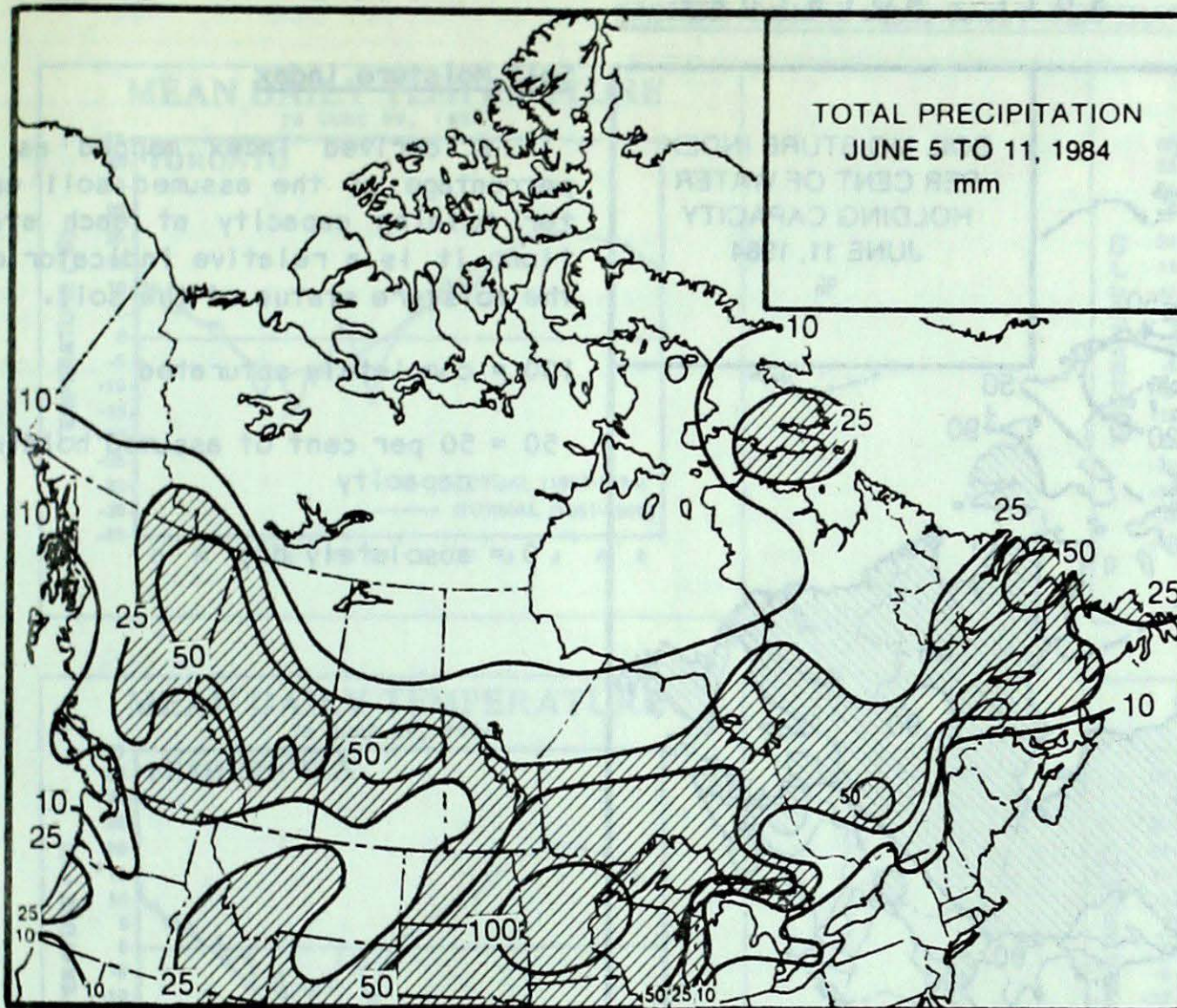
Unsettled and wet weather conditions prevailed through the week. Precipitation, with the exception of the north, ranged between 20 and 50 millimetres but some communities in the east received more than 100 mm of rain. In southern Manitoba localized heavy downpours caused some flooding in low lying areas. Over the weekend, nighttime temperatures in southern Manitoba dropped to near freezing and frost damaged some sensitive crops. Funnel clouds were sighted near Regina. The ski season at Sunshine ski resort near Banff came to an end last week.

WEEKLY TEMPERATURES EXTREMES (°C)

	<u>MAXIMUM</u>	<u>MINIMUM</u>
YUKON TERRITORY	23.3 Dawson	-3.0 Burwash
NORTHWEST TERRITORIES	28.7 Fort Simpson	-10.0 Alert
BRITISH COLUMBIA	28.5 Revelstoke	1.5 Dease Lake
ALBERTA	28.0 High Level	-0.6 Edson
SASKATCHEWAN	26.0 La Ronge	-1.6 Collins Bay
MANITOBA	27.3 Portage La Prairie	-7.2 Gretna
ONTARIO	32.6 Ottawa	0.1 Big Trout Lake
QUEBEC	31.7 Québec	-3.3 La Grande Rivière
NEW BRUNSWICK	34.9 Fredericton	1.2 Charlo
NOVA SCOTIA	33.3 Greenwood	0.0 Inverness
PRINCE EDWARD ISLAND	29.8 Charlottetown	3.3 Charlottetown
NEWFOUNDLAND	21.0 St. Lawrence	-3.2 Churchill Falls

ACROSS THE NATION

Warmest mean temperature	24.4	Windsor, ONT
Coollest mean temperature	-7.7	Broughton Island, NWT



HEAVIEST WEEKLY PRECIPITATION (mm)

YUKON	25.1	Watson Lake
NORTHWEST TERRITORIES	30.4	Frobisher Bay
BRITISH COLUMBIA	52.8	Fort Nelson
ALBERTA	82.2	Edmonton Namao
SASKATCHEWAN	63.4	Prince Albert
MANITOBA	52.3	Bissett
ONTARIO	74.2	Britt
QUEBEC	65.4	Blanc Sablon
NEW BRUNSWICK	10.7	Moncton
NOVA SCOTIA	5.4	Yarmouth
PRINCE EDWARD ISLAND	5.4	Charlottetown
NEWFOUNDLAND	47.6	St. Anthony

Forest Fire Season in British Columbia

Owing to the cool and damp weather this spring, forest fire activity was well below normal in British Columbia. The forest fire danger was described as low over most of the Province. There was, however, a major fire that erupted near Fort Nelson near the

end of May. The fire covering an estimated 4,000 hectares burned valuable timber, but was brought under control. This year over 7,700 hectares have been burned as compared to 56,400 hectares for the same period last year.

Ontario

Hot summery weather arrived as the temperatures rose to a hot 30° across the Province. A number of record high overnight readings were broken; the most notable occurrence at London where a minimum temperature of 22.6° on June 9 erased the previous record of 18.3°.

Severe thunderstorms accompanied the warm and humid weather. Large size hail and high winds pounded southwestern Ontario on June 10; near London, winds caused considerable property damage. The unseasonable warmth provided a welcome boost to southern Ontario's field crop that had been progressing very slowly during the cool and dull May.

Québec

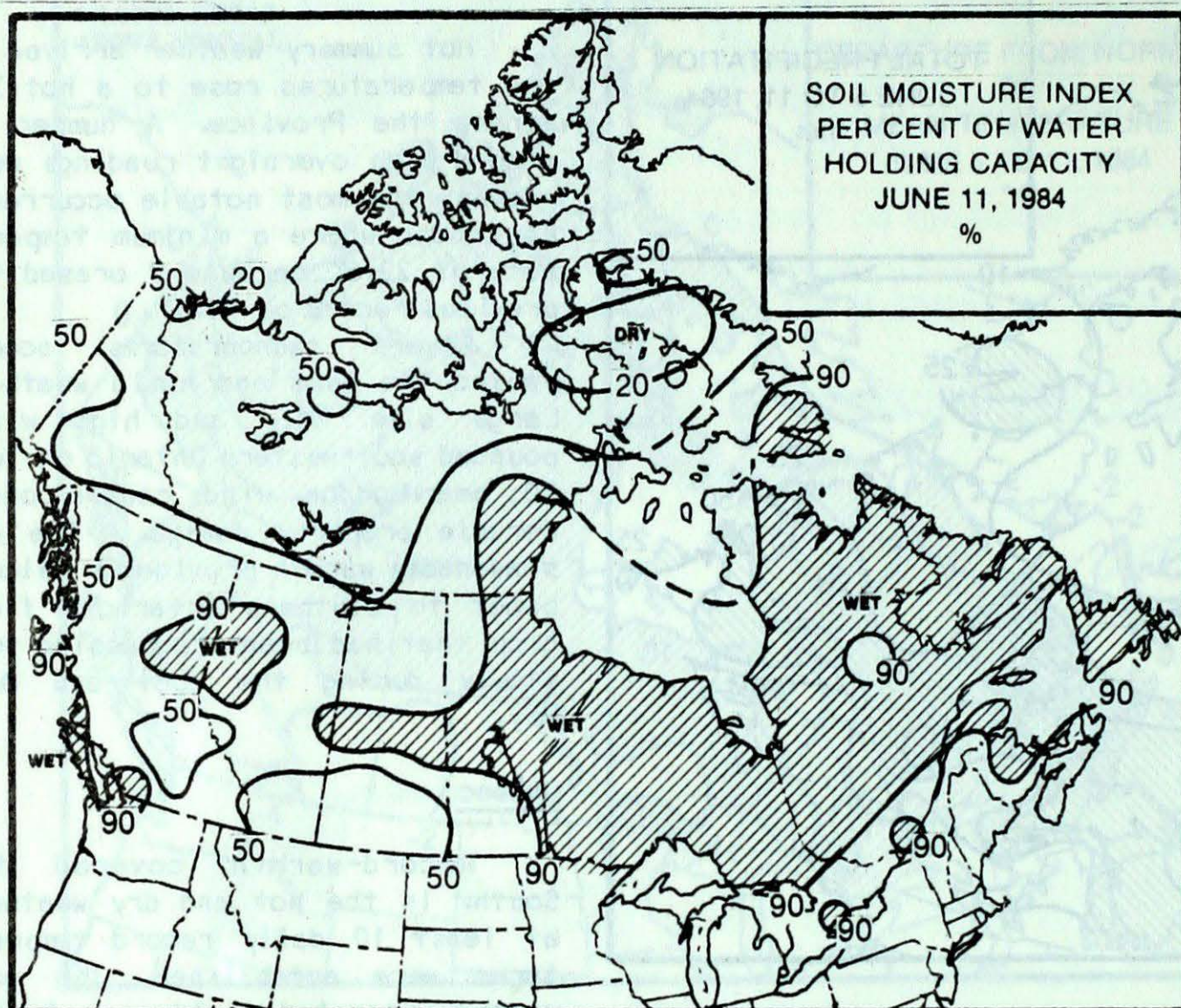
Record-warmth covered the South. In the hot and dry weather, at least 10 daily record temperatures were established. The warm weather promoted field work in the southern agricultural areas, and near Lac Saint-Jean, potato planting was completed. In contrast, northern and eastern Québec experienced cold and damp weather. Several record-low daytime temperatures were set and rainfall was excessive, Blanc Sablon received over 60 mm.

Atlantic Provinces

A sweltering heat wave with temperatures in the low thirties covered the Maritimes. Numerous daily records were set for example 35° at Fredericton was only 1 degree shy of the monthly record. The fine weather attracted nearly 100,000 people to the Halifax Harbour for the arrival of the "tall ships". Before the warmth, frost occurred throughout most of the Maritimes on June 4. Some tobacco and vegetable crops were damaged as the temperatures dropped below -1°. In Prince Edward Island, tobacco had to be reseeded. In New Brunswick, the Saint John River overflowed its banks in low lying areas and crops were damaged in those locations.

Cool and damp weather plagued Newfoundland. Several low daytime temperatures were set and deluges of rain in the 30 to 40 mm range caused minor flooding near St. John's.

SOIL MOISTURE



Soil Moisture Index

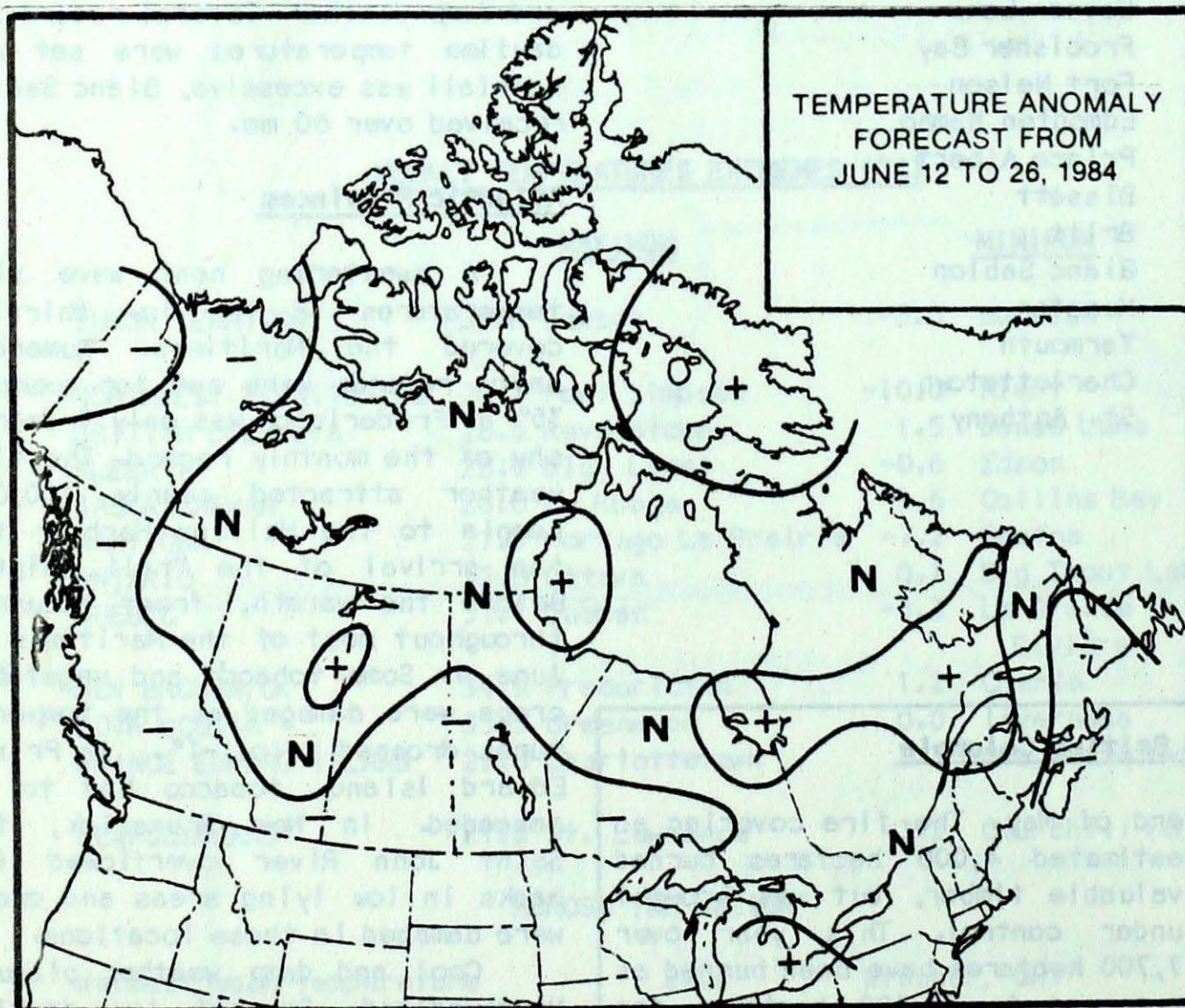
A derived index mapped as a percentage of the assumed soil water holding capacity at each station. It is a relative indicator of the moisture status of the soil.

100 = completely saturated

50 = 50 per cent of assumed holding capacity

0 = absolutely dry

TEMPERATURE ANOMALY FORECAST



Temperature Anomaly Forecast

The temperature anomaly forecast, for each of the 70 Canadian stations, is prepared by searching historical weather maps to find cases similar to the present one. The principle used is that a prediction for the next 15 days may be based on what is known to have actually happened during the 15-day anomaly periods. After the five best sets are selected, the surface temperature anomalies are calculated. This results in five separate forecasts, which are averaged to provide the consensus forecast depicted.

++ much above normal

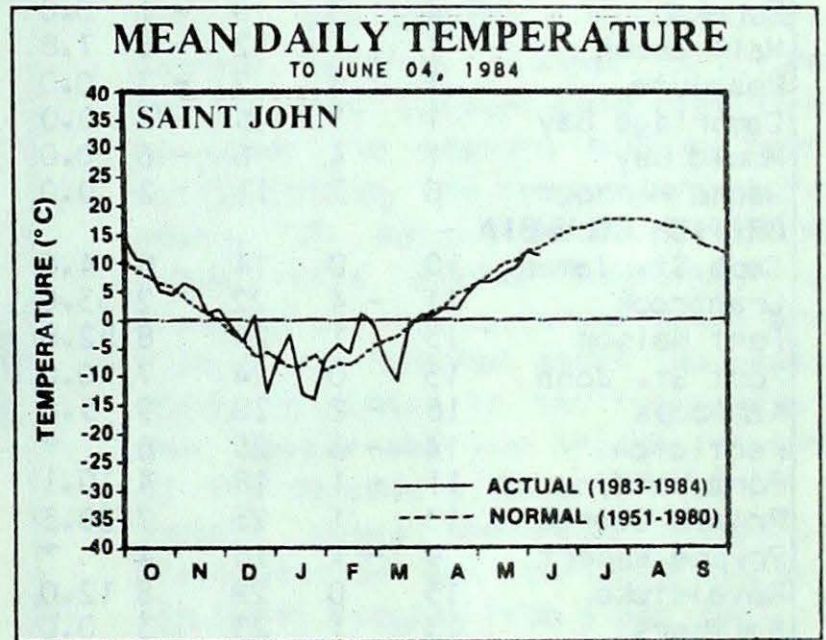
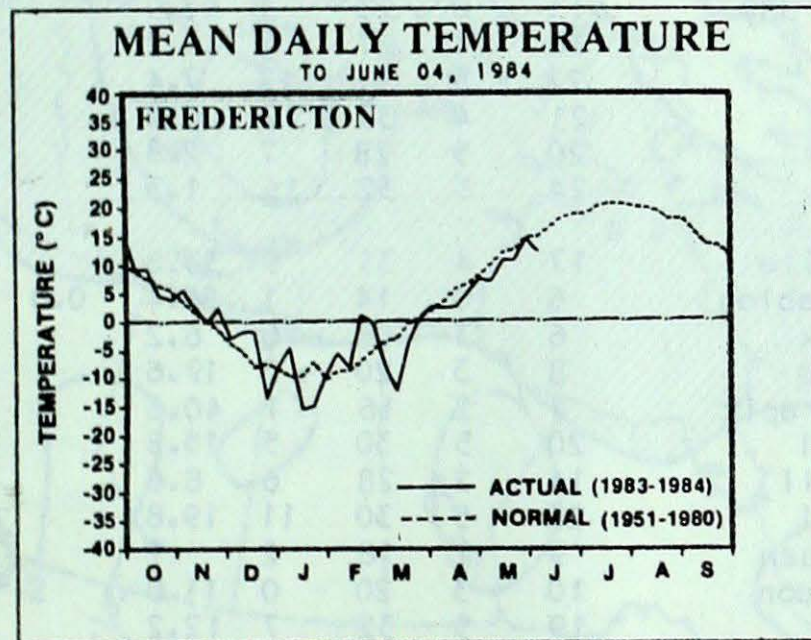
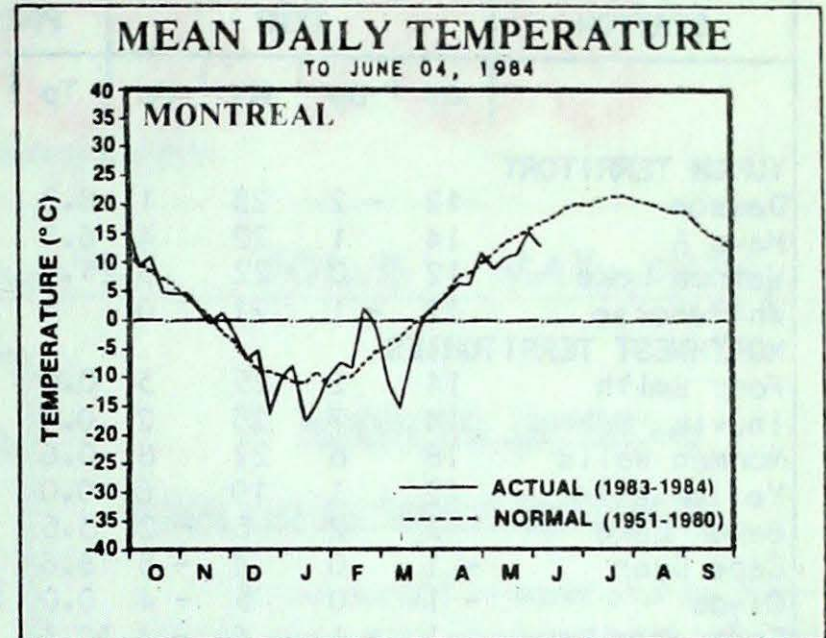
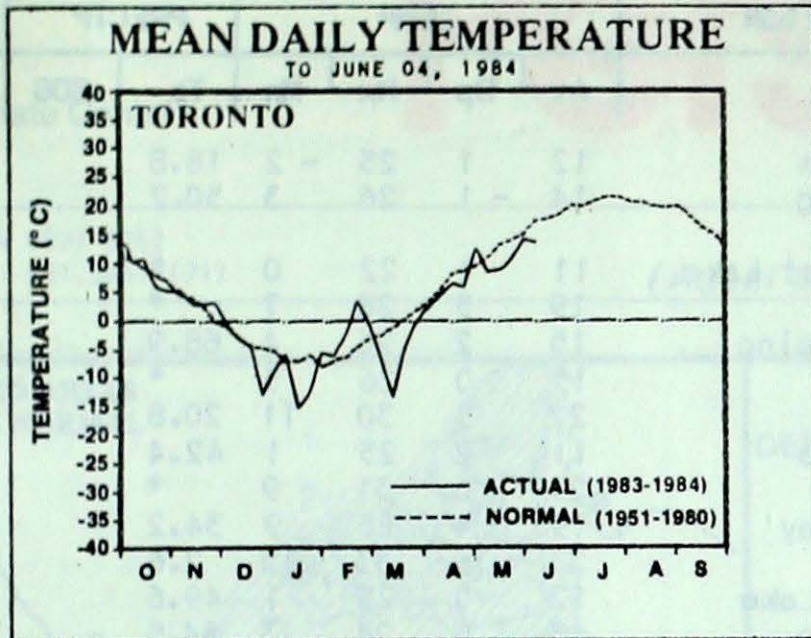
+ above normal

N normal

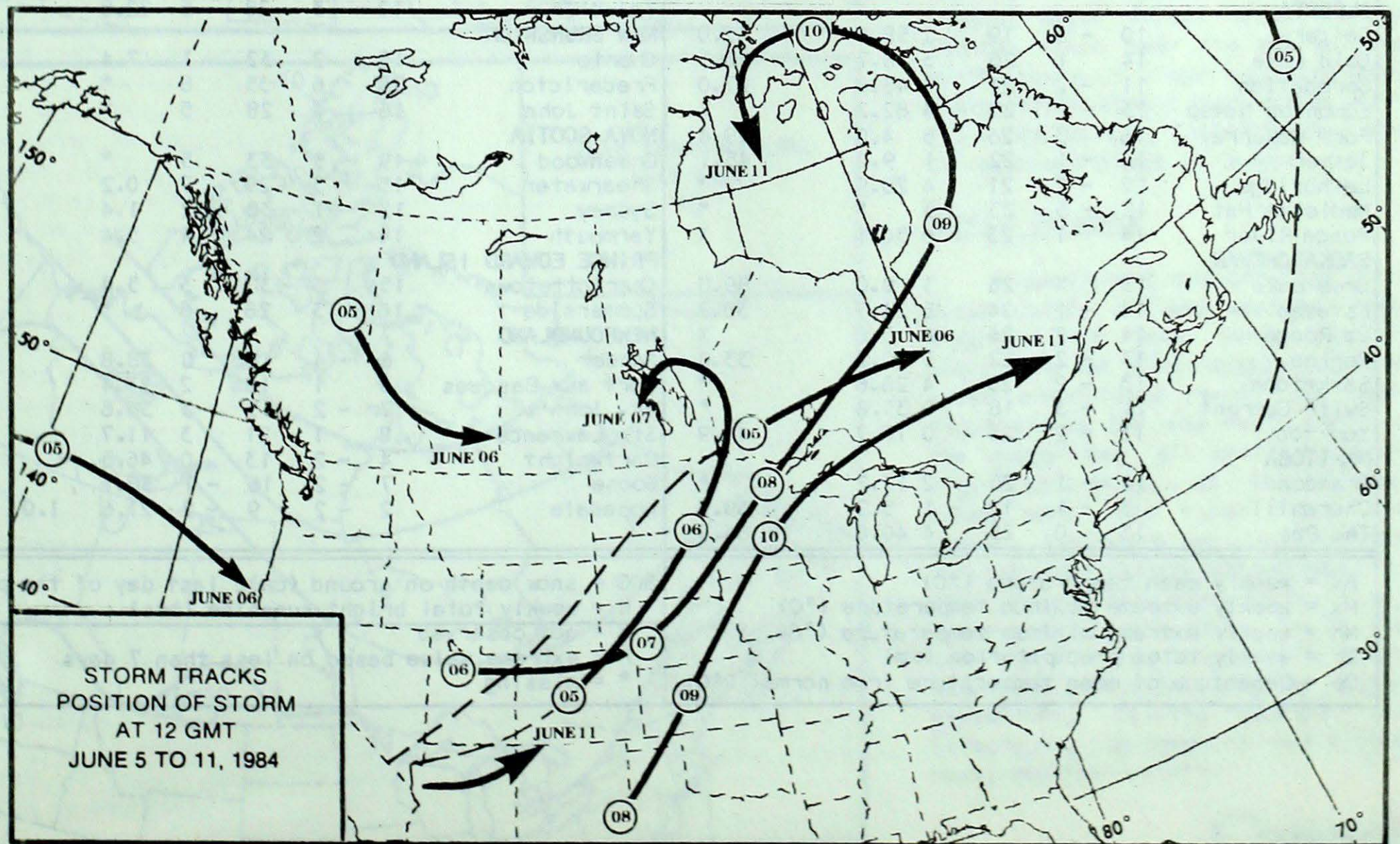
- below normal

-- much below normal

EASTERN CANADA MEAN DAILY TEMPERATURES



STORM TRACKS



TEMPERATURE, PRECIPITATION AND BRIGHT SUNSHINE DATA FOR THE WEEK ENDING 0600 GMT JUNE 12, 1984

STATION	TEMP				PRECIP		SUN	STATION	TEMP				PRECIP		SUN
	Av	Dp	Mx	Mn	Tp	SOG	H		Av	Dp	Mx	Mn	Tp	SOG	H
YUKON TERRITORY								Thompson	12	1	25	-2	18.8		65.0
Dawson	12	-2	23	1	8.2		X	Winnipeg	14	-1	26	3	50.2		38.5
Mayo A	14	1	22	4	6.8		X	ONTARIO							
Watson Lake	12	0	22	5	25.1		42.3	Blg Trout Lake	11	1	22	0	*		X
Whitehorse	12	-1	21	0	*		*	Earlton	19	5	28	7	*		X
NORTHWEST TERRITORIES								Kapuskasing	15	2	26	4	68.9		*
Fort Smith	14	2	25	3	0.0		*	Kenora	15	0	26	5	*		X
Inuvik	14	7	25	2	0.4		*	London	22	5	30	11	20.8		61.5
Norman Wells	18	6	27	8	0.6		70.2	Mosonoe	11	2	25	1	42.4		*
Yellowknife	12	1	19	6	0.0		*	Muskoka	21	6	31	9	*		X
Baker Lake	2	2	6	-2	3.6	0.0	*	North Bay	19	4	26	9	34.2		*
Cape Dyer	-1	0	4	-5	8.6	43.0	X	Ottawa	23	6	33	12	2.6		70.5
Clyde	-1	0	5	-4	0.0	80.0	*	Pickle Lake	12	0	25	1	49.6		X
Frobisher Bay	1	-1	6	-4	30.4	8.0	*	Red Lake	13	0	24	3	54.5		28.2
Alert	-2	1	6	-10	0.4	16.0	112.6	Sudbury	19	4	29	9	*		*
Eureka	4	3	9	-1	0.0	0.0	*	Thunder Bay	13	0	23	3	57.9		26.2
Hall Beach	-1	1	2	-6	7.8	11.0	X	Timmins	18	4	27	5	14.2		X
Resolute	1	4	7	-3	0.0	1.0	*	Toronto	22	5	31	12	7.4		X
Cambridge Bay	1	1	5	-3	0.0	3.0	*	Trenton	21	4	30	12	0.4		X
Mould Bay	1	4	8	-6	0.0	20.0	*	Warton	20	5	28	7	2.8		64.7
Sachs Harbour	6	7	11	2	0.0		130.2	Windsor	24	5	32	15	1.3		X
BRITISH COLUMBIA								QUEBEC							
Cape St. James	10	0	14	6	4.6		*	Bagotville	17	4	31	9	33.8		X
Cranbrook	11	-4	22	2	33.0		46.0	Blanc-Sablon	6	0	14	1	65.4	0.0	*
Fort Nelson	15	1	26	8	52.8		*	Inukjuak	6	3	18	0	6.2		47.6
Fort St. John	13	0	24	7	50.0		X	Kuujuuaq	8	3	20	-3	19.6		51.6
Kamloops	16	-2	28	9	15.8		41.9	Kuujuarapik	7	2	16	-1	40.6		54.3
Penticton	14	-3	25	8	*		*	Maniwaki	20	5	30	5	15.8		62.8
Port Hardy	11	-1	18	4	10.1		48.0	Mont-Joli	14	2	28	6	8.6		46.0
Prince George	13	1	25	7	28.3		46.6	Montréal	22	5	30	11	19.8		72.7
Prince Rupert	9	-1	16	4	*		*	Natashquan	9	1	18	2	*		*
Revelstoke	15	0	29	8	12.0		*	Nitchequon	10	3	20	0	11.0		31.3
Smithers	13	1	23	3	0.0		71.1	Québec	19	5	32	7	12.2		58.9
Vancouver	14	-1	20	10	0.8		36.8	Schefferville	7	1	17	-3	21.6	0.0	46.0
Victoria	13	-1	19	6	3.6		40.3	Sept-Îles	10	1	18	3	42.2		42.4
Williams Lake	11	-2	22	5	24.3		28.4	Sherbrooke	19	4	30	5	11.0		64.9
ALBERTA								Val-d'Or	17	3	28	6	22.8		*
Calgary	10	-3	19	2	58.6		42.0	NEW BRUNSWICK							
Cold Lake	14	1	26	3	18.7		60.1	Charlo	15	2	32	1	7.4		57.0
Coronation	11	-2	21	5	48.8		27.0	Fredericton	20	6	35	8	*		*
Edmonton Namao	13	-2	23	4	82.2		X	Saint John	16	4	28	5	*		*
Fort McMurray	16	3	26	5	4.0		79.4	NOVA SCOTIA							
Jasper	12	-1	22	1	9.2		45.1	Greenwood	19	5	33	5	*		X
Lethbridge	12	-2	21	4	20.9		*	Shearwater	15	3	29	7	0.2		*
Medicine Hat	12	-3	23	5	*		*	Sydney	12	1	30	2	1.4		*
Peace River	14	1	23	6	50.1		X	Yarmouth	14	2	24	4	5.4		61.8
SASKATCHEWAN								PRINCE EDWARD ISLAND							
Cree Lake	13	X	26	3	0.0		89.0	Charlottetown	15	3	30	3	5.4		*
Estevan	14	-1	24	5	24.7		38.7	Summerside	16	3	28	6	*		*
La Ronge	14	2	26	6	5.8		X	NEWFOUNDLAND							
Regina	13	-2	22	5	10.2		33.0	Gander	6	-4	16	0	38.8		*
Saskatoon	13	-2	25	4	28.6		*	Port aux Basques	9	1	18	2	27.4		*
Swift Current	11	-3	18	0	35.8		*	St. John's	7	-2	15	3	36.6		8.1
Yorkton	13	-2	25	0	16.7		47.9	St. Lawrence	8	1	21	3	11.7		X
MANITOBA								Cartwright	4	-2	13	0	46.5		X
Brandon	14	-1	25	2	17.2		*	Goose	7	-2	16	-1	36.1		11.7
Churchill	3	-1	12	-1	5.2		39.0	Hopedale	2	-2	9	-2	21.6	1.0	X
The Pas	13	0	25	4	40.0		66.9								

Av = weekly mean temperature (°C)
Mx = weekly extreme maximum temperature (°C)
Mn = weekly extreme minimum temperature (°C)
Tp = weekly total precipitation (mm)
Dp = Departure of mean temperature from normal (°C)

SOG = snow depth on ground (cm), last day of the period
H = weekly total bright sunshine (hrs)

X = not observed

P = extreme value based on less than 7 days

* = missing