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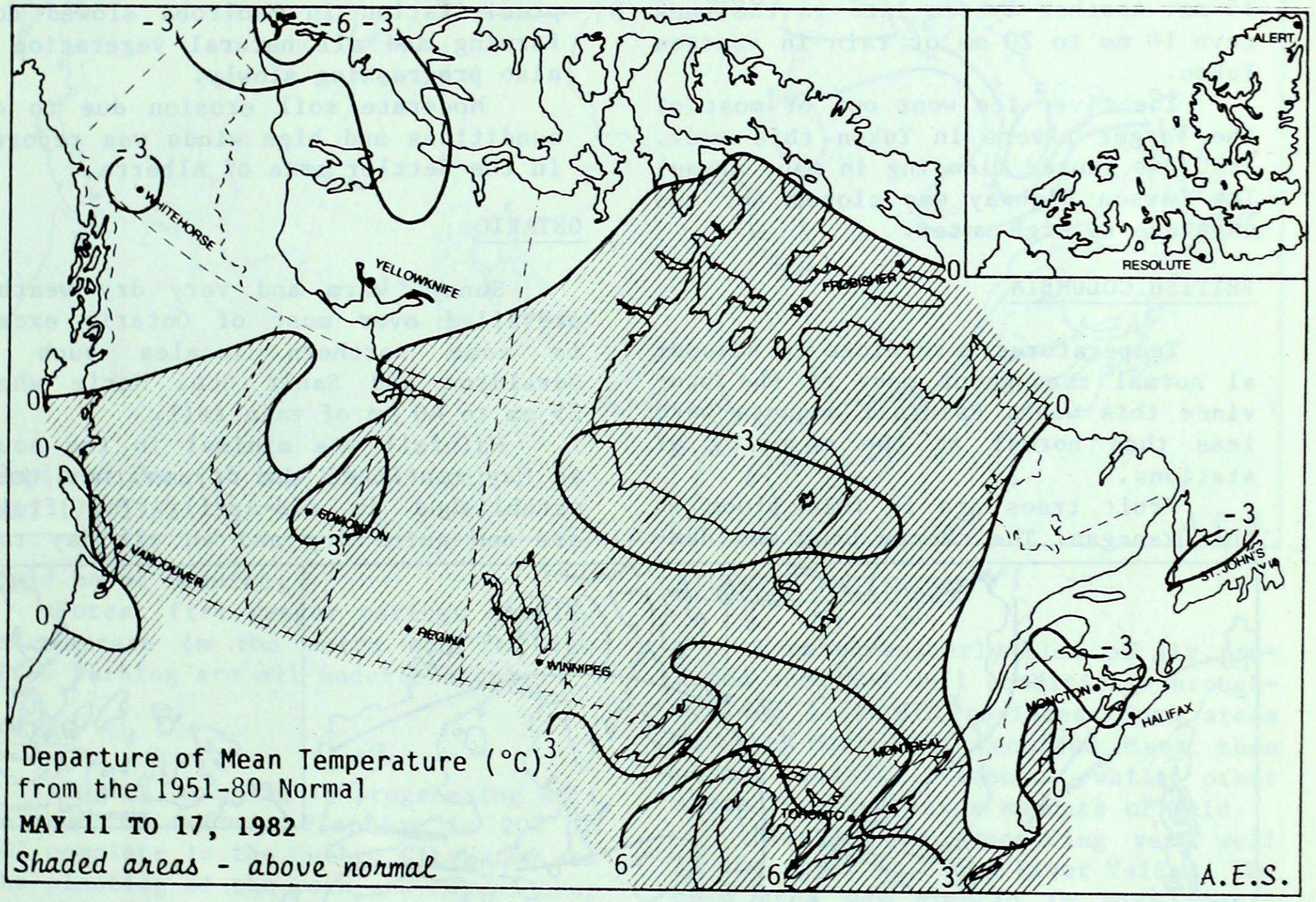
A WEEKLY REVIEW OF CANADIAN CLIMATE

CLIMATIC PERSPECTIVES

Canada

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

MAY 21 1982 (Aussi disponible en français) VOL.4 NO.19



Departure of Mean Temperature (°C)
from the 1951-80 Normal
MAY 11 TO 17, 1982
Shaded areas - above normal

A.E.S.

WEATHER HIGHLIGHTS FOR THE PERIOD - MAY 11 TO 17, 1982

Most regions enjoy good farming weather

With the exception of only a few areas of the country, spring farming operations are proceeding well. An extended period of dry weather in Ontario may cause problems if rain does not arrive soon. In contrast, southern Manitoba and Saskatchewan had problems with too much rain.

Forest fires have not yet started to become a problem in any region of the country.

Temperatures varied from 28.4° at Timmins, Ontario to -23.3° at Shingle Point, Yukon. The highest weekly precipitation total, 114.8 mm, was measured at Sydney, Nova Scotia.

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

The prolonged spell of cool weather continued in Yukon and across most of the Northwest Territories. Mean temperatures were as much as 7° below normal in some extreme northern areas of Yukon.

Some precipitation was recorded in all areas. In mid-week central and western areas of Yukon measured 5 mm to 15 mm. Another system late in the week gave 10 mm to 20 mm of rain in eastern Yukon.

The river ice went out of most of the larger rivers in Yukon this week. Ice jams caused flooding in many areas. The Dawson Highway was closed for two days due to high water.

BRITISH COLUMBIA

Temperatures were close to seasonal normal throughout most of the province this week. Rainfall amounts were less than normal at the majority of stations.

Fruit trees are in full bloom in the Okanagan. The cherry crop was damaged by an earlier frost, but the extent of the damage is not yet known.

PRAIRIE PROVINCES

Dry sunny weather prevailed throughout most of the Prairies with the exception of southern Manitoba and Saskatchewan where unsettled conditions prevailed.

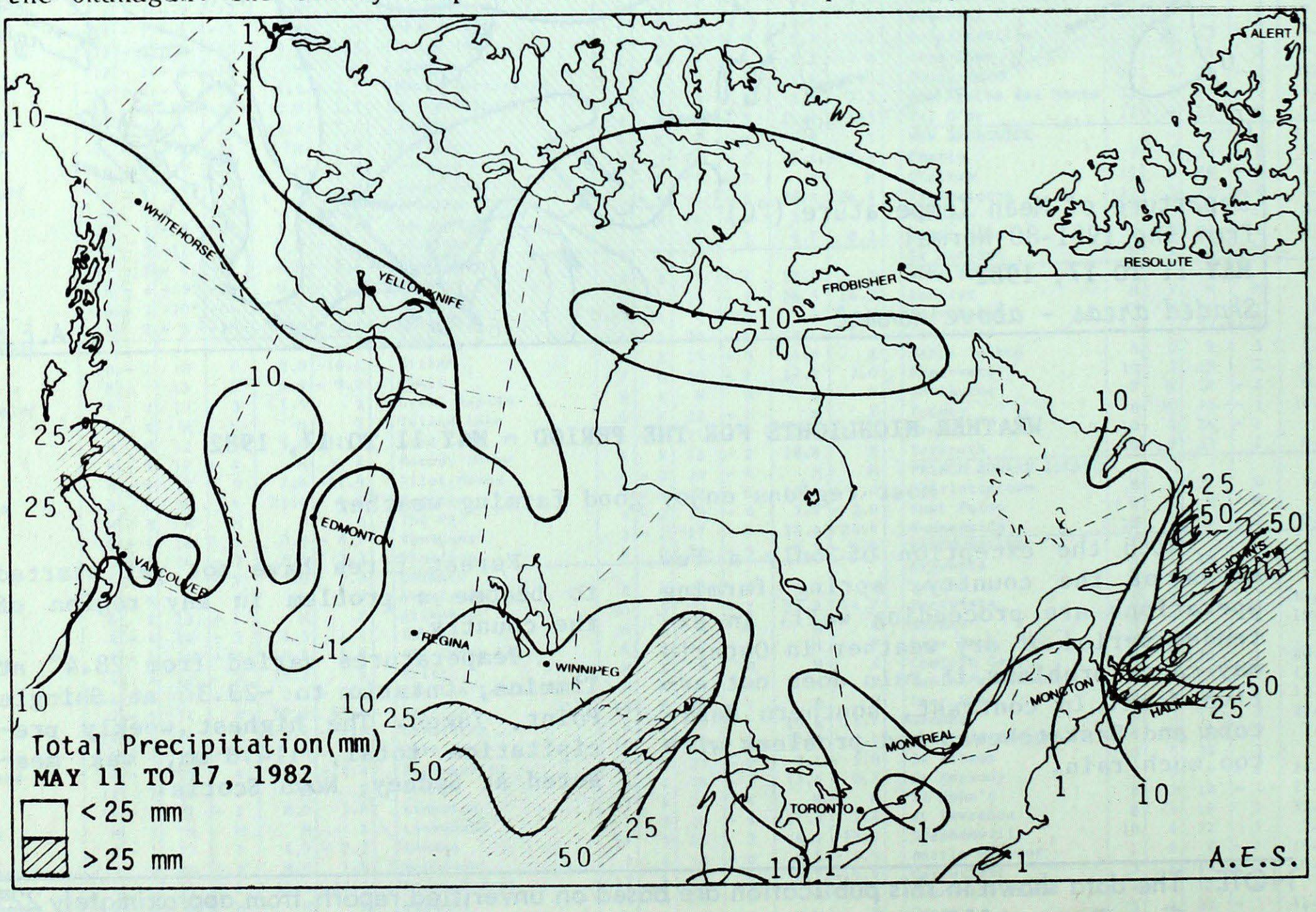
The greater than normal amounts of precipitation in Manitoba slowed down farming and all natural vegetation is also progressing slowly.

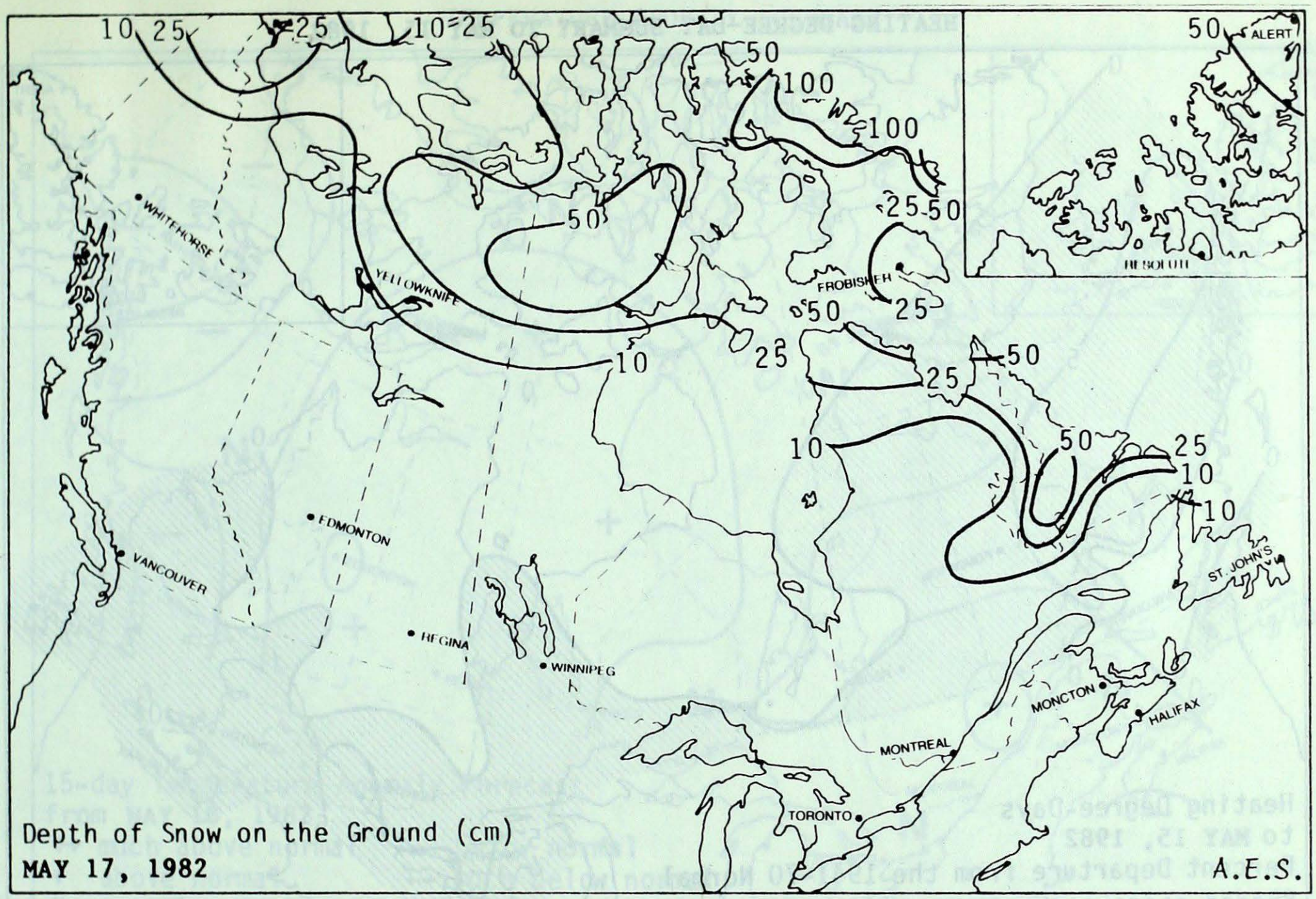
Moderate soil erosion due to dry conditions and high winds was reported in the Settler area of Alberta.

ONTARIO

Sunny, warm and very dry weather prevailed over most of Ontario except in some northern locales such as Geraldton and Sault Ste. Marie where 25 mm to 40 mm of rain fell.

Rainfall was minimal in the south as May continued the dry weather trend established in mid-April. The fields are now quite dry and an all day rain





Depth of Snow on the Ground (cm)
MAY 17, 1982
A.E.S.

would be of benefit.

Forest fire danger ratings are low to moderate in the north and the few fires burning are all under control.

QUEBEC

Spring planting is progressing well in most of Québec. Planting is 20% to 40% complete in the Québec City area and the planting of the corn and cereal crop is almost finished in the Ottawa area. Planting in the Nicolet region is 50% to 80% complete but the soil moisture content is poor.

ATLANTIC PROVINCES

A north-easterly flow of air produced cool and dull conditions throughout the Atlantic Provinces. Some areas of the Maritimes recorded less than normal rainfall amounts while other areas recorded large amounts of rain.

Planting is proceeding very well in the upper St. John River Valley. The corn crop was planted in Nova Scotia but the weather has been too cool for germination.

CLIMATIC PERSPECTIVES

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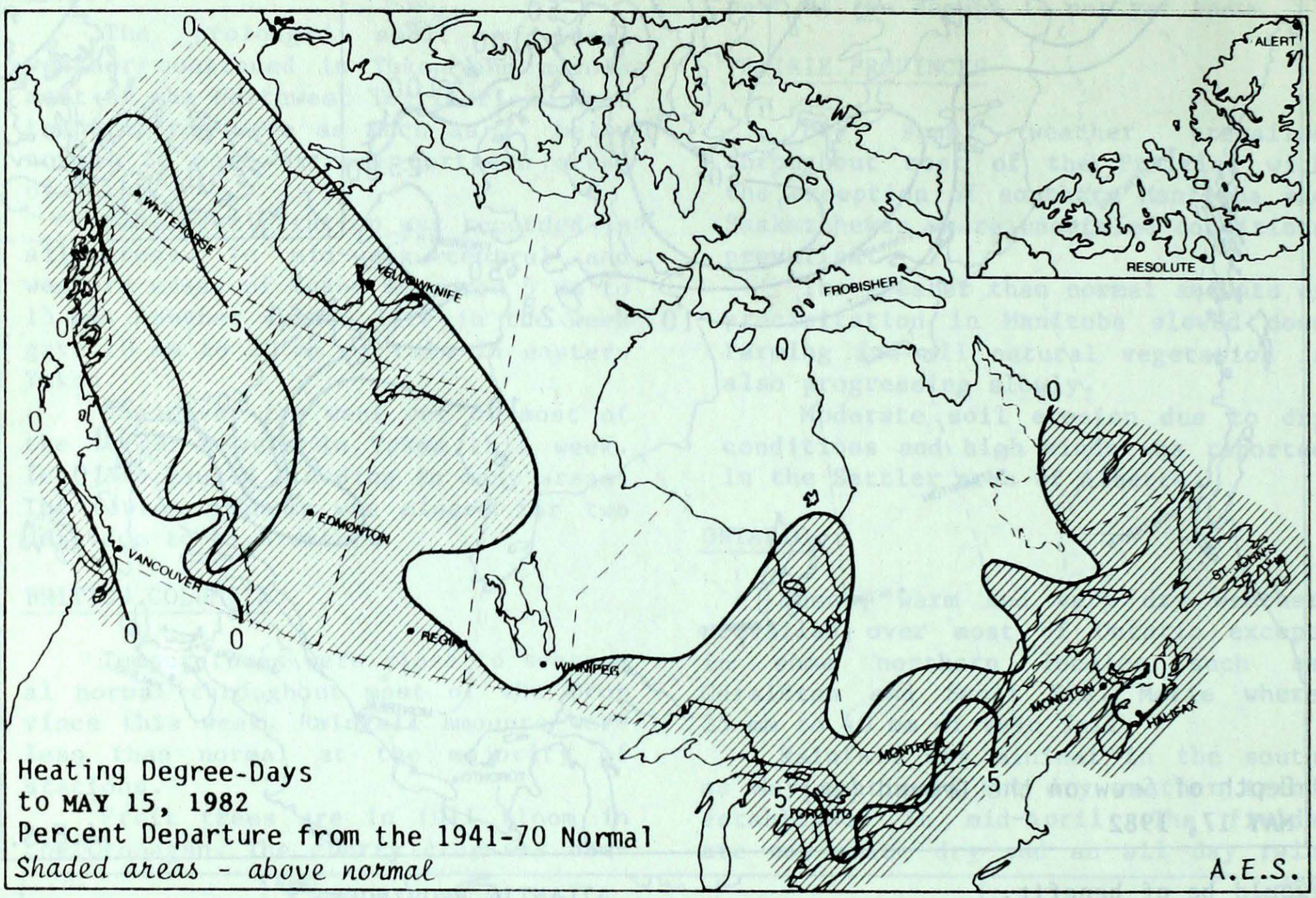
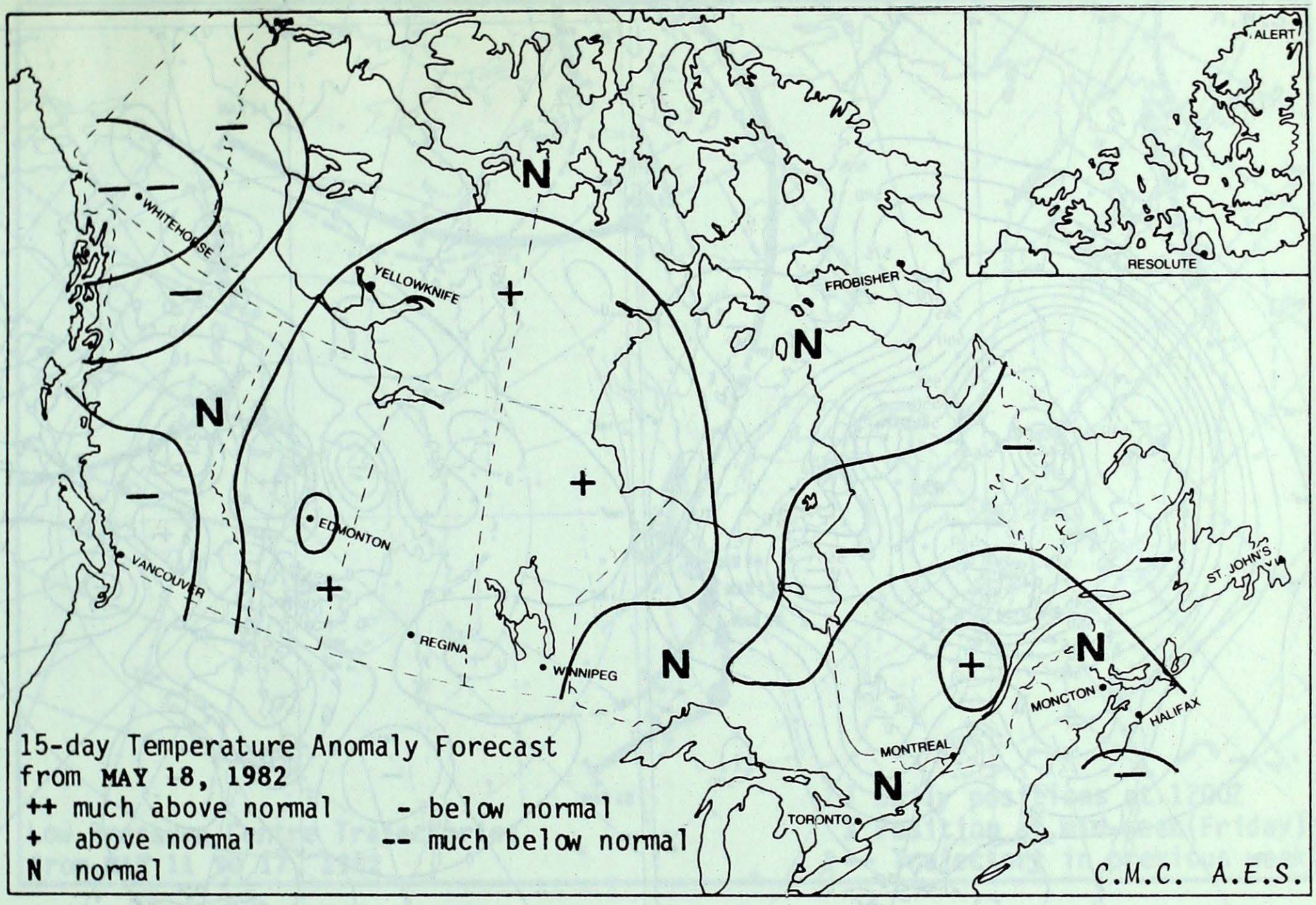
HEATING DEGREE-DAY SUMMARY TO MAY 15, 1982

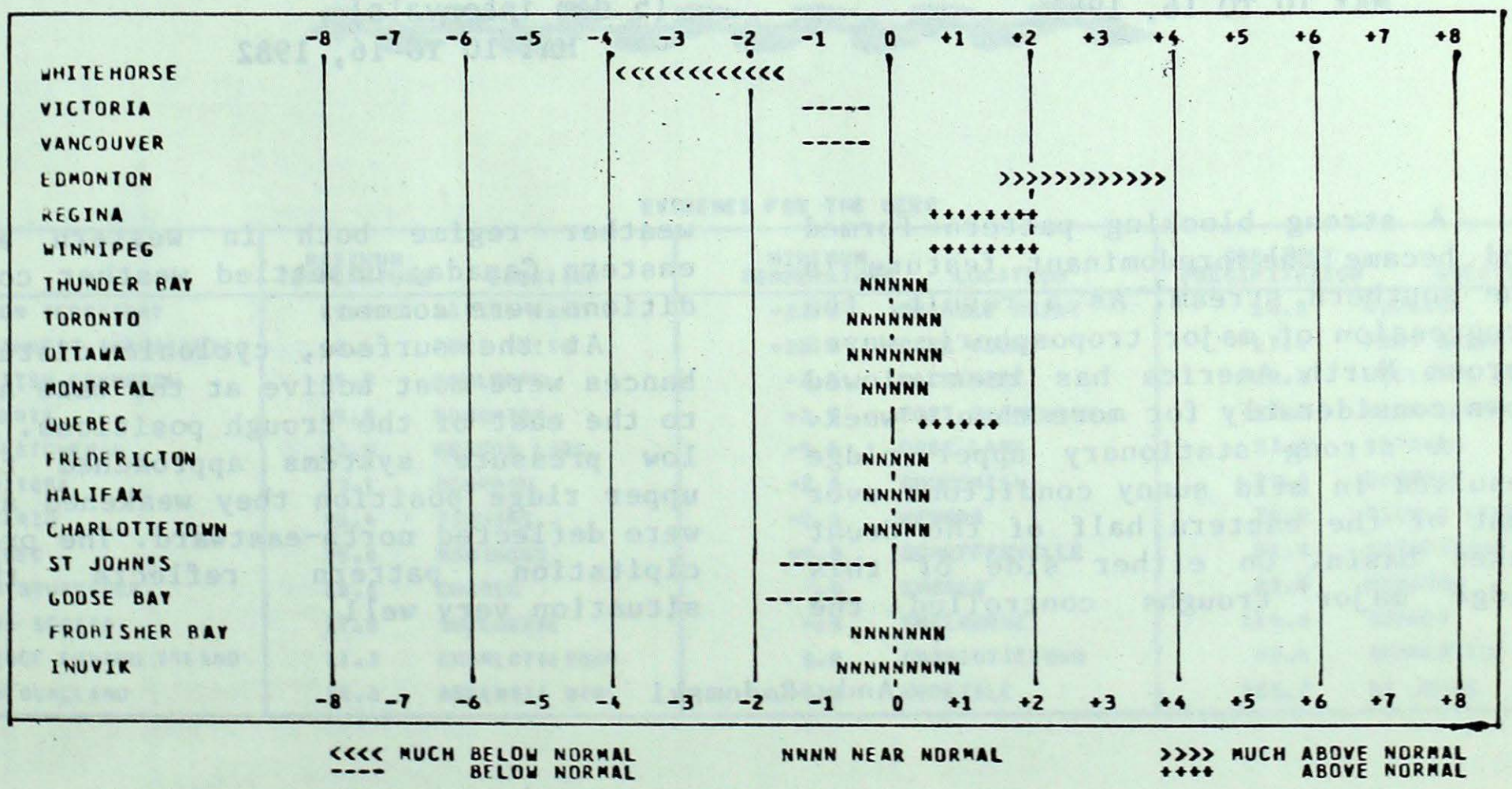


STATION	MONTHLY CUMULATIVE TOTAL	MONTHLY DIFF. FROM 1941-70 NORMAL	SEASONAL TOTAL	SEASONAL DIFF. FROM 1941-70 NORMAL	SEASONAL PERCENT OF NORMAL
Resolute	495.5	27.5	11292.5	-286.5	98
Inuvik	387.0	46.0	9500.5	-186.5	98
Whitehorse	221.0	34.0	7072.5	515.5	108
Vancouver	107.5	7.5	2861.5	13.5	100
Edmonton Mun	126.5	-2.5	5449.5	62.5	101
Calgary	162.0	13.0	5325.5	250.5	105
Regina	138.0	-1.0	5928.5	200.5	104
Winnipeg	103.5	-34.5	5656.5	-58.5	99
Thunder Bay	141.5	-16.5	5627.0	155.0	103
Windsor	25.5	-61.5	3803.0	296.0	108
Toronto	73.5	-40.5	4275.5	314.5	108
Ottawa	66.0	-45.0	4708.5	149.5	103
Montreal	76.0	-29.0	4660.5	290.5	107
Quebec	128.5	-6.5	5173.5	266.5	105
Saint John, N.B.	159.5	-5.5	4658.5	143.5	103
Halifax	159.0	0.0	3983.0	112.0	103
Charlottetown	173.5	0.5	4431.0	53.0	101
St. John's, Nfld.	185.0	-19.0	4402.5	10.5	100

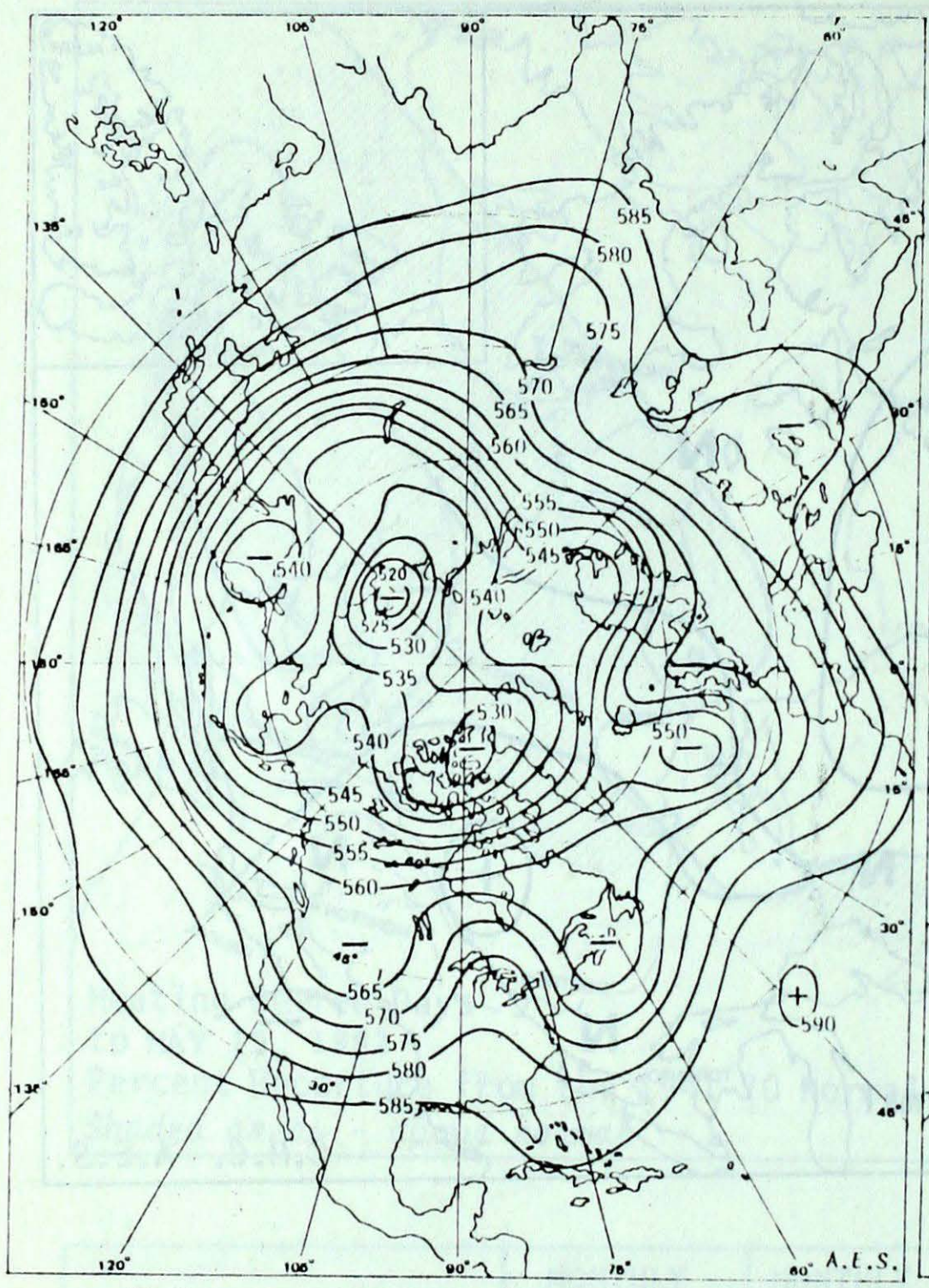
TEMPERATURE ANOMALY FORECAST



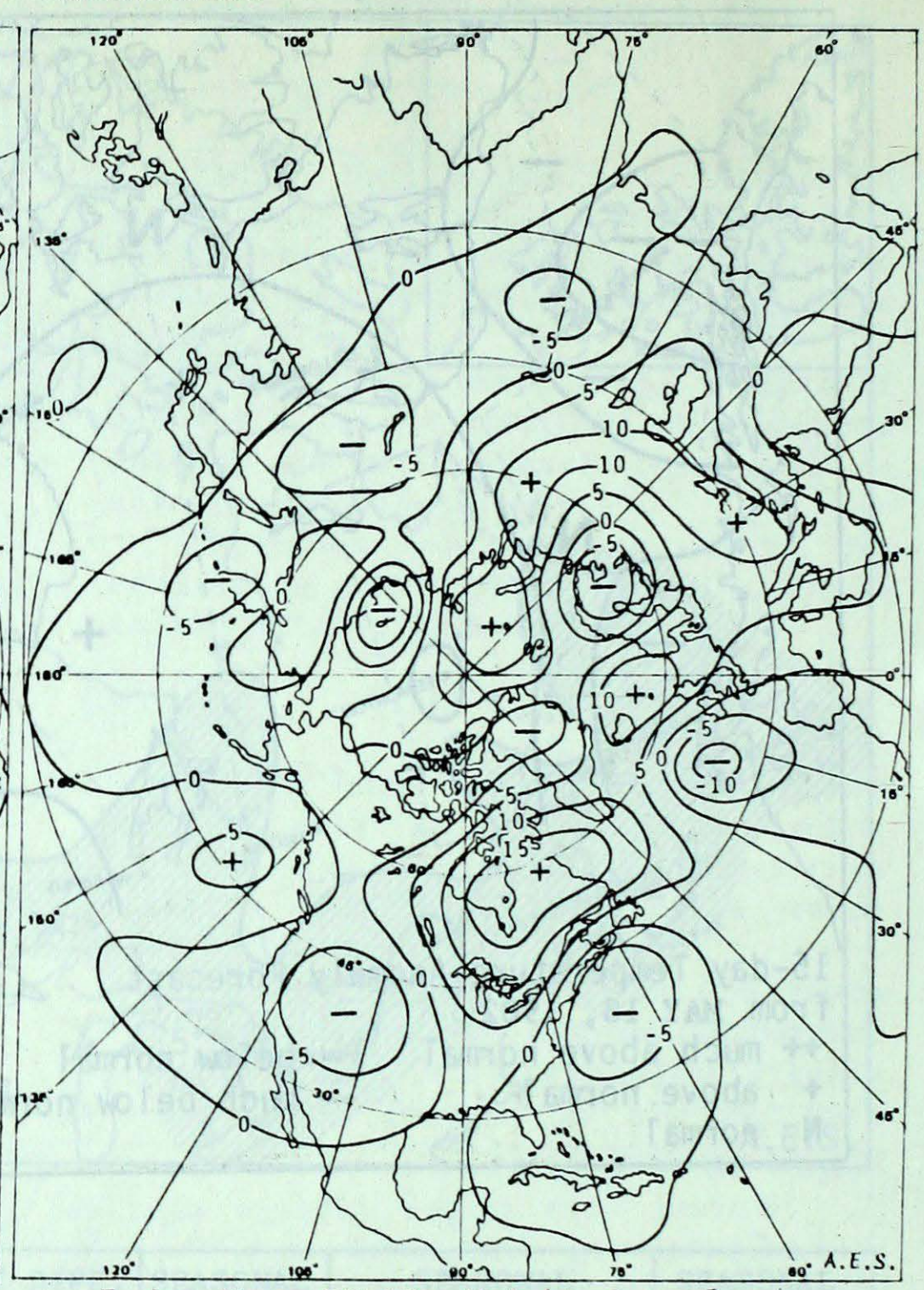
TEMPERATURE ANOMALY FORECAST FOR MAY 18 1982 TO JUN 1 1982



ATMOSPHEREIC CIRCULATION



7-day Mean 50 kPa Height (dam)
MAY 10 TO 16, 1982



7-day Mean 50 kPa Height Anomaly
(5 dam intervals)
MAY 10 TO 16, 1982

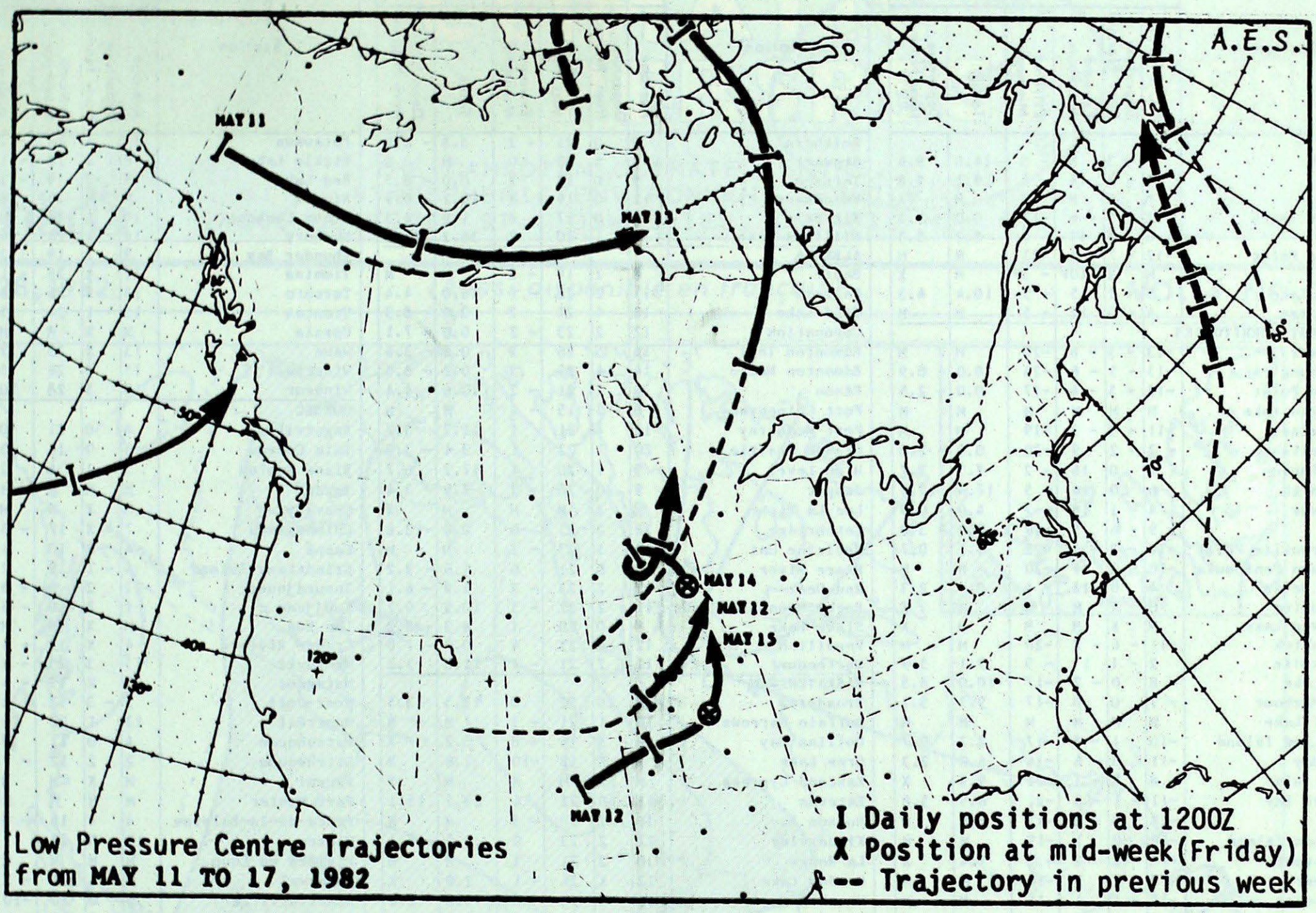
A strong blocking pattern formed and became the predominant feature in the southern stream. As a result, the progression of major tropospheric waves across North America has been slowed down considerably for more than a week.

A strong stationary upper ridge resulted in mild sunny conditions over most of the eastern half of the Great Lakes basin. On either side of this ridge major troughs controlled the weather regime both in western and eastern Canada; unsettled weather conditions were common.

At the surface, cyclonic disturbances were most active at the base and to the east of the trough positions. As low pressure systems approached the upper ridge position they weakened and were deflected north-eastward. The precipitation pattern reflects the situation very well.

Andy Radomski

LOW PRESSURE CENTRE TRAJECTORIES



Low Pressure Centre Trajectories
from MAY 11 TO 17, 1982

EXTREMES FOR THE WEEK

	MAXIMUM TEMPERATURE	LOCATION	MINIMUM TEMPERATURE	LOCATION	GREATEST PRECIPITATION	LOCATION
YUKON TERRITORY	15.2	WATSON LAKE	-23.3	SHINGLE POINT	14.8	BURWASH
NORTHWEST TERRITORIES	16.4	FORT SMITH	-22.6	CAPE YOUNG	17.4	FORT SMITH
BRITISH COLUMBIA	25.5	KAMLOOPS	-3.6	MACKENZIE	38.2	WILLIAMS LAKE
ALBERTA	25.5	EDMONTON	-3.5	FORT CHIPEWYAN	17.2	HIGH LEVEL
SASKATCHEWAN	23.9	MEACON LAKE	-9.6	CREE LAKE	23.2	ESTEVAN
MANITOBA	23.1	DAUPHIN	-7.8	CHURCHILL	21.8	DAUPHIN
ONTARIO	28.4	TIMMINS	-8.4	KENORA	34.4	PICKLE LAKE
QUEBEC	25.8	MANIWAKI	-9.8	SCHEFFERVILLE	21.4	GRINDSTONE ISLAND
NEW BRUNSWICK	18.1	CHARLO	.4	CHARLO	29.6	MONCTON
NOVA SCOTIA	17.8	SHELBURNE	-.5	SHELBURNE	114.8	SYDNEY
PRINCE EDWARD ISLAND	11.3	CHARLOTTETOWN	1.8	CHARLOTTETOWN	52.4	SUMMERSIDE
NEWFOUNDLAND	16.3	ARGENTIA WTR'S	-5.8	HOPEDALE	109.7	ST JOHNS

TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. MAY 18, 1982

Station	Temperature (°C) Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Precip. (mm) Total	Departure from Normal
YUKON						
Burwash	2	- 3	8	- 5	14.0	9.4
Dawson	5	- 2	14	- 4	9.1	5.8
Faro	M	X	M	M	M	X
Komakuk Beach	-12	- 5	- 6	-17	0.0	- 1.1
Mayo A	6	- 1	13	- 2	8.2	5.3
Shingle Point	-12	- 7	- 5	-23	M	M
Tealin	M	X	10P	- 5P	M	X
Watson Lake	5	- 2	15	- 5	10.4	4.5
Whitehorse	4	- 3	12	- 5	M	M
NORTHWEST TERRITORIES						
Cape Parry	-13	- 5	- 6	-20	M	M
Cape Young	-13	- 5	- 6	-23	0.0	- 0.9
Clinton Point	-12	- 5	- 4	-17	0.0	- 2.5
Contwoyto Lake	M	M	M	M	M	M
Coppermine	-11	- 5	- 3	-19	M	M
Fort Reliance	- 2	- 2	9	-20	0.0	- 2.0
Fort Simpson	6	0	16	- 2	7.3	3.7
Fort Smith	6	0	16	- 5	17.4	12.6
Hay River	4	- 1	16	- 7	4.0	0.9
Inuvik	- 9	- 6	5	-19	0.0	- 3.0
Lady Franklin Point	-11	- 2	- 5	-22	1.1	0.7
Nicholson Peninsula	-10	- 3	1	-20	M	M
Norman Wells	4	0	12	- 4	0.0	- 2.3
Port Radium	M	X	M	M	M	X
Robertson Lake	M	X	M	M	M	X
Tuktoyaktuk	-12	- 6	- 2	-20	M	M
Yellowknife	2	- 1	13	- 9	9.1	5.9
Baker Lake	- 8	0	- 2	-17	10.0	8.5
Coral Harbour	- 7	0	0	-17	9.7	5.1
Ennadai Lake	M	M	M	M	M	M
Jenny Lind Island	-10	1	- 5	-17	2.2	0.7
Pelly Bay	-11	0	- 6	-16	6.0	2.3
Rankin Inlet	- 8	X	- 1	-22	9.9	X
Shepherd Bay	-11	- 1	- 3	-21	6.5	5.8
Alert	-13	0	- 5	-17	M	M
Broughton Island	- 8	0	1	-15	M	M
Cape Dorset	- 5	X	2	- 8	5.4	X
Cape Dyer	- 7	- 1	3	-16	M	M
Cape Hooper	- 9	- 1	1	-15	M	M
Clyde	- 8	- 1	0	-18	0.4	- 3.7
Dewar Lakes	-11	- 1	- 5	-17	M	M
Eureka	-14	- 3	- 6	-21	M	M
Frobisher Bay	- 3	0	5	-11	7.6	2.2
Gladman Point	-11	0	- 5	-17	8.2	5.3
Hall Beach	- 9	1	- 3	-15	M	M
Longstaff Bluff	-10	- 1	- 4	-16	M	M
Mackar Inlet	-11	0	- 5	-15	1.8	- 3.2
Pond Inlet	-12	X	- 2	-21	M	X
Resolute	-13	- 2	- 6	-20	0.2	- 1.7
Byron Bay	-11	- 1	- 6	-17	0.0	- 0.9
Cambridge Bay	-11	0	- 5	-20	0.8	- 0.7
Mould Bay	-14	- 2	-10	-18	M	M
Sachs Harbour	-11	- 1	- 5	-18	0.0	- 3.2
BRITISH COLUMBIA						
Abbotsford	12	0	19	5	18.0	2.4
Alert Bay	10	- 1	17	4	7.4	- 5.6
Amphitrite Point	10	X	16	6	18.6	X
Blue River	M	X	M	M	M	X
Bull Harbour	M	M	15	M	23.3	4.6
Burns Lake	8	X	20	- 2	M	X
Cape Scott	9	0	14	5	29.4	-20.1
Cape St James	9	0	13	5	18.9	- 0.2
Clinton	M	X	M	M	M	X
Comox	12	0	18	7	17.4	9.1
Cranbrook	11	1	21	- 2	1.4	- 6.3
Dease Lake	5	- 1	17	- 3	6.0	1.2
Estevan Point	M	M	M	M	M	M
Ethelda Bay	9	X	32	0	M	X
Fort Nelson	9	- 1	19	1	17.4	11.1
Fort St John	10	0	19	- 2	8.8	2.1
Hope	12	X	21	6	15.6	X
Kamloops	14	0	26	5	8.4	5.8
Langara	7	- 1	11	2	14.2	- 3.3
Lytton	14	0	24	6	1.2	- 2.1
Mackenzie	9	X	21	- 4	M	X
McInnes Island	10	0	15	6	25.8	- 6.3
Nanaimo A	11	X	18	5	M	X
Penticton	13	0	24	2	10.0	3.3
Port Alberni	M	X	M	M	M	X
Port Hardy	10	0	17	4	11.4	- 3.2
Prince George	10	1	22	- 1	20.7	9.2
Prince Rupert	8	0	16	- 1	16.9	-17.3
Puntzi Mountain	M	X	M	M	M	X
Quesnel	11	0	23	1	15.6	6.0
Revelstoke	12	0	23	0	13.0	- 2.6
Sandspit	8	- 1	12	3	10.7	- 2.4
Smithers	9	0	21	- 2	3.8	- 6.9
Stewart	9	X	20	0	M	X
Terrace	9	0	17	2	0.0	- 8.7
Vancouver	12	0	19	8	10.2	- 0.9
Victoria	11	0	17	6	1.9	- 4.3
Williams Lake	9	1	20	2	38.2	33.5
ALBERTA						
Banff	8	1	19	- 2	M	M
Calgary	11	2	22	- 1	16.0	4.4
Cold Lake	13	4	24	2	0.0	- 8.3
Coronation	12	2	23	- 2	0.0	- 7.1
Edmonton Intl	14	5	26	2	0.8	- 3.4
Edmonton Namao	14	4	25	3	0.2	- 6.5
Edson	9	1	21	- 2	10.6	- 4.4
Fort Chipewyan	6	- 2	15	- 4	M	M
Fort McMurray	12	4	21	1	11.2	3.7
Grande Prairie	10	1	22	1	3.4	- 3.9
High Level	9	1	20	1	17.2	6.7
Jasper	9	0	20	- 2	3.8	- 3.4
Lac La Biche	M	X	M	M	M	X
Lethbridge	12	2	23	0	0.0	-13.8
Medicine Hat	13	1	23	- 1	M	M
Peace River	9	0	21	0	1.6	- 3.2
Red Deer	12	2	23	- 2	2.9	- 6.1
Rocky Mountain House	11	2	22	- 3	10.5	0.2
Slave Lake	9	0	20	1	8.3	- 0.2
Vermilion	12	3	23	4	0.0	- 7.0
Whitecourt	11	2	21	- 1	11.8	3.2
SASKATCHEWAN						
Broadview	10	10	22	0	13.5	13.5
Buffalo Narrows	10	1	21	- 3	M	M
Collins Bay	4	X	16	- 8	0.2	X
Cree Lake	7	X	18	-10	1.8	X
Eastend Cypress	M	X	M	M	M	X
Estevan	11	0	22	4	23.2	15.1
Hudson Bay	10	2	20	- 3	M	M
Kindersley	12	2	23	0	0.0	- 6.4
La Ronge	10	2	21	1	M	M
Meadow Lake	12	X	24	- 1	2.0	X
Moose Jaw	11	0	23	0	3.0	- 2.8
Nipawin	11	X	21	- 1	4.4	X
North Battleford	12	2	23	1	2.3	- 2.7
Prince Albert	11	2	21	- 2	3.2	- 1.6
Regina	11	1	23	- 2	8.6	3.7
Rockglen	M	X	M	M	M	X
Saskatoon	11	1	23	- 1	2.8	- 2.1
Swift Current	10	0	22	- 2	M	M
Uranium City	7	2	20	- 9	6.9	4.1
Wynyard	10	X	22	- 2	1.2	X
Yorkton	10	1	23	- 3	11.4	3.9
MANITOBA						
Bissett	11	X	20	2	18.9	X
Brandon	11	1	22	2	17.3	8.5
Churchill	2	5	20	- 7	3.4	- 3.6
Dauphin	11	1	23	1	21.8	12.2
Gillam	6	X	20	- 4	1.2	X
Gimli	9	0	17	0	6.3	- 5.4
Grand Rapids	M	X	M	M	M	X
Island Lake	8	X	20	0	M	X
Lynn Lake	6	0	19	- 6	1.6	- 8.7
Norway House	10	X	20	1	9.2	X
Pilot Mound	10	1	21	3	17.5	0.5
Portage	12	2	22	2	21.3	10.2
The Pas	9	2	20	- 2	1.9	- 4.6
Thompson	8	2	20	- 3	0.0	-10.3
Winnipeg	13	3	20	5	10.0	- 1.0
ONTARIO						
Armstrong	9	3	17	- 4	M	M
Atikokan	12	2	22	0	26.2	12.0
Barrie	M	X	M	M	M	X
Big Trout Lake	6	3	13	- 5	4.2	- 6.3
Britt	M	X	M	M	M	X
Caribou Island	M	X	M	M	M	X
Earlton	14	5	28	0	M	M
Geraldton	9	1	20	- 2	M	M
Gore Bay	13	4	21	7	3.4	- 9.1
Kapuskasing	12	5	25	- 1	5.0	-12.0
Kenora	9	0	18	- 8	M	M
Kingston	13	2	23	4	M	M
Lansdowne	6	1	13	- 2	28.6	18.9
London	18	5	26	6	M	M
Moosonee	6	2	21	- 4	3.9	- 9.8
Mount Forest	17	7	25	9	M	M
Muskoka	16	5	24	5	M	M
Nagagami	M	X	M	M	M	X
North Bay	15	5	24	5	0.2	-15.1
Ottawa	15	3	25	5	0.0	-20.8
Petawawa	14	X	24	- 2	0.0	X
Pickle Lake	8	2	18	- 1	34.4	21.6
Red Lake	9	2	19	- 1	16.6	6.9
Simcoe	M	M	25P	6P	M	M
Sioux Lookout	10	2	18	0	23.3	8.0
Sudbury	14	4	28	4	5.8	- 6.1
Thunder Bay	9	2	19	2	30.0	15.0
Timmins	12	4	28	- 1	0.0	-14.2
Toronto	15	3	26	6	0.0	-19.8
Trenton	13	1	24	3	4.3	-17.3
Upsala	M	X	M	M	M	X
Wawa	13	X	23	5	M	X
Wiarton	15	5	26	5	3.6	-10.0
Windsor	19	5	28	10	13.2	- 9.0
QUÉBEC						
Bagotville	8	0	21	0	1.6	-11.2
Baie Comeau	6	0	14	0	7.3	-10.1
Blanc Sablon	2	- 1	6	- 2	M	M
Border	M	M	M	M	M	M
Chevery	M	X	M	M	M	X
Chibougamau	7	X	17	- 3	4.0	X
Gaspé	4	X	10	1	6.8	X
Grindstone Island	4	- 1	9	2	21.4	8.9
Inoucdjouac	- 1	2	6	- 5	8.6	3.4
Kuujjuaq	1	2	10	- 8	2.6	- 2.9
Lac Eon	M	X	M	M	M	X
Grande Riviere	4	X	15	- 6	5.0	X
Maniwaki	13	3	25	- 1	2.0	-17.4
Matagami	8	X	19	- 4	M	X
Mont-Joli	5	- 3	13	- 1	7.6	- 3.0
Montréal	13	1	22	5	1.2	-18.7
Natashquan	4	0	11	0	M	M
Nitchequon	2	2	12	- 7	4.6	- 6.0
Parent	M	X	M	M	M	X
Port Menier	M	M	M	M	M	M
Poste-de-la-Baleine	4	4	18	- 3	4.8	- 2.7
Québec	10	0	22	3	0.0	-18.7
Rivière du Loup	M	M	M	M	M	M
Roberval	8	- 1	21	- 2	1.4	-12.3
Schefferville	0	0	10	-10	5.4	- 5.0
Sept-Iles	5	0	13	- 1	2.4	-10.5
Sherbrooke	10	- 1	20	0	0.0	-20.8
Ste Agathe des Monts	12	2	22	0	M	M
Val D'Or	10	2	23	0	1.4	-15.0
NEW BRUNSWICK						
Charlo	8	0	18	0	0.5	-17.3
Chatham	5	- 4	15	2	9.2	- 9.1
Fredericton	7	- 3	18	1	4.4	-15.7
Moncton	4	- 5	13	2	29.6	11.4
Saint John	6	- 3	15	1	7.9	-15.4
St Stephen	M	X	M	M	M	X
NOVA SCOTIA						
Amherst	M	X	M	M	M	X
Eddy Point	6	X	10	3	82.8	X
Greenwood	6	- 3	15	2	21.7	1.9
Sable Island	7	0	14	3	18.8	- 1.4
Shearwater	7	- 1	13	3	13.5	- 9.7
Shelburne	8	X	17	- 1	21.9	X
Sydney	5	- 2	10	3	114.5	93.0
Truro	6	- 2	16	3	M	M
Yarmouth	8	- 1	15	3	7.4	-14.1
PRINCE EDWARD ISLAND						
Charlottetown	4	- 4	11	1	42.8	27.0
East Point	M	X	M	M	M	X
Summerside	4	- 5	9	2	52.4	37.2
NEWFOUNDLAND						
Argentia	7	X	16	3	62.0	X
Badger	M	X	M	M	M	X
Bonavista	3	- 1	8	0	51.6	37.6
Burgeo	7	2	13	3	24.6	1.3
Cape Race	M	X	M	M	M	X
Comfort Cove	3	- 4	10	0	42.0	23.8
Daniel's Harbour	4	0	8	0	61.0	50.2
Deer Lake	4	- 3	14	0	43.8	31.0
Gander	4	- 2	11	0	27.7	15.5
Port aux Basques	7	3	13	3	48.0	33.6
St Albans	7	- 1	14	2	M	M
St Anthony	1	X	4	- 3	18.5	X
St John's	3	- 2	6	1	105.7	83.0
St Lawrence	6	2	12	2	50.9	30.5
Stephenville	7	1	11	2	48.8	34.2
Battle Harbour	0	- 2	3	- 2	10.2	1.6
Cartwright	1	- 1	8	- 2	7.9	- 3.1
Churchill Falls	1	- 2	13	- 6	9.4	- 2.0
Goose	2	- 3	10	- 4	10.6	- 1.3
Hopedale	0	- 1	8	- 6	4.1	- 6.8
Wabush Lake	1	- 1	12	- 5	0.4	- 7.5

P = extreme value based on less than 7 days

X = no normal due to short period

M = not available at press time