



Environment  
Canada

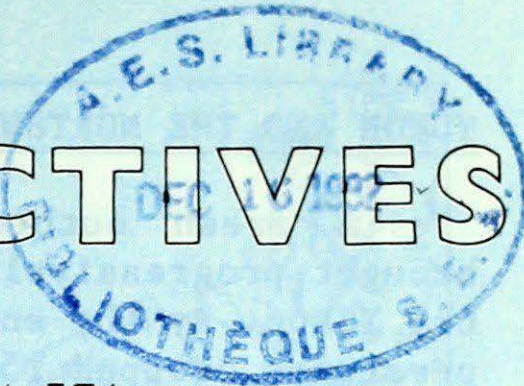
Environnement  
Canada

# A WEEKLY REVIEW OF CANADIAN CLIMATE

Atmospheric  
Environment

Environnement  
atmosphérique

# CLIMATIC PERSPECTIVES



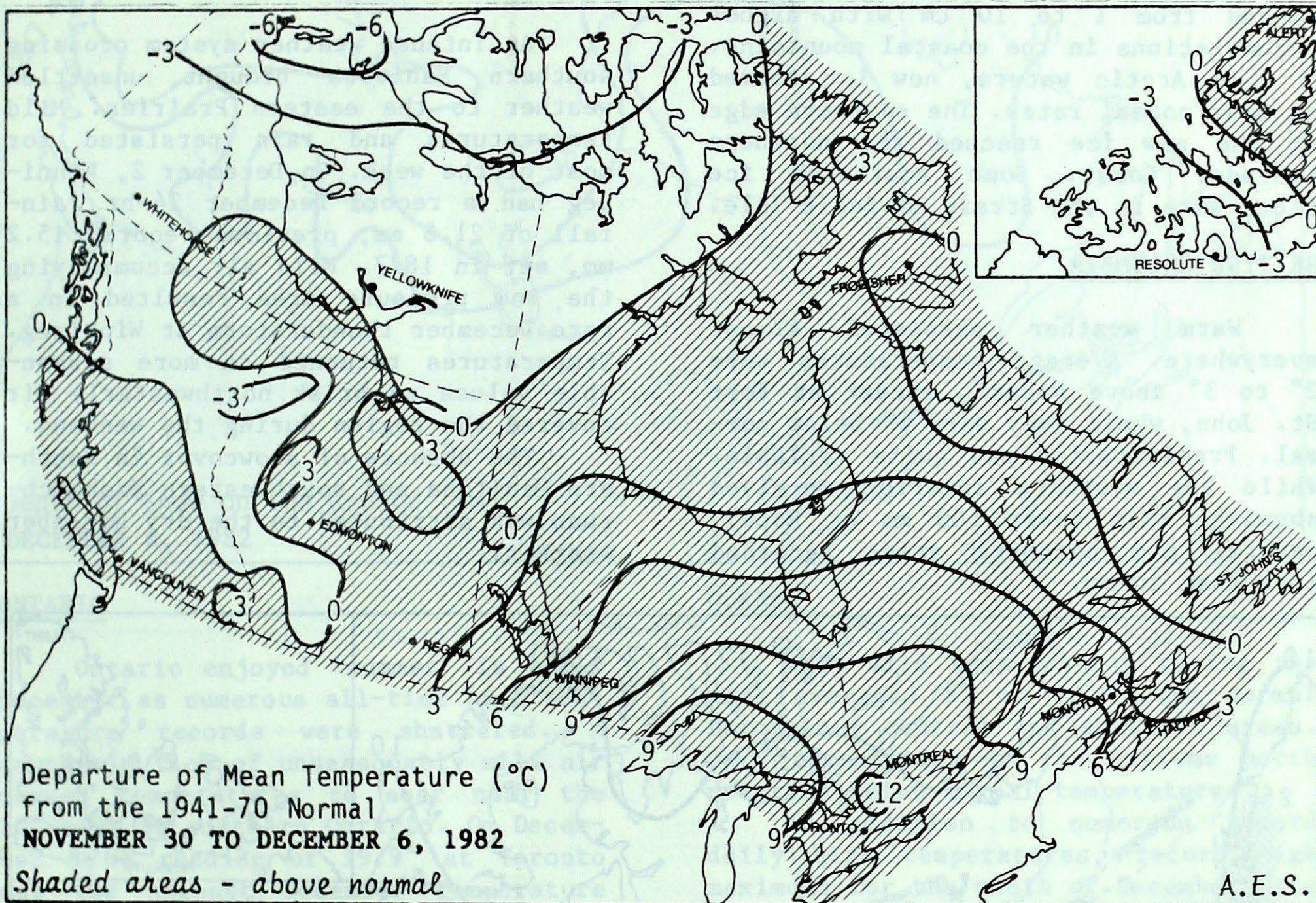
THE CANADIAN CLIMATE CENTRE,  
ATMOSPHERIC ENVIRONMENT SERVICE,  
4905 DUFFERIN ST., DOWNSVIEW, ONTARIO M3H 5T4

## Canada

DECEMBER 10, 1982

(Aussi disponible en français)

VOL. 4 NO. 48



### WEATHER HIGHLIGHTS FOR THE PERIOD - NOVEMBER 30-DECEMBER 6, 1982

#### Record warmth in Central Canada

A southerly flow of extremely mild air extending from Manitoba to the Maritimes produced record high temperatures. Ontario enjoyed the mildest weather setting numerous all-time high maximums. On December 3, temperatures soared over the 20° mark in the Niagara Peninsula. The 22.5° reading at Hamilton Municipal Laboratory may well be the highest December temperature ever recorded in Ontario.

Considerable rainfall accompanying the mild weather caused minor flooding of roads and previously saturated fields in southern and central Ontario. Minor flooding occurred in southern Québec as well.

Temperatures ranged from 22.5° at Hamilton Municipal Laboratory, Ontario to -45° at Old Crow, Yukon Territory. Amphitrite Point, British Columbia received 117.7 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

A fresh outbreak of Arctic air brought progressively colder weather to the Yukon. By the end of the week, temperatures dropped 15° to 20° below normal. The highest temperature was -6°, at Whitehorse on December 1.

Generally, light snow fell across the Yukon early in the week; amounts ranged from 1 to 10 cm with higher accumulations in the coastal mountains.

In Arctic waters, new ice formed at near normal rates. The southern edge of the new ice reached the northern Labrador Coast. Some scattered ice floes were in the Strait of Belle Isle.

BRITISH COLUMBIA

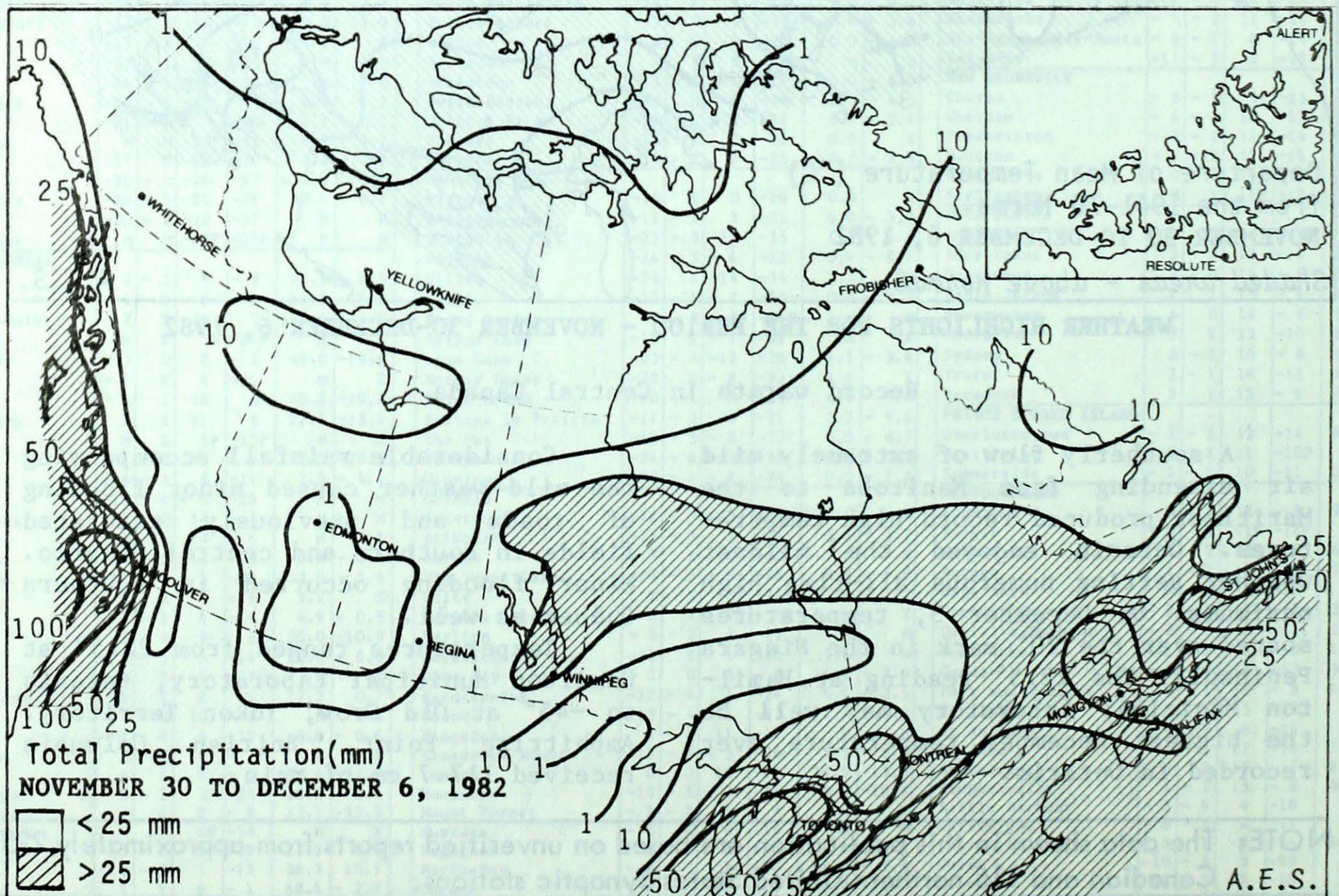
Warm weather persisted almost everywhere. Average temperatures were 2° to 3° above normal, except at Fort St. John, where they were 4° below normal. Precipitation was quite variable. While the southern interior received abundant rain (over 100 mm at Hope), central and northern areas recorded less than 20 mm.

During the week-end, freezing rain in the Fort St. John and Prince George areas created treacherous roads, disrupting traffic for several hours. On December 3, sections of Victoria were flooded as leave-clogged sewers could not discharge the runoff from 47 mm of rain.

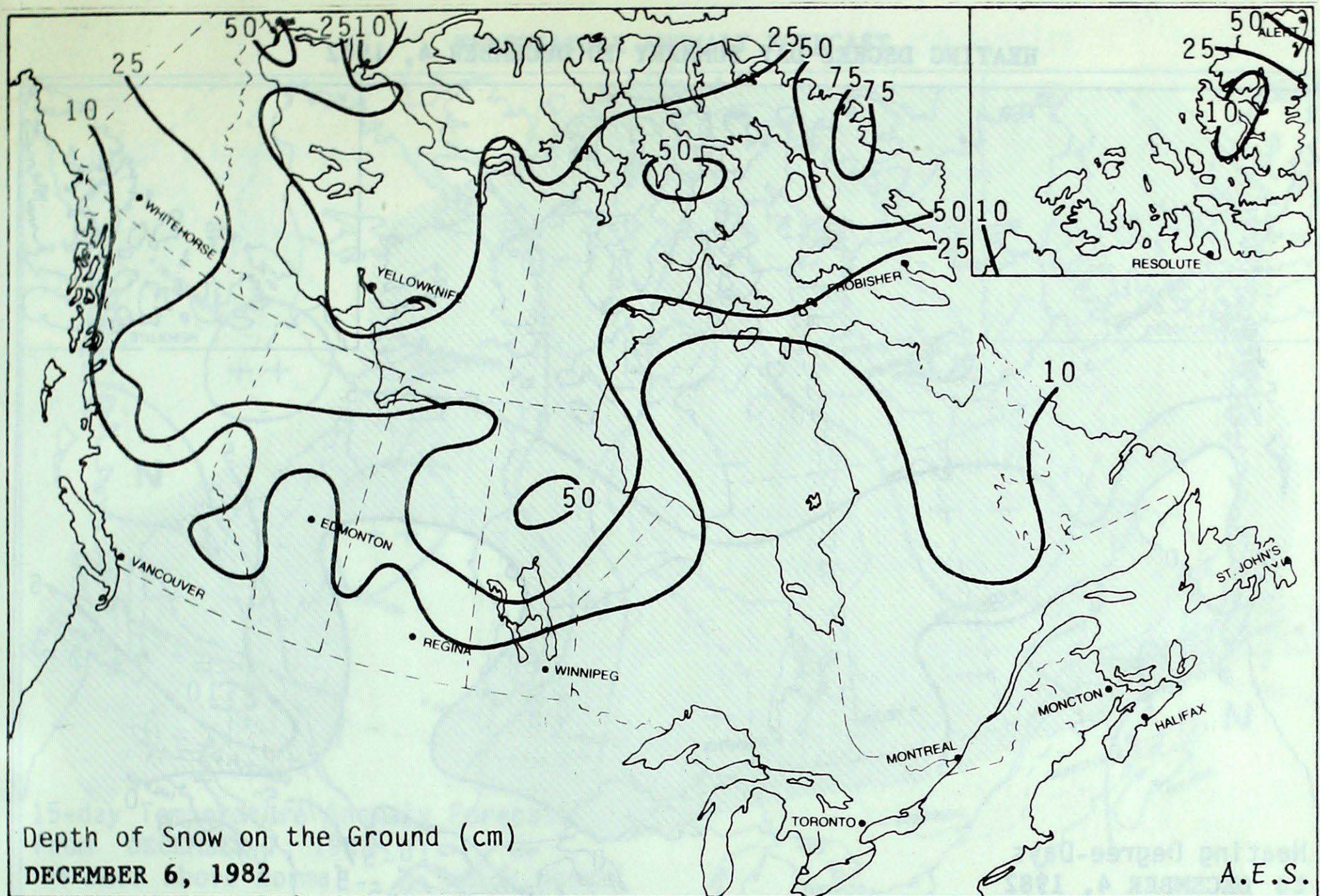
PRAIRIE PROVINCES

An intense weather system crossing southern Manitoba brought unsettled weather to the eastern Prairies. Mild temperatures and rain persisted for most of the week. On December 2, Winnipeg had a record December 24-hr rainfall of 21.8 mm; previous record: 15.2 mm, set in 1877. Mild air accompanying the low pressure area resulted in a rare December thunderstorm at Winnipeg. Temperatures returned to more seasonable values as brisk northwesterly air covered the region during the weekend.

The absence of snowcover in southern Manitoba and southwestern Saskatchewan was attributed to the dry November weather.







### ONTARIO

Ontario enjoyed 'summer' in early December as numerous all-time high temperature records were shattered. A southerly flow of unseasonably mild air caused temperatures to soar near the 20° mark in southern Ontario. On December 3, a reading of 19.9° at Toronto was the highest December temperature since records began in 1840. Moreover, a maximum of 22.5° at Hamilton Municipal Laboratory may turn out to be the highest maximum temperature ever measured in Ontario in any December. Nearly every station set record high temperatures during the week, only Big Trout Lake in northwestern Ontario retained a measurable snowcover.

Abundant moisture accompanied the mild weather. Rainfall in the 25 to 50 mm range caused some minor flooding of roads and previously saturated fields in southern and central areas. Muskoka received over 80 mm of rain during the week.

### QUÉBEC

Very mild temperatures during the week averaged 8° to 12° above normal throughout central and southern areas. Only communities in the extreme north recorded below normal temperatures.

In addition to numerous record daily high temperatures, record high maximums for the month of December were established at the following stations.

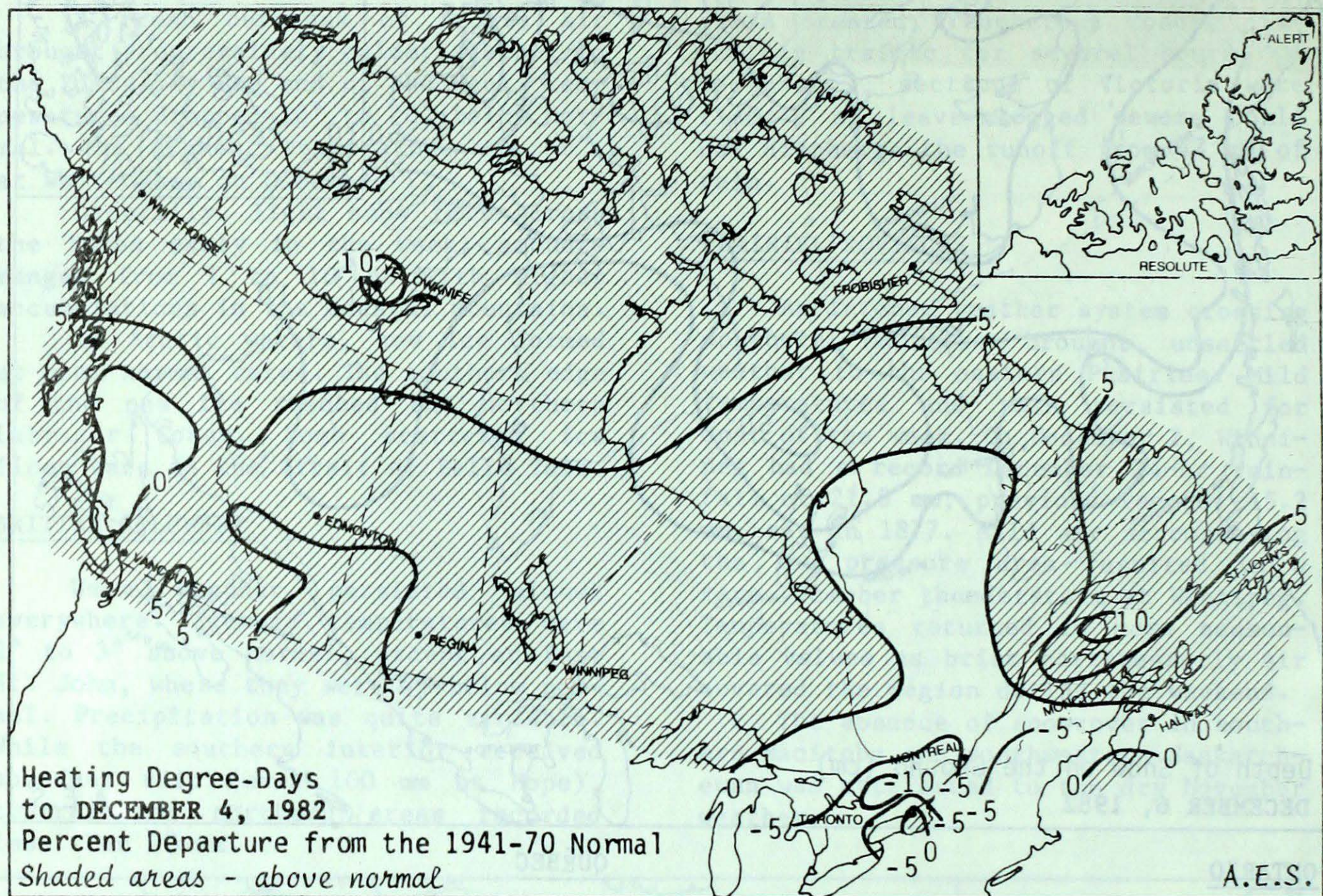
|             | New Record | Old Record  |
|-------------|------------|-------------|
| Maniwaki    | 14° Dec.3  | 7.2 in 1962 |
| Chibougamau | 10° Dec.4  | 0.6 in 1973 |
| Roberval    | 12° Dec.6  | 9.5 in 1972 |

From 20 to 30 mm of rain fell in southern areas. Although the mild weather was welcomed across Québec, the bare ground, and the unseasonable weather was adversely affecting the skiing industry.

(continued on page 7)



## HEATING DEGREE-DAY SUMMARY TO DECEMBER 4, 1982



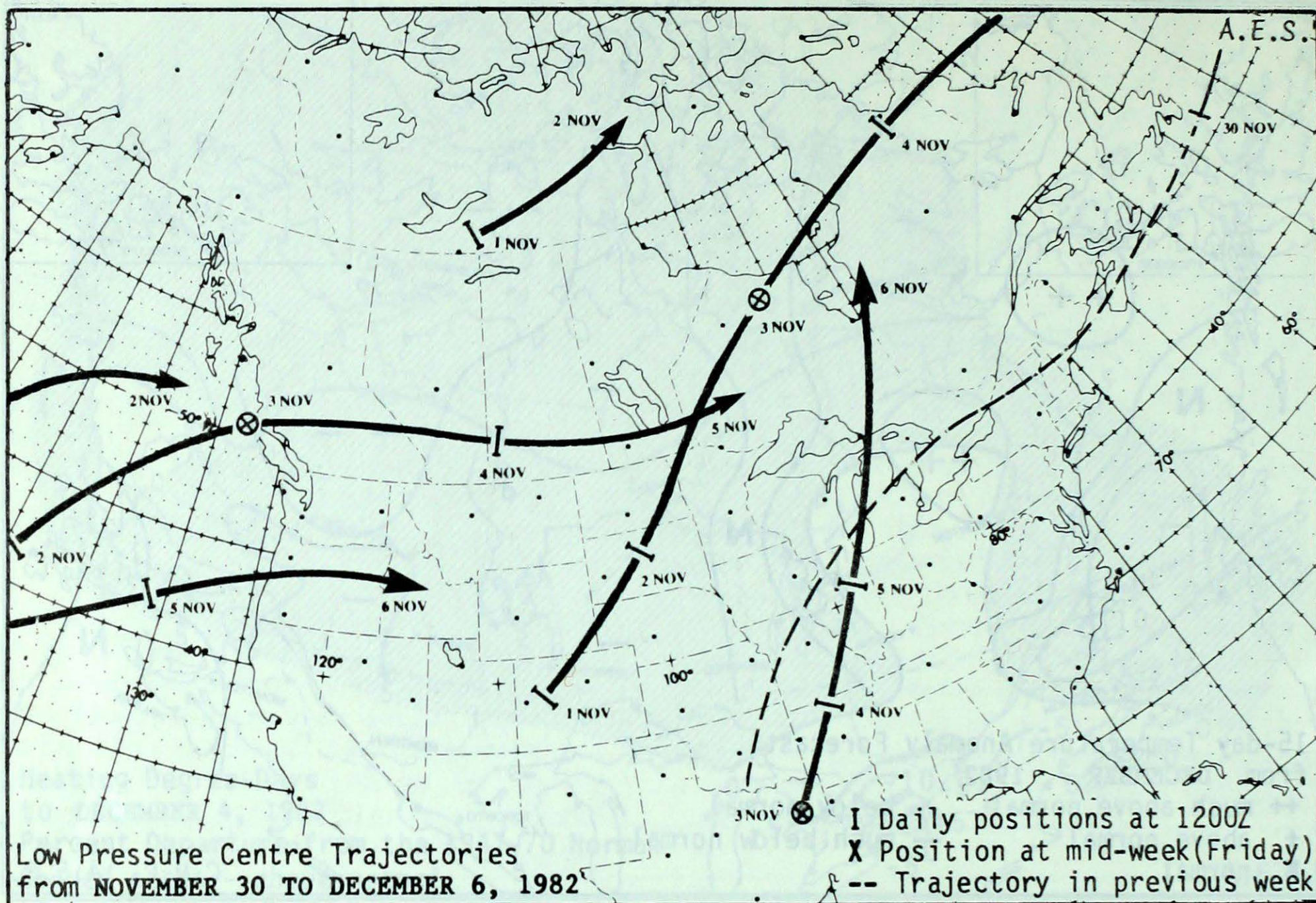
| STATION       | MONTHLY CUMULATIVE TOTAL | MONTHLY DIFF. FROM 1941-70 NORMAL | SEASONAL TOTAL | SEASONAL DIFF. FROM 1941-70 NORMAL | SEASONAL PERCENT OF NORMAL |
|---------------|--------------------------|-----------------------------------|----------------|------------------------------------|----------------------------|
| Resolute      | 202.5                    | 20.5                              | 4085.5         | 216.5                              | 106                        |
| Inuvik        | 198.5                    | 26.5                              | 3101.0         | 239.0                              | 108                        |
| Whitehorse    | 130.0                    | 2.0                               | 2108.5         | 115.5                              | 106                        |
| Vancouver     | 45.5                     | -6.5                              | 845.0          | 38.0                               | 105                        |
| Edmonton      | 93.0                     | -11.0                             | 1439.5         | 7.5                                | 101                        |
| Calgary       | 88.5                     | -7.5                              | 1436.5         | 24.5                               | 102                        |
| Regina        | 95.0                     | -19.0                             | 1422.5         | 9.5                                | 101                        |
| Winnipeg      | 65.5                     | -44.5                             | 1334.0         | 16.0                               | 101                        |
| Thunder Bay   | 56.0                     | -46.0                             | 1382.0         | 40.0                               | 103                        |
| Windsor       | 18.0                     | -54.0                             | 666.5          | -70.5                              | 90                         |
| Toronto       | 34.0                     | -42.0                             | 839.0          | -21.0                              | 98                         |
| Ottawa        | 46.5                     | -44.5                             | 937.5          | -59.5                              | 94                         |
| Montreal      | 46.5                     | -39.5                             | 911.0          | -6.0                               | 99                         |
| Quebec        | 57.0                     | -39.0                             | 1096.5         | -30.5                              | 97                         |
| Saint John    | 56.5                     | -24.5                             | 1036.0         | -44.0                              | 96                         |
| Halifax       | 55.0                     | -13.0                             | 830.0          | -10.0                              | 99                         |
| Charlottetown | 68.0                     | -8.0                              | 974.0          | 20.0                               | 102                        |
| St John's     | 82.5                     | 17.5                              | 1186.5         | 34.5                               | 103                        |







LOW PRESSURE CENTRE TRAJECTORIES



EXTREMES FOR THE WEEK

|                       | MAXIMUM TEMPERATURE | LOCATION               | MINIMUM TEMPERATURE | LOCATION       | GREATEST PRECIPITATION | LOCATION          |
|-----------------------|---------------------|------------------------|---------------------|----------------|------------------------|-------------------|
| YUKON TERRITORY       | -6.0                | WHITEHORSE             | -45.0               | OLD CROW       | 7.2                    | MAYO              |
| NORTHWEST TERRITORIES | -4.0                | FORT SMITH             | -43.7               | INUVIK         | 12.4                   | CAPE DYER         |
| BRITISH COLUMBIA      | 13.9                | VICTORIA               | -27.1               | FORT ST JOHN   | 117.7                  | AMPHITRITE POINT  |
| ALBERTA               | 9.9                 | LETHBRIDGE             | -31.0               | FORT CHIPEWYAN | 16.7                   | HIGH LEVEL        |
| SASKATCHEWAN          | 6.4                 | SWIFT CURRENT          | -31.5               | URANIUM CITY   | 18.4                   | BROADVIEW         |
| MANITOBA              | 9.7                 | WINNIPEG               | -31.2               | LYNN LAKE      | 28.2                   | GILLAM            |
| ONTARIO               | 22.5                | HAMILTON MUNICIPAL LAB | -22.5               | PICKLE LAKE    | 50.4                   | NORTH BAY         |
| QUEBEC                | 15.0                | MONTREAL/DORVAL        | -27.8               | KUJJUAQ        | 46.0                   | LA GRANDE RIVIERE |
| NEW BRUNSWICK         | 16.8                | MONCTON                | -12.1               | CHATHAM        | 27.7                   | SAINT JOHN        |
| NOVA SCOTIA           | 17.9                | GREENWOOD              | -7.7                | TRURO          | 26.4                   | SHEARWATER        |
| PRINCE EDWARD ISLAND  | 14.4                | CHARLOTTETOWN          | -5.1                | SUMMERSIDE     | 26.3                   | CHARLOTTETOWN     |
| NEWFOUNDLAND          | 9.4                 | ST JOHNS               | -24.8               | WABUSH LAKE    | 66.4                   | PORT AUX BASQUES  |



### Explanation of various terms used in this publication

|   |   |              |                        |       |  |                            |              |  |           |      |
|---|---|--------------|------------------------|-------|--|----------------------------|--------------|--|-----------|------|
| Mean  | arithmetic average  |              |                        |       |  |                            |              |  |           |      |
| Monthly cumulative total                      | the total of a given parameter to date from the beginning of the current month  |              |                        |       |  |                            |              |  |           |      |
| Extreme maximum                               | the highest daily maximum temperature for the week  |              |                        |       |  |                            |              |  |           |      |
| Extreme minimum                               | the lowest daily minimum temperature for the week   |              |                        |       |  |                            |              |  |           |      |
| Normal  | climatic averages for a 30-year period as recommended by the World Meteorological Organization (current period is 1951-1980)  |              |                        |       |  |                            |              |  |           |      |
| Depth of snow on ground                       | a ruler measurement of the depth of snow on the ground at a representative site near each station. Depth is taken once per day at standard time   |              |                        |       |  |                            |              |  |           |      |
| Departure of mean temperature from the normal | difference between the 7-day average temperature and the 30-year average temperature (normal)   |              |                        |       |  |                            |              |  |           |      |
|   | <table border="0" style="margin-left: 2em;"> <tr> <td>e.g.</td> <td>7-day mean temperature</td> <td style="text-align: right;">7.1°C</td> </tr> <tr> <td></td> <td>30-year normal temperature</td> <td style="text-align: right;"><u>6.7°C</u></td> </tr> <tr> <td></td> <td>departure</td> <td style="text-align: right;">+0.4</td> </tr> </table> | e.g.         | 7-day mean temperature | 7.1°C |  | 30-year normal temperature | <u>6.7°C</u> |  | departure | +0.4 |
| e.g.  | 7-day mean temperature  | 7.1°C        |                        |       |  |                            |              |  |           |      |
|   | 30-year normal temperature  | <u>6.7°C</u> |                        |       |  |                            |              |  |           |      |
|   | departure   | +0.4         |                        |       |  |                            |              |  |           |      |
| Temperature anomaly forecast                  | a forecast of the 15-day mean temperature departure from the 30-year average.   |              |                        |       |  |                            |              |  |           |      |



(continued from page 3)

#### ATLANTIC PROVINCES

The week began with cold temperatures but moderated significantly towards the end of the period as mild air edged northward. Numerous record daily high temperatures were set; 15.4° at Fredericton on December 6 was a record for the month. Rainfall in excess of 50 mm was confined to the southern section of Newfoundland Island, and was generally less than 25 mm elsewhere.

#### CLIMATIC PERSPECTIVES

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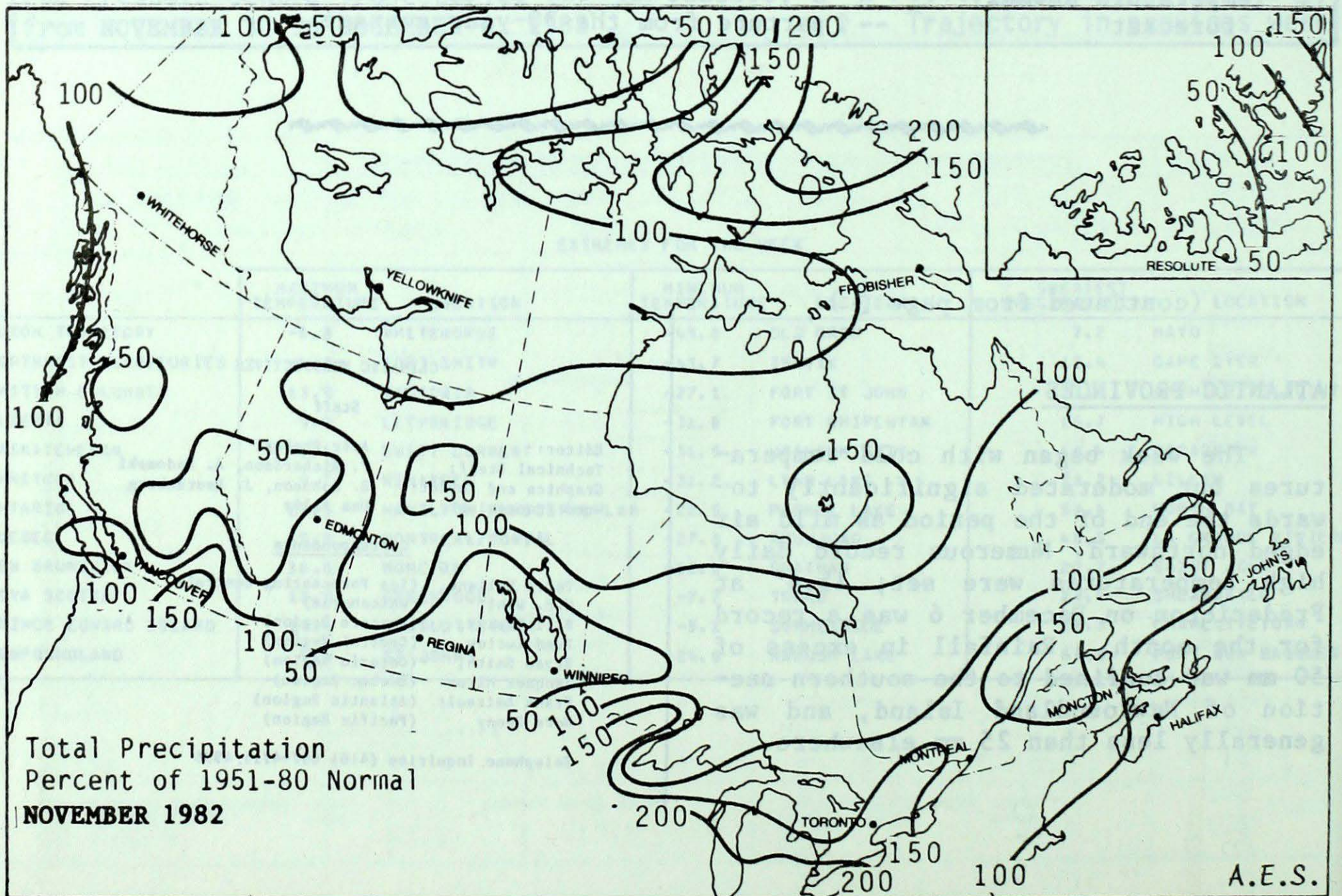
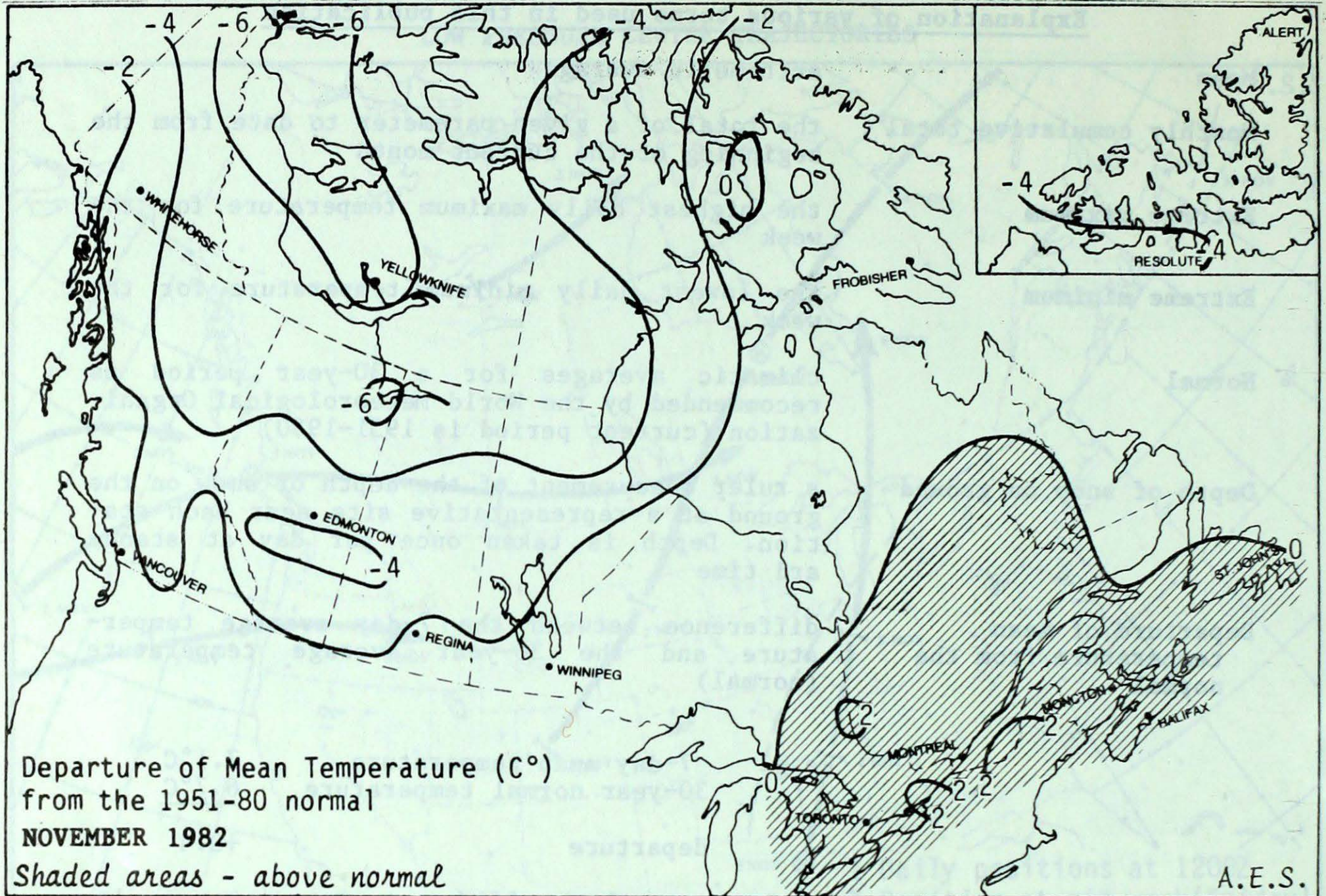
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MONTHLY MAP

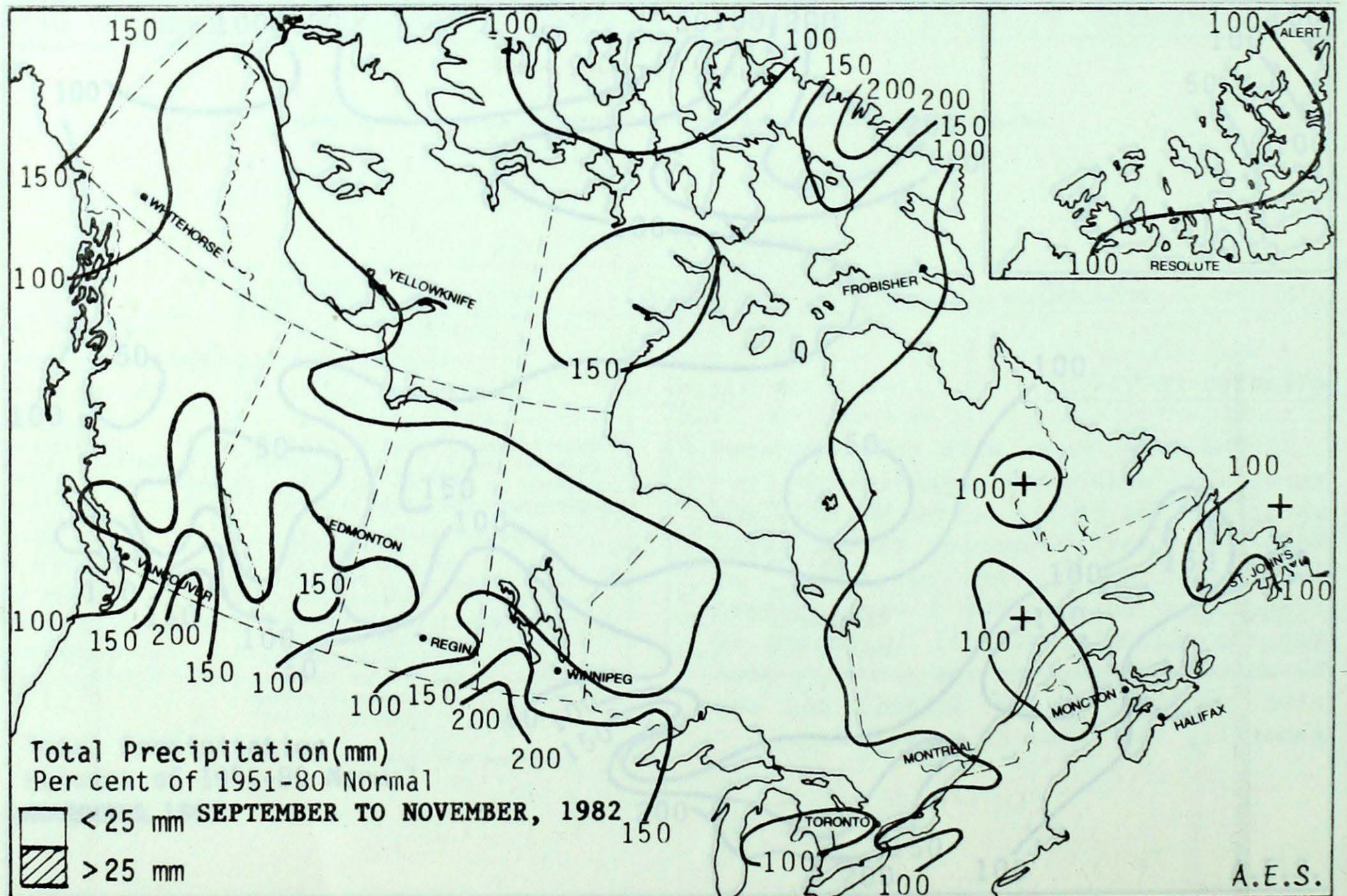
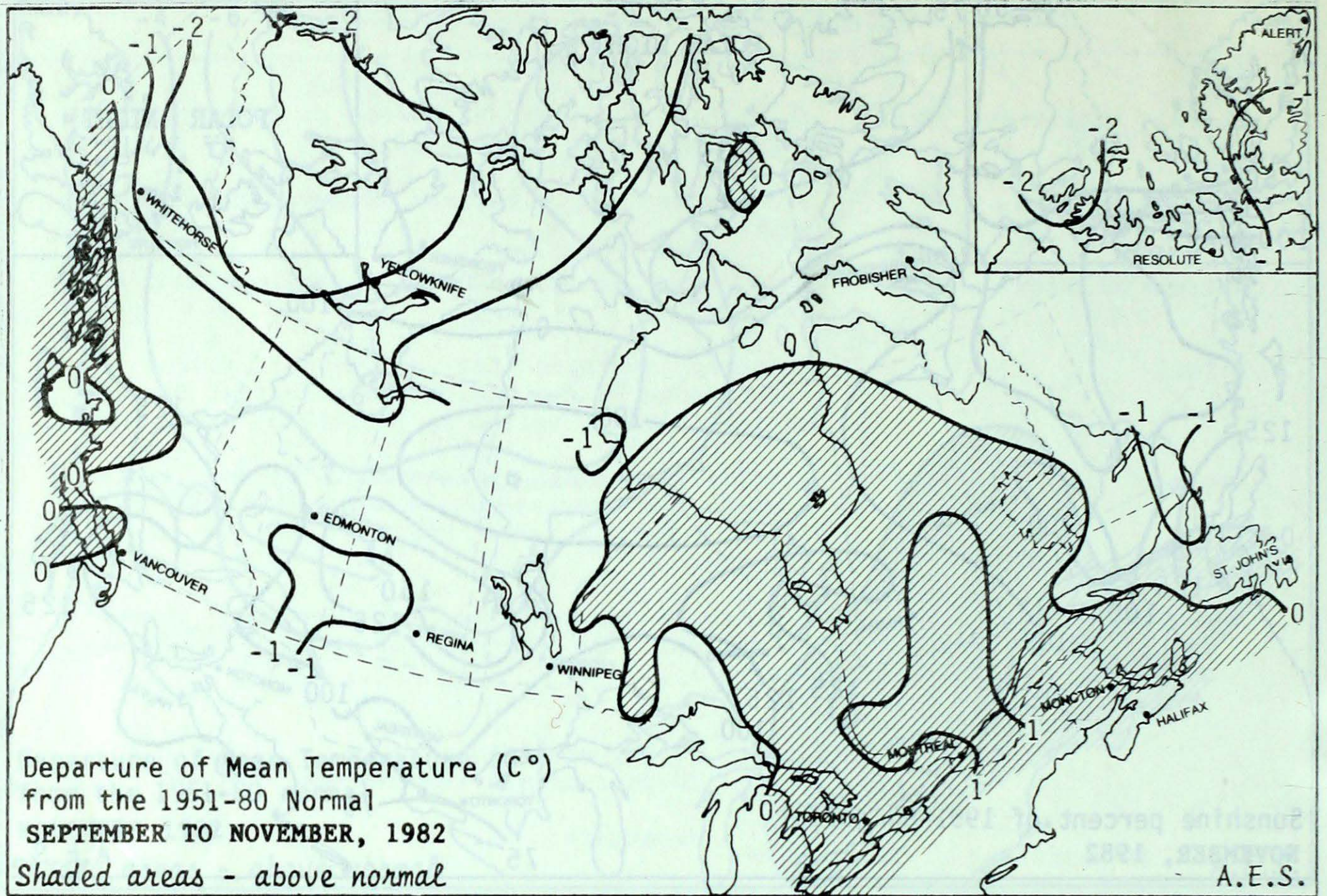






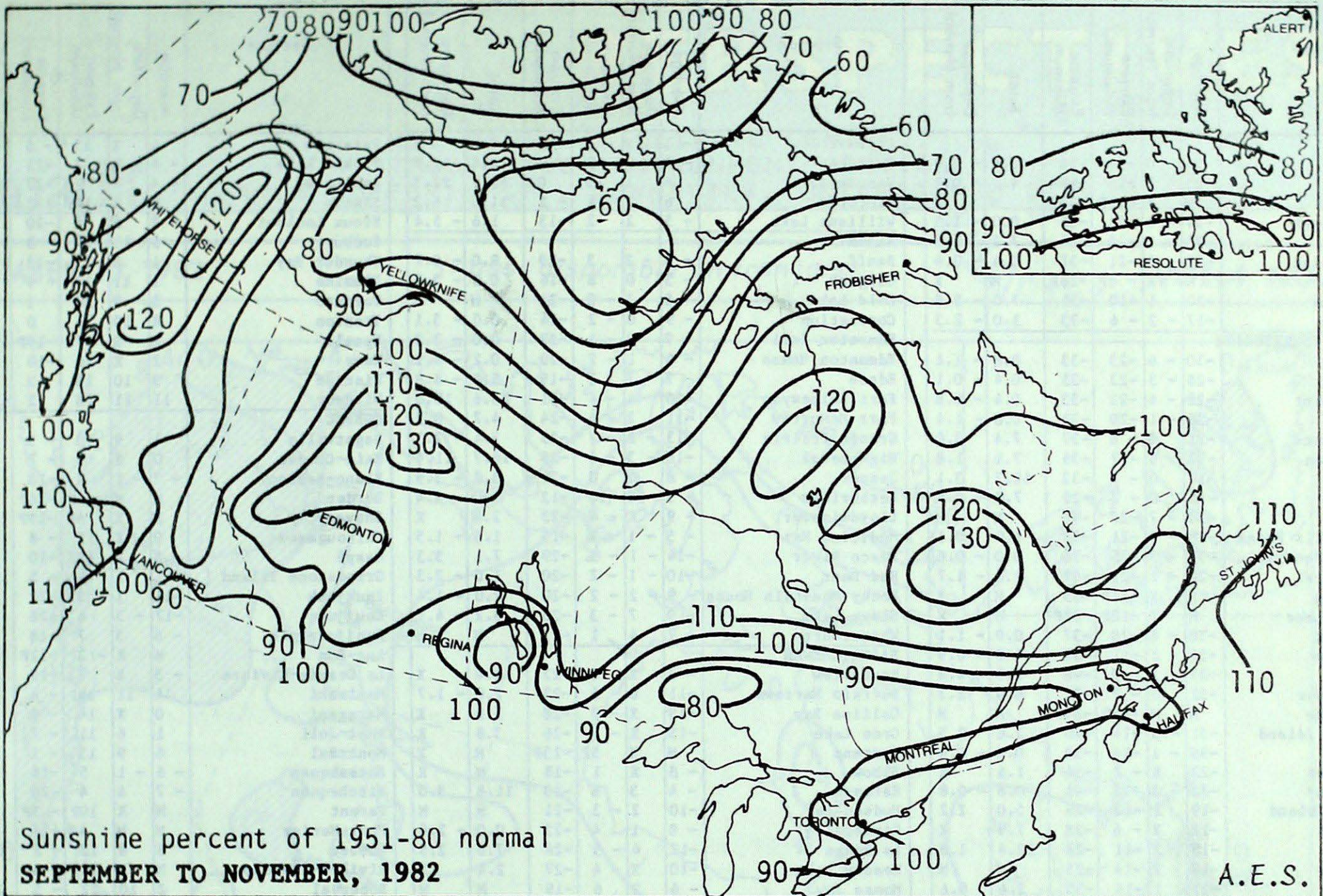


SEASONAL MAPS





SEASONAL MAPS



Sunshine percent of 1951-80 normal  
**SEPTEMBER TO NOVEMBER, 1982**

A.E.S.



TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. DECEMBER 7, 1982

| Station                      | Temperature (°C) |                       |                 |                 | Precip. (mm) |                       |
|------------------------------|------------------|-----------------------|-----------------|-----------------|--------------|-----------------------|
|                              | Average          | Departure from Normal | Extreme Maximum | Extreme Minimum | Total        | Departure from Normal |
| <b>YUKON</b>                 |                  |                       |                 |                 |              |                       |
| Burwash                      | -24              | 0                     | -14             | -38             | 0.9          | -1.3                  |
| Dawson                       | -25              | -1                    | -15             | -44             | 4.0          | -0.6                  |
| Faro                         | M                | X                     | -11P            | -33P            | M            | X                     |
| Komakuk Beach                | -29              | -6                    | -22             | -36             | 0.0          | -1.5                  |
| Mayo                         | -25              | -2                    | -8              | -44             | 7.2          | 2.8                   |
| Shingle Point                | -29              | -5                    | -21             | -37             | 0.4          | -0.4                  |
| Tealin                       | M                | X                     | -8P             | -26P            | M            | X                     |
| Watson Lake                  | -20              | 1                     | -10             | -31             | 7.0          | -5.8                  |
| Whitehorse                   | -17              | -2                    | -6              | -33             | 3.0          | -2.3                  |
| <b>NORTHWEST TERRITORIES</b> |                  |                       |                 |                 |              |                       |
| Cape Parry                   | -30              | -6                    | -23             | -33             | 0.8          | -1.1                  |
| Cape Young                   | -28              | -3                    | -23             | -35             | 0.4          | -0.1                  |
| Clinton Point                | -28              | -6                    | -22             | -33             | 0.4          | -0.8                  |
| Coppermine                   | -26              | -1                    | -20             | -32             | 0.8          | -1.4                  |
| Fort Reliance                | -21              | 0                     | -6              | -37             | 7.4          | 3.0                   |
| Fort Simpson                 | -22              | 0                     | -17             | -39             | 7.1          | 1.8                   |
| Fort Smith                   | -17              | 0                     | -4              | -32             | 11.7         | 3.1                   |
| Hay River                    | -18              | 0                     | -7              | -29             | 7.0          | -0.6                  |
| Inuvik                       | -33              | -7                    | -27             | -44             | M            | M                     |
| Lady Franklin Point          | -28              | -3                    | -21             | -35             | 1.0          | 0.1                   |
| Nicholson Peninsula          | -32              | -7                    | -26             | -36             | 0.0          | -0.6                  |
| Norman Wells                 | -27              | -2                    | -21             | -37             | 1.6          | -1.7                  |
| Port Radium                  | M                | X                     | -17P            | -35             | M            | X                     |
| Robertson Lake               | M                | X                     | -12P            | -32P            | M            | X                     |
| Tuktoyaktuk                  | -30              | -6                    | -25             | -37             | 0.0          | -1.1                  |
| Yellowknife                  | -22              | -2                    | -11             | -37             | 4.8          | -0.9                  |
| Baker Lake                   | -27              | -1                    | -9              | -40             | 7.5          | 4.8                   |
| Coral Harbour                | -22              | 0                     | -7              | -30             | 6.0          | 2.3                   |
| Ennadai Lake                 | M                | M                     | -25P            | -34P            | M            | M                     |
| Jenny Lind Island            | -31              | -3                    | -14             | -40             | 2.8          | 2.5                   |
| Pelly Bay                    | -30              | -1                    | -16             | -38             | 0.0          | -0.4                  |
| Rankin Inlet                 | -22              | X                     | -7              | -34             | 1.6          | X                     |
| Shepherd Bay                 | -32              | -3                    | -15             | -41             | 0.8          | -0.8                  |
| Broughton Island             | -19              | 2                     | -12             | -26             | 5.0          | 2.2                   |
| Cape Dorset                  | -18              | X                     | -6              | -28             | 7.9          | X                     |
| Cape Dyer                    | -18              | 2                     | -11             | -28             | 12.4         | 1.8                   |
| Cape Hooper                  | -19              | 2                     | -14             | -25             | M            | M                     |
| Clyde                        | -21              | 1                     | -14             | -30             | 2.6          | 0.6                   |
| Dewar Lakes                  | -22              | 3                     | -18             | -33             | 8.6          | 8.2                   |
| Frobisher Bay                | -20              | -2                    | -8              | -28             | 12.0         | 6.4                   |
| Longstaff Bluff              | -23              | 2                     | -14             | -36             | 4.4          | 3.4                   |
| Pond Inlet                   | -26              | X                     | -17             | -39             | 1.2          | X                     |
| Alert                        | -28              | 1                     | -21             | -34             | M            | M                     |
| Eureka                       | -32              | 1                     | -22             | -39             | M            | M                     |
| Gladman Point                | M                | M                     | -16P            | -42             | 7.0          | 5.8                   |
| Hall Beach                   | -29              | -2                    | -15             | -38             | 2.5          | 1.2                   |
| Mackar Inlet                 | M                | M                     | -7P             | -39             | M            | M                     |
| Resolute                     | -32              | -4                    | -23             | -39             | M            | M                     |
| Byron Bay                    | -31              | -3                    | -20             | -37             | 3.4          | 2.7                   |
| Cambridge Bay                | -31              | -4                    | -20             | -41             | 4.2          | 2.7                   |
| Mould Bay                    | -35              | -4                    | -25             | -41             | M            | M                     |
| Sachs Harbour                | M                | M                     | -27P            | -40P            | M            | M                     |
| <b>BRITISH COLUMBIA</b>      |                  |                       |                 |                 |              |                       |
| Abbotsford                   | 5                | 0                     | 13              | -3              | 115.8        | 68.7                  |
| Alert Bay                    | 4                | 0                     | 8               | 0               | 23.5         | -33.6                 |
| Amphitrite Point             | 7                | X                     | 13              | 1               | 117.7        | X                     |
| Blue River                   | M                | X                     | 3P              | -17P            | M            | X                     |
| Bull Harbour                 | 4                | -1                    | 9               | -2              | 33.3         | -36.8                 |
| Burns Lake                   | -7               | X                     | 0               | -26             | M            | X                     |
| Cape Scott                   | 5                | 0                     | 9               | 2               | 55.4         | -21.9                 |
| Cape St James                | 6                | 1                     | 10              | 1               | 33.6         | -11.5                 |
| Clinton                      | M                | X                     | -1P             | -16P            | M            | X                     |
| Comox                        | 5                | 1                     | 14              | -1              | 83.2         | 31.1                  |
| Cranbrook                    | -2               | 3                     | 6               | -13             | 11.1         | 3.2                   |
| Dease Lake                   | -16              | -2                    | -8              | -25             | 4.6          | -4.5                  |
| Estevan Point                | M                | M                     | 9P              | 1P              | M            | M                     |
| Ethelda Bay                  | 4                | X                     | 7               | 1               | M            | X                     |
| Fort Nelson                  | -18              | 1                     | -13             | -26             | 15.2         | 8.1                   |
| Fort St John                 | -16              | -4                    | -3              | -27             | 6.9          | -0.8                  |
| Hope                         | 4                | X                     | 13              | -1              | 110.2        | X                     |
| Kamloops                     | 1                | 1                     | 9               | -7              | 2.4          | -1.5                  |
| Langara                      | 4                | 0                     | 8               | 1               | 31.0         | -16.1                 |
| Lytton                       | 1                | 3                     | 8               | -5              | 38.0         | 18.7                  |
| Mackenzie                    | -6               | X                     | 1               | -16             | M            | X                     |
| McInnes Island               | 5                | 0                     | 8               | 2               | 30.8         | -42.3                 |
| Nanaimo                      | M                | X                     | 7P              | 5P              | M            | X                     |
| Penticton                    | 2                | 1                     | 10              | -5              | 9.8          | 3.2                   |
| Port Alberni                 | M                | X                     | 8P              | -1              | M            | X                     |
| Port Hardy                   | 4                | 0                     | 8               | -1              | 30.7         | -38.1                 |
| Prince George                | -5               | 1                     | 2               | -19             | 8.9          | -2.9                  |
| Prince Rupert                | 3                | 0                     | 7               | -3              | 29.5         | -40.5                 |
| Puntzi Mountain              | M                | X                     | -1P             | -20P            | M            | X                     |
| Quesnel                      | -4               | 1                     | 3               | -12             | 11.6         | 2.1                   |
| Revelstoke                   | 0                | 3                     | 3               | -8              | 35.4         | 11.6                  |
| Sandspit                     | 4                | 1                     | 8               | 0               | 25.2         | -26.9                 |
| Smithers                     | -9               | -3                    | -1              | -20             | 6.3          | -7.0                  |

| Station              | Temperature (°C) |                       |                 |                 | Precip. (mm) |                       |
|----------------------|------------------|-----------------------|-----------------|-----------------|--------------|-----------------------|
|                      | Average          | Departure from Normal | Extreme Maximum | Extreme Minimum | Total        | Departure from Normal |
| Stewart              | -1               | X                     | 3               | -6              | M            | X                     |
| Terrace              | -2               | 0                     | 2               | -9              | 14.4         | -41.8                 |
| Vancouver            | 6                | 1                     | 13              | 0               | 62.7         | 22.3                  |
| Victoria             | 6                | 1                     | 14              | -2              | 51.4         | 16.2                  |
| Williams Lake        | -5               | 2                     | 2               | -15             | 1.6          | -5.4                  |
| <b>ALBERTA</b>       |                  |                       |                 |                 |              |                       |
| Banff                | -8               | -2                    | 3               | -29             | 9.0          | -0.7                  |
| Calgary              | -5               | 0                     | 8               | -16             | 0.0          | -3.2                  |
| Cold Lake            | -8               | 3                     | -2              | -21             | M            | M                     |
| Coronation           | -9               | 0                     | -2              | -24             | 0.0          | -3.1                  |
| Edmonton Intl        | -9               | 2                     | -1              | -22             | 0.0          | -3.2                  |
| Edmonton Namao       | -8               | 1                     | -2              | -20             | 0.2          | -4.1                  |
| Edson                | -7               | 7                     | 1               | -19             | 5.8          | -6.9                  |
| Fort Chipewyan       | -16              | 4                     | -4              | -31             | 16.6         | 10.0                  |
| Fort McMurray        | -11              | 2                     | -4              | -24             | 4.7          | 0.2                   |
| Grande Prairie       | -13              | -2                    | -2              | -25             | 3.4          | -2.1                  |
| High Level           | -18              | -3                    | -6              | -29             | 16.7         | 11.4                  |
| Jasper               | -8               | 0                     | 0               | -21             | 3.8          | -3.9                  |
| Lethbridge           | -3               | 0                     | 10              | -12             | 0.0          | -4.4                  |
| Lloydminster         | -9               | X                     | -4              | -23             | 2.8          | X                     |
| Medicine Hat         | -5               | -1                    | 8               | -15             | 1.6          | -1.5                  |
| Peace River          | -14              | -1                    | -5              | -29             | 7.1          | 3.3                   |
| Red Deer             | -10              | -1                    | -2              | -20             | 1.0          | -2.3                  |
| Rocky Mountain House | -9               | -2                    | -2              | -20             | 2.0          | -1.4                  |
| Slave Lake           | -9               | 7                     | -3              | -20             | 3.2          | -4.1                  |
| Whitecourt           | -7               | 4                     | 1               | -17             | M            | M                     |
| <b>SASKATCHEWAN</b>  |                  |                       |                 |                 |              |                       |
| Broadview            | -7               | X                     | 6               | -22             | 18.4         | X                     |
| Buffalo Narrows      | -11              | 6                     | -6              | -23             | 2.0          | -1.7                  |
| Collins Bay          | -19              | X                     | -7              | -28             | 7.8          | X                     |
| Cree Lake            | -15              | X                     | -6              | -26             | 3.8          | X                     |
| Eastend              | M                | X                     | 5P              | -13P            | M            | X                     |
| Elbow                | -8               | X                     | 1               | -18             | M            | X                     |
| Estevan              | -4               | 3                     | 6               | -15             | 11.8         | 8.0                   |
| Hudson Bay           | -10              | 2                     | -3              | -21             | M            | M                     |
| Kindersley           | -8               | 1                     | 4               | -22             | 0.0          | -2.8                  |
| La Ronge             | -12              | 4                     | -5              | -24             | 7.6          | 2.5                   |
| Meadow Lake          | -10              | X                     | -4              | -27             | 2.4          | X                     |
| Moose Jaw            | -6               | 2                     | 6               | -19             | M            | M                     |
| Nipawin              | -10              | X                     | -4              | -21             | 1.2          | X                     |
| North Battleford     | -8               | 2                     | -4              | -22             | M            | M                     |
| Prince Albert        | -10              | 3                     | -4              | -24             | 2.4          | -1.2                  |
| Regina               | -7               | 2                     | 5               | -22             | 7.6          | 4.5                   |
| Rockglen             | M                | X                     | 5P              | -12             | M            | X                     |
| Saskatoon            | -9               | 1                     | -4              | -24             | 0.2          | -4.1                  |
| Swift Current        | -5               | 1                     | 6               | -17             | M            | M                     |
| Uranium City         | -18              | -1                    | -7              | -32             | 12.4         | 2.5                   |
| Wynyard              | -10              | X                     | -3              | -23             | 15.8         | X                     |
| Yorkton              | -8               | 2                     | 2               | -20             | 15.8         | 11.7                  |
| <b>MANITOBA</b>      |                  |                       |                 |                 |              |                       |
| Bissett              | -4               | X                     | 7               | -21             | 22.1         | X                     |
| Brandon              | -5               | 5                     | 2               | -18             | 14.0         | 10.0                  |
| Churchill            | -17              | 1                     | -5              | -26             | M            | M                     |
| Dauphin              | -7               | 3                     | 0               | -20             | 9.8          | 5.4                   |
| Gillam               | -16              | X                     | -4              | -28             | 28.2         | X                     |
| Gimli                | -4               | 6                     | 5               | -19             | 24.6         | 17.9                  |
| Grand Rapids         | M                | X                     | 0P              | -26P            | M            | X                     |
| Island Lake          | -10              | X                     | 0               | -25             | M            | X                     |
| Lynn Lake            | -18              | 3                     | -6              | -31             | 9.7          | 2.8                   |
| Norway House         | -12              | X                     | -1              | -28             | 22.0         | X                     |
| Pilot Mound          | -3               | 6                     | 6               | -17             | 24.4         | 21.6                  |
| Portage la Prairie   | -3               | 5                     | 5               | -17             | 24.0         | 20.2                  |
| The Pas              | -13              | 0                     | -2              | -27             | 23.4         | 18.8                  |
| Thompson             | -16              | 4                     | -4              | -27             | 27.4         | 19.1                  |
| Winnipeg             | -2               | 7                     | 10              | -18             | M            | M                     |
| <b>ONTARIO</b>       |                  |                       |                 |                 |              |                       |
| Armstrong            | -2               | 10                    | 9               | -19             | 8.8          | -2.7                  |
| Atikokan             | -1               | 11                    | 9               | -17             | 1.4          | -5.5                  |
| Barrie               | M                | X                     | 13P             | -1              | M            | X                     |
| Big Trout Lake       | -8               | 7                     | 5               | -21             | 31.7         | 22.5                  |
| Britt                | M                | X                     | 12P             | -2P             | M            | X                     |
| Caribou Island       | M                | X                     | 3P              | 3P              | M            | X                     |
| Earlton              | 3                | 11                    | 15              | -3              | M            | M                     |
| Geraldton            | 0                | X                     | 11              | -18             | 10.2         | X                     |
| Gore Bay             | 6                | 8                     | 14              | -1              | 40.1         | 24.1                  |
| Kapuskasing          | 0                | 10                    | 13              | -13             | 21.5         | 7.2                   |
| Kenora               | -2               | 7                     | 8               | -19             | 6.6          | -2.7                  |
| Kingston             | 9                | 11                    | 14              | 3               | M            | M                     |
| Lansdowne House      | -4               | 9                     | 7               | -20             | 24.6         | 14.0                  |
| London               | 10               | 11                    | 19              | 1               | 34.3         | 15.5                  |
| Moosonee             | -2               | 8                     | 13              | -16             | 8.8          | -4.1                  |
| Mount Forest         | 8                | 12                    | 18              | 0               | 16.2         | -4.5                  |
| Muskoka              | 8                | 12                    | 19              | 1               | M            | M                     |
| Nagagamí             | M                | X                     | 7P              | -18P            | M            | X                     |
| North Bay            | 6                | 11                    | 14              | -3              | 50.4         | 33.1                  |
| Ottawa               | 5                | 9                     | 16              | 0               | 30.9         | 16.9                  |

| Station           | Temperature (°C) |                       |                 |                 | Precip. (mm) |                       |
|-------------------|------------------|-----------------------|-----------------|-----------------|--------------|-----------------------|
|                   | Average          | Departure from Normal | Extreme Maximum | Extreme Minimum | Total        | Departure from Normal |
| Petawawa          | 4                | X                     | 15              | -5              | M            | X                     |
| Pickle Lake       | -4               | 9                     | 7               | -23             | 14.2         | -5.5                  |
| Red Lake          | -4               | 8                     | 7               | -22             | M            | M                     |
| Simcoe            | M                | M                     | 16P             | -3              | 6.0          | -13.3                 |
| Sioux Lookout     | -2               | 8                     | 8               | -20             | 7.5          | -2.2                  |
| Sudbury           | 5                | 11                    | 14              | -3              | 35.3         | 23.3                  |
| Thunder Bay       | 1                | 8                     | 11              | -13             | 2.8          | -7.7                  |
| Timmins           | 1                | 11                    | 14              | -9              | 25.6         | 12.2                  |
| Toronto           | 8                | 9                     | 20              | 1               | 19.3         | 7.7                   |
| Trenton           | 8                | 10                    | 16              | 0               | 18.7         | 2.2                   |
| Upsala            | M                | X                     | 7P              | -19P            | M            | M                     |
| Wawa              | 2                | X                     | 16              | -10             | 40.7         | X                     |
| Warton            | 9                | 10                    | 18              | 2               | 41.6         | 17.6                  |
| Windsor           | 11               | 11                    | 18              | 2               | 20.3         | 8.3                   |
| <b>QUÉBEC</b>     |                  |                       |                 |                 |              |                       |
| Bagotville        | 1                | 9                     | 13              | -5              | 29.6         | 11.6                  |
| Bele-Comeau       | 0                | 6                     | 9               | -7              | 35.4         | 17.4                  |
| Blanc-Sablon      | -7               | -1                    | 2               | -18             | M            | M                     |
| Border            | M                | M                     | 1P              | -26P            | M            | M                     |
| Chevery           | M                | X                     | 4P              | -19P            | M            | M                     |
| Chibouganau       | 0                | X                     | 11              | -8              | 19.8         | X                     |
| Gaspé             | -1               | X                     | 12              | -10             | 9.0          | X                     |
| Grindstone Island | 1                | 1                     | 11              | -5              | 21.0         | 0.0                   |
| Inukjuak          | -11              | 1                     | 2               | -22             |              |                       |