

Environment Canada

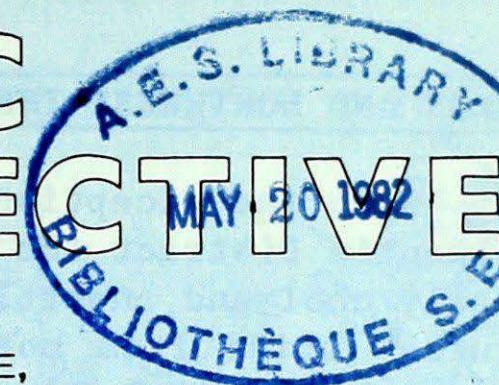
Environnement Canada

Atmospheric environment

Environnement atmosphérique

A WEEKLY REVIEW OF CANADIAN CLIMATE

CLIMATIC PERSPECTIVES



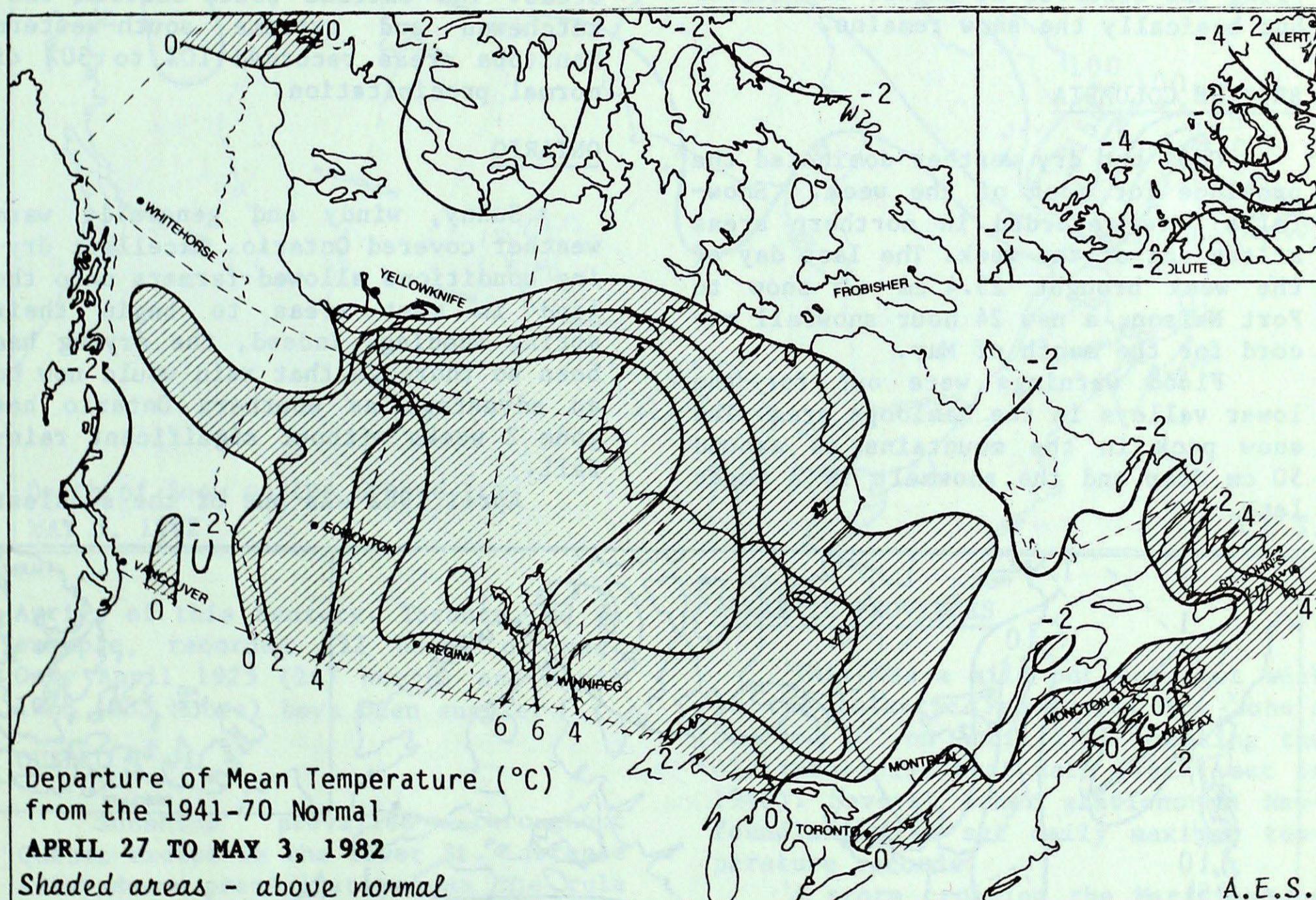
Canada

THE CANADIAN CLIMATE CENTRE,
ATMOSPHERIC ENVIRONMENT SERVICE,
4905 DUFFERIN ST., DOWNSVIEW, ONTARIO M3H 5T4

7 MAY, 1982

(Aussi disponible en français)

VOL. 4 NO. 17



WEATHER HIGHLIGHTS FOR THE PERIOD - APRIL 27 TO 3, 1982

Heavy rainfalls in the Maritimes

A storm brought large amounts of precipitation to the Maritimes and the lower St. Lawrence area this week. Halifax measured 97 mm of precipitation on April 28th and recorded the highest weekly total in the country, 134.6 mm. A 100 m section of the Trans-Canada Highway was washed out near St. Ann's Bay (Cape Breton).

The last day of the week saw 25.4 cm of snow fall on Fort Nelson, B.C. establishing a new 24 hour snowfall record for the month of May (previous record 17.3 cm in 1962).

Temperatures across the country varied from a maximum of 31.3° at Dauphin, Manitoba, to a minimum of -32.6° at Shepherd Bay, N.W.T.

NOTE: The data shown in this publication are based on unverified reports from approximately 225 Canadian and 115 northern United States Synoptic stations.

YUKON AND NORTHWEST TERRITORIES

With the exception of the southern Mackenzie District the weather was generally cool and unsettled. Mean temperatures varied from more than 6° above normal at Fort Smith to more than 6° below normal at Eureka.

Snowmelt is general only in the lower valley floors in Yukon. Some settling has occurred at higher elevations but basically the snow remains.

BRITISH COLUMBIA

Cool but dry weather dominated the province for most of the week. Snowfalls were recorded in northern areas at the end of the week. The last day of the week brought 25.4 cm of snow to Fort Nelson, a new 24 hour snowfall record for the month of May.

Flood warnings were out for the lower valleys in the Kamloops area. The snow pack in the mountains is around 50 cm deep and the snowmelt is 2 weeks late.

Many fruit trees in southern British Columbia are now in bloom.

PRAIRIE PROVINCES

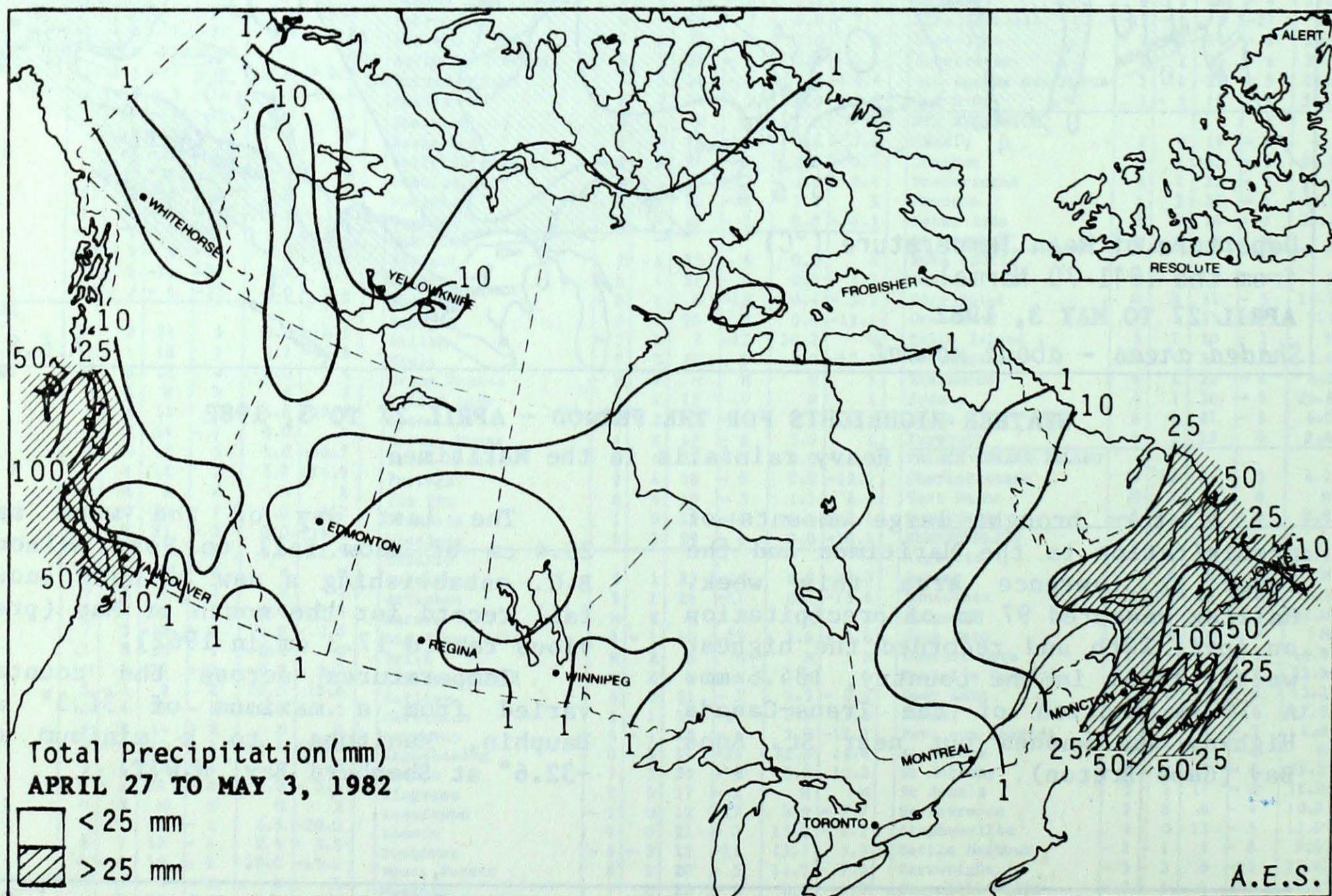
Sunny, dry weather and above normal temperatures were enjoyed throughout the Prairies. Most farmers were able to begin their field work.

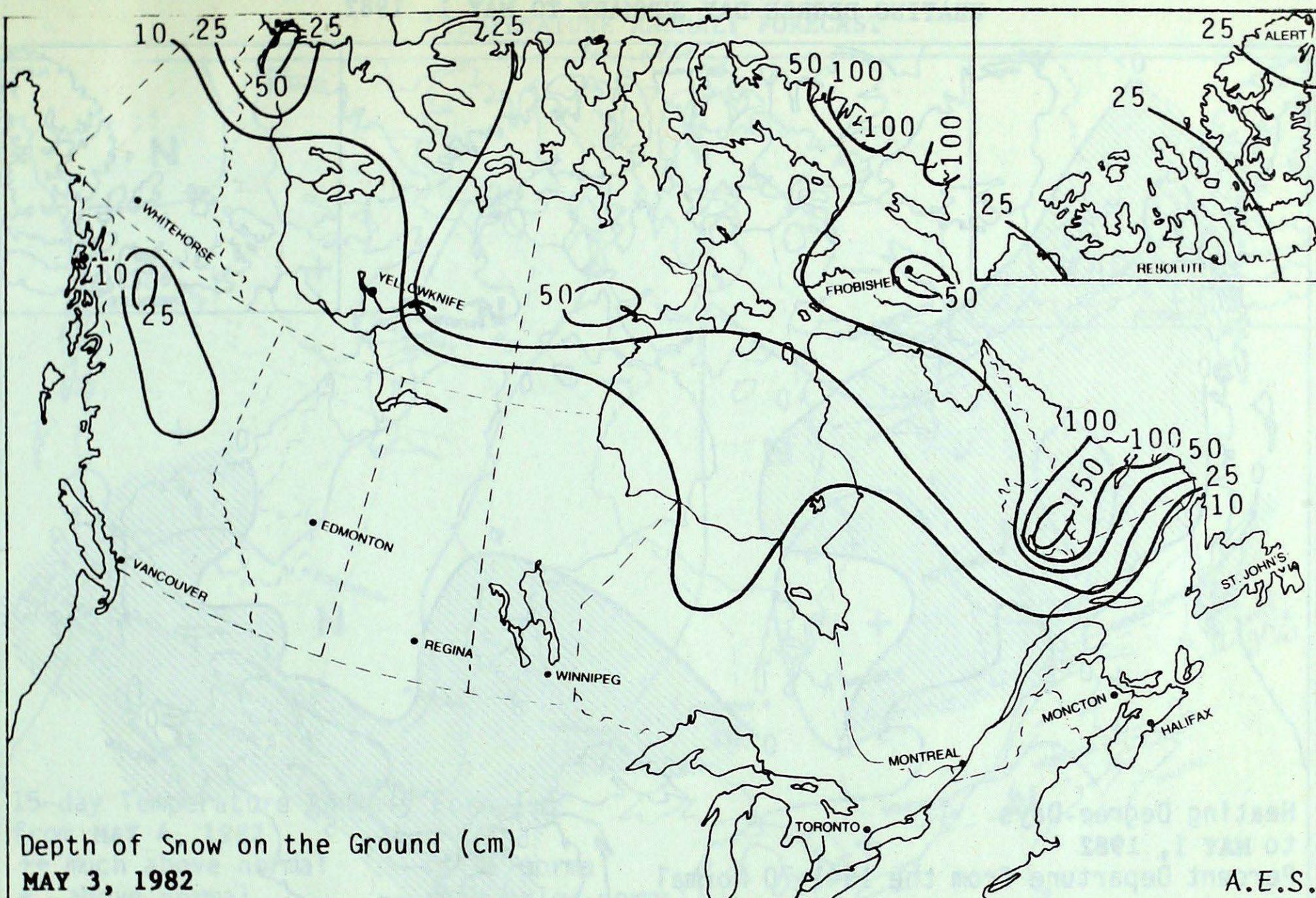
April was a dry month in many areas. The extreme south-eastern Saskatchewan and extreme south-western Manitoba areas recorded 10% to 30% of normal precipitation.

ONTARIO

Sunny, windy and generally warm weather covered Ontario. Excellent drying conditions allowed farmers onto the land in most areas to begin their spring seeding. Indeed, the drying has been so thorough that rain would now be an advantage as southern Ontario has gone 2 weeks without significant rainfall.

April 1982 was one of the sunniest





Aprils of this century. Toronto, as an example, recorded 232 hours of sun. Only April 1925 (247 hours) and April 1976 (233 hours) have been sunnier.

QUEBEC

Sunshine prevailed throughout Quebec except in the lower St. Lawrence area where precipitation was the rule for most of the week. A storm deposited 30 cm of snow and 2 cm of freezing rain on the lower North Shore region; the airport at Blanc Sablon was closed for 2 days as a result of the storm.

The month of April 1982 established many new monthly snowfall records. (See table below)

Monthly snowfall records for April, 1982

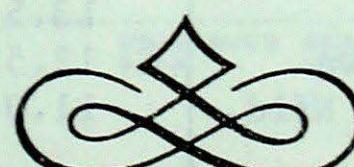
Station	Record	Old record
Chibougamau	78.0 cm	61.1 cm (1977)
Val d'Or	56.2 cm	53.4 cm (1977)
Bagotville	67.1 cm	66.9 cm (1943)
Sept-Îles	84.2 cm	80.2 cm (1969)
Gaspe	96.5 cm	60.0 cm (1979)
Natashquan	78.4 cm	68.1 cm (1976)

ATLANTIC PROVINCES

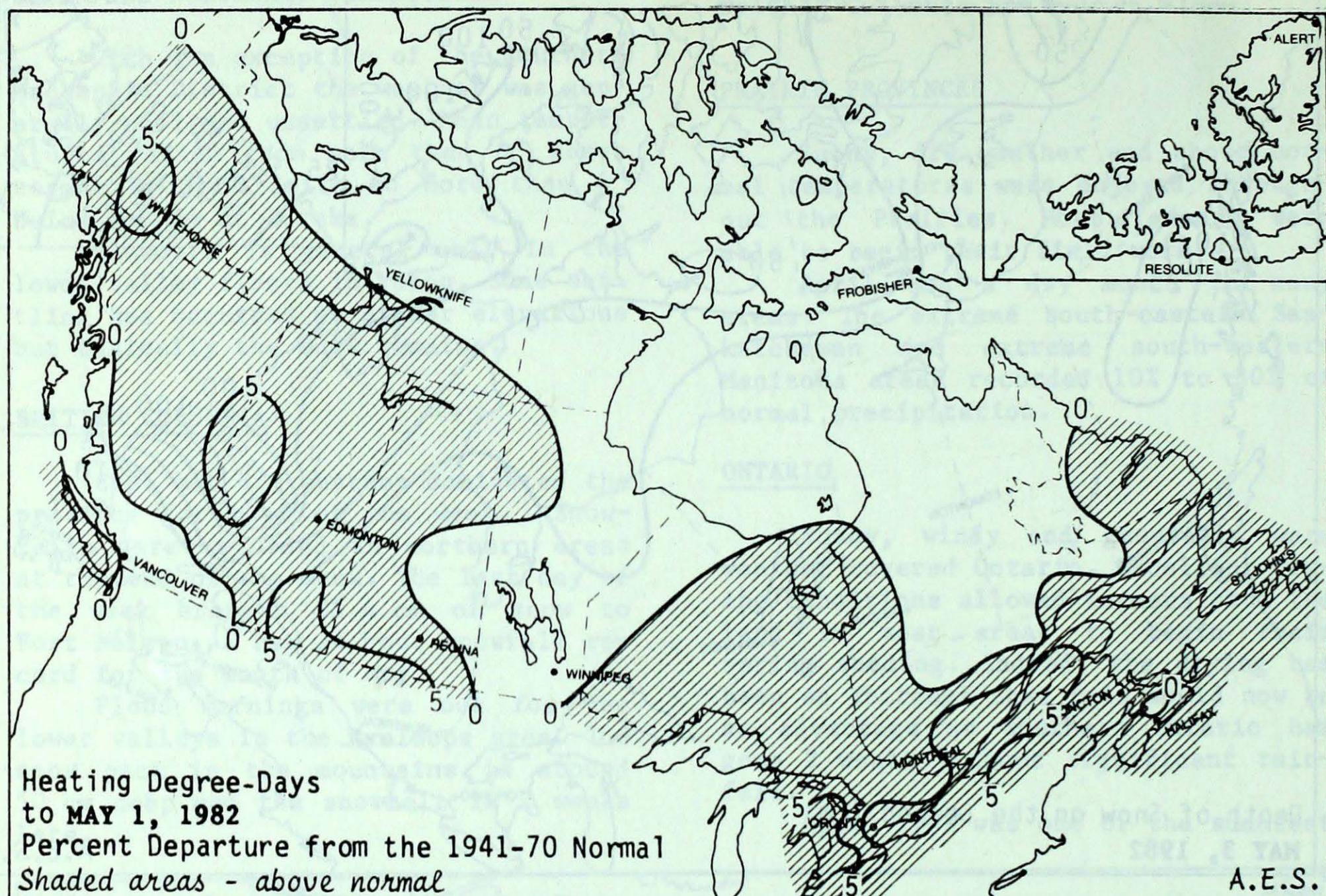
This was a mild but very wet week in the Atlantic Provinces. St. John's reached 20° on April 27th breaking the old record for that date (16.7° set in 1946). Several other stations in Newfoundland also set daily maximum temperature records.

A storm crossing the Maritimes on April 27th to 29th brought large amounts of precipitation to most areas. Halifax measured 97 mm on the 28th and Sydney 73 mm on the 29th. A 100 m section of the Trans-Canada Highway was washed out near St. Ann's Bay. As much as 14 cm of snow accumulated at Summerside before melting and wind gusts of 90 km/h were measured.

The Saint John River reached 7.2 m above normal on April 29th and was down to 5.9 m at week's end.

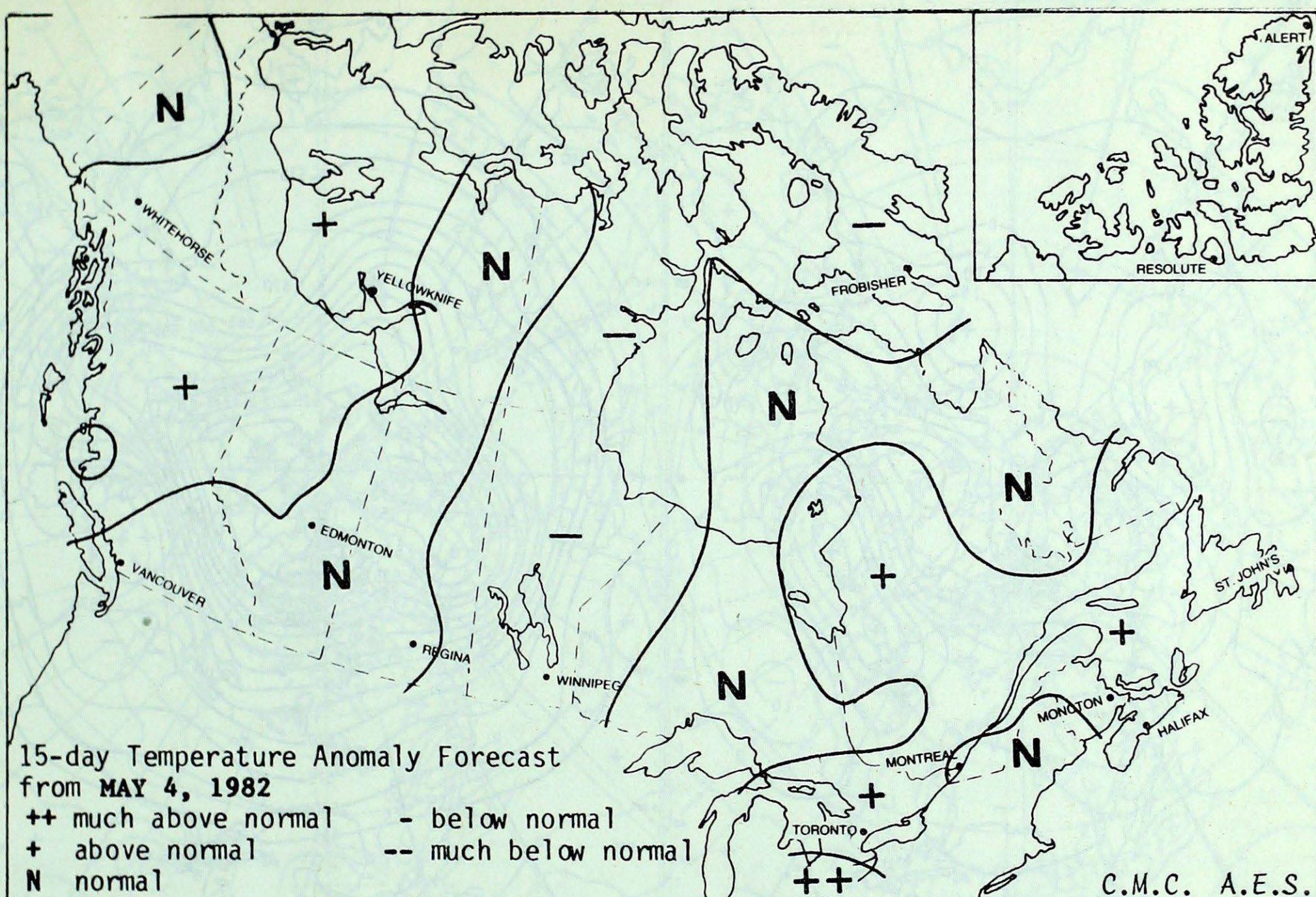


HEATING DEGREE-DAY SUMMARY TO MAY 1, 1982

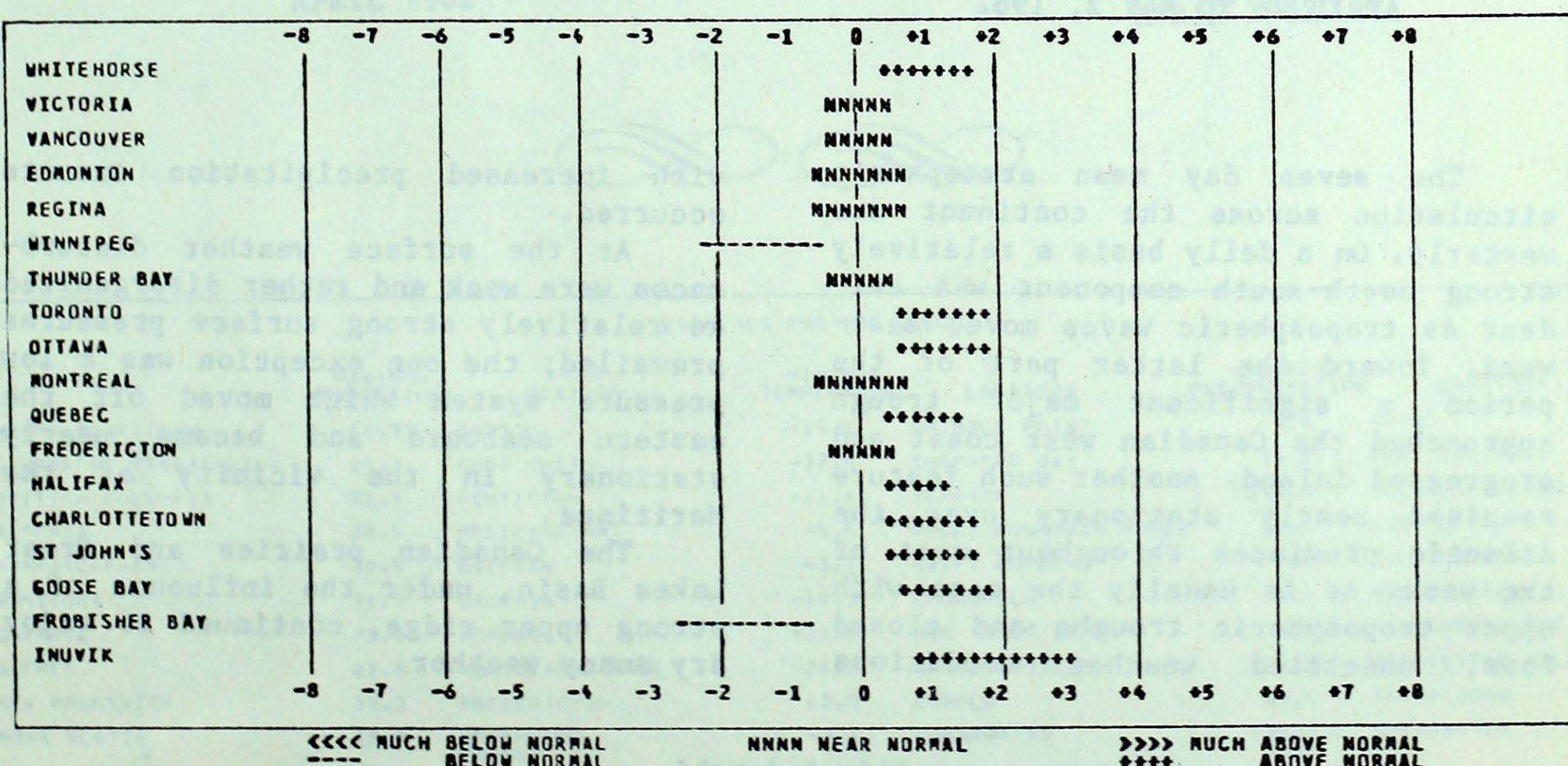


STATION	MONTHLY CUMULATIVE TOTAL	MONTHLY DIFF. FROM 1941-70 NORMAL	SEASONAL TOTAL	SEASONAL DIFF. FROM 1941-70 NORMAL	SEASONAL PERCENT OF NORMAL
Resolute	36.0	2.0	10833.0	-312.0	97
Inuvik	26.0	0.0	9139.5	-232.5	98
Whitehorse	16.0	2.0	6867.5	483.5	108
Vancouver	8.0	0.0	2762.0	6.0	100
Edmonton Mun	5.5	-3.5	5328.5	61.5	101
Calgary	7.0	-5.0	5170.5	232.5	105
Regina	4.0	-6.0	5794.5	195.5	103
Winnipeg	5.0	-5.0	5558.0	-29.0	99
Thunder Bay	8.5	-2.5	5494.0	169.0	103
Windsor	2.5	-4.5	3780.0	353.0	110
Toronto	6.0	-2.0	4208.0	353.0	109
Ottawa	4.5	-4.5	4647.0	190.0	104
Montreal	7.0	-1.0	4591.5	318.5	107
Quebec	14.5	4.5	5059.5	277.5	106
Saint John, N.B.	13.5	1.5	4512.5	150.5	103
Halifax	13.5	1.5	3837.5	113.5	103
Charlottetown	12.5	-0.5	4270.0	52.0	101
St. John's, Nfld.	11.0	-3.0	4228.5	26.5	101

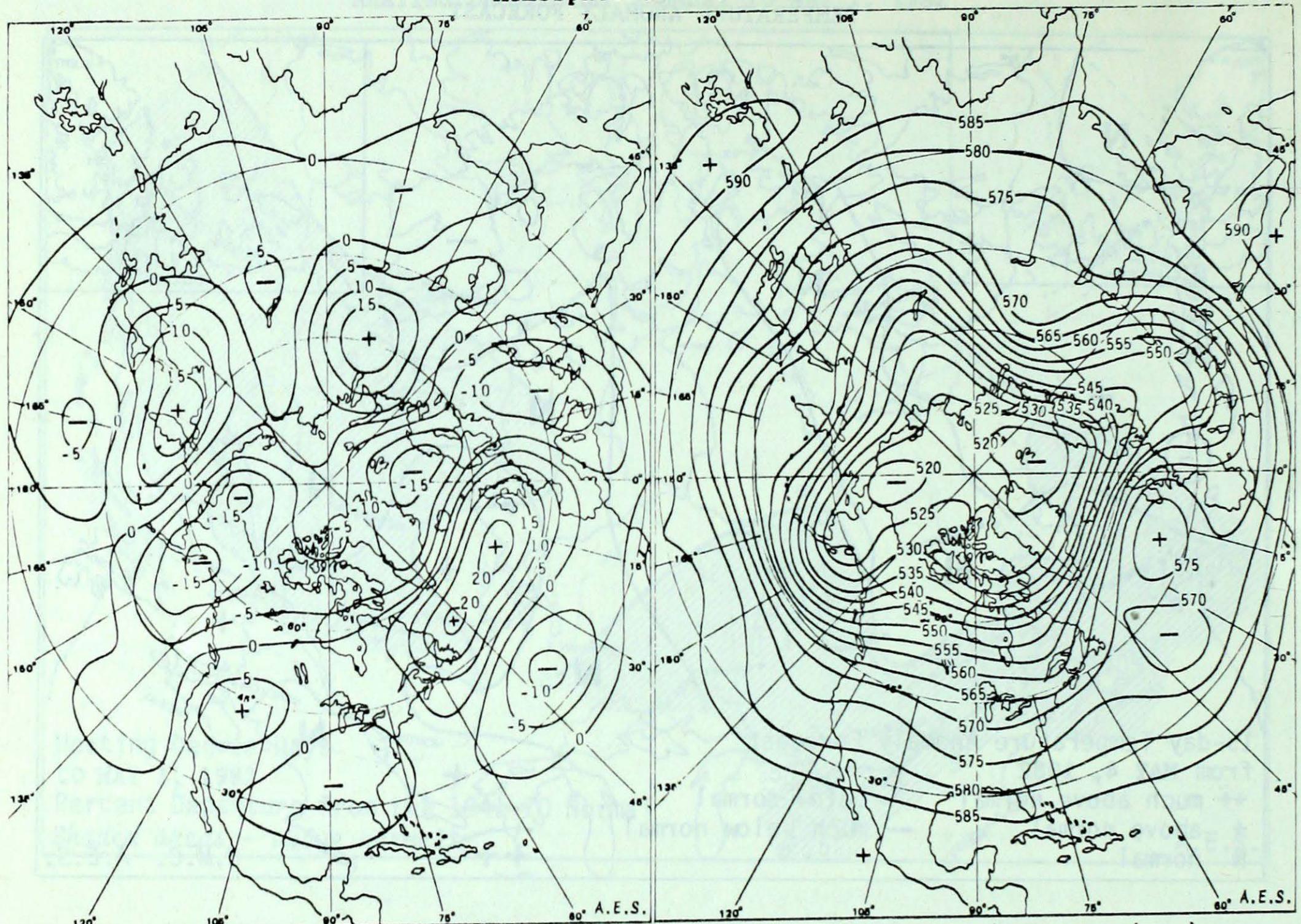
TEMPERATURE ANOMALY FORECAST



TEMPERATURE ANOMALY FORECAST FOR MAY 4 1982 TO MAY 18 1982



Atmospheric Circulation



7-day Mean 50 kPa Height Anomaly
(5 dam intervals)

APRIL 26 TO MAY 2, 1982

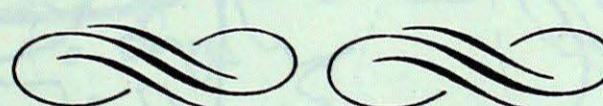
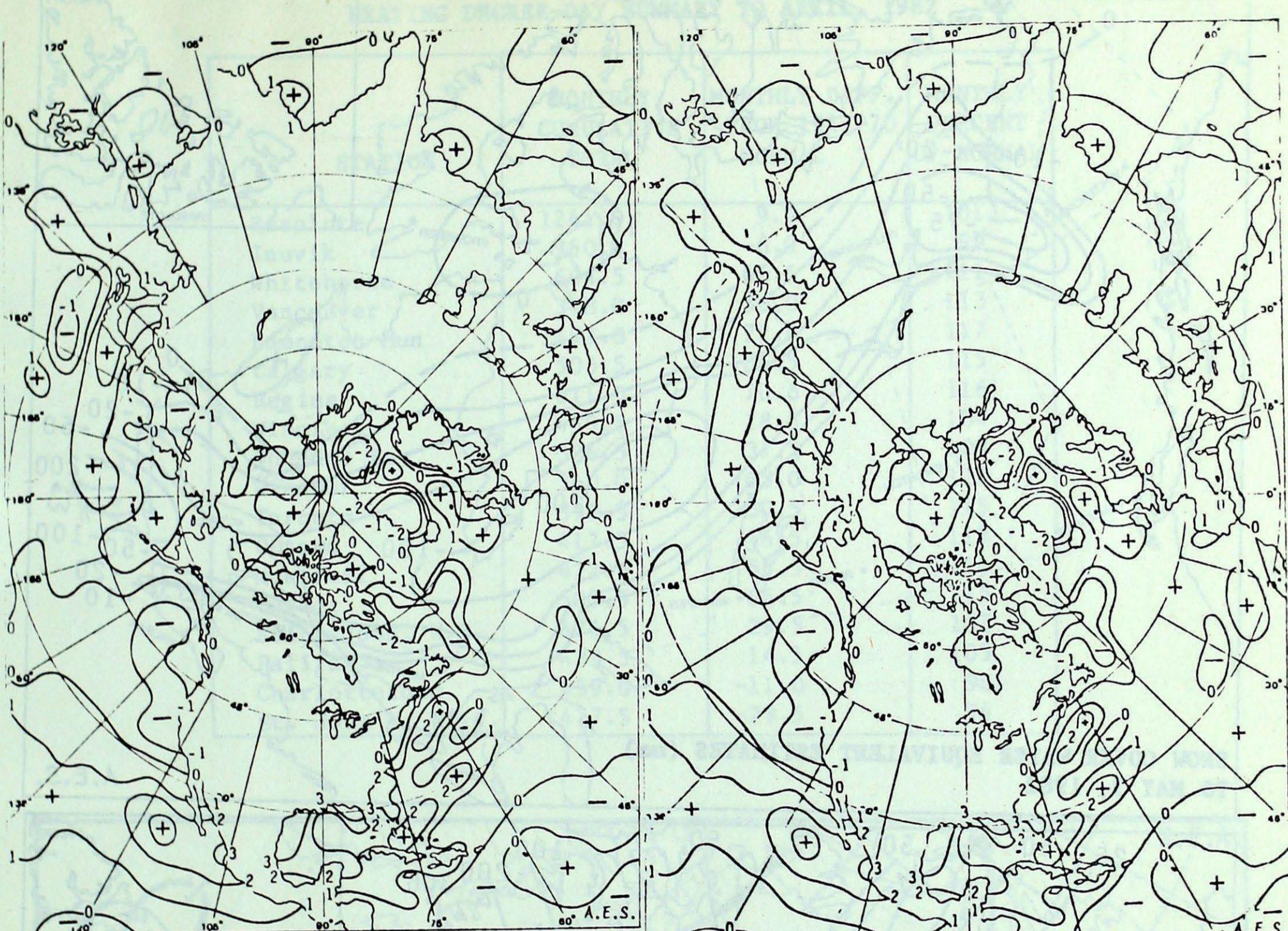
7-day Mean 50 kPa Height (dam)
APRIL 26 TO MAY 2, 1982

The seven day mean atmospheric circulation across the continent was westerly. On a daily basis a relatively strong north-south component was evident as tropospheric waves moved eastward. Toward the latter part of the period a significant major trough approached the Canadian west coast and progressed inland. Another such feature remained nearly stationary over the Atlantic provinces throughout most of the week. As is usually the case with upper tropospheric troughs and closed lows, unsettled weather conditions

with increased precipitation amounts occurred.

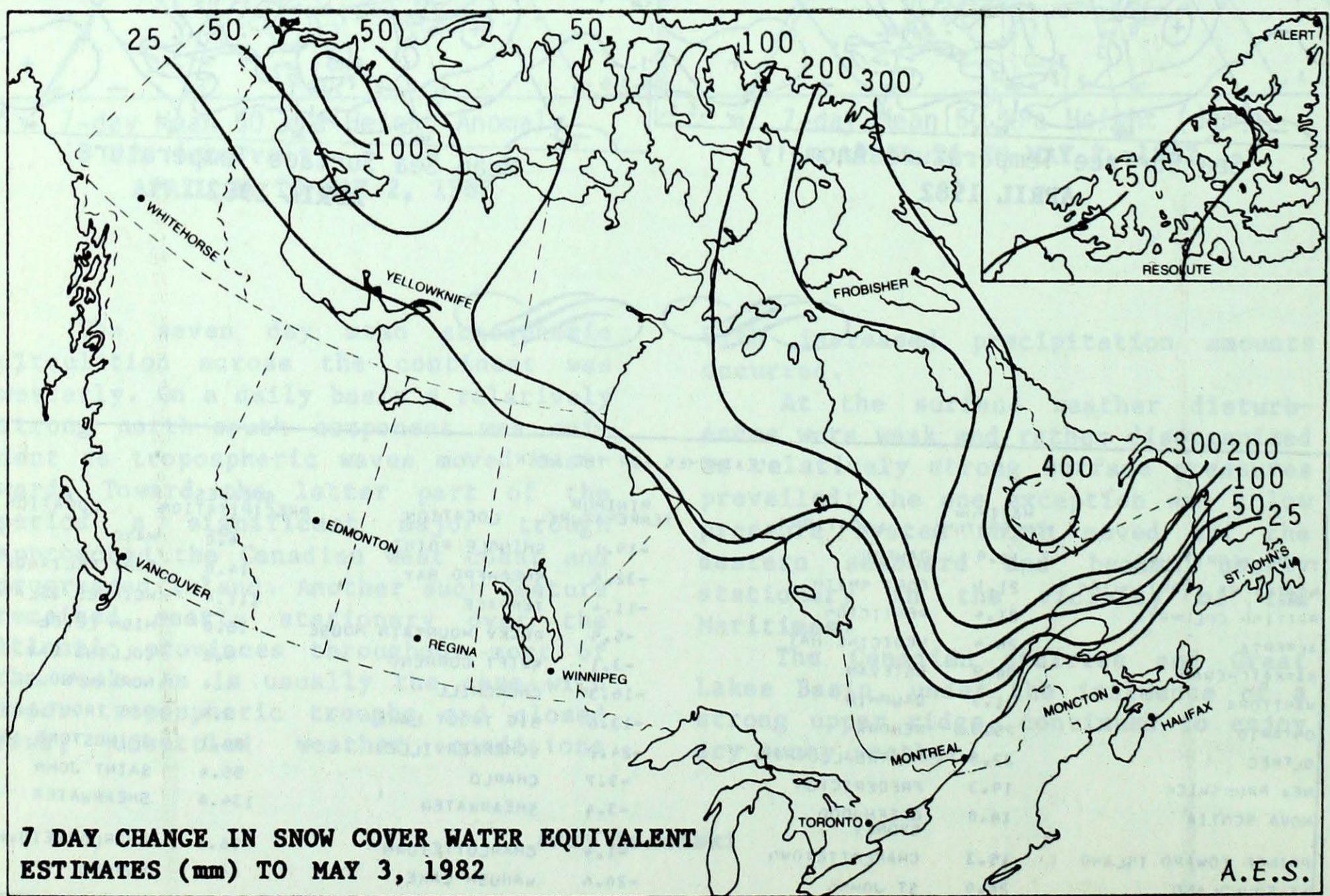
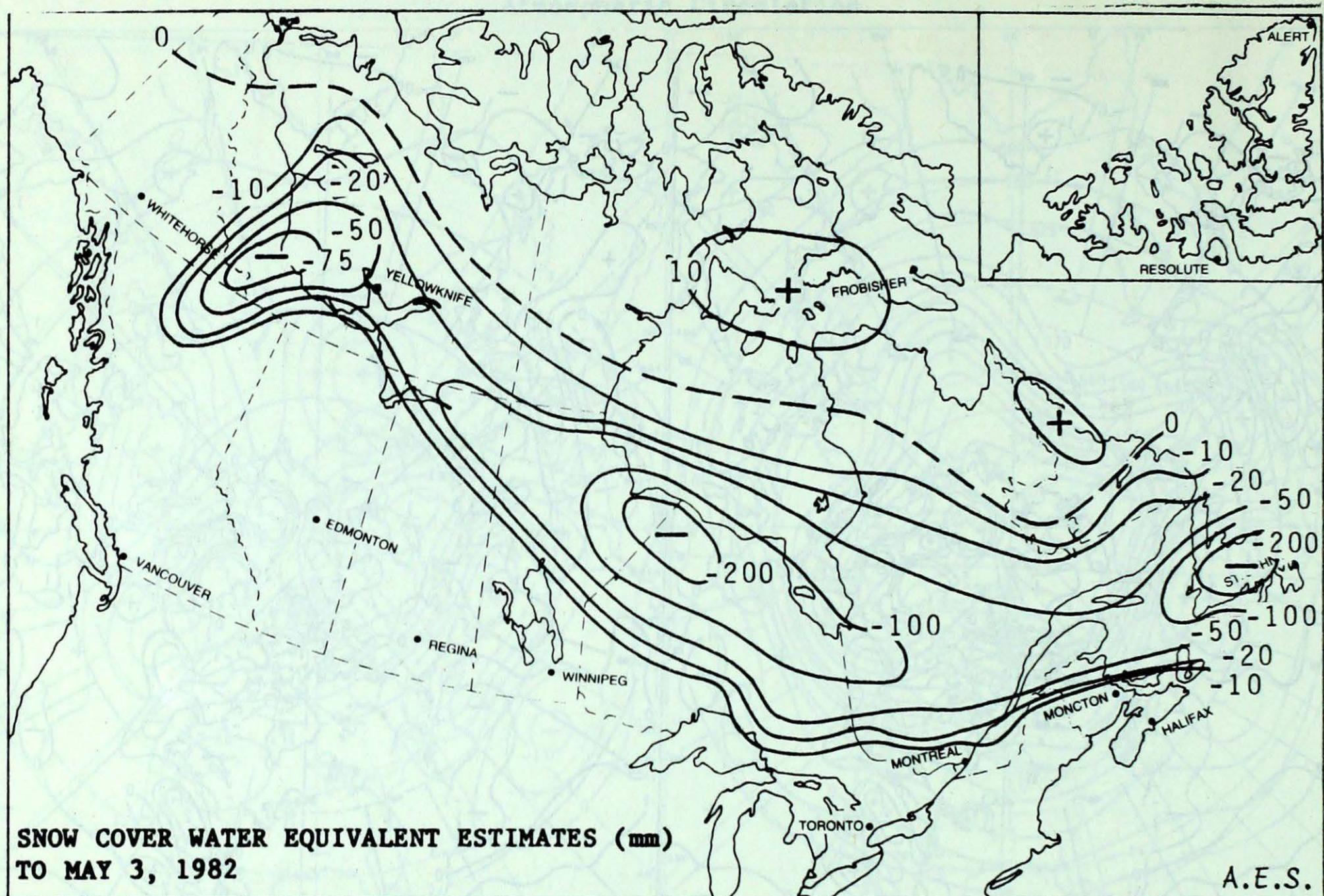
At the surface weather disturbances were weak and rather disorganized as relatively strong surface pressures prevailed; the one exception was a low pressure system which moved off the eastern seaboard and became nearly stationary in the vicinity of the Maritimes.

The Canadian prairies and Great Lakes Basin, under the influence of a strong upper ridge, continued to enjoy dry sunny weather.



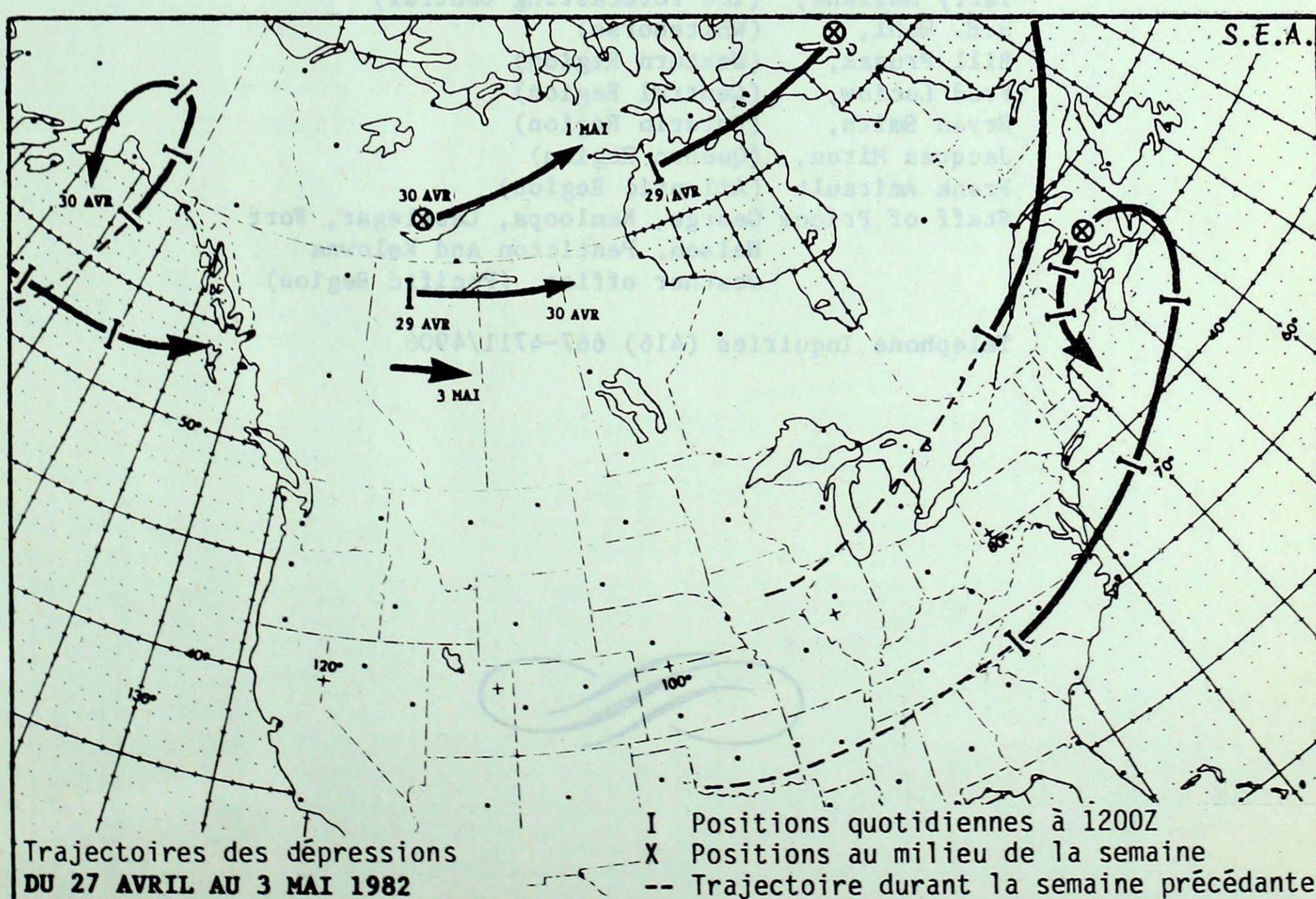
EXTREMES FOR THE WEEK

	MAXIMUM TEMPERATURE	LOCATION	MINIMUM TEMPERATURE	LOCATION	GREATEST PRECIPITATION	LOCATION
YUKON TERRITORY	10.9	DAWSON	-19.1	SHINGLE POINT	4.0	MAYO
NORTHWEST TERRITORIES	21.1	FORT SMITH	-32.6	SHEPHERD BAY	14.0	FORT RELIANCE
BRITISH COLUMBIA	21.4	PENTICTON	-11.4	TERRACE	111.4	MCINNES ISLAND
ALBERTA	26.4	MEDICINE HAT	-5.5	ROCKY MOUNTAIN HOUSE	15.0	HIGH LEVEL
SASKATCHEWAN	30.9	ESTEVAN	-3.1	SWIFT CURRENT	9.8	COLLINS BAY
MANITOBA	31.3	DAUPHIN	-16.3	CHURCHILL	4.4	NORWAY HOUSE
ONTARIO	25.3	KENORA	-13.6	BIG TROUT LAKE	3.4	BIG TROUT LAKE
QUEBEC	22.8	MONTREAL/DORVAL	-24.2	SCHEFFERVILLE	84.1	GRINDSTONE ISLAND
NEW BRUNSWICK	19.3	FREDERICTON	-3.7	CHARLO	55.4	SAINT JOHN
NOVA SCOTIA	18.0	GREENWOOD SYDNEY	-3.4	SHEARWATER	134.6	SHEARWATER
PRINCE EDWARD ISLAND	15.3	CHARLOTTETOWN	-1.4	CHARLOTTETOWN	96.6	CHARLOTTETOWN
NEWFOUNDLAND	20.0	ST JOHNS	-20.6	WAHUSH LAKE	64.2	BURGEO



HEATING DEGREE-DAY SUMMARY TO APRIL, 1982

STATION	MONTHLY CUMULATIVE TOTAL	MONTHLY DIFF. FROM 1941-70 NORMAL	MONTHLY PERCENT OF NORMAL
Resolute	1241.0	9.0	101
Inuvik	960.0	-6.0	99
Whitehorse	604.5	61.5	111
Vancouver	308.0	36.0	113
Edmonton Mun	493.0	72.0	117
Calgary	505.5	66.5	115
Regina	511.5	70.5	116
Winnipeg	459.5	18.5	104
Thunder Bay	506.5	37.5	108
Windsor	360.0	65.0	122
Toronto	398.5	50.5	115
Ottawa	417.5	46.5	113
Montreal	422.5	53.5	114
Quebec	507.5	66.5	115
Saint John, N.B.	476.5	29.5	107
Halifax	433.5	14.5	103
Charlottetown	459.0	-11.0	98
St. John's, Nfld.	477.5	-29.5	94



CLIMATIC PERSPECTIVES

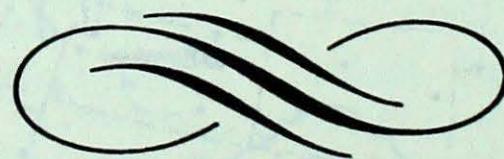
Staff

Editor:	Yves Durocher
Assistant Editor:	Bob Paterson
Technical Staff:	Fred Richardson, Andy Radomski
Graphics and Layout:	J. Rautenberg, Lubna Malik
Word Processing:	Naseem Khaja

Correspondents

Terry Mullane,	(Ice Forecasting Central)
H.E. Wahl,	(Whitehorse)
Bill Prusak,	(Western Region)
Fred Luciow,	(Central Region)
Bryan Smith,	(Ontario Region)
Jacques Miron,	(Quebec Region)
Frank Amirault	(Atlantic Region)
Staff of Prince George, Kamloops, Castlegar, Fort	
Nelson, Penticton and Kelowna	
weather office	(Pacific Region)

Telephone Inquiries (416) 667-4711/4906



This page intentionally left blank.

TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. MAY 4, 1982

Station	Temperature (°C)				Precip. (mm)		Station	Temperature (°C)				Precip. (mm)		Station	Temperature (°C)				Precip. (mm)	
	Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal		Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal		Extreme Maximum	Extreme Minimum	Total	Departure from Normal		
YUKON							Smithers	5	-1	11	-3	6.1	-1.2	Petawawa	8	X	24	-6	0.0	X
Burwash	0	2	6	-11	0.0	4.1	Stewart	5	X	13	0	M	X	Pickle Lake	8	5	22	-8	1.0	-11.5
Dawson	3	0	11	-6	3.7	0.8	Terrace	4	-4	11	-11	52.2	35.0	Red Lake	10	3	25	-5	0.8	-10.6
Faro	M	X	M	M	M	X	Vancouver	9	-1	15	3	17.4	2.1	Simcoe	M	M	20P	-1P	2.2	-16.6
Komakuk Beach	M	M	4P	-18P	M	M	Victoria	8	-1	14	3	9.2	-1.3	Sioux Lookout	10	4	25	-6	1.6	-12.8
Mayo A	3	1	11	-5	4.0	2.2	Williams Lake	6	0	16	-4	3.4	-0.9	Sudbury	10	3	21	-5	0.0	-22.8
Shingle Point	M	M	7P	-19P	M	M	ALBERTA	5	-1	16	-4	M	M	Banff	7	2	21	-5	0.0	-20.9
Teslin	M	X	5P	-5P	M	X	Calgary	9	3	21	-3	5.6	-5.9	Timmins	7	2	20	-12	0.0	-19.6
Watson Lake	3	0	11	-7	0.0	3.3	Cold Lake	11	6	23	-2	1.6	-4.3	Toronto	10	0	22	-1	0.0	-13.3
Whitehorse	2	-2	8	-7	0.0	2.0	Coronation	9	3	24	-5	2.2	-6.0	Trenton	12	2	22	0	0.0	-17.2
TERRITOIRES DU NORD-OUEST							Edmonton Intl	9	2	22	-3	0.0	-5.7	Upsala	M	X	M	M	M	X
Cape Parry	M	M	-11P	-21P	M	M	Edmonton Nameo	10	3	20	-1	0.0	-6.5	Wawa	4	X	17	-8	0.5	X
Cape Young	M	M	-12P	-24P	M	M	Edson	6	0	19	-3	0.4	-6.7	Wiarton	8	-1	18	-1	0.0	-14.8
Clinton Point	M	M	-13P	-21P	M	M	Fort Chipewyan	8	3	19	-3	M	M	Windsor	11	0	22	1	1.4	-17.8
Contwoyto Lake	M	M	M	M	M	M	Fort McMurray	11	6	22	-1	0.9	-5.1	QUEBEC						
Coppermine	-15	-4	1	-22	M	M	Grande Prairie	6	0	17	-2	3.6	-4.6	Bagotville	4	-2	14	-4	10.6	-2.2
Fort Reliance	-6	-2	9	-17	14.0	11.1	High Level	7	0	20	-3	15.0	13.5	Baie Comeau	3	-1	8	-1	18.5	10.7
Fort Simpson	3	1	15	-3	10.9	3.8	Jasper	5	0	15	-3	13.2	7.3	Blanc Sablon	2	1	7	-4	32.6	14.4
Fort Smith	8	6	21	-3	6.0	0.9	Lac La Biche	M	X	M	M	M	X	Border	M	M	M	M	M	M
Hay River	1	1	19	-7	8.0	-4.0	Lethbridge	11	3	24	-1	0.0	-12.2	Chevery	M	X	M	M	M	X
Inuvik	-7	0	3	-15	0.6	3.3	Medicine Hat	12	4	26	0	7.6	0.3	Chibougamau	3	X	15	-7	9.8	X
Lady Franklin Point	-17	-2	-12	-23	0.0	0.4	Peace River	7	2	19	-2	3.1	-4.6	Gaspé	3	X	13	-2	23.9	X
Nicholson Peninsula	M	M	-3P	-21P	M	M	Red Deer	8	2	21	-5	1.0	-7.1	Grindstone Island	4	1	12	-1	84.1	72.2
Norman Wells	0	0	10	-12	12.6	10.4	Rocky Mountain House	7	2	20	-6	0.0	-13.8	Inouedjouac	-6	1	6	-22	0.6	-3.1
Port Radium	M	X	M	M	M	X	Slave Lake	7	1	20	-5	0.6	-6.2	Kuujjuarapik	-6	-1	5	-22	0.8	-2.6
Robertson Lake	M	X	M	M	M	X	Vermilion	10	4	22	-1	3.5	-5.6	Lac Eon	M	X	M	M	M	X
Tuktoyaktuk	M	M	0P	-16P	M	M	Whitecourt	7	3	19	-3	3.2	-9.1	Grande Riviere	0	X	16	-20	0.0	X
Yellowknife	-2	0	10	-9	0.6	1.9	SASKATCHEWAN							Maniwaki	7	-1	22	-6	0.0	-16.2
Baker Lake	-12	0	-5	-27	4.1	2.2	Broadview	12	X	28	1	0.8	X	Matagami	6	X	18	-7	M	X
Coral Harbour	-12	-1	1	-25	12.5	8.5	Buffalo Narrows	10	5	20	-2	M	M	Mont-Joli	1	-3	7	-5	11.5	1.6
Ennadai Lake	M	M	M	M	M	M	Collins Bay	7	X	20	-2	9.8	X	Montréal	10	0	23	0	0.0	-15.3
Jenny Lind Island	M	M	-12P	-26	2.6	1.5	Cree Lake	9	X	18	0	0.6	X	Natashquan	1	0	5	-2	29.4	15.2
Pelly Bay	M	M	-10P	-22P	M	M	Eastend Cypress	M	X	M	M	X	Nitchequon	-2	1	11	-15	0.7	-6.4	
Rankin Inlet	-10	X	-1	-25	4.7	X	Estevan	13	5	31	-1	1.8	-10.4	Parent	M	X	M	M	M	X
Shepherd Bay	-19	-1	9	-33	0.0	0.9	Hudson Bay	13	8	27	-1	M	M	Port Menier	M	M	M	M	M	M
Alert	-18	-2	-12	-24	M	M	Kindersley	12	5	25	-2	2.8	-1.0	Poste-de-la-Baleine	-2	0	13	-18	0.0	-5.9
Broughton Island	M	M	-2P	-18P	M	M	La Ronge	11	7	24	-3	8.4	3.2	Québec	6	-1	17	-3	3.4	-12.1
Cape Dorset	-9	X	0	-16	5.4	X	Meadow Lake	11	X	23	1	2.4	X	Rivière du Loup	M	M	M	M	M	M
Cape Dyer	M	M	-4P	-25P	M	M	Moose Jaw	13	X	26	1	1.2	X	Roberval	4	-1	17	-4	10.6	2.0
Cape Hooper	M	M	-1P	-20P	M	M	Nipawin	13	X	26	1	1.2	X	Schefferville	-5	-2	9	-24	6.0	-0.9
Clyde	-15	-2	6	-23	3.4	1.4	North Battleford	12	5	24	-2	8.0	0.7	Sept-Iles	1	-1	8	-6	43.3	31.7
Dewar Lakes	M	M	-5P	-19P	M	M	Prince Albert	12	6	25	-1	2.5	-5.5	Sherbrooke	7	-1	19	-5	2.8	-8.2
Eureka	-25	-7	-19	-31	0.0	0.5	Regina	12	5	26	-2	1.6	-8.9	Ste Agathe des Monts	7	2	19	-3	0.2	-14.2
Frobisher Bay	-10	-1	1	-22	7.5	2.6	Rockglen	M	X	M	M	X	Val D'Or	7	1	19	-5	1.0	-11.5	
Gladman Point	M	M	-12P	-28	1.0	0.1	Saskatoon	13	6	25	-3	1.4	-6.8	NOUVEAU-BRUNSWICK						
Hall Beach	M	M	-3P	-26P	M	M	Swift Current	11	5	25	-3	2.0	-9.1	Charlo	4	0	10	-4	11.0	-3.7
Longstaff Bluff	M	M	-4P	-21P	M	M	Uranium City	7	8	20	-2	6.3	0.4	Chatham	5	0	16	-1	23.4	10.8
Mackar Inlet	M	M	-9P	-24P	M	M	Wynyard													