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A WEEKLY REVIEW OF CANADIAN CLIMATE

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CLIMATIC PERSPECTIVES

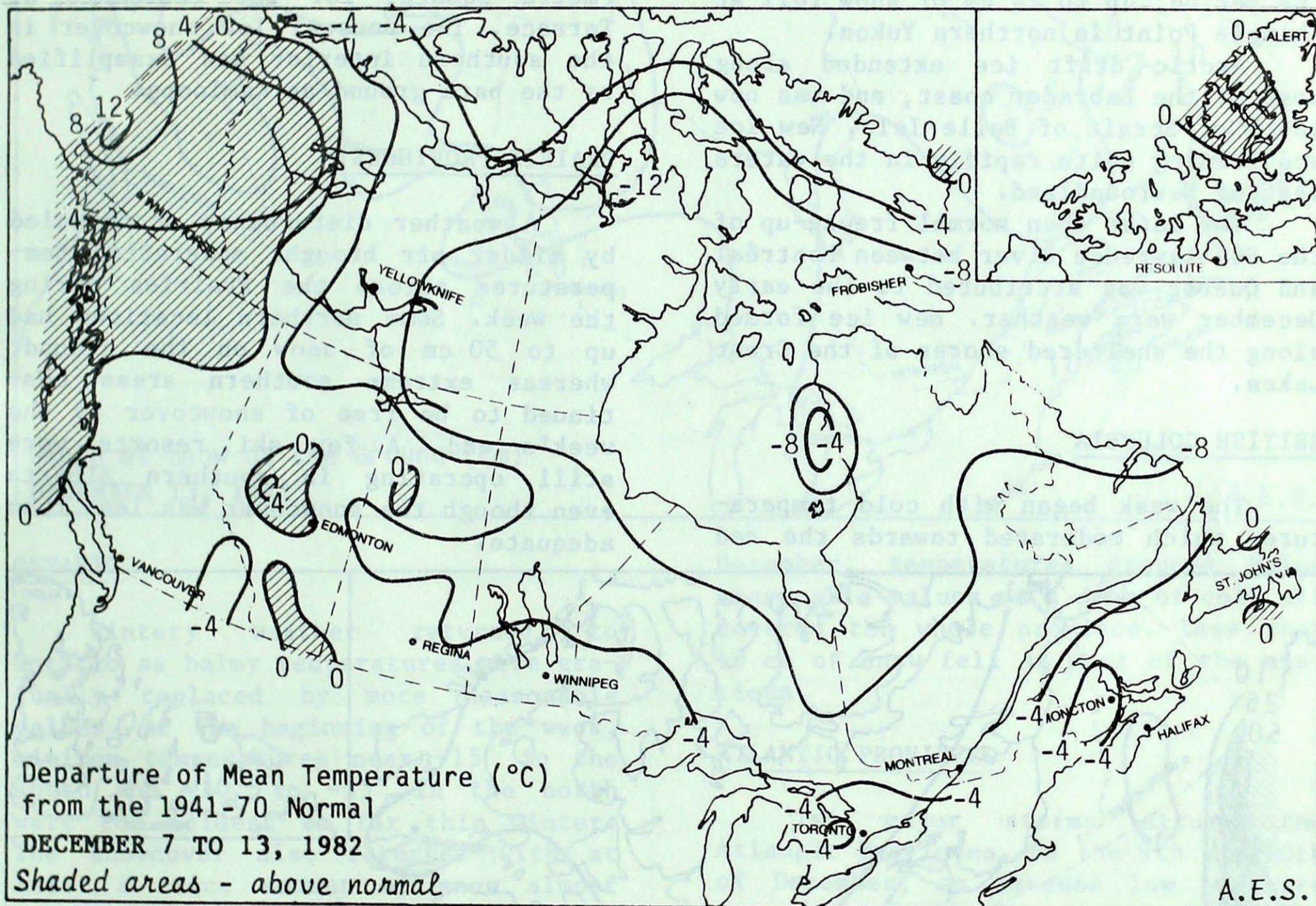
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THE CANADIAN CLIMATE CENTRE,
ATMOSPHERIC ENVIRONMENT SERVICE,
4905 DUFFERIN ST., DOWNSVIEW, ONTARIO M3H 5T4

DECEMBER 17, 1982

(Aussi disponible en français)

VOL. 4 NO. 49



WEATHER HIGHLIGHTS FOR THE PERIOD - DECEMBER 7-13, 1982

Stormy weather on the East Coast

Two major storms struck the Atlantic Provinces. Strong winds battered southern Newfoundland on December 9. Gusts up to 148 km/h were recorded at Bonavista. Another storm on December 12 brought the first significant snowfall to southern Nova Scotia dumping up to 33 cm at Shelburne, and making roads impassable in most areas.

Temperatures plummeted to below seasonable values in central Canada after the record warmth of early December.

Temperatures ranged from 14.1° at Sydney, Nova Scotia to -46.3° at Shepherd Bay, Northwest Territories. St. Lawrence, Newfoundland received 83.4 mm of rain.

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 THE NORTHWEST TERRITORIES

In the Yukon, bitterly cold Arctic air was replaced by milder air as Chinook winds allowed temperatures to moderate early in the week. Temperatures climbed to 8° at Burwash, setting a record daily maximum for December 7. Elsewhere in the Yukon, temperatures averaged 4° to 10° above normal. Widespread snowfalls occurred throughout the period; up to 14 cm of snow fell at Shingle Point in northern Yukon.

Arctic drift ice extended along most of the Labrador coast, and was now south of Strait of Belle Isle. New ice was forming quite rapidly in the waters east of Newfoundland.

The later than normal freeze-up of the St. Lawrence River between Montréal and Québec was attributed to the early December warm weather. New ice formed along the sheltered shores of the Great Lakes.

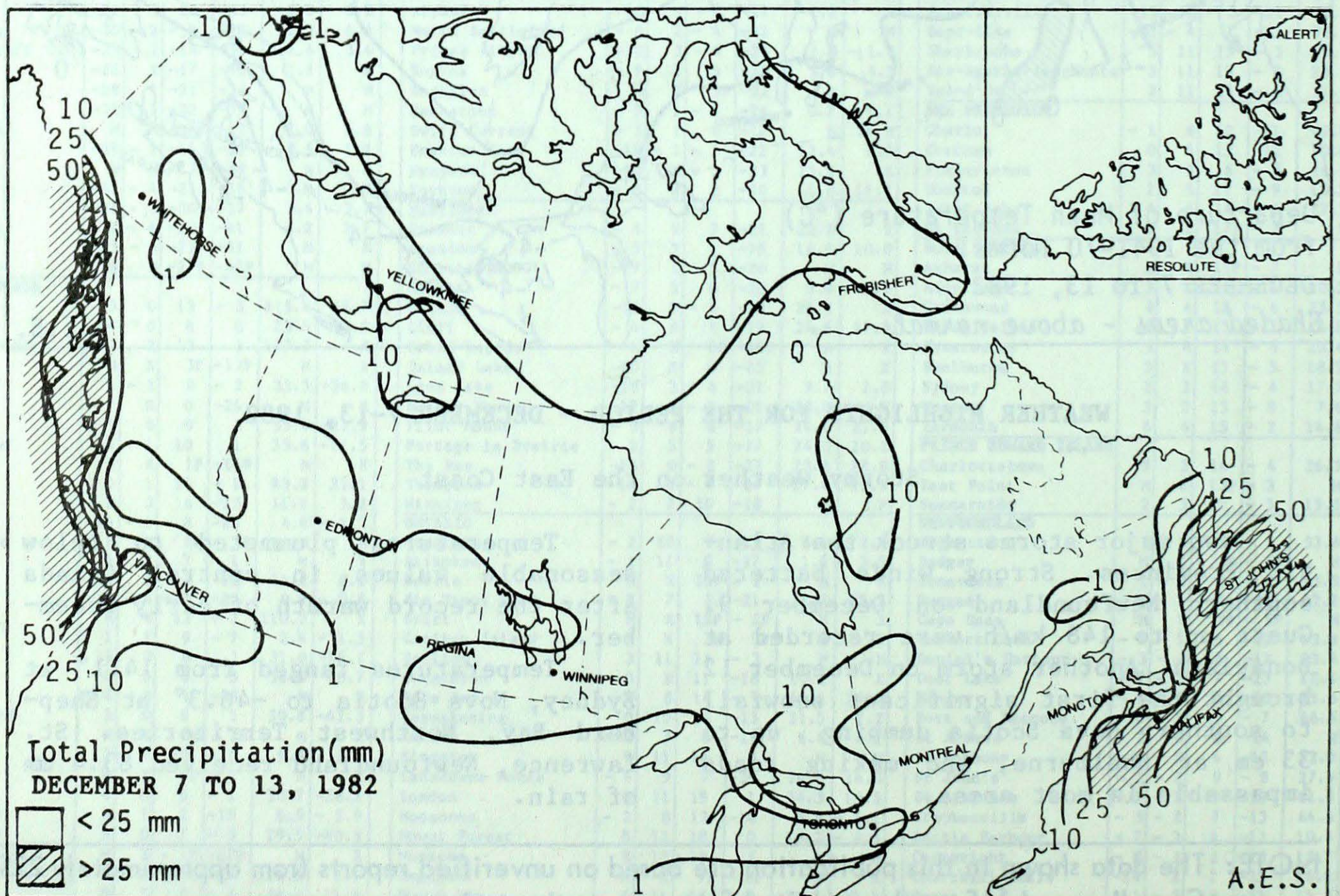
BRITISH COLUMBIA

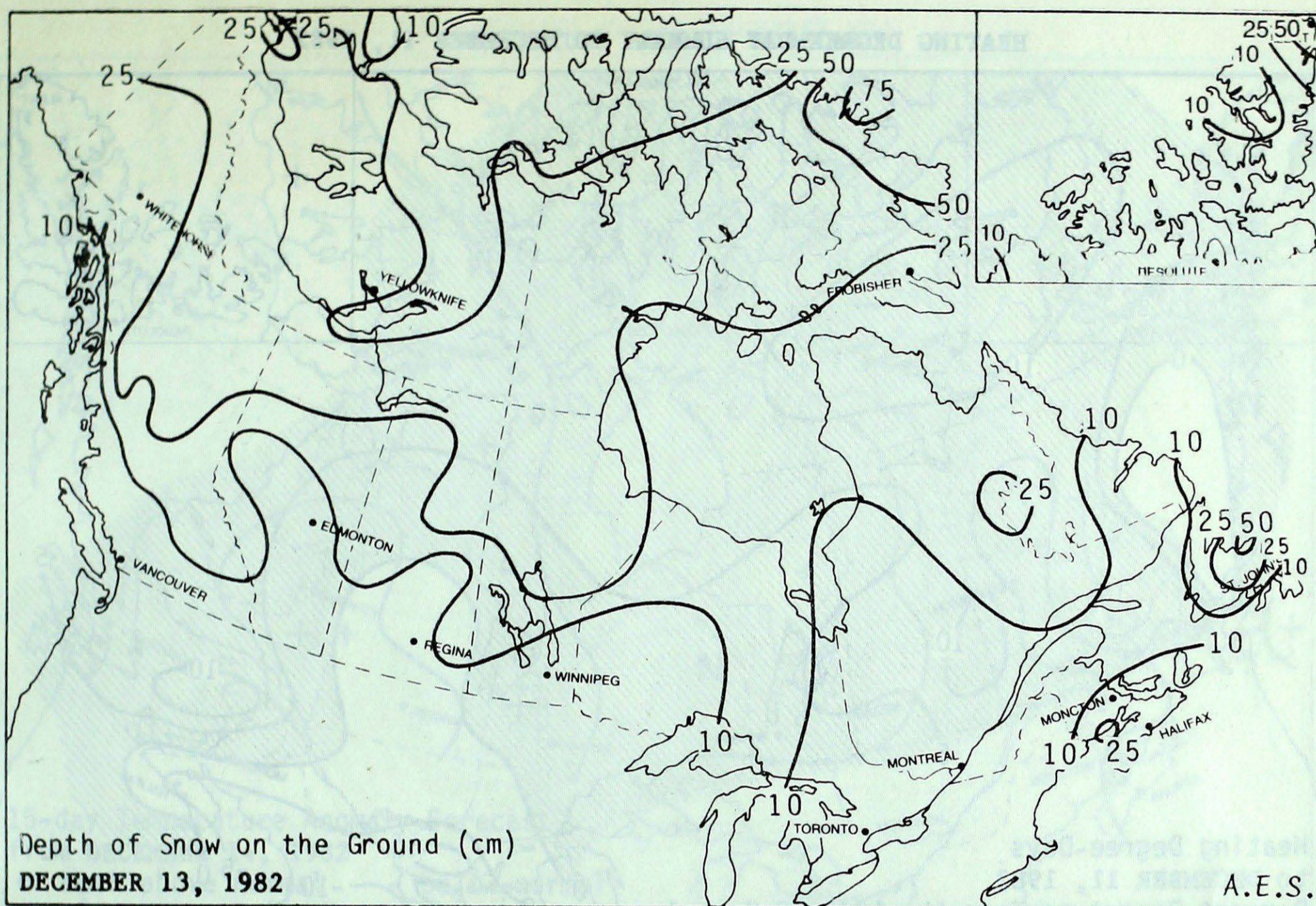
The week began with cold temperatures which moderated towards the end

of the period as mild Pacific air moved over the province. Temperatures were 1° to 3° below normal except at Victoria where they were 1.2° above normal. Significant precipitation of 25 to 50 mm was confined to southern coastal areas; less than 10 mm fell elsewhere. On the 9th and 10th of December, strong winds combined with sub-freezing temperatures to produce uncomfortably high wind chill values (about 1400 watts/metre square) for the residents of Terrace. The unusual low snowcover in the southern interior was exemplified by the bare ground at Kamloops.

PRAIRIE PROVINCES

A weather disturbance accompanied by milder air brought moderating temperatures across the Prairies during the week. Some northern locations had up to 50 cm of snow on the ground; whereas extreme southern areas continued to be free of snowcover by the week's end. A few ski resorts were still operating in southern Alberta even though the snowcover was less than adequate.





ONTARIO

Wintery weather returned to Ontario as balmy temperatures were gradually replaced by more seasonable values. At the beginning of the week, minimum temperatures near -15° in the south and -30° to -35° in the north were the coldest so far this winter. The snowcover also returned with at least a trace amount of snow almost everywhere. Muskoka received the most snow, ending the week with 25 cm on the ground.

The return to cold and snowy weather was welcomed by at least 2 sectors of the economy. Ski resort operators were able to use the newly fallen snow as a base for adding artificial snow. Farmers were finally able to complete their late ploughing after freezing temperatures firmed-up the saturated fields.

QUÉBEC

Cold weather returned. After setting numerous record highs in early

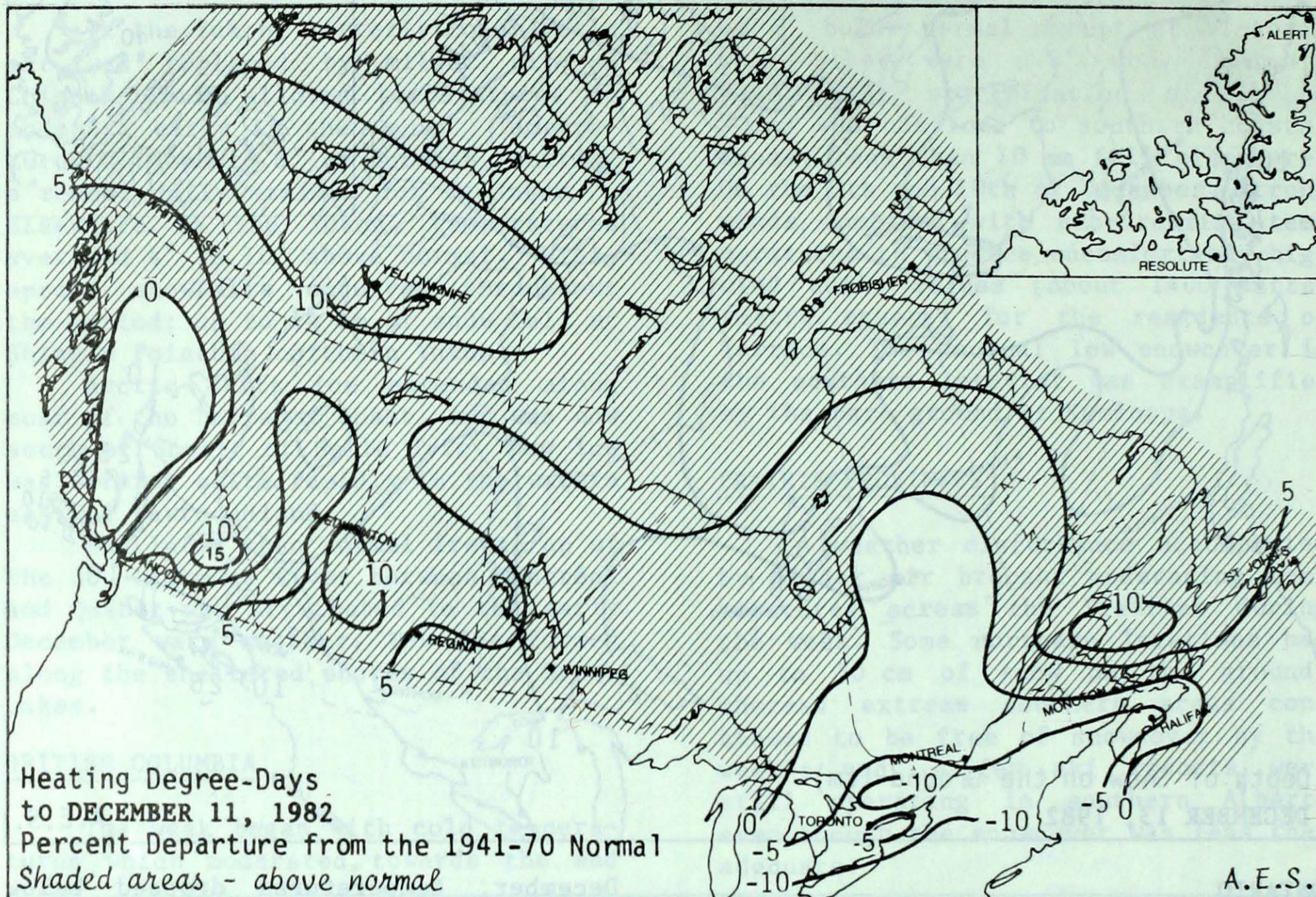
December, temperatures dropped below seasonable values as a dome of cold air covered the whole province. Less than 10 cm of snow fell at most of the stations.

ATLANTIC PROVINCES

Two major storms struck the Atlantic Provinces. On the 9th and 10th of December, an intense low pressure system produced very strong winds in Newfoundland, which reached 148 km/h at Bonavista and 100 km/h at Gander. With the passage of the storm, temperatures plummeted; at Shearwater, N.S. the temperature dropped 8° in half an hour. As the cold air entrenched the Maritimes, record daily low minimums were set at a few locations.

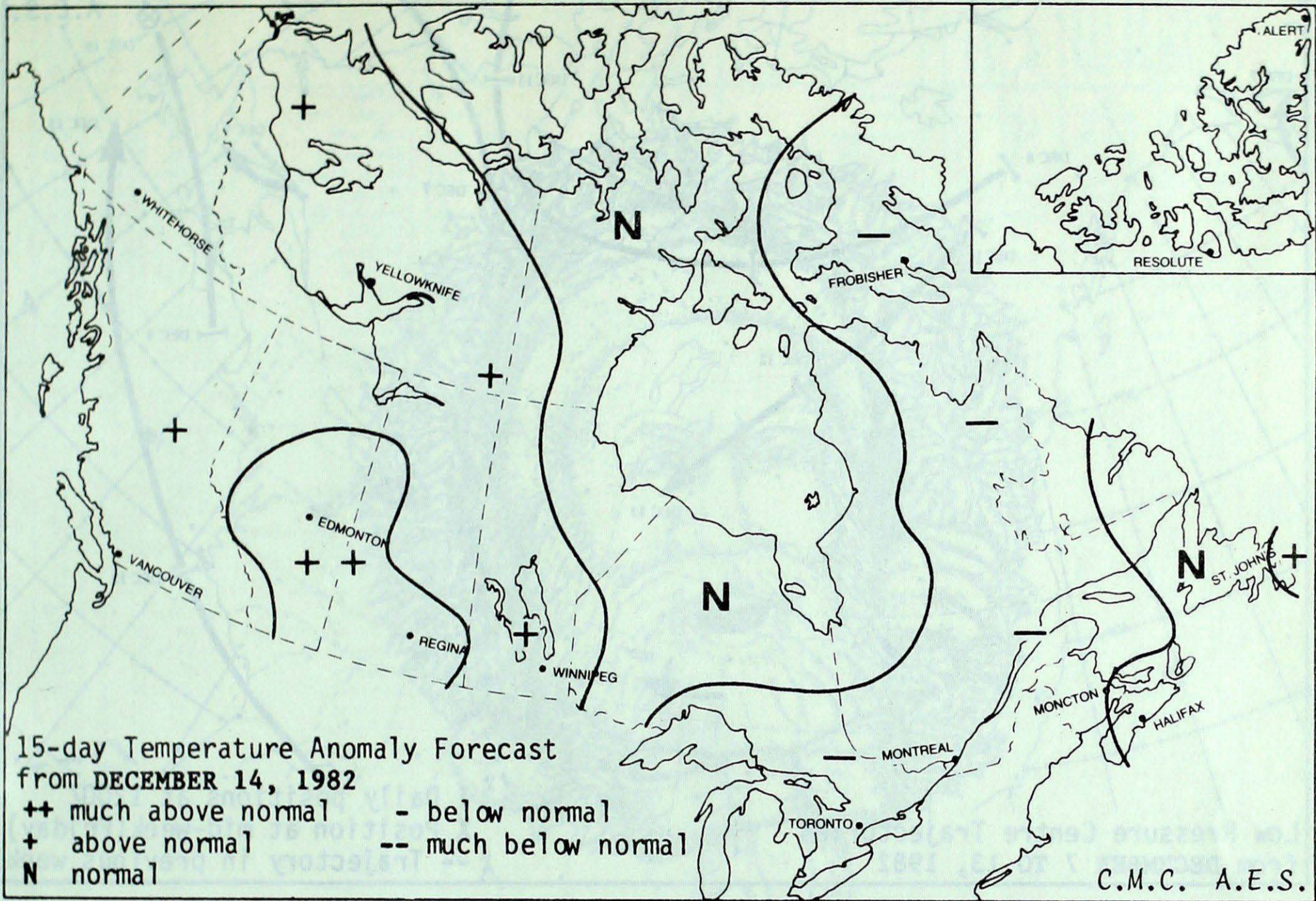
On December 12, another intense storm lashed the Maritimes, dumping the first major snowfall of the season in Nova Scotia; over 33 cm of snow fell at Shelburne, N.S. heavy snow made roads impassable, forcing some schools to be closed in the Annapolis Valley and in Shelburne County.

HEATING DEGREE-DAY SUMMARY TO DECEMBER 11, 1982

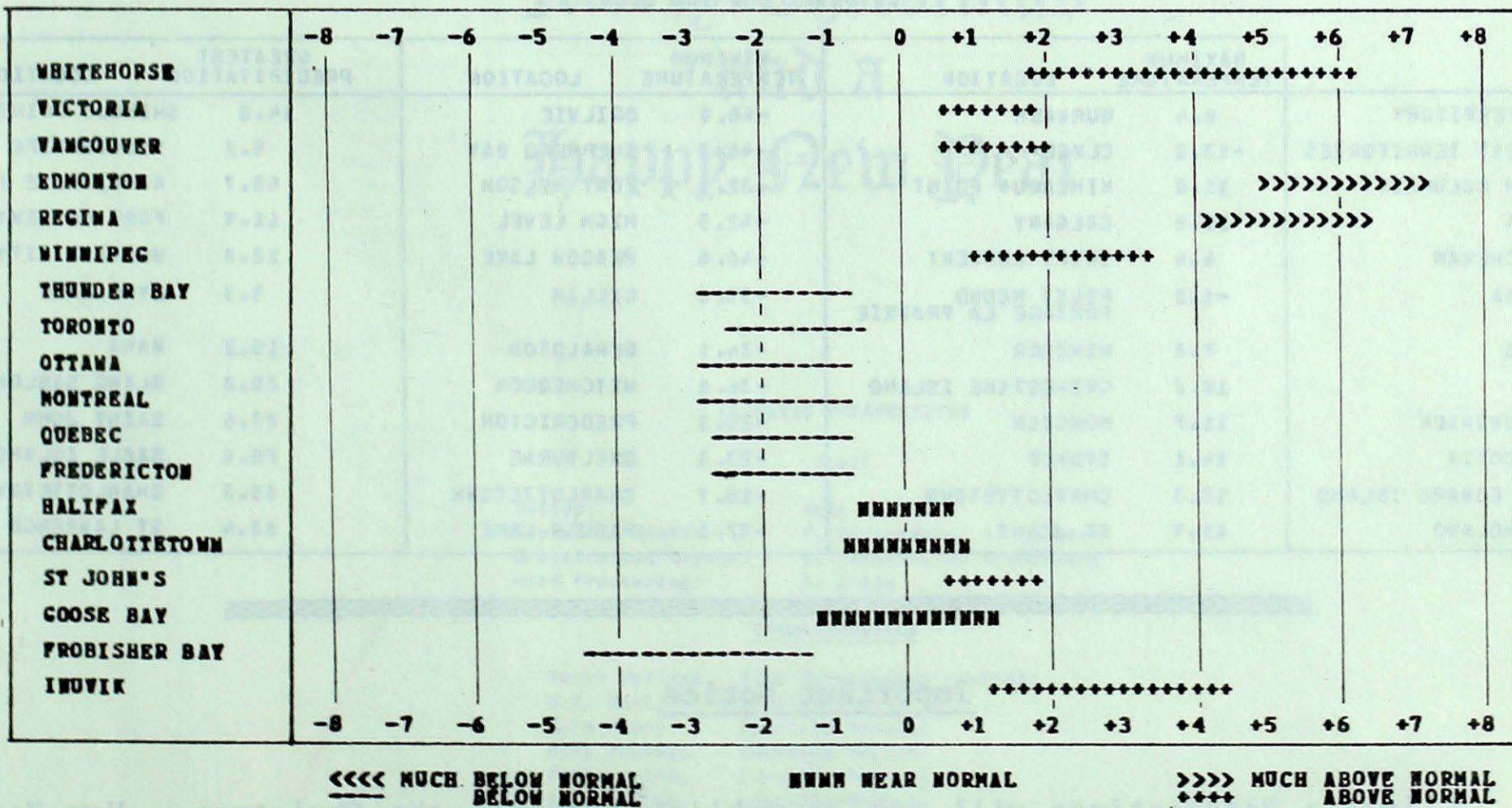


STATION	MONTHLY CUMULATIVE TOTAL	MONTHLY DIFF. FROM 1941-70 NORMAL	SEASONAL TOTAL	SEASONAL DIFF. FROM 1941-70 NORMAL	SEASONAL PERCENT OF NORMAL
Resolute	552.5	48.5	4435.5	244.5	106
Inuvik	518.5	43.5	3421.0	256.0	108
Whitehorse	359.0	1.0	2337.5	114.5	105
Vancouver	156.0	9.0	955.5	53.5	106
Edmonton	294.5	1.5	1641.0	20.0	101
Calgary	270.0	1.0	1618.0	33.0	102
Regina	341.5	20.5	1669.0	49.0	103
Winnipeg	286.5	-34.5	1555.0	26.0	102
Thunder Bay	258.0	-35.0	1584.0	51.0	103
Windsor	130.5	-73.5	779.0	-90.0	90
Toronto	162.0	-56.0	967.0	-35.0	97
Ottawa	203.0	-58.0	1094.0	-73.0	94
Montreal	191.0	-55.0	1055.5	-21.5	98
Quebec	222.0	-51.0	1261.5	-42.5	97
Saint John	188.5	-42.5	1168.0	-62.0	95
Halifax	171.0	-21.0	946.0	-18.0	98
Charlottetown	199.5	-18.5	1105.5	9.5	101
St John's	210.0	20.0	1314.0	37.0	103

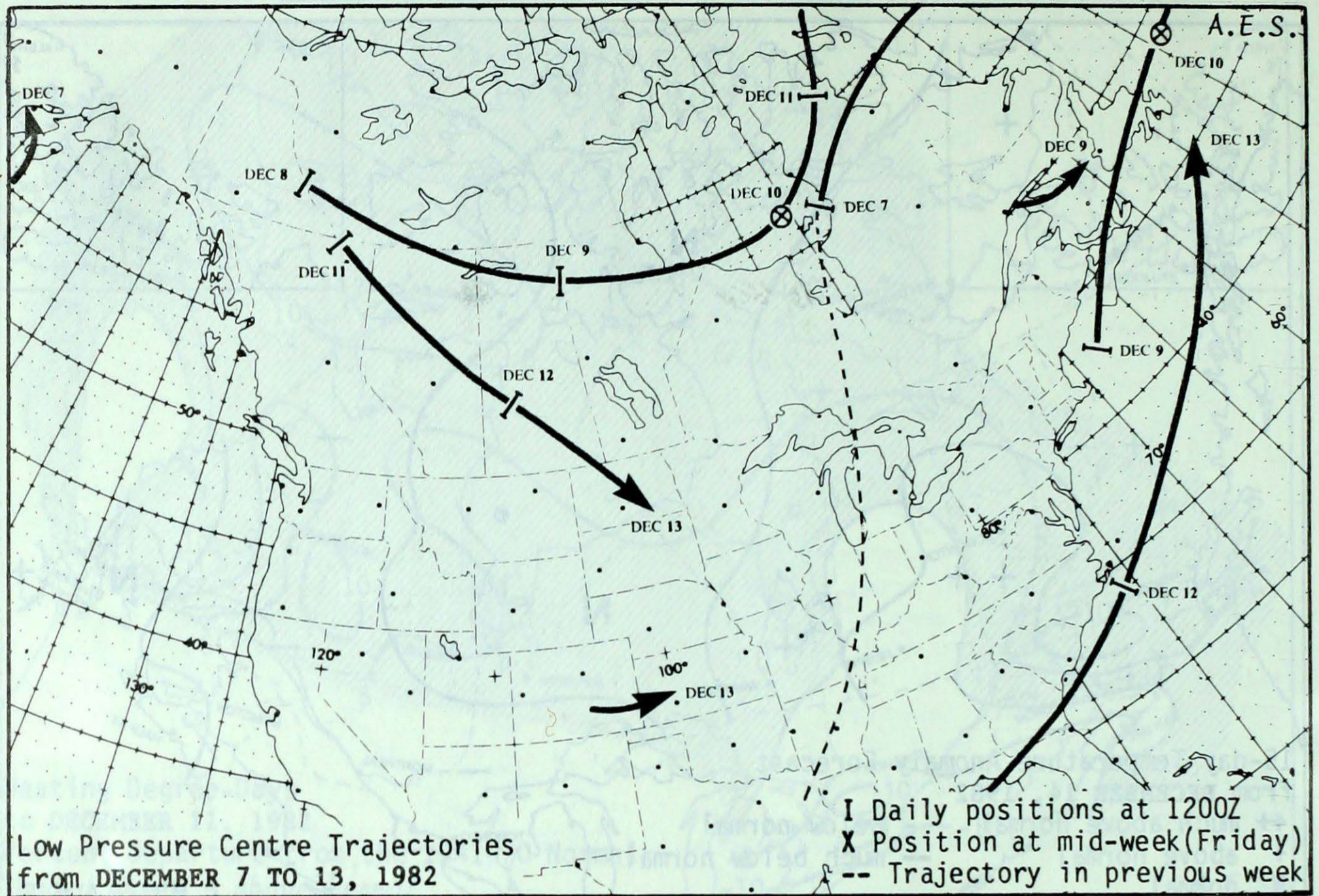
TEMPERATURE ANOMALY FORECAST



TEMPERATURE ANOMALY FORECAST FOR DEC 14 1982 TO DEC 28 1982



LOW PRESSURE CENTRE TRAJECTORIES



EXTREMES FOR THE WEEK

	MAXIMUM TEMPERATURE	LOCATION	MINIMUM TEMPERATURE	LOCATION	GREATEST PRECIPITATION	LOCATION
YUKON TERRITORY	8.4	BURWASH	-46.0	OGILVIE	14.0	SHINGLE POINT
NORTHWEST TERRITORIES	-13.2	CLYDE	-46.3	SHEPHERD BAY	9.2	YELLOWKNIFE
BRITISH COLUMBIA	11.0	KINCAUN POINT	-32.1	FORT NELSON	63.7	AMPHITRITE POINT
ALBERTA	10.8	CALGARY	-42.5	HIGH LEVEL	11.9	FORT CHIPEWYAN
SASKATCHEWAN	4.4	SWIFT CURRENT	-40.6	MEADOW LAKE	12.8	URANIUM CITY
MANITOBA	-1.0	PILCT MOUND FORTAGE LA PRAIRIE	-39.8	GILLAM	9.3	LYNN LAKE
ONTARIO	7.8	WINSOR	-34.1	GERALDTON	15.2	WAWA
QUEBEC	10.2	GRINDSTONE ISLAND	-36.8	NITCHEQUON	20.8	BLANC SABLON
NEW BRUNSWICK	11.7	MONCTON	-25.3	FREDERICTON	27.6	SAINT JOHN
NOVA SCOTIA	14.1	SYDNEY	-23.0	SHELBURNE	70.6	SABLE ISLAND
PRINCE EDWARD ISLAND	12.3	CHARLOTTETOWN	-18.7	CHARLOTTETOWN	35.3	CHARLOTTETOWN
NEWFOUNDLAND	11.9	ST JOWNS	-37.1	WABUSH LAKE	83.4	ST LAWRENCE

Important Notice

Climatic Perspectives will not be published during the Christmas - New Year holidays. Temperature and precipitation tables for the periods December 14 to 20 and December 21 to 27 will appear in the first issue of 1983.



Merry Christmas and a Happy New Year

CLIMATIC PERSPECTIVES

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TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. DECEMBER 14, 1982

Table columns: Station, Temperature (°C) [Average, Departure from Normal, Extreme Maximum, Extreme Minimum], Total, Departure from Normal. Rows include YUKON, NORTHWEST TERRITORIES, BRITISH COLUMBIA, and others.

Table columns: Station, Temperature (°C) [Average, Departure from Normal, Extreme Maximum, Extreme Minimum], Total, Departure from Normal. Rows include Alberta, Saskatchewan, Manitoba, Ontario, and Ottawa.

Table columns: Station, Temperature (°C) [Average, Departure from Normal, Extreme Maximum, Extreme Minimum], Total, Departure from Normal. Rows include Quebec, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland.

P = extreme value based on less than 7 days

X = no normal due to short period

M = not available at press time

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