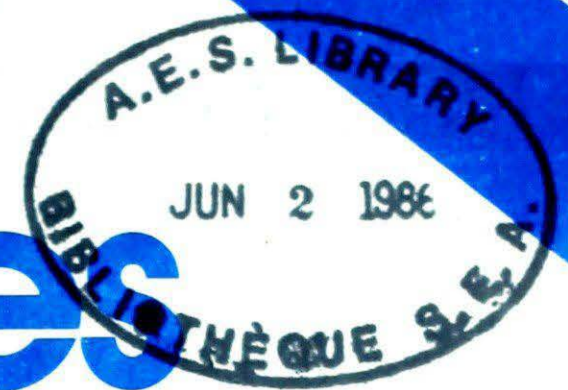


Climatic Perspectives



A weekly review of Canadian climate

March 25 to 31, 1986

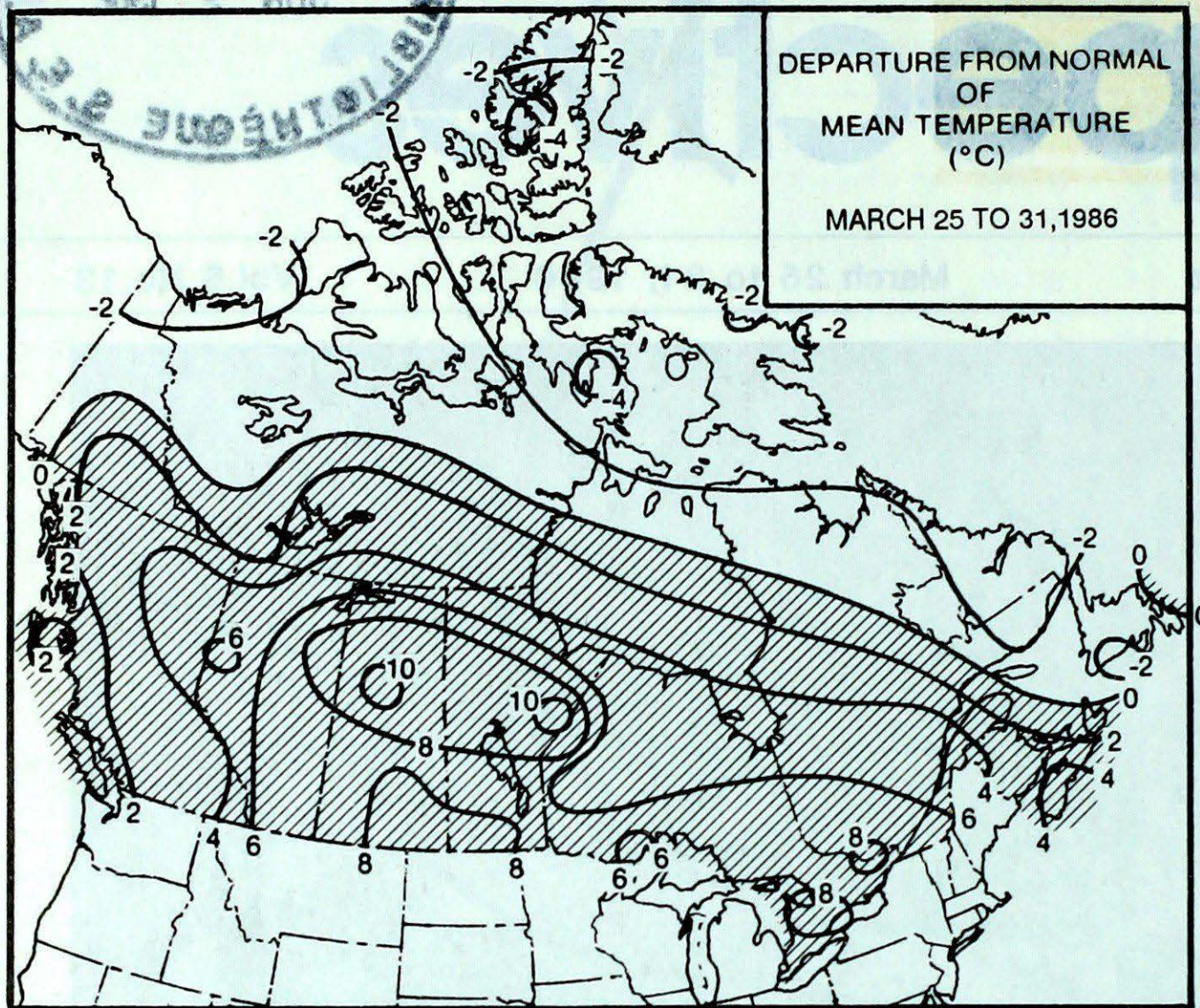
Vol.8 No.13



With increasingly warmer spring time temperatures, lower levels of the atmosphere become drier, as relative humidities decrease. This results in large areas of clear skies between individual weather systems, as seen in this NOAA 9 photo of March 26, 1986.

- ***Avalanches kill four in British Columbia***
- ***Record warmth from Ontario to the Maritimes***
- ***Storm - force winds whip Newfoundland***

TEMPERATURE



DEPARTURE FROM NORMAL
OF
MEAN TEMPERATURE
(°C)

MARCH 25 TO 31, 1986

ACROSS THE COUNTRY...

Yukon and Northwest Territories

In the Yukon, the week was primarily cloudy and cold, with scattered flurries or periods of light snow. In the Mackenzie District, snowfalls ranged between 5 and 15 centimetres, mostly falling towards the end of the period. Blizzards and blowing snow were common in the Keewatin District and coastal areas of Hudson Bay. On March 29-30, Cape Dyer, on the east coast of Baffin Island, was buried under more than 50 cm of fresh snow, increasing their depth of snow on the ground to 170 cm. It was primarily clear and cold in the high Arctic, where temperatures plunged to the minus forties.

British Columbia

A series of disturbances produced heavy rains along the coast, and gave above normal precipitation further inland. Mild temperatures and a heavy snow pack in the southern interior were conducive to avalanches. Six snowmobilers were caught in a snowslide near Valemont in southern B.C.; four of them perished. Trees were beginning to bloom in the southern valleys, while good spring skiing was still available on the higher slopes.

Prairie Provinces

Record warm weather was experienced in Alberta during the early part of the week, but strong winds, frequently gusting to over 100 km/h, created serious soil erosion problems in the south due to the lack of soil moisture. In some open areas, blowing dust reduced visibilities to only a few kilometres. Warm weather moved into the eastern prairies over the weekend, but only after fresh snow blanketed central Saskatchewan and Manitoba earlier in the week. Locations in the inter-lake district received 15 cm of new snow on March 25. Over the weekend, under mainly sunny skies, daily high temperature records were broken in the east, when readings climbed to the low twenties.

WEEKLY TEMPERATURE EXTREME (C)

	MAXIMUM	MINIMUM
BRITISH COLUMBIA	KAMLOOPS 20	FORT NELSON -16
YUKON TERRITORY	ROSS RIVER 8	OGILVIE -35
NORTHWEST TERRITORIES	FORT SMITH 10	EUREKA -47
ALBERTA	MEDICINE HAT 23	HIGH LEVEL -23
SASKATCHEWAN	ESTEVAN 22	URANIUM CITY -25
MANITOBA	GRETNA 17	LYNN LAKE -30
ONTARIO	WINDSOR 27	MOOSONEE -29
QUEBEC	SUTTON JUNCTION 23	KUUJUAUPIK -32
NEW BRUNSWICK	FREDERICTON 19	CHARLO -13
NOVA SCOTIA	GREENWOOD 24	SYDNEY -12
PRINCE EDWARD ISLAND	SUMMERSIDE 13	CHARLOTTETOWN -10
NEWFOUNDLAND	DEER LAKE 12	WABUSH LAKE -33
	ST JOHN'S	

ACROSS THE NATION

WARMEST MEAN TEMPERATURE	11	WINDSOR	ONT
COOLEST MEAN TEMPERATURE	-41	EUREKA	NWT

Ontario

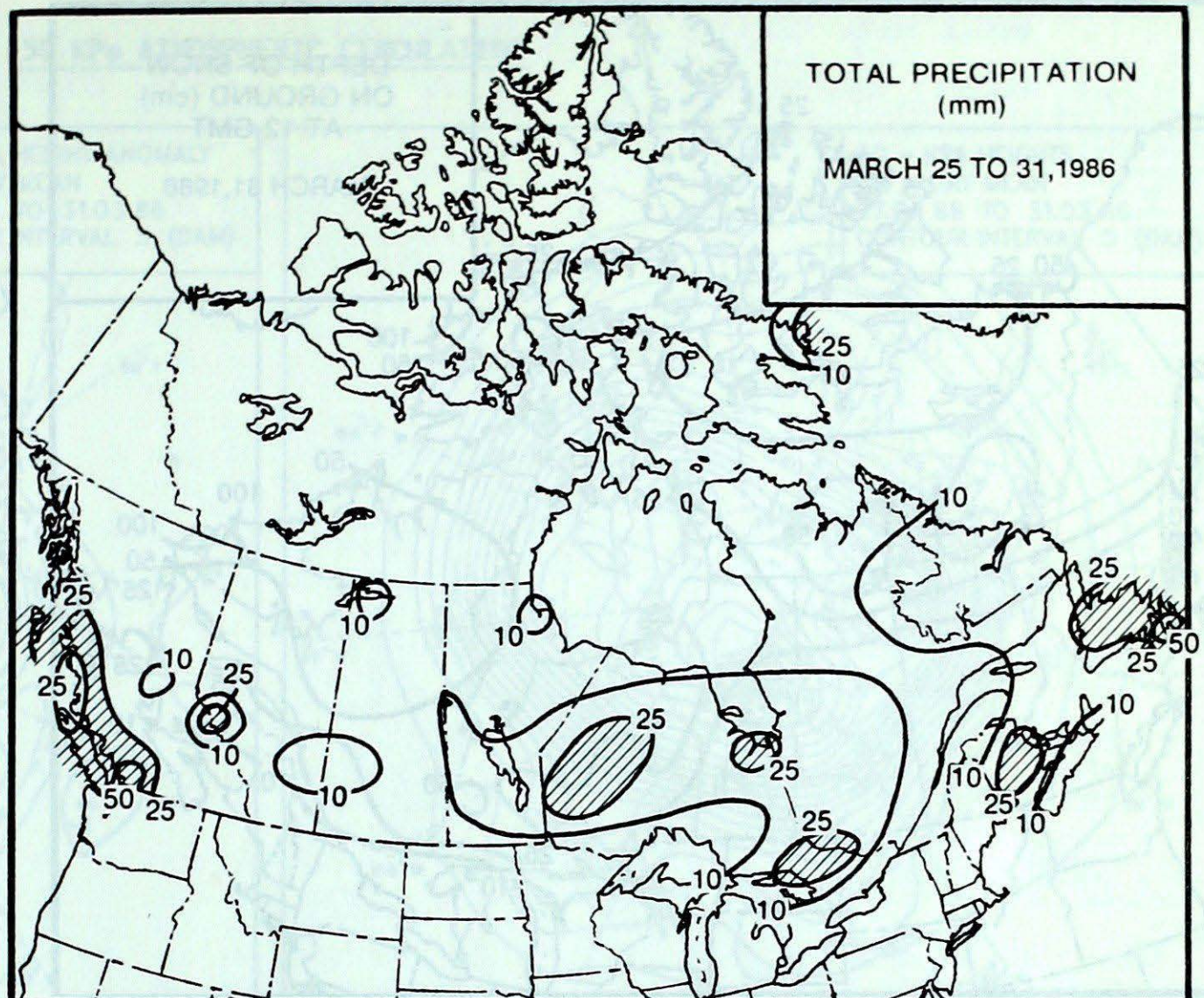
Weatherwise it was a perfect Easter weekend in the southern half of the province. The weather was unusually warm, with plenty of sunshine. In fact, this was the mildest spell of warm weather in southern Ontario during March since 1946. A northward shift in the storm track steered low pressure systems across the upper Great Lakes, where the heaviest precipitation was recorded, some of it falling as snow. Associated strong southerly winds allowed very warm air to surge northward from the American south, breaking many daily temperature records. Over the weekend readings in southern Ontario climbed into the twenties. The mercury at Windsor registered 27°C on Easter Sunday. In contrast, maximum temperatures in northwestern Ontario reached 8°C - still significantly above normal.

Quebec

Warm and sunny weather conditions infiltrated the southern half of the province, as weather systems tracked further to the north. The unseasonably mild weather caused rapid snow melt, swelling streams and rivers. In the Eastern Townships, several rivers overflowed their banks, flooding many low lying areas. Eighteen daily maximum temperature records were broken. As a result of the unusually warm weather, maple syrup production yields have been poor. Spring skiing continues in the Eastern Townships.

Maritimes

Except for brief intrusions of cold air, it was a mild spring week. On March 26, a southerly flow brought record breaking maximum temperatures to Nova Scotia. On March 30, a new monthly temperature record of 23.9°C was established at Greenwood. Monthly temperature records were also set at Halifax and Shearwater on March 31, 16.4 and 18.8°C, respectively. Several weather systems brought inclement weather to the Maritimes. Despite the overall warm temperatures, New Brunswick and P.E.I. still incurred

**HEAVIEST WEEKLY PRECIPITATION (mm)**

BRITISH COLUMBIA	MCINNES ISLAND	97
YUKON TERRITORY	EAGLE PLAINS	5
NORTHWEST TERRITORIES	CAPE DYER	43
ALBERTA	JASPER	26
SASKATCHEWAN	URANIUM CITY	13
MANITOBA	GIMLI	18
ONTARIO	MOOSONEE	42
QUEBEC	BLANC SABLON	25
NEW BRUNSWICK	FREDERICTON	44
NOVA SCOTIA	SABLE ISLAND	23
PRINCE EDWARD ISLAND	CHARLOTTETOWN	35
NEWFOUNDLAND	ARGENTIA	68

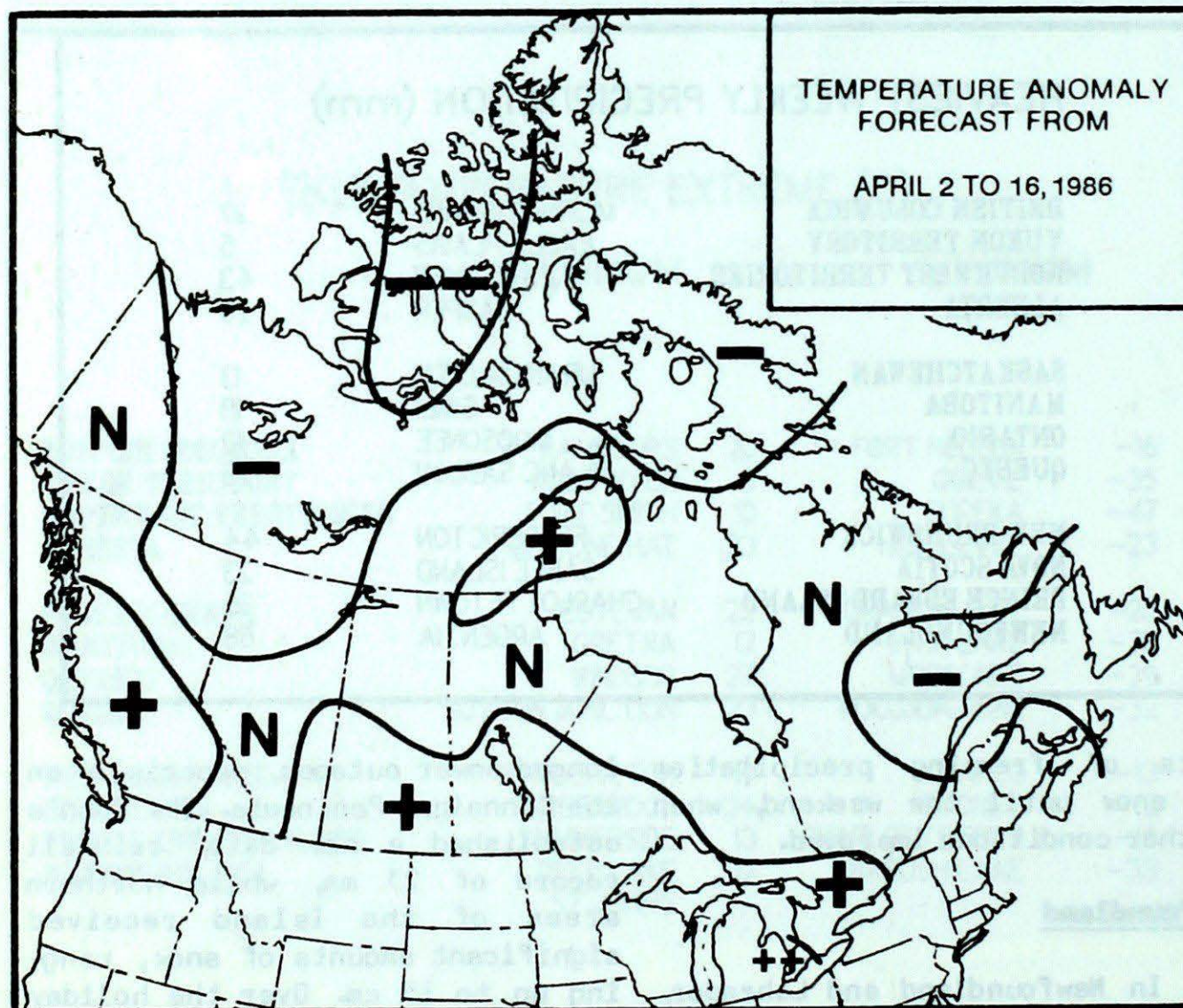
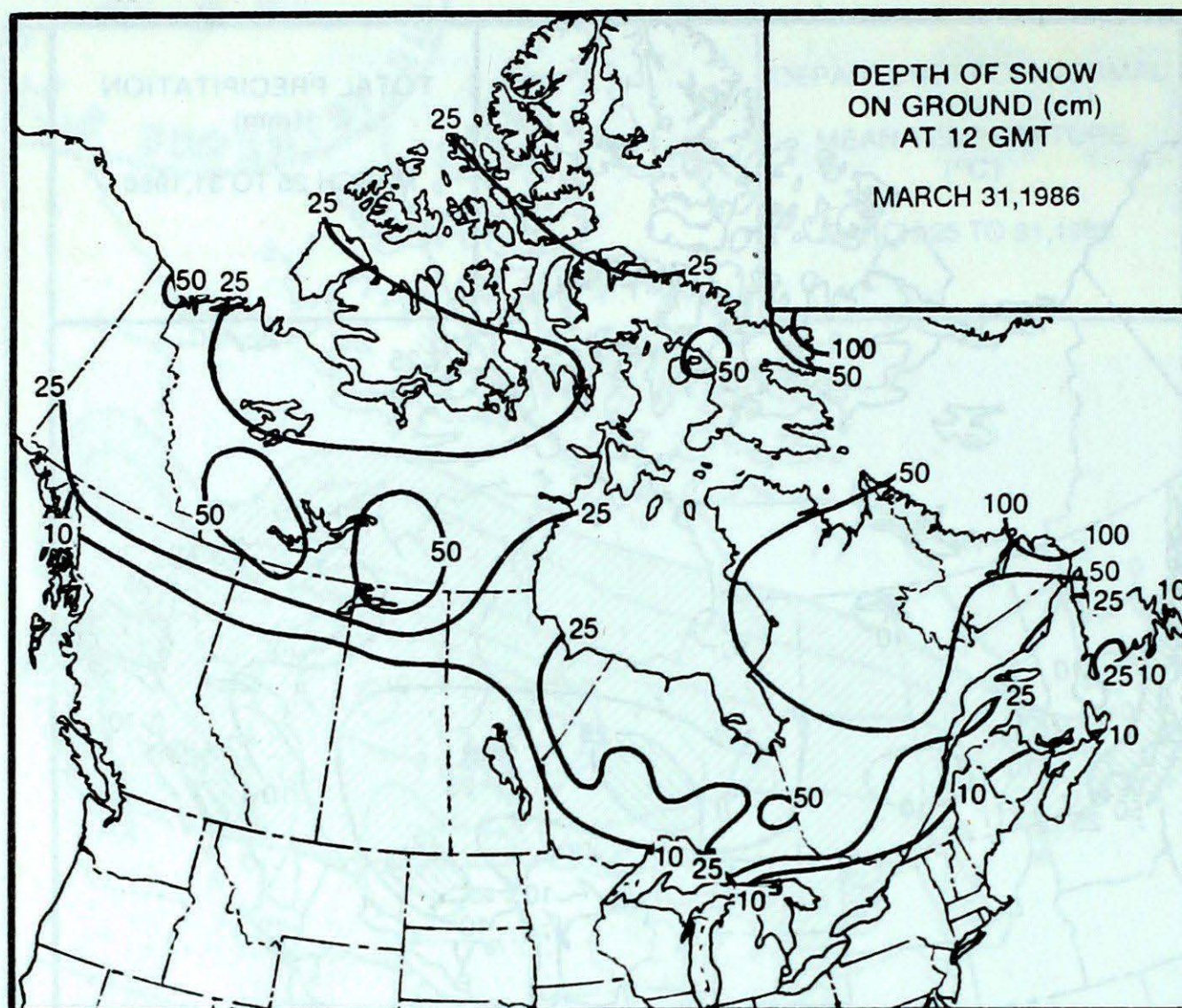
bouts of freezing precipitation and snow until the weekend, when weather conditions improved.

Newfoundland

In Newfoundland and Labrador, the week started out on the cold side. On March 25, winds were gusting to 104 and 111 km/h at Port aux Basques and St. John's, respectively. Low temperature records were also broken the same day. On March 28, a weather system brought freezing rain and snow. There were pro-

longed power outages, especially on the Connaigre Peninsula. St. John's established a new daily rainfall record of 23 mm, while northern areas of the Island received significant amounts of snow, ranging up to 15 cm. Over the holiday weekend, temperatures climbed to above normal values, but the mild weather was also accompanied by coastal fog. Considerable sunshine was experienced in Labrador, with gradually moderating temperatures through the period.

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 purpose of the publication is to make topical information available to the public concerning the Canadian Climate and its socio-economic impact.

Unsolicited articles are welcome but should be at maximum about 1500 words in length. They will be subject to editorial change without notice due to publishing time constraints. Black and white photographs can be used, but not colour. The contents may be reprinted freely with proper credit.

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.

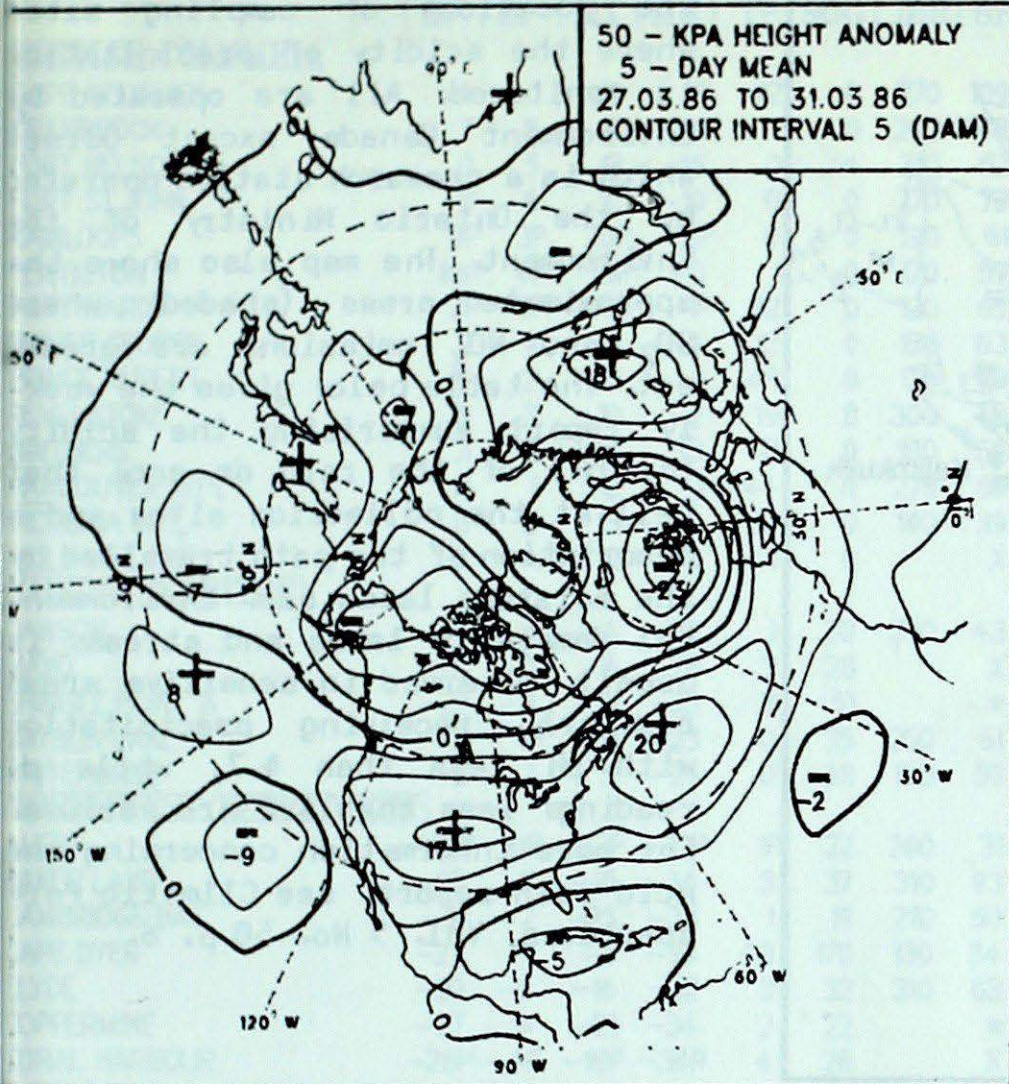
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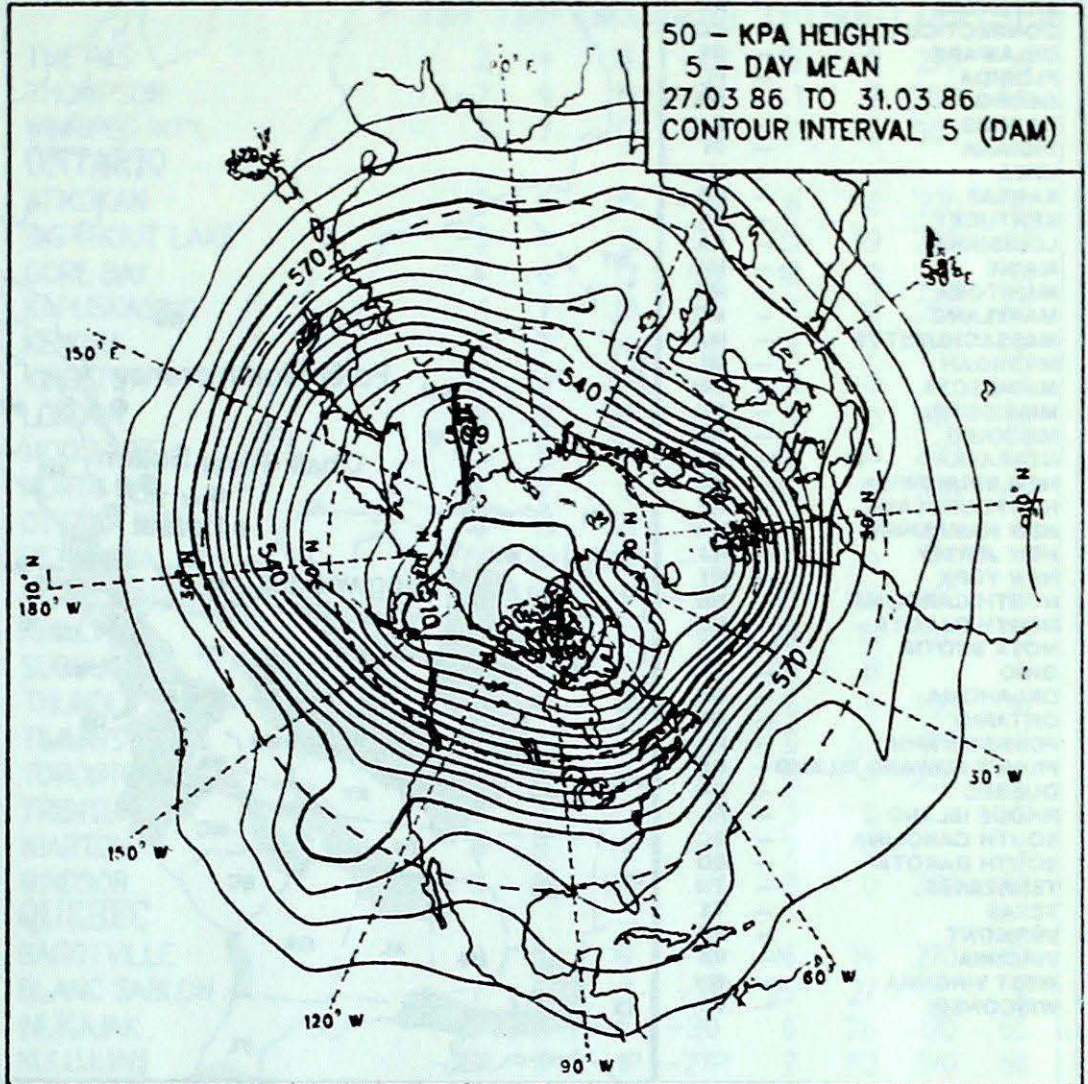
50 KPa ATMOSPHERIC CIRCULATION

50 - KPa HEIGHT ANOMALY
5 - DAY MEAN
27.03.86 TO 31.03.86
CONTOUR INTERVAL 5 (DAM)

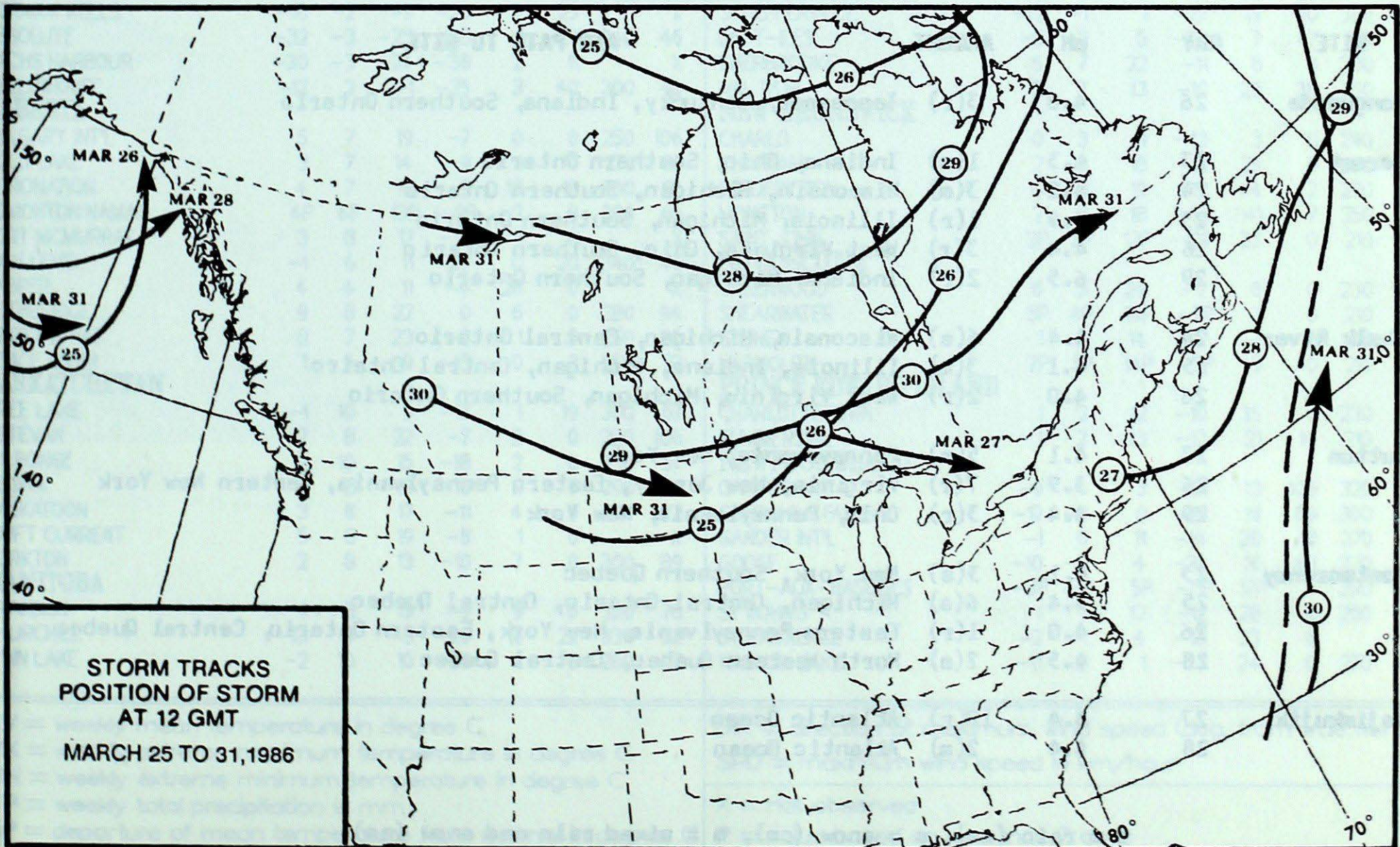


MEAN 50 KPa HEIGHT ANOMALY (dam)
March 27 to March 31, 1985

50 - KPa HEIGHTS
5 - DAY MEAN
27.03.86 TO 31.03.86
CONTOUR INTERVAL 5 (DAM)



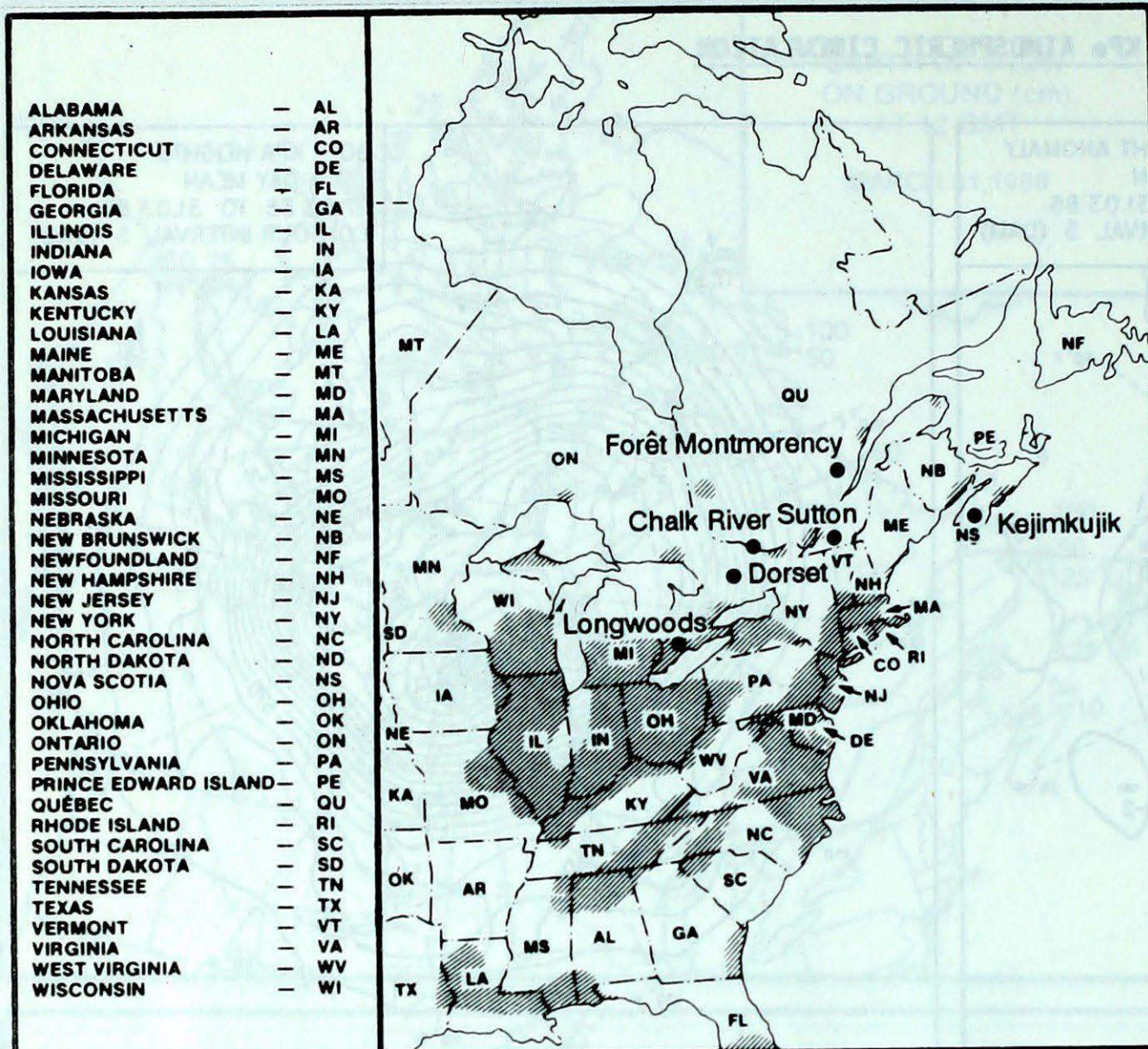
MEAN 50 KPa HEIGHTS (dam)
March 27 to March 31, 1985



STORM TRACKS
POSITION OF STORM
AT 12 GMT
MARCH 25 TO 31, 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 23 TO MARCH 29, 1986

SITE	DAY	pH	AMOUNT	AIR PATH TO SITE
Longwoods	26	4.8	3(r)	Tennessee, Kentucky, Indiana, Southern Ontario
Dorset	23	4.3	1(m)	Indiana, Ohio, Southern Ontario
	24	4.2	3(m)	Wisconsin, Michigan, Southern Ontario
	25	3.9	1(r)	Illinois, Michigan, Southern Ontario
	26	4.4	3(r)	West Virginia, Ohio, Southern Ontario
	29	6.5	2(r)	Indiana, Michigan, Southern Ontario
Chalk River	24	4.4	6(s)	Wisconsin, Michigan, Central Ontario
	25	4.1	3(m)	Illinois, Indiana, Michigan, Central Ontario
	26	4.0	2(r)	West Virginia, Michigan, Southern Ontario
Sutton	23	4.1	5(m)	Pennsylvania, New York
	26	3.9	7(r)	Virginia, New Jersey, Eastern Pennsylvania, Eastern New York
	29	4.4	3(r)	Ohio, Pennsylvania, New York
Montmorency	23	4.1	3(s)	New York, Southern Quebec
	25	4.4	6(s)	Michigan, Central Ontario, Central Quebec
	26	4.0	1(r)	Eastern Pennsylvania, New York, Eastern Ontario, Central Quebec
	28	4.5	2(s)	North Western Quebec, Central Quebec
Kejimikujik	27	4.4	10(r)	Atlantic Ocean
	28	4.4	2(m)	Atlantic Ocean

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

TEMPERATURE, PRECIPITATION AND MAXIMUM WIND DATA FOR THE WEEK ENDING 0800 GMT APRIL 1, 1988

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	2	*	14	-13	15	0	270	59
CAPE ST. JAMES	6	1	10	3	42	0	270	109	THOMPSON	-2	9	12	-28	1	2	300	44
CRANBROOK	7	5	17	-1	1	0	290	48	WINNIPEG INT'L	3	7	12	-10	7	0	300	61
FORT NELSON	0	5	13	-16	0	14	310	52	ONTARIO								
FORT ST. JOHN	3	6	10	-10	0	0	270	72	ATKOKAN	3	6	15	-14	6	18	270	50
KAMLOOPS	9P	3P	20P	-3P	0	0	190	61	BIG TROUT LAKE	-5	*	8	-23	25	39	290	69
PENTICTON	10P	4P	18P	-3	1	0	170	59	GORE BAY	4	6	13	-4	18	2	210	56
PORT HARDY	7P	2P	14P	1P	82	0	120	65	KAPUSKASING	1	7	13	-16	7	19	250	63
PRINCE GEORGE	2	*	11	-4	12	0	180	63	KENORA	3	7	14	-7	6	7	210	48
PRINCE RUPERT	6	2	10	1	48	0	120	69	KINGSTON	8P	6P	16P	1P	0	0	X	X
REVELSTOKE	5	3	10	-2	19	8	300	48	LONDON	9	8	24	-3	5	0	240	76
SMITHERS	3	2	10	-3	8	0	180	56	MOOSONEE	-5	5	8	-29	42	40	290	57
VANCOUVER INT'L	8	1	12	1	44	0	270	65	NORTH BAY	4	7	15	-6	28	10	250	46
VICTORIA INT'L	8	2	15	0	22	0	140	39	OTTAWA INT'L	8	8	21	-4	5	0	X	X
WILLIAMS LAKE	4	*	13	-6	1	0	X	X	PETAWAWA	6P	9P	23P	-5P	6	0	X	X
YUKON TERRITORY									PICKLE LAKE	-2P	5P	10P	-16P	23	46	290	61
DAWSON	-9	*	4	-30	1	30	260	43	RED LAKE	1	6	10	-9	29	18	320	50
MAYO	-6	0	5	-28	3	28	X	X	SUDBURY	3	6	13	-6	28	8	X	X
SHINGLE POINT A	-27	-3	-21	-33	3	51	X	X	THUNDER BAY	2	5	17	-12	6	6	290	91
WATSON LAKE	-3	4	6	-23	0	35	250	61	TIMMINS	2	7	12	-13	9	53	170	46
WHITEHORSE	-3	1	5	-25	0	38	160	59	TORONTO INT'L	9	8	25	-1	3	0	250	70
NORTHWEST TERRITORIES									TRENTON	8	7	20	-2	3	0	X	X
ALERT	-32P	0P	-23P	-39P	1P	22	240	31	WIARTON	8	8	19	-3	7	0	X	X
BAKER LAKE	-25	0	-16	-34	3	37	310	93	WINDSOR	11	8	27	-1	8	0	240	80
CAMBRIDGE BAY	-31	-2	-25	-38	1	19	210	50	QUEBEC								
CAPE DYER	-23	-1	-6	-34	43	170	130	54	BAGOTVILLE	1	5	19	-16	16	14	270	67
CLYDE	-29	-4	-16	-42	3	32	310	63	BLANC SABLON	-7	*	3	-19	25	27	X	X
COPPERMINE	-27	*	-21	-34	2	22	X	X	INUKJUAK	-17	1	-6	-30	6	26	170	65
CORAL HARBOUR	-26P	-4P	-18P	-34P	4	26	X	X	KUUJUAQ	-15P	-1P	-1P	-27P	7	82	270	69
EUREKA	-41P	-5P	-32P	-47P	1	21	X	X	KUUJUAUPIK	-12	2	1	-32	5	63	160	67
FORT SMITH	-5	6	10	-23	5	28	X	X	MANIWAKI	5	8	22	-5	12	0	210	50
FROBISHER BAY	-24	-4	-10	-33	6	20	340	61	MONT JOLI	2	4	16	-12	3	0	240	56
HALL BEACH	-30P	-3P	-17P	-41	3	27	290	63	MONTREAL INT'L	7	7	23	-6	2	0	250	50
INUVIK	-25	-3	-17	-35	4	39	X	X	NATASHQUAN	-7	-3	2	-21	10	28	310	65
MOULD BAY	-32	-2	-26	-39	3	30	X	X	QUEBEC	2	4	13	-10	8	58	280	50
NORMAN WELLS	-18	-2	-9	-26	3	25	X	X	SCHIEFFERVILLE	-13	-1	1	-27	19	60	300	57
RESOLUTE	-32	-3	-23	-38	1	31	040	46	SEPT-ILES	-5	-2	6	-20	7	47	310	69
SACHS HARBOUR	-30	-3	-24	-38	2	11	X	X	SHERBROOKE	5	7	22	-11	8	0	200	50
YELLOWKNIFE	-12	3	-1	-25	3	40	300	46	VAL D'OR	2	7	13	-10	23	38	250	70
ALBERTA									NEW BRUNSWICK								
CALGARY INT'L	5	7	19	-7	0	0	250	106	CHARLO	0	3	9	-13	3	11	290	67
COLD LAKE	3	7	14	-9	1	0	270	65	CHATHAM	2	3	18	-12	25	0	280	63
CORONATION	4	7	19	-9	13	0	300	65	FREDERICTON	4	3	19	-12	44	2	290	54
EDMONTON NAMA0	4P	6P	13P	-9P	2	0	290	65	MONCTON	2	2	18	-12	41	7	350	72
FORT MCMURRAY	3	8	12	-13	1	0	X	X	SAINT JOHN	3P	3P	13P	-10P	23	0	210	59
HIGH LEVEL	-1	6	11	-23	0	20	340	46	NOVA SCOTIA								
JASPER	4	4	11	-4	26	0	X	X	GREENWOOD	6	5	24	-7	8	0	230	109
LETHBRIDGE	9	8	22	0	6	0	280	94	SHEARWATER	5P	4P	19P	-7P	3	0	210	61
MEDICINE HAT	8	7	23	-2	1	0	260	85	SYDNEY	1	2	14	-12	7	13	210	81
PEACE RIVER	1	5	9	-15	0	3	250	52	YARMOUTH	7P	5P	14P	-3P	5	0	210	69
SASKATCHEWAN									PRINCE EDWARD ISLAND								
CREE LAKE	-1	10	9	-17	1	19	300	67	CHARLOTTETOWN	1	2	12	-10	35	6	230	52
ESTEVAN	7	8	22	-7	2	0	280	106	SUMMERSIDE	1	2	13	-10	21	14	210	87
LA RONGE	2	10	15	-18	2	0	330	57	NEWFOUNDLAND								
REGINA	4	8	19	-10	2	0	290	81	CARTWRIGHT	-9	-4	3	-21	13	106	320	87
SASKATOON	3	8	17	-11	4	0	290	72	CHURCHILL FALLS	-12	-3	0	-29	18	89	300	52
SWIFT CURRENT	5	8	19	-8	1	0	X	X	GANDER INT'L	-1	0	11	-14	28	18	270	72
YORKTON	2	8	13	-10	7	0	300	89	GOOSE	-10	-5	4	-24	16	43	320	59
MANITOBA									PORT-AUX-BASQUES	-3P	-1P	5P	-11P	17P	4	290	102
BRANDON	4	8	15	-9	9	0	320	76	ST JOHN'S	1	1	12	-12	28	0	250	94
CHURCHILL	-13	4	-3	-26	12	22	330	63	ST LAWRENCE	-2	-1	4	-13	33	6	X	X
LYNN LAKE	-2	10	10	-30	1	6	260	37	WABUSH LAKE	-11	-2	1	-33	24	0	270	48

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

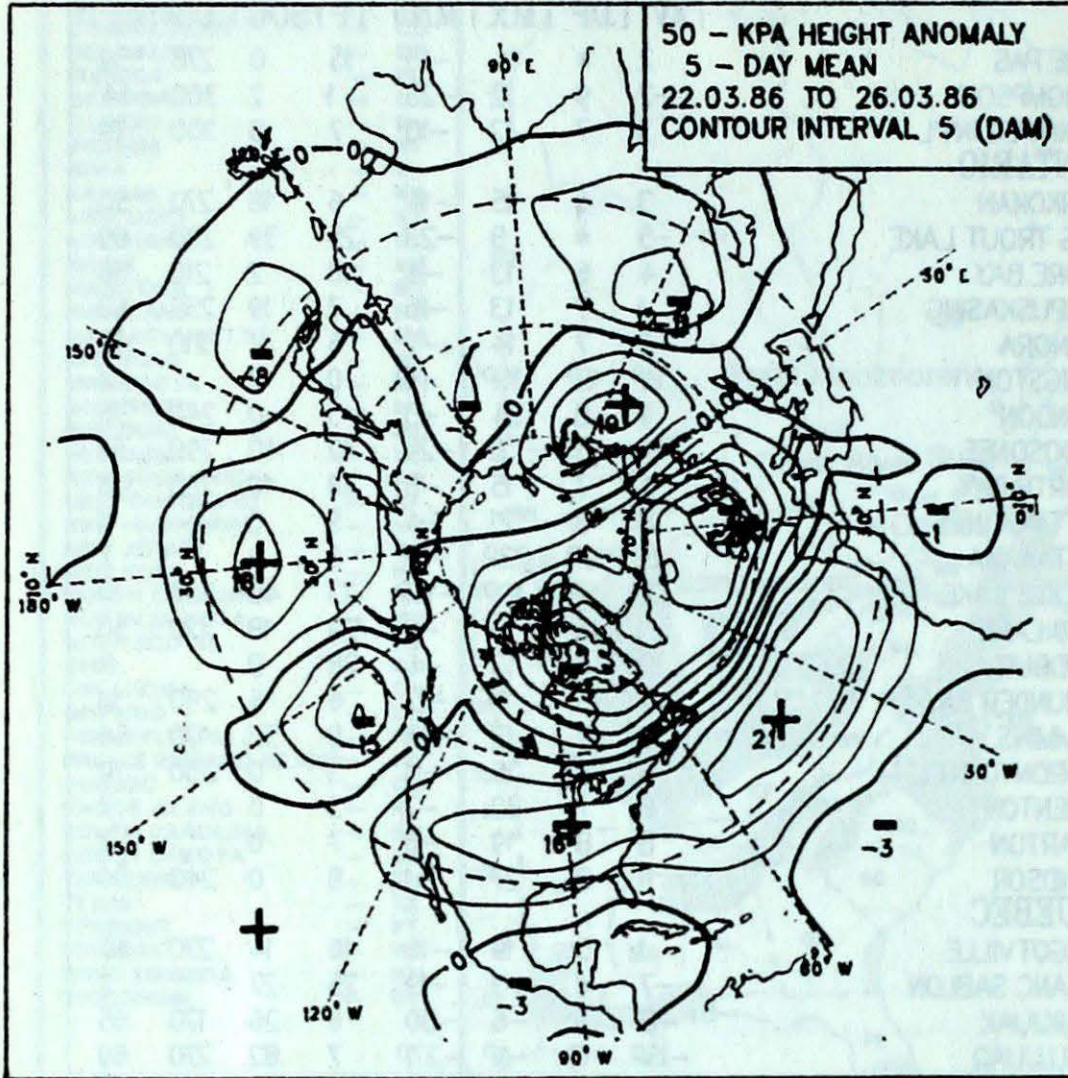
X = not observed

P = value based on less than 7 days

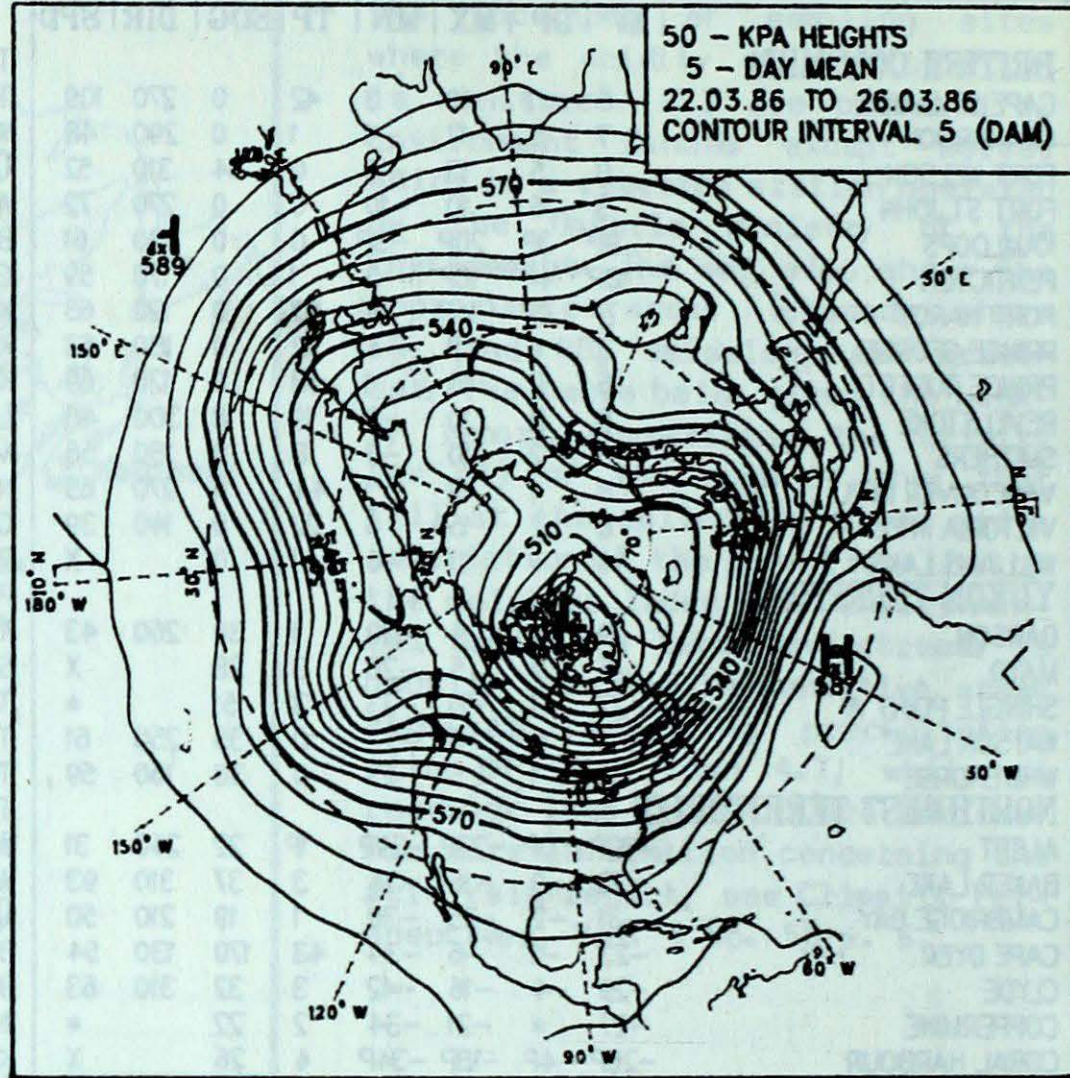
* = missing

CIRCULATION

50 KPa ATMOSPHERIC CIRCULATION



MEAN 50 KPa HEIGHT ANOMALY (dam)
March 22 to March 26, 1986



MEAN 50 KPa HEIGHTS (dam)
March 22 to March 26, 1986

