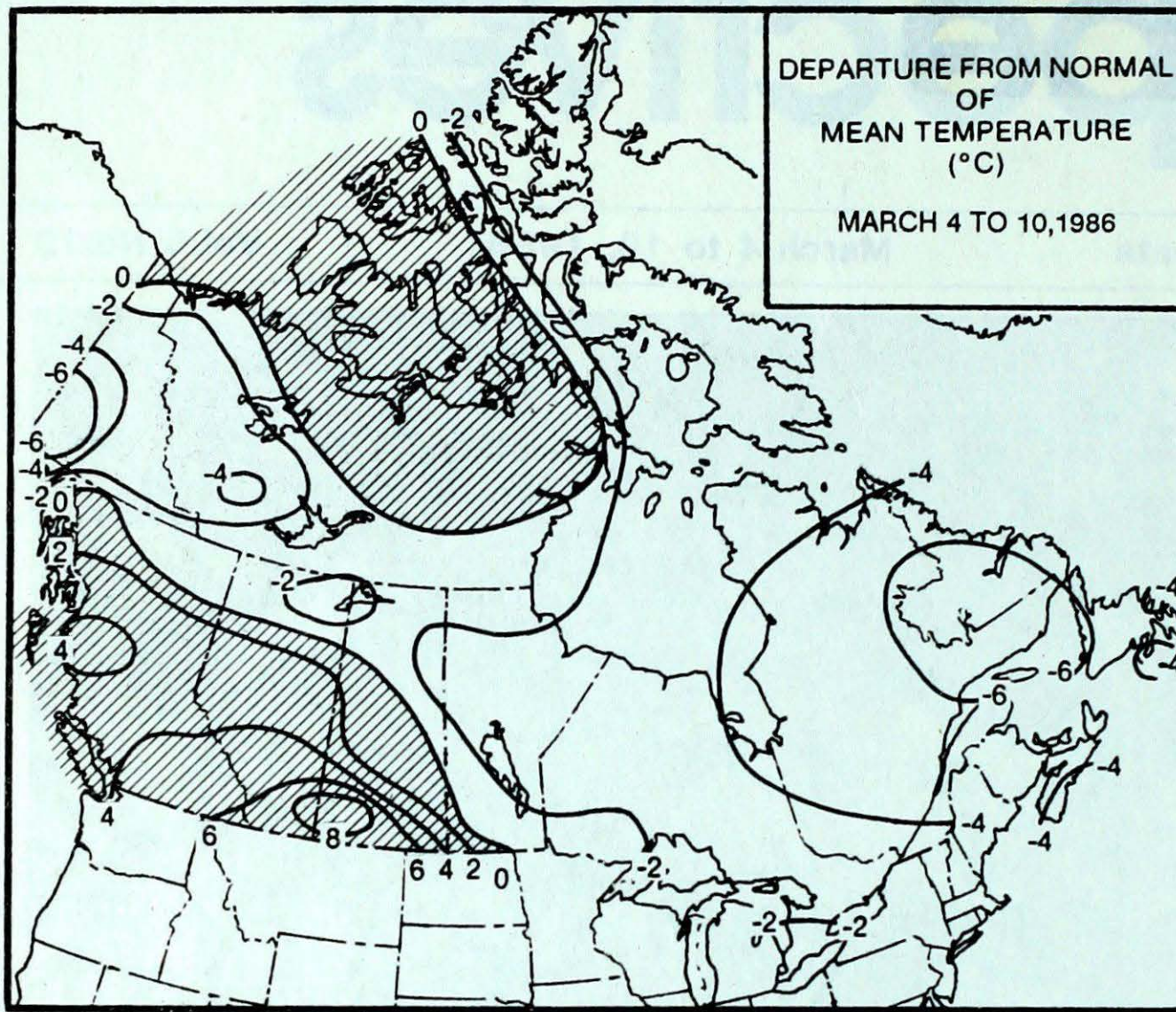


This March 7, 1986, NOAA 9 satellite picture, a composite of three separate passes, approximately 1½ hours apart, shows late winter storms affecting both the west and east coasts of the country. Strong winds blowing across the Great Lakes formed long streamers of cloud over the lee shores.

● *Fickle March weather across the country*

- record snow in the Yukon
- flowers blooming in southern B.C.
- rain, freezing rain and snow in the East

TEMPERATURE



ACROSS THE COUNTRY...

Yukon and Northwest Territories

Heavy snowfall warnings were issued daily for the southern Yukon. Since the beginning of the month, Whitehorse has received 47 cm of snow, establishing a new March snowfall record. This week alone many locations received between 20 and 30 centimetres of snow. The heavy snowfalls hampered the annual Yukon Quest dogsled race between Fairbank and Whitehorse. Several Arctic high pressure cells gave clear, but cold weather conditions to the Northwest Territories. Significant snowfalls occurred in the Mackenzie District and on Baffin Island. Temperatures in the high Arctic plunge to the minus fifties.

British Columbia

A southwesterly flow gave showery, but mild weather conditions in the southern two thirds of the province. In the north, it was cold and snowy. Higher elevations of the interior received fresh snow, and skiing conditions remained fairly good. There were periods of freezing rain on March 6 and 7. Many logging roads are closed because of the thaw. Early spring flowers are coming into bloom in the southern valleys. Spring gardening is well underway on the lower mainland. In Victoria, tulips have been delayed because of the cold spell during the month of February.

Prairie Provinces

Record warm weather of the previous week slowly gave way, as an Arctic airmass infiltrated the south. In the east, the cold weather was heralded by blustery conditions and dangerously low wind chills. Only southern Alberta escaped the bitter cold during the middle of the week. Towards the weekend, a developing disturbance, associated with moderating temperatures gave widespread snowfalls to the agricultural districts. Amounts generally ranged between 10 and 15 centimetres. Communities in southern Alberta received periods of rain because of well above freezing temperatures.

WEEKLY TEMPERATURE EXTREME (C)

	MAXIMUM		MINIMUM	
BRITISH COLUMBIA	KAMLOOPS	16	FORT NELSON	-22
YUKON TERRITORY	TESLIN	4	OGILVIE	-49
NORTHWEST TERRITORIES	FORT SMITH	-6	EUREKA	-50
ALBERTA	LETHBRIDGE	12	FORT CHIPEWYAN	-37
SASKATCHEWAN	ESTEVAN	9	URANIUM CITY	-34
MANITOBA	DAUPHIN	2	CHURCHILL	-34
ONTARIO	WINDSOR	13	MOOSONEE	-34
QUEBEC	GASPE	5	KUUJJIARAPIK	-41
NEW BRUNSWICK	FREDERICTON	7	CHARLO	-24
NOVA SCOTIA	GREENWOOD	5	SYDNEY	-20
PRINCE EDWARD ISLAND	SUMMERSIDE	4	CHARLOTTETOWN	-20
NEWFOUNDLAND	DEER LAKE	5	CHURCHILL FALLS	-36

ACROSS THE NATION

WARMEST MEAN TEMPERATURE	9	ABBOTSFORD	BC
COOLEST MEAN TEMPERATURE	-44	EUREKA	NWT

Ontario

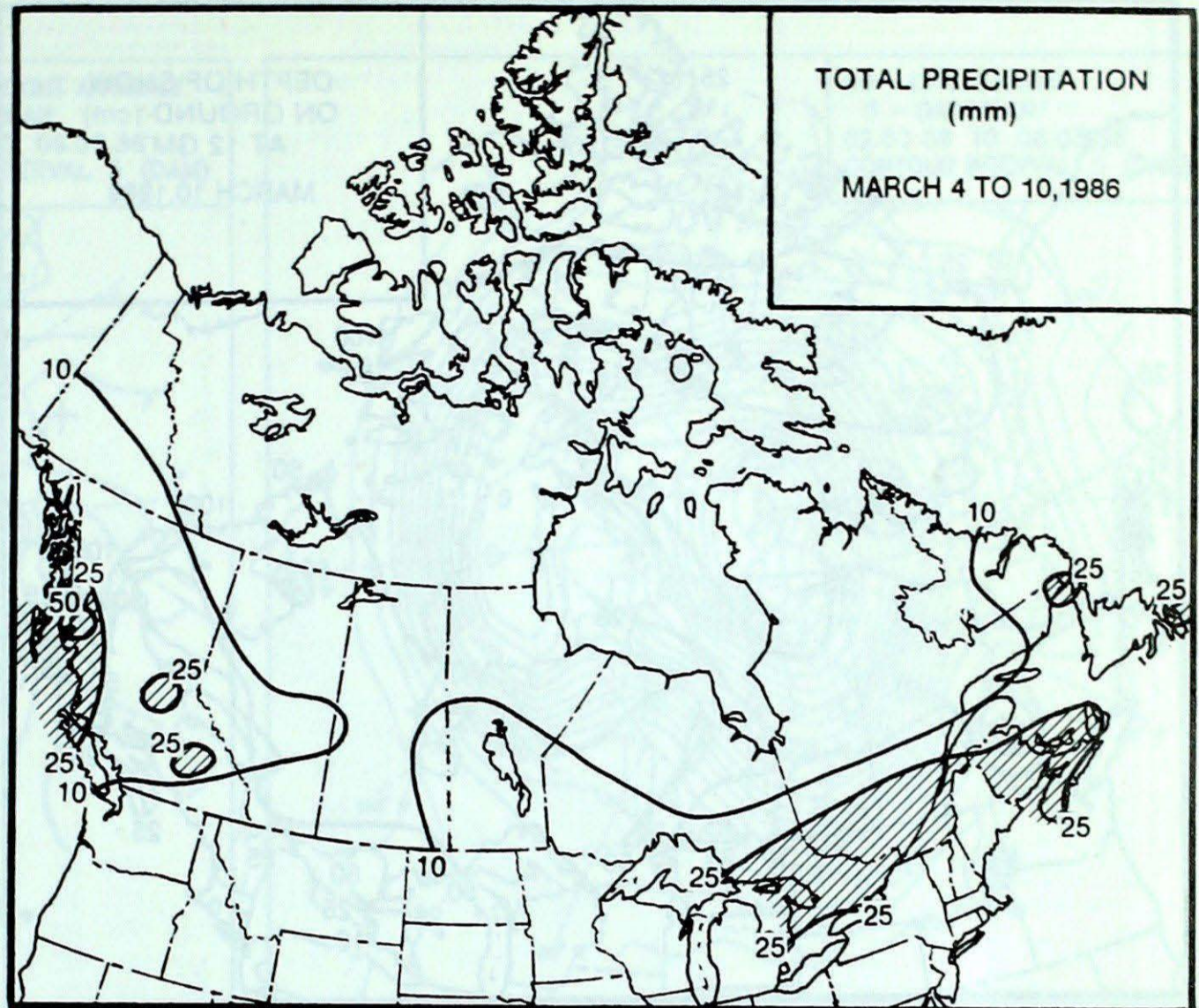
As is typical at this time of the year, weather conditions varied markedly. In southern Ontario, above freezing temperatures and sunshine early in the week gave way to snow, freezing rain and record low temperatures by the weekend. A cold snap on March 7 and 8 had temperatures in the south plunging into the minus twenties. Snow fell throughout the province on March 6. On March 9, a freezing rain storm hit southern Ontario, coating everything with a 5 to 10 millimetre layer of ice. The following day, the ice storm affected northern and eastern sections of the province. Arctic air remained well established in the north until the weekend, when an area of snow moved in. Snowfalls ranged between 10 and 20 centimetres before changing to freezing rain in eastern districts on March 10.

Quebec

Winter refused to let up, as periods of snow and blowing snow affected most of the southern half of the province. On March 6 and 7, a strengthening storm off the east coast gave 10 to 20 centimetres of snow to the south. Winds gusting as high as 81 km/h produced blowing snow, lowering visibilities in rural areas to near zero. There were numerous traffic accidents on Montréal's south shore. Arctic air had a firm hold in the north, where minimum temperatures dropped to the mid-minus forties. Daily low temperature records were broken in many areas of the province.

Atlantic

It was a typical early March week, with a variety of weather conditions. Temperatures were mild at first, but dropped to below normal values over the weekend. In Newfoundland, the first part of the week was generally fair. On March 6 a disturbance brought freezing rain to the Avalon Peninsula, and up to 10 cm of snow to the rest of the island. On March 7 and 8, another major storm hit Atlantic Canada. See article on this page.

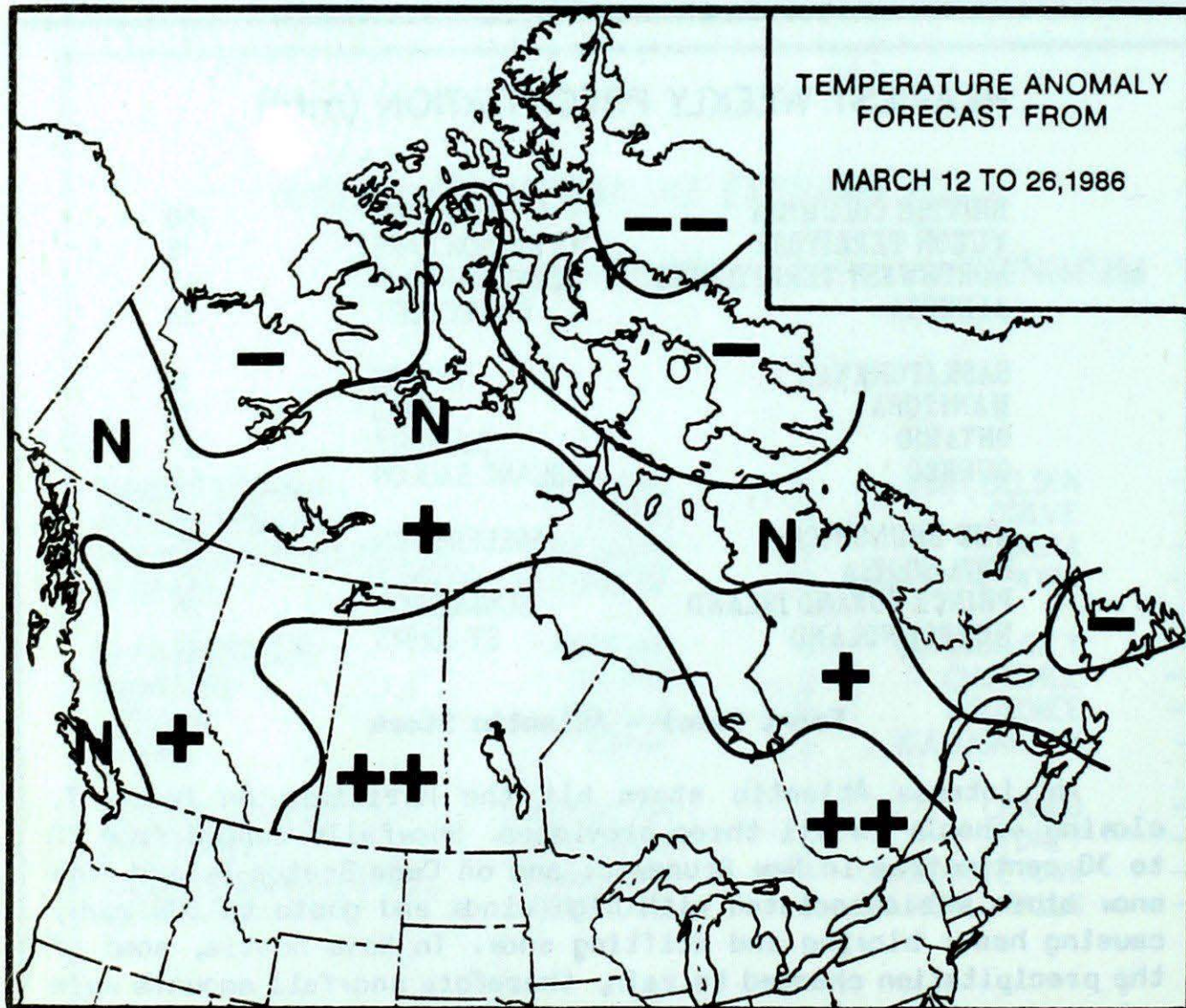
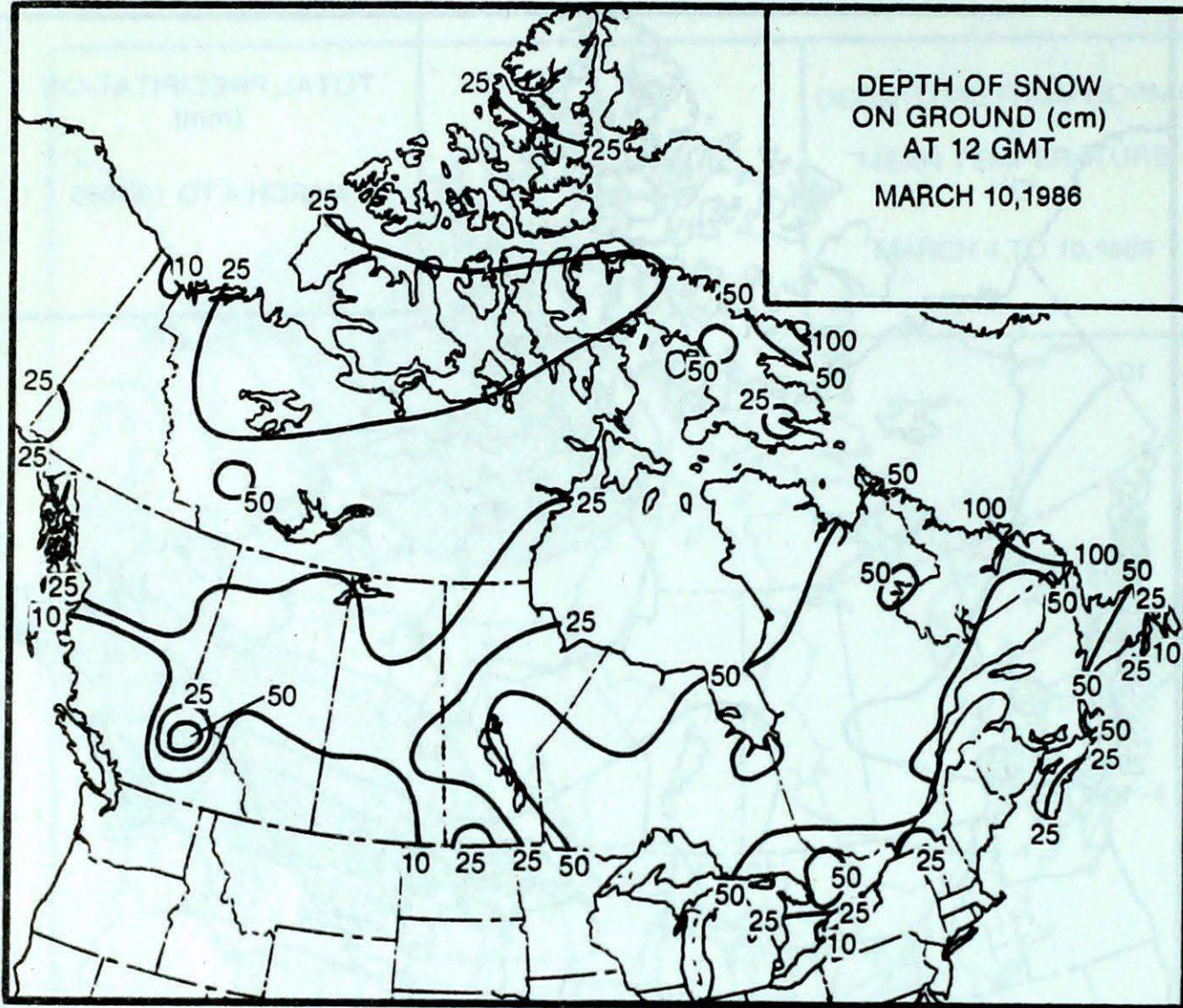
**HEAVIEST WEEKLY PRECIPITATION (mm)**

BRITISH COLUMBIA	LANGARA	60
YUKON TERRITORY	WATSON LAKE	18
NORTHWEST TERRITORIES	CORAL HARBOUR	7
ALBERTA	WHITECOURT	38
SASKATCHEWAN	NIPAWIN	16
MANITOBA	GIMLI	15
ONTARIO	SUDBURY	47
QUEBEC	BLANC SABLON	43
NEW BRUNSWICK	FREDERICTON	39
NOVA SCOTIA	SYDNEY	29
PRINCE EDWARD ISLAND	SUMMERSIDE	26
NEWFOUNDLAND	ST JOHN'S	28

Front Cover - Atlantic Storm

An intense Atlantic storm hit the Maritimes on March 7, closing schools in all three provinces. Snowfalls ranged from 20 to 30 centimetres in New Brunswick and on Cape Breton Island. The snow storm was associated with high winds and gusts to 100 km/h, causing heavy blowing and drifting snow. In Nova Scotia, some of the precipitation changed to rain, therefore snowfall amounts were not as great. As the storm moved towards Newfoundland, another blast of cold air swept across the region, resulting in low wind chills. In Newfoundland and Labrador, snowfalls ranged up to 20 cm. Winds gusting to 115 km/h hit coastal areas, disrupting CN ferry services across Cabot Strait. On March 10, low temperature readings of -29°C at Gander and -25°C at Stephenville, were new monthly minimum temperature records.

FORECAST



Temperature Anomaly Forecast

- ++ much above normal
- + above normal
- N normal
- below normal
- much below normal

This forecast is prepared by searching historical weather maps to find cases similar to the present. The historical outcome during the 15 days subsequent to the chosen analogues is assumed to be a forecast for the next 15 days from now.

CLIMATIC PERSPECTIVES VOLUME 8

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The data shown in this publication are based on unverified reports from approximately 225 Canadian synoptic weather stations. Information concerning climatic impacts is gathered from AES contacts with the public and from the media. Articles do not necessarily reflect the views of the Atmospheric Environment Service.

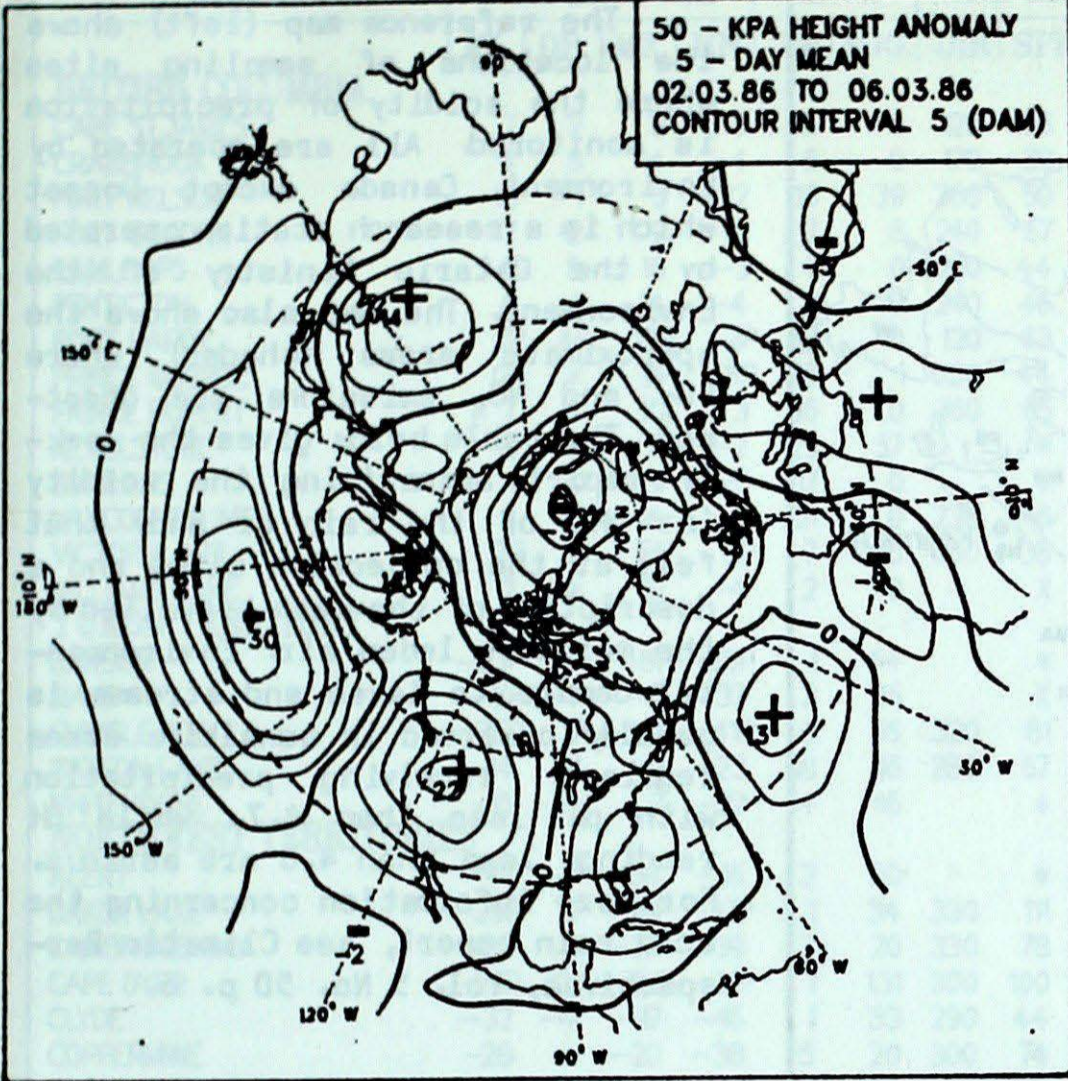
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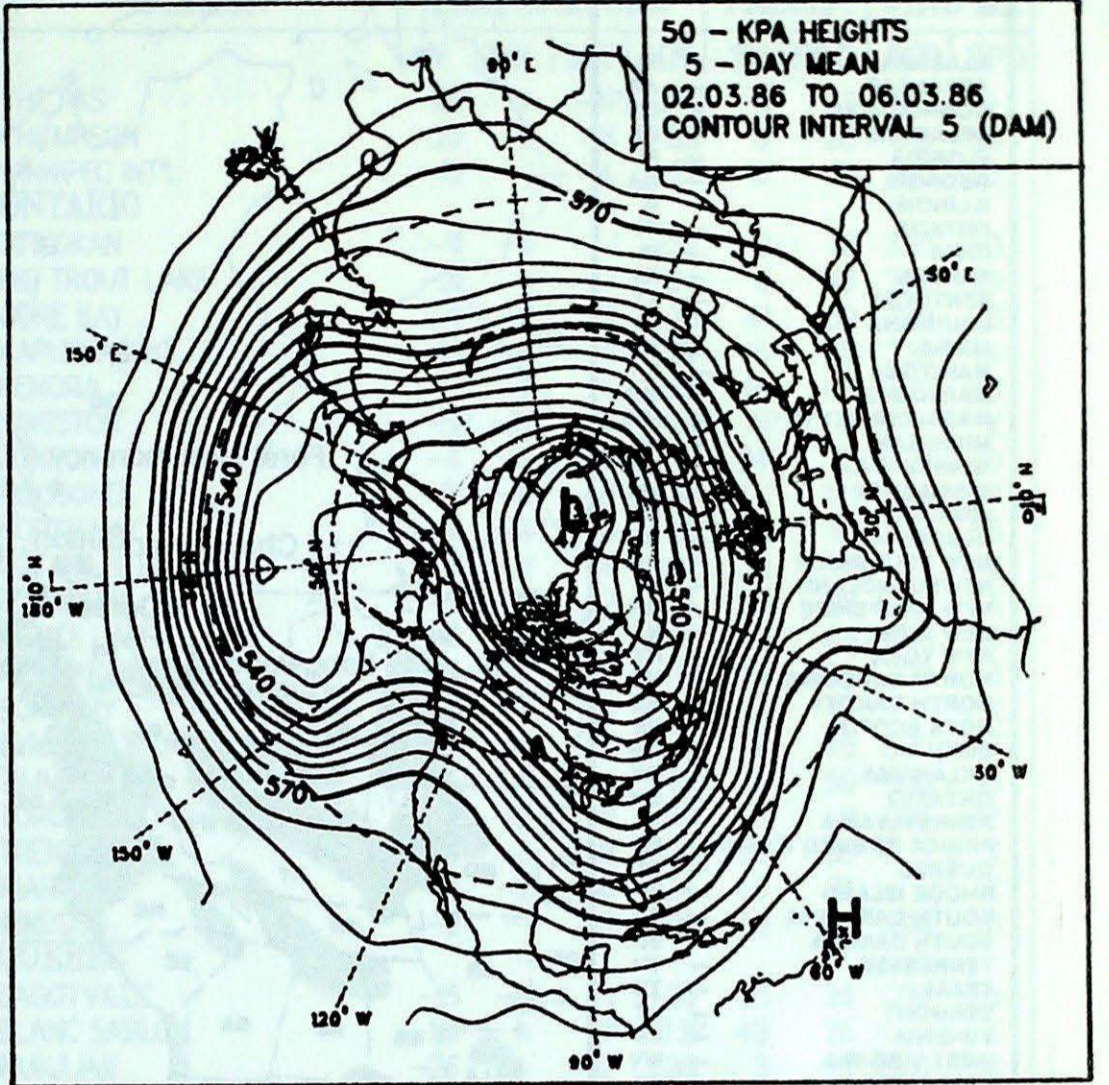
50 KPa ATMOSPHERIC CIRCULATION

50 - KPa HEIGHT ANOMALY
5 - DAY MEAN
02.03.86 TO 06.03.86
CONTOUR INTERVAL 5 (DAM)

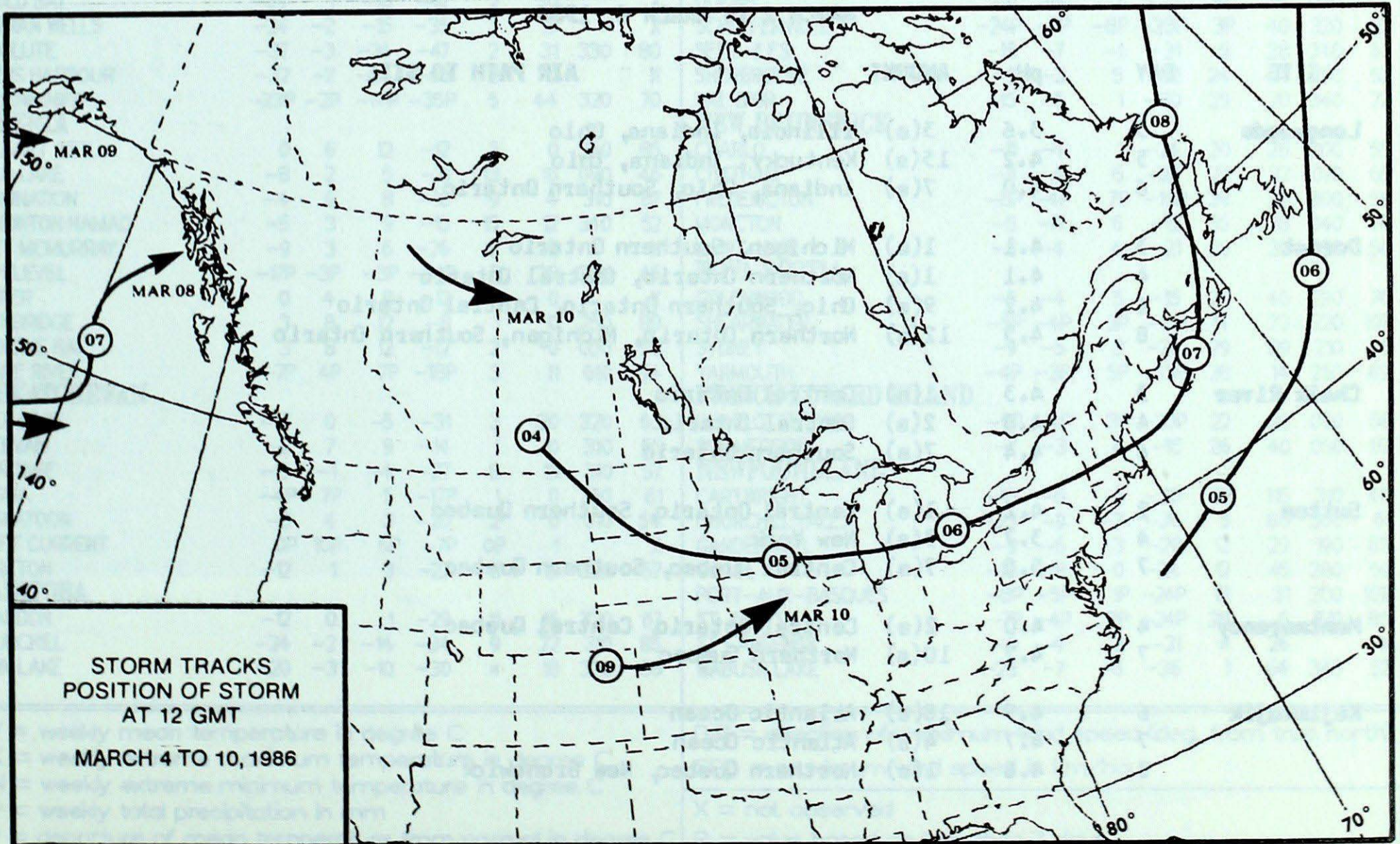


MEAN 50 KPa HEIGHT ANOMALY (dam)
March 2 to March 6, 1986

50 - KPa HEIGHTS
5 - DAY MEAN
02.03.86 TO 06.03.86
CONTOUR INTERVAL 5 (DAM)



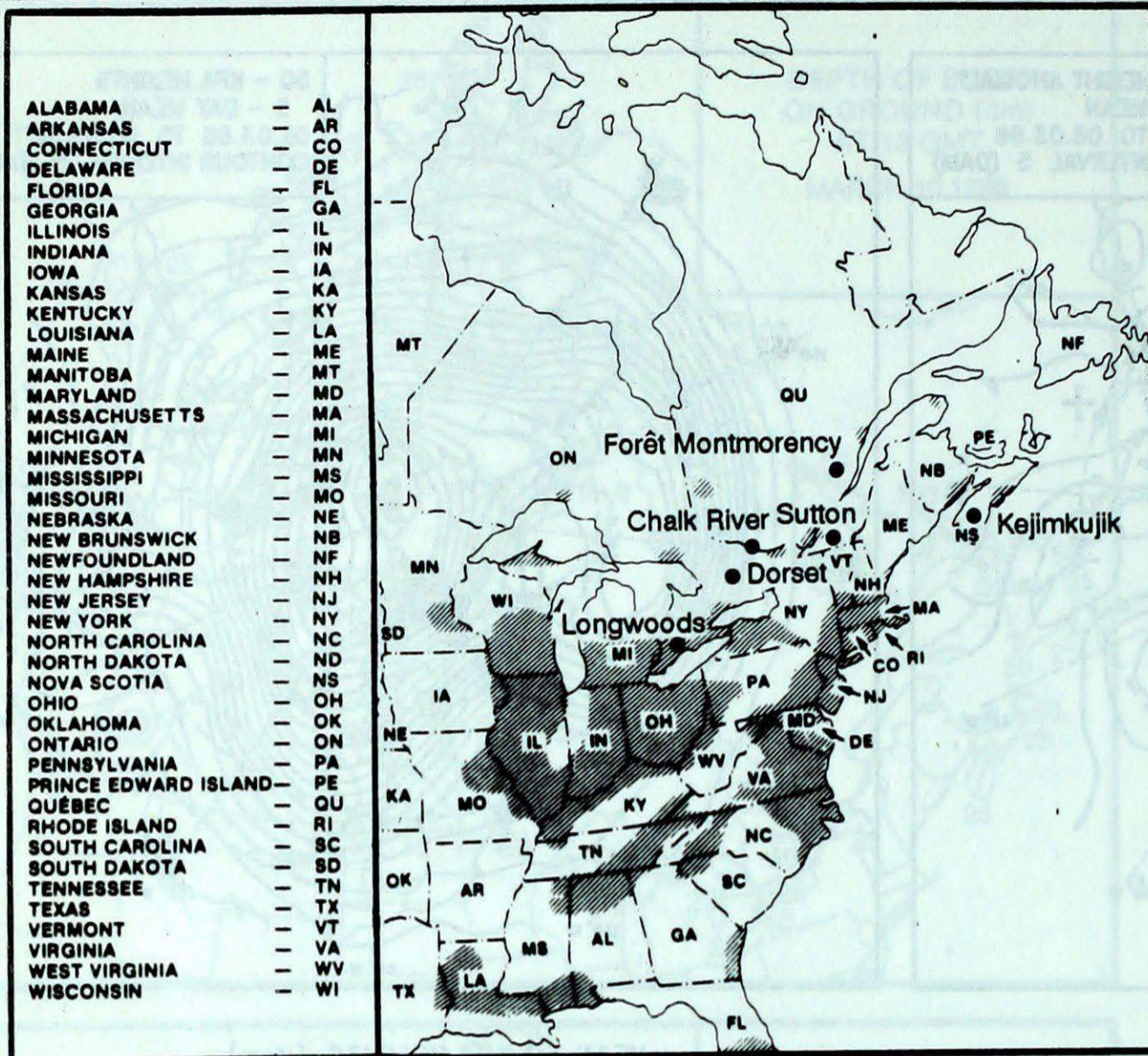
MEAN 50 KPa HEIGHTS (dam)
March 2 to March 6, 1986



STORM TRACKS
POSITION OF STORM
AT 12 GMT
MARCH 4 TO 10, 1986

ACID RAIN

ACID RAIN REPORT



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 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 less than 4.7, while pH readings less than 4.0 are serious. For more information concerning the acid rain report, see Climatic Perspectives, Vol. 5 No. 50 p. 6.

MARCH 2 TO MARCH 6, 1986

SITE	DAY	pH	AMOUNT	AIR PATH TO SITE
Longwoods	3	3.6	3(s)	Illinois, Indiana, Ohio
	5	4.2	15(s)	Kentucky, Indiana, Ohio
	6	4.0	7(s)	Indiana, Ohio, Southern Ontario
Dorset	3	4.1	1(s)	Michigan, Southern Ontario
	4	4.1	1(s)	Northern Ontario, Central Ontario
	6	4.2	9(s)	Ohio, Southern Ontario, Central Ontario
	8	4.5	12(s)	Northern Ontario, Michigan, Southern Ontario
Chalk River	3	4.3	1(s)	Central Ontario
	4	4.0	2(s)	Central Ontario
	6	4.4	7(s)	Southern Ontario
Sutton	2	4.2	1(s)	Central Ontario, Southern Quebec
	4	3.7	3(s)	New York
	7	5.0	7(s)	Central Quebec, Southern Quebec
Montmorency	4	4.0	2(s)	Central Ontario, Central Quebec
	7	4.7	10(s)	Northern Quebec
Kejimikujik	6	4.9	18(s)	Atlantic Ocean
	7	4.7	4(s)	Atlantic Ocean
	8	4.8	1(s)	Northern Quebec, New Brunswick

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

TEMPERATURE, PRECIPITATION AND MAXIMUM WIND DATA FOR THE WEEK ENDING 0600 GMT MARCH 11, 1986

STATION	TEMPERATURE				PRECIP.		WIND MX		STATION	TEMPERATURE				PRECIP.		WIND MX	
	AV	DP	MX	MN	TP	SOG	DIR	SPD		AV	DP	MX	MN	TP	SOG	DIR	SPD
BRITISH COLUMBIA									THE PAS	-15P	*	-4P	-26P	11	23	100	54
CAPE ST. JAMES	7	2	8	5	35	0	120	106	THOMPSON	-20	-4	-8	-33	5	28	310	56
CRANBROOK	4	5	14	-4	5	0	170	39	WINNIPEG INT'L	-13	-1	-4	-27	10	21	160	52
FORT NELSON	-13	-1	3	-22	10	39	360	50	ONTARIO								
FORT ST. JOHN	-7	2	9	-18	17	8	240	67	ATIKOKAN	-11	0	1	-32	12	72	330	50
KAMLOOPS	6	5	16	-3	0	0	220	44	BIG TROUT LAKE	-21	*	-7	-34	6	45	340	69
PENTICTON	6	4	14	-4	3	0	240	46	GORE BAY	-9	-2	2	-23	41	32	290	78
PORT HARDY	7P	4P	12P	2P	38	0	120	63	KAPUSKASING	-16	-4	-4	-29	6	65	330	74
PRINCE GEORGE	0P	*	9P	-8P	30	1	030	44	KENORA	-12	-2	0	-28	14	56	330	48
PRINCE RUPERT	7	4	10	3	55	0	160	65	KINGSTON	-5P	-2P	1P	-10P	4P	0		X
REVELSTOKE	3	3	11	-2	29	57		*	LONDON	-4	-2	10	-17	24	12	320	70
SMITHERS	1	4	9	-5	17	0		*	MOOSENEE	-21	-6	-8	-34	1	131	340	57
VANCOUVER INT'L	8	4	14	2	21	0	230	46	NORTH BAY	-11	-3	0	-25	41	61	340	56
VICTORIA INT'L	7P	3P	12P	3P	7	0	060	35	OTTAWA INT'L	-8	-3	4	-22	38	41		X
WILLIAMS LAKE	2	*	10	-4	2	0		X	PETAWAWA	-9	-4	2	-24	35	38		X
YUKON TERRITORY									PICKLE LAKE	-16	-2	-2	-31	3	66	330	65
DAWSON	-23P	*	-8P	-38P	1	44		*	RED LAKE	-15	-3	0	-31	14	57	320	63
MAYO	-19	-4	-6	-37	3	36		X	SUDBURY	-11	-3	0	-24	47	47		X
SHINGLE POINT A	-25P	1P	-14P	-41P	0	56	320	81	THUNDER BAY	-11	-1	1	-25	11	68	330	67
WATSON LAKE	-14	1	-1	-23	18	45	280	67	TIMMINS	-15	-4	0	-27	14	59	330	56
WHITEHORSE	-15	-4	2	-27	14	45		*	TORONTO INT'L	-5	-2	9	-20	21	8	280	67
NORTHWEST TERRITORIES									TRENTON	-6	-3	8	-20	35	35		X
ALERT	-41	-7	-34	-45	2	20		*	WIARTON	-7	-2	10	-24	46	27		X
BAKER LAKE	-29P	1P	-18P	-37P	1	34	330	111	WINDSOR	-2	-1	13	-16	23	0	290	61
CAMBRIDGE BAY	-30	3	-23	-39	3	20	330	78	QUEBEC								
CAPE DYER	-25P	0P	-15P	-31P	1	131	300	100	BAGOTVILLE	-15	-6	1	-25	21	35	270	65
CLYDE	-32	-4	-17	-45	1	33	290	44	BLANC SABLON	-16P	*	-3P	-33P	43	26		X
COPPERMINE	-28	*	-20	-38	5	20	300	74	INUKJUAK	-26	-4	-12	-38	3	25	300	52
CORAL HARBOUR	-30P	-3P	-17P	-42P	7	36		X	KUUJUAQ	-27	-8	-8	-40	1	85	280	70
EUREKA	-44P	-4P	-34	-50P	1	20	320	41	KUUJUARAPIK	-26	-6	-8	-41	3	49	130	52
FORT SMITH	-16	1	-6	-34	3	41		X	MANIWAKI	-9	-2	3	-27	40	42	320	46
FROBISHER BAY	-27	-3	-12	-38	2	18	320	72	MONT JOLI	-11	-4	1	-20	18	23	060	70
HALL BEACH	-35	-3	-20	-48	2	28	300	80	MONTREAL INT'L	-8	-3	4	-22	30	17	260	65
INUVIK	-28	-2	-19	-40	2	38		X	NATASHQUAN	-15	-7	0	-29	8	29	330	63
MOULD BAY	-34	1	-16	-42	2	30		X	QUEBEC	-11	-5	2	-22	39	85	080	65
NORMAN WELLS	-24	-2	-15	-35	3	19		X	SCHIEFFERVILLE	-24P	-7P	-8P	-38P	3P	40	320	52
RESOLUTE	-37	-3	-24	-47	2	31	330	80	SEPT-ILES	-15	-7	-1	-31	5	28	340	67
SACHS HARBOUR	-32	-2	-24	-40	2	11		X	SHERBROOKE	-9	-3	5	-22	24	44	280	52
YELLOWKNIFE	-23P	-2P	-14P	-35P	5	44	320	70	VAL D'OR	-15	-5	1	-30	29	70	340	72
ALBERTA									NEW BRUNSWICK								
CALGARY INT'L	0	6	12	-12	3	0	330	85	CHARLO	-11	-4	1	-24	20	28	300	59
COLD LAKE	-8	2	5	-21	13	10	090	46	CHATHAM	-9	-4	6	-20	27	22	070	65
CORONATION	-4	6	8	-16	9	4	310	67	FREDERICTON	-8P	-4P	7P	-19P	39	26	300	59
EDMONTON NAMAQ	-5	3	9	-15	15	12	340	52	MONCTON	-8	-4	6	-19	35	28	040	74
FORT MCMURRAY	-9	3	6	-26	5	8		X	SAINT JOHN	-8	-4	4	-21	30	39	320	56
HIGH LEVEL	-17P	-3P	-3P	-34P	5	38	330	46	NOVA SCOTIA								
JASPER	0	4	9	-12	11	0		X	GREENWOOD	-6	-4	5	-15	29	46	290	76
LETHBRIDGE	3	8	12	-8	1	0	250	89	SHEARWATER	-5P	-4P	3P	-15P	14	23	220	107
MEDICINE HAT	3	8	12	-12	2	0	050	56	SYDNEY	-9	-5	3	-20	29	89	210	96
PEACE RIVER	-7P	4P	7P	-18P	3	11	010	74	YARMOUTH	-4P	-3P	5P	-13P	28	14	250	89
SASKATCHEWAN									PRINCE EDWARD ISLAND								
CREE LAKE	-17	0	-5	-31	3	30	320	63	CHARLOTTETOWN	-9P	-4P	3P	-20P	22	28	050	56
ESTEVAN	-2	7	9	-14	1	0	310	65	SUMMERSIDE	-7	-3	4	-18	26	40	050	87
LA RONGE	-15	-1	-4	-27	8	19	310	57	NEWFOUNDLAND								
REGINA	-4P	7P	5	-17P	1	0	350	61	CARTWRIGHT	-15	-5	-1	-30	18	115	310	69
SASKATOON	-8	4	3	-20	2	0	010	54	CHURCHILL FALLS	-23	-9	-7	-36	5	80	300	61
SWIFT CURRENT	0P	10P	6P	-7P	0P	1		X	GANDER INT'L	-9	-5	3	-29	12	29	190	83
YORKTON	-12	1	3	-27	11	19	320	57	GOOSE	-18	-8	0	-34	12	45	280	59
MANITOBA									PORT-AUX-BASQUES	-8P	-5P	1P	-24P	13	31	300	102
BRANDON	-12	0	1	-29	11	16	320	67	ST JOHN'S	-7P	-4P	2P	-24P	28	5	270	85
CHURCHILL	-24	-2	-14	-34	9	22	310	85	ST LAWRENCE	-6	-4	3	-21	*	26		X
LYNN LAKE	-20	-3	-10	-30	*	18	320	56	WABUSH LAKE	-23	-7	-6	-36	1	64	340	52

AV = weekly mean temperature in degree C
 MX = weekly extreme maximum temperature in degree C
 MN = weekly extreme minimum temperature in degree C
 TP = weekly total precipitation in mm
 DP = departure of mean temperature from normal in degree C
 SOG = snow depth on ground in cm, last day of the period

DIR = direction of maximum wind speed (deg. from true north)
 SPD = maximum wind speed in km/hour
 X = not observed
 P = value based on less than 7 days
 * = missing