

Environment  
CanadaEnvironnement  
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Canada**A WEEKLY REVIEW OF CANADIAN CLIMATE****CLIMATIC PERSPECTIVES**

JAN 14 1980

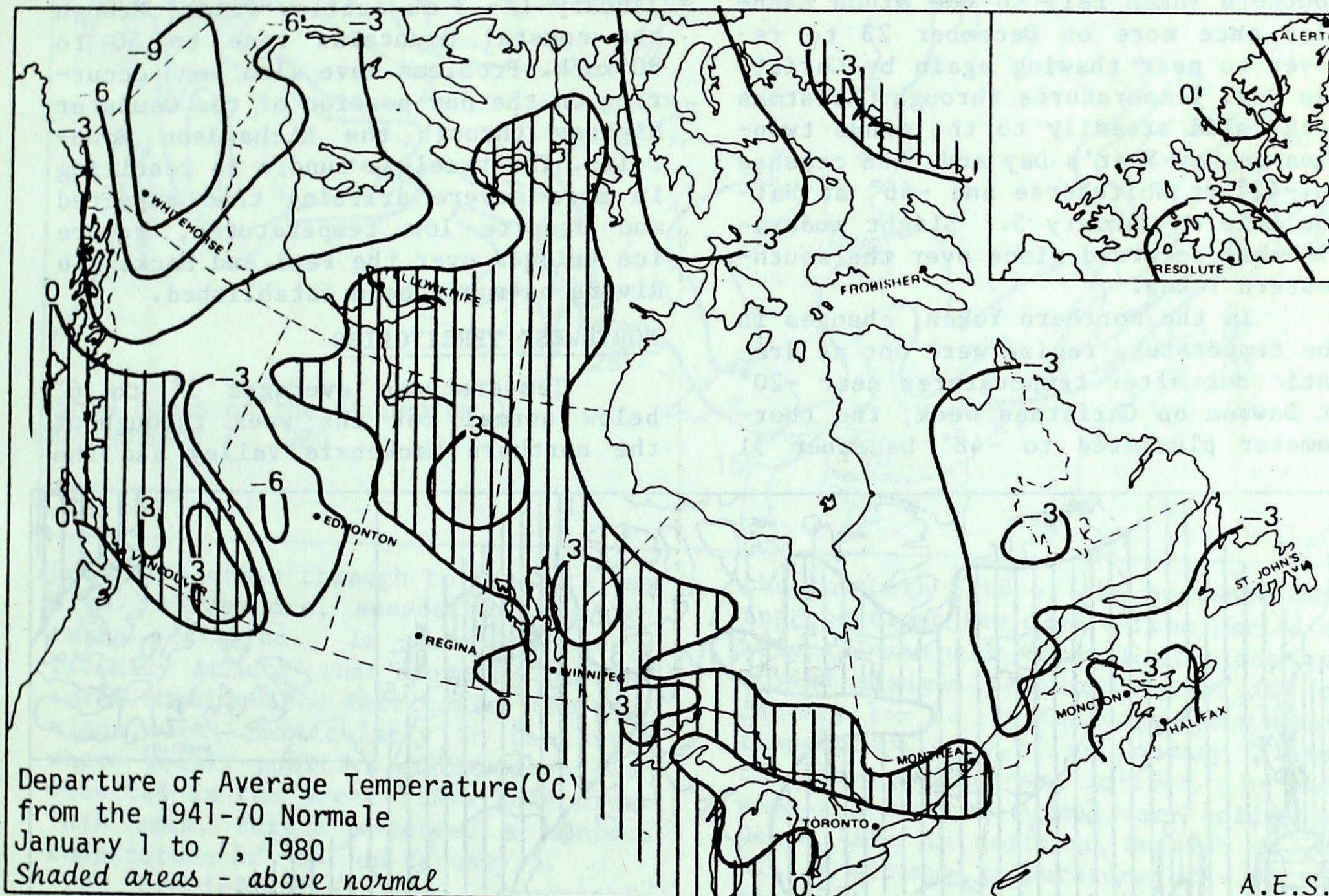
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CLIMATIC PERSPECTIVESCAN CLIMATE CENTRE,  
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VOL. 2 NO. 1

**WEATHER HIGHLIGHTS FOR THE WEEK - JANUARY 1 - 7, 1980**Exceptionally mild weather comes to an end throughout Canada

Cold arctic air moved into nearly all of Canada by mid-period thus marking an end to the exceptionally mild weather which had engulfed Canada for the previous week-and-a-half. With the surge of arctic air, blizzard conditions prevailed throughout the Canadian Prairies January 6-7.

Precipitation was generally light throughout Canada this past week.

National temperature extremes ranged from  $10^{\circ}$  at several southern British Columbia coastal stations on January 1 and 2, to  $-50^{\circ}$  at Eureka, Northwest Territories on January 5. Cape Scott, British Columbia, reported the greatest weekly precipitation, 78.0 mm. The most hours of bright sunshine for the week, 46.8, were measured at Natashquan, Quebec.

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

## YUKON

The temperature regime has fluctuated considerably in the past few weeks. The temperature at Whitehorse rose  $23^{\circ}$  on December 18 and remained above freezing through to December 21. Over a five-day period Watson Lake temperatures rose  $38^{\circ}$  with readings of  $1^{\circ}$  on December 20 and 21. The  $1^{\circ}$  reading on December 21 was a new record maximum for the day. Temperatures over the southern Yukon fell to the minus twenties once more on December 23 to recover to near thawing again by Christmas Day. Temperatures through Christmas week, slid steadily to the minus twenties on New Year's Day and then crashed to  $-42^{\circ}$  at Whitehorse and  $-46^{\circ}$  at Watson Lake on January 5. Slight moderation has occurred since over the southwestern Yukon.

In the northern Yukon, changes in the temperature regime were not as dramatic but after temperatures near  $-20^{\circ}$  at Dawson on Christmas week, the thermometer plummeted to  $-48^{\circ}$  December 31

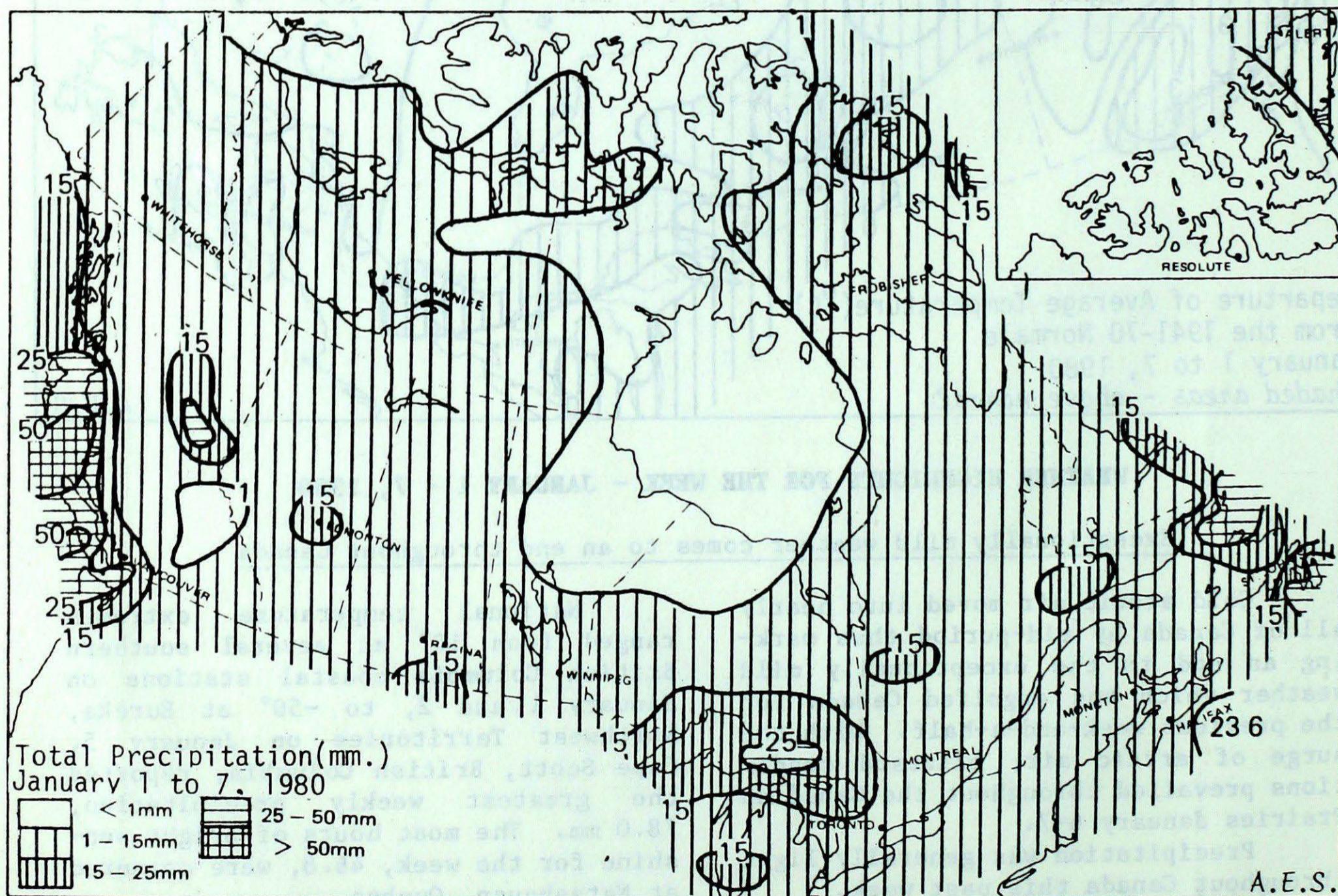
and January 2 - 3, with some moderation to  $-22^{\circ}$  by January 7.

The disturbances associated with these fluctuating temperatures also resulted in some major snowfalls.

In the period December 17 through January 7, Dawson reported 24 cm of snow, Whitehorse, 20 cm and Watson Lake 30 cm. Some problems did occur with highway travel, particularly in the higher passes. The Haines Road closed January 1 - 3 as outflow winds through the coastal mountains rose to 50 to 80 km/h. Problems have also been occurring on the new portion of the Dempster Highway through the Richardson Mountains. The treeless tundra is resulting in more severe drifting than expected and despite low temperatures, secure ice bridges over the Peel and Mackenzie Rivers have not been established.

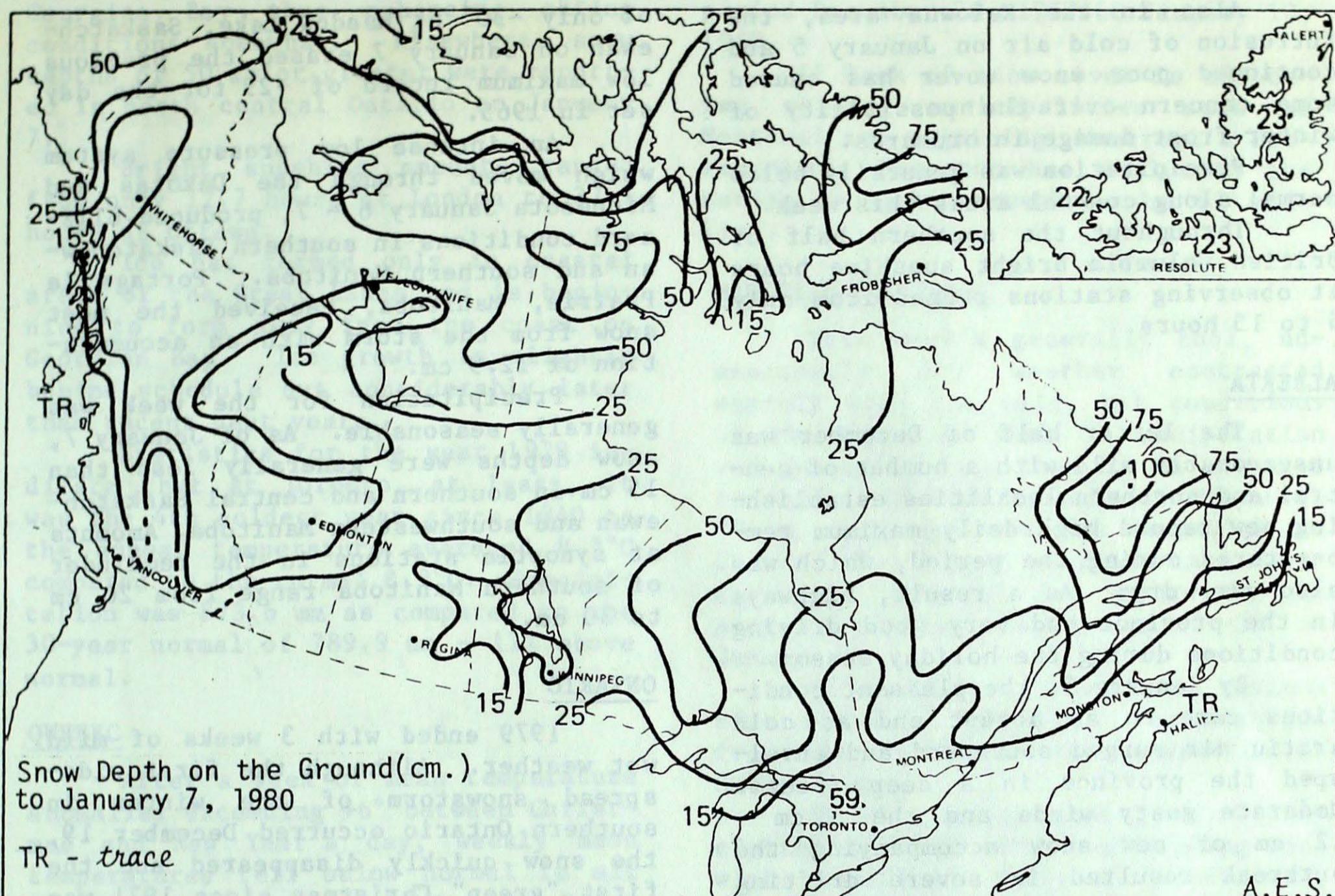
## NORTHWEST TERRITORIES

Temperatures averaged  $3^{\circ}$  to  $6^{\circ}$  below normal for the week throughout the northern Mackenzie Valley and the



Note: Values are non-representative in non-uniform topographical regions such as the Rocky Mts.

A.E.S.



Gulf of Boothia through to Resolute Bay area. Elsewhere, seasonable temperatures prevailed. In contrast, exceptionally milder than normal temperatures engulfed the Territories the previous week, particularly in the south where weekly positive anomalies of 15° occurred in the Great Slave Lake area. This week, Eureka recorded a minimum temperature of -50° on January 5.

Precipitation was seasonably light for the January 1 - 7 period except in central and east central Baffin Island where amounts varied from 15 mm to 25 mm.

On January 7 at Clyde, Baffin Island, northwest winds gusting upwards of 106 km/h were associated with temperatures of approximately -20°.

Baker Lake, District of Keewatin and Cape Dyer, Baffin Island, reported the deepest snow packs throughout the Territories with measurements of 88 cm and 86 cm respectively.

#### BRITISH COLUMBIA

Mild temperatures of the previous week continued to prevail throughout

the southern half of the province during the first few days of the period as several southern coastal stations recorded maximum temperatures of 10° on January 1 - 2. At Kamloops the maximum temperature of 7.6° on January 2 tied the previous high set in 1948. By mid-week the weather turned very cold. At Dease Lake in northern British Columbia, a minimum temperature of -39° was reported on the 5th.

In the Fort Nelson area, drilling and logging activities are well underway as are resupply operations.

At Prince George ice bridges are currently being built across lakes and rivers as previous weather had been too mild. The transportation of heavy lumber has just commenced.

In the southern interior, precipitation was very light this past week. Skiing conditions are quite variable. Skiing is very good at higher elevations in the Castlegar area. In contrast, the lack of snow has allowed only one major ski hill to open at Kamloops. Conditions are similar at Kelowna.

Also in the Kelowna area, the intrusion of cold air on January 5 and continued poor snow cover has caused some concern over the possibility of winter frost damage in orchards.

Precipitation was generally below normal along coastal areas this week.

Throughout the southern half of British Columbia bright sunshine hours at observing stations ranged from only 5 to 15 hours.

#### ALBERTA

The latter half of December was unseasonably mild with a number of central and northern localities establishing new record high daily maximum temperatures during the period, which was also very dry. As a result, highways in the province had very good driving conditions during the holiday season.

By January 5, the pleasant conditions came to an abrupt end as cold arctic air surged southward and enveloped the province in a deep freeze. Moderate gusty winds and the 8 cm - 12 cm of new snow accompanying the outbreak resulted in severe drifting throughout most of the province. Highways north and west of Calgary were closed to traffic during the afternoon of the 7th. Temperatures well into the minus thirties (-42° at High Level on January 6) were general throughout the area. In Edmonton many motorists still unprepared for winter found themselves waiting up to six hours for emergency road service. 15 water main breaks in Edmonton during the week were attributed to the low temperatures.

As of January 7, snow depths ranging from 25 cm to 35 cm were prevalent in central portions of the province compared to generally less than 10 cm in the south.

#### SASKATCHEWAN AND MANITOBA

Subsequent to temperature anomalies of +7° to +16° which prevailed the previous week, the temperature regime moderated to more seasonable values this week as very cold arctic air moved into the region in the latter part of the week. Minimum temperatures as low as -36° were reported at several northern localities. The maximum temperature

of only -30° at Meadow Lake, Saskatchewan on January 7 erased the previous low maximum record of -29° for the day set in 1965.

An intense low pressure system which moved through the Dakotas and Minnesota January 6 - 7, produced blizzard conditions in southern Saskatchewan and southern Manitoba. Portage la Prairie, Manitoba, received the most snow from the storm with an accumulation of 12.9 cm.

Precipitation for the week was generally seasonable. As of January 7, snow depths were generally less than 15 cm in southern and central Saskatchewan and southwestern Manitoba. Amounts at synoptic stations in the remainder of southern Manitoba range from 20 cm to 30 cm.

#### ONTARIO

1979 ended with 3 weeks of mild wet weather. Although the first widespread snowstorm of the winter in southern Ontario occurred December 19, the snow quickly disappeared and the first "green" Christmas since 1971 was the result. Moreover, heavy rains fell Christmas Eve and Christmas Day, setting records in many locations for the wettest Christmas ever, (a 2-day total of 65.3 mm in Toronto City). Numerous southern Ontario residents found themselves mopping up flooded basements. The New Year was also ushered in by uncharacteristic balmy weather and the springlike conditions persisted until January 3, when temperatures dropped to more seasonable values.

As a result of this exceptional mild spell, homeowners have been delighted by a decreased need for heating fuel and local municipalities have saved substantial amounts on their snow ploughing and salting bills. However, ski operators in southern and central Ontario have suffered considerably and have petitioned the Ontario government for financial aid.

On January 7 a vigorous storm brought widespread snow mixed with rain in the south, and winds gusting to 70 km/h to southern and central Ontario. In the wake of the storm, snow squalls developed in the lee of

Georgian Bay thus enhancing skiing conditions somewhat. Elsewhere, snow depths of 50 cm or greater were reported in north central Ontario on January 7.

Bright sunshine amounts ranged from only 12.7 hours at London to 37.7 hours at Ottawa.

Ice has formed only in coastal areas of the Great Lakes and is beginning to form away from the coast on Georgian Bay. Ice growth is slightly behind schedule but considerably later than recent past years.

Statistics for the year 1979 indicate that at Toronto, at least, it was the 4th coldest year since 1940 as the annual temperature averaged  $8.3^{\circ}\text{C}$  compared to the normal  $8.9^{\circ}\text{C}$ . Precipitation was 873.6 mm as compared to the 30-year normal of 789.9 mm - 11% above normal.

#### QUEBEC

After a week of mean temperature anomalies exceeding  $+6^{\circ}$  between Christmas and New Year's day, weekly mean temperatures fell below normal in all regions, Montreal and Ottawa River areas excepted. Temperatures fluctuated between  $3^{\circ}$  (at Montreal) and  $-37^{\circ}$  (at Nitchequon) both on January 7. The weekly sunshine total reached 46.8 hours at Natashquan and 45.6 hours at Quebec City.

Appreciable precipitation occurred only on the last day of the week (January 7) and weekly totals reached 16.6 mm at Sept-Iles and 17.1 mm at Matagami. Snow cover is now 72 cm at Port Menier but there is less than 1 cm of snow on the ground at Montreal.

The main characteristic of this winter so far remains the lack of snow cover in southern areas of the province. At Dorval, the smallest December snowfall (81 cm) was recorded this year since observations began; at McGill, only 7.4 cm fell in December 1881. December 1979 was also the December with the largest number of days (22) with no snow, or a trace only, on the ground at 12 GMT; there had been 19 such days recorded in December 1953 and 1966. The record for the largest number of consecutive days with a trace or less of snow at 12 GMT is 22, set during the

period December 20, 1957 to January 10, 1958.

If lack of snow cover is affecting skiers, municipalities such as Montreal are rejoicing; Montreal's Public Works Director has evaluated the saving in snow removal to be \$2 million.

#### MARITIME PROVINCES

This week's generally cool, unseasonably dry weather contrasted sharply with the mild, wet conditions of the previous week. Precipitation was generally less than 10 mm compared to weekly 1941-70 normals of 20 mm to 40 mm. In northern New Brunswick at Charlo, 45.1 bright sunshine hours were measured. Moncton, New Brunswick, reported a minimum temperature of  $-25^{\circ}$  on January 5.

On January 3, a 1-minute maximum wind speed of 126 km/h was reported from the north-northwest direction at Sable Island.

Despite the general lack of precipitation, high winds and blowing snow with localized whiteout conditions, forced the closure of schools in eastern Kings County, Nova Scotia on January 4.

As of January 7, snow depths in Nova Scotia ranged from none to 5 cm and in Prince Edward Island approximately 10 cm. Very little snow is reported on the ground in southern New Brunswick; however, in the north at Charlo a snow depth of 40 cm was reported.

At Saint John, New Brunswick, a new all-time annual record high precipitation total of 1976.6 mm was established in 1979, erasing the previous record of 1876.8 mm set in 1954. Records for the area date back to 1871. Canadian Forces Base Shearwater (Halifax-Dartmouth) recorded an annual rainfall of 1671.0 mm, setting a new annual high rainfall mark for the area where measurements began in 1871. The previous record was 1639.6 mm set in 1948 at CFB Shearwater.

#### NEWFOUNDLAND AND LABRADOR

Due to a cooling trend which developed early in the week, temperatures

averaged slightly below normal in southern Newfoundland and approximately 4° below normal in northern portions of the Island and throughout Labrador. The previous week temperatures were well above the 1941-70 average. On January 6, Gore Bay with a maximum temperature of only -27°, Cartwright with a reading of -23° and Hopedale with a maximum of -28° all set low daily maximum records. The previous record at Goose Bay was -24° established in 1972.

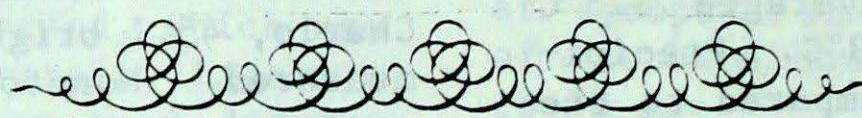
Precipitation was much lighter than that experienced the previous week although portions of the Avalon Peninsula and the north coast of Newfoundland and southern coast of Labrador

received amounts ranging from 15 mm to 40 mm.

Strong westerly to northerly winds up to 90 km/h were reported at Atlantic coastal stations from January 3 to January 5.

As ascertained from synoptic reporting stations, a deep snow pack is prevalent throughout Labrador with 117 cm reported on the ground at Goose Bay on January 7. Many stations in northern Newfoundland report depths of greater than 30 cm.

Ice has been present along the Labrador coast as far south as the Straits of Belle Isle for the past two weeks.



#### ON THIS DATE ...

.....January 1, 1971.

The highest pressure values recorded this century in Canada occurred in the Yukon. A sea level pressure of 1067.9 mb (106.79 kPa) was recorded at Mayo Airport.

January 9, 1889.

The Niagara Suspension Bridge, located just above the Falls, was blown down during a storm described in the press as "one of the greatest storms that has ever passed over any part of Canada".

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#### CLIMATIC PERSPECTIVES

##### Staff

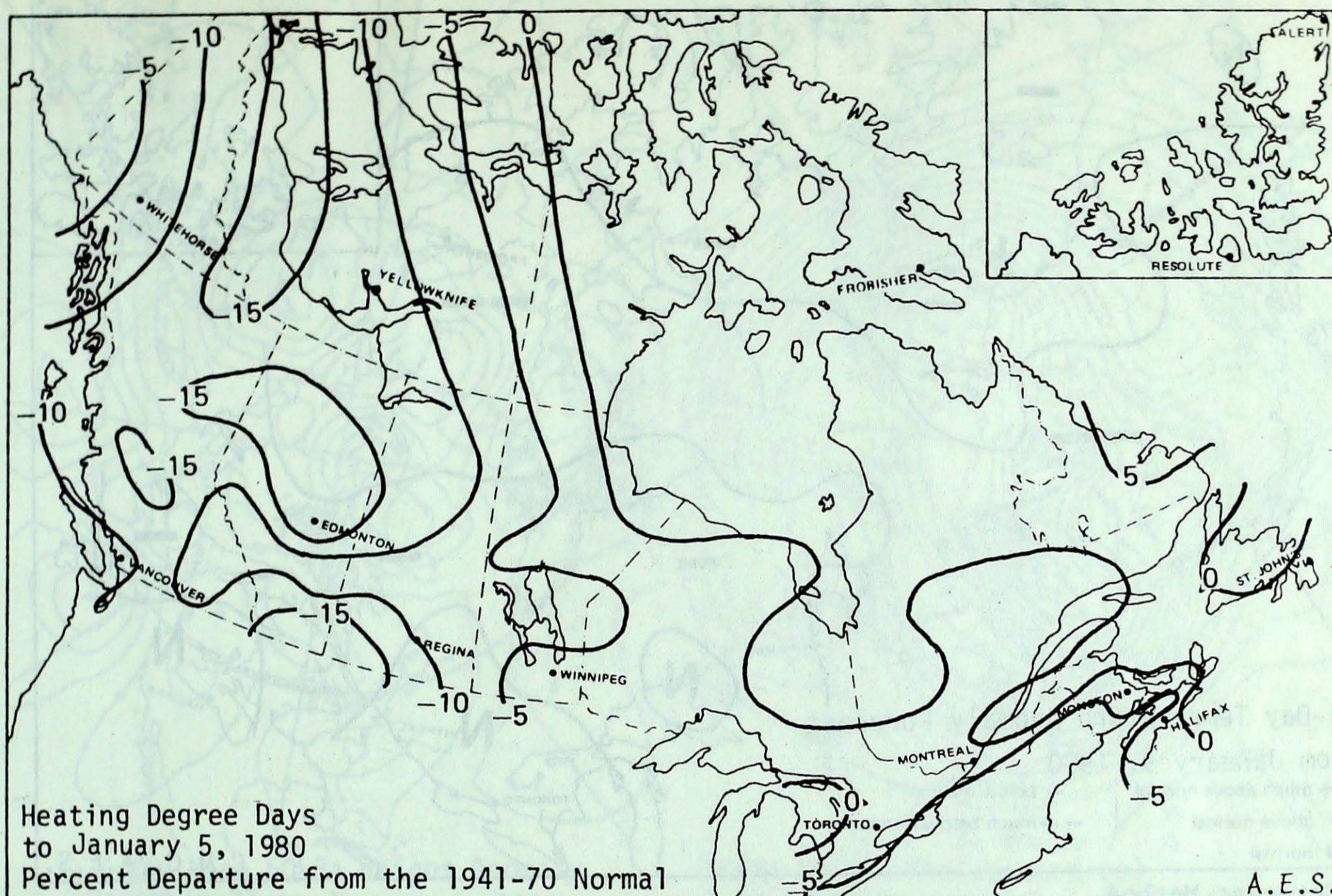
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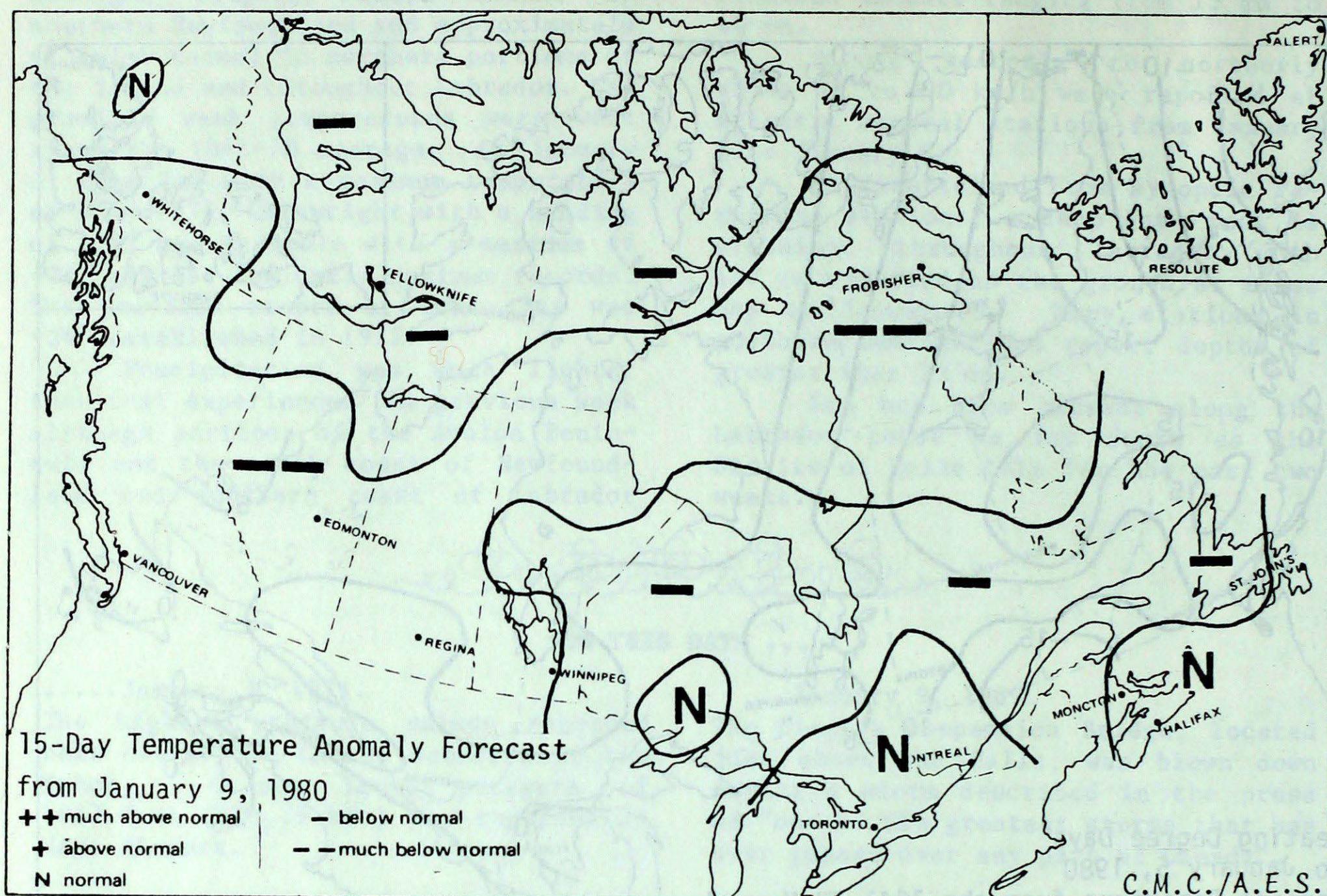
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## HEATING DEGREE-DAY SUMMARY TO JANUARY 5, 1980



| STATION           | MONTHLY CUMULATIVE TOTAL | MONTHLY DIFF. FROM 1941-70 NORMAL | SEASONAL TOTAL | SEASONAL DIFF. FROM 1941-70 NORMAL | SEASONAL PERCENT OF NORMAL |
|-------------------|--------------------------|-----------------------------------|----------------|------------------------------------|----------------------------|
| Resolute          | 273.0                    | 28.0                              | 5807.0         | 233.0                              | 104                        |
| Inuvik            | 274.0                    | 38.0                              | 3754.0         | -699.0                             | 84                         |
| Whitehorse        | 231.0                    | 46.0                              | 2945.0         | -245.0                             | 92                         |
| Vancouver Int'l A | 68.0                     | -7.0                              | 1196.5         | -110.5                             | 92                         |
| Edmonton Mun A    | 147.0                    | -13.0                             | 2052.5         | -395.5                             | 84                         |
| Calgary Int'l A   | 140.0                    | 0.0                               | 2029.5         | -288.5                             | 88                         |
| Regina            | 161.5                    | -13.5                             | 2246.5         | -251.5                             | 90                         |
| Winnipeg Int'l A  | 173.5                    | -1.5                              | 2384.0         | -38.0                              | 98                         |
| Thunder Bay       | 154.5                    | -4.5                              | 2316.5         | -44.5                              | 98                         |
| Windsor           | 106.0                    | -4.0                              | 1358.0         | -60.0                              | 96                         |
| Toronto Int'l A   | 120.5                    | 0.5                               | 1590.5         | -15.5                              | 99                         |
| Ottawa Int'l A    | 140.0                    | -5.0                              | 1825.0         | -66.0                              | 97                         |
| Montreal Int'l A  | 135.5                    | -4.5                              | 1770.5         | -7.5                               | 100                        |
| Quebec            | 160.0                    | 18.0                              | 2087.5         | 35.5                               | 102                        |
| Saint John, N.B.  | 137.5                    | 17.5                              | 1772.5         | -99.5                              | 95                         |
| Halifax           | 124.5                    | 19.5                              | 1526.5         | 14.5                               | 101                        |
| Charlottetown     | 135.5                    | 15.5                              | 1710.0         | -7.0                               | 100                        |
| St. John's, Nfld. | 105.0                    | 2.0                               | 1860.5         | 13.5                               | 101                        |

## 15 DAY TEMPERATURE ANOMALY FORECAST

Forecast Method

Analogue technique based on point prediction at 70 Canadian stations.

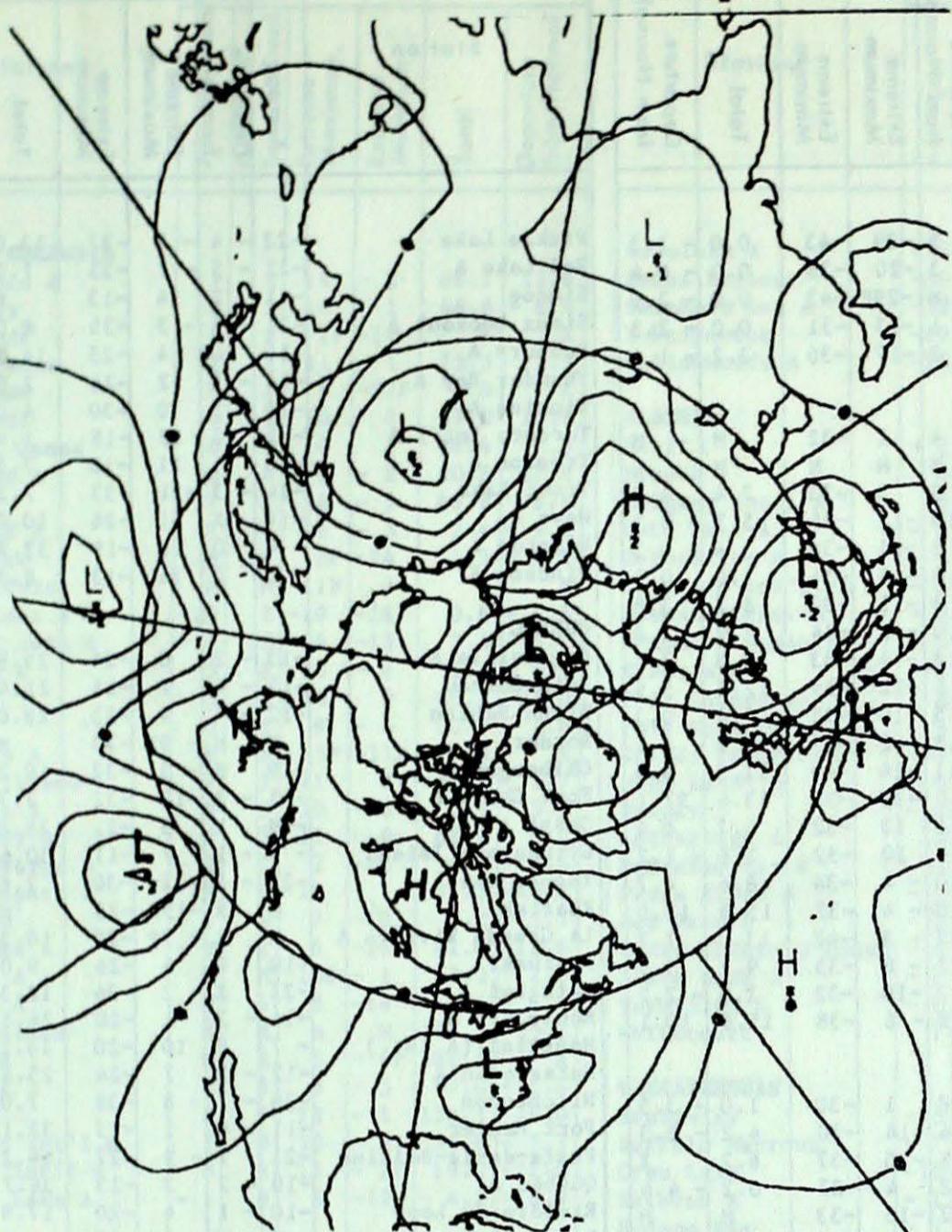
Temperature Scale

Each temperature class is designed to contain 20% of the historically observed 15 day means pertinent to specific location and time of year:

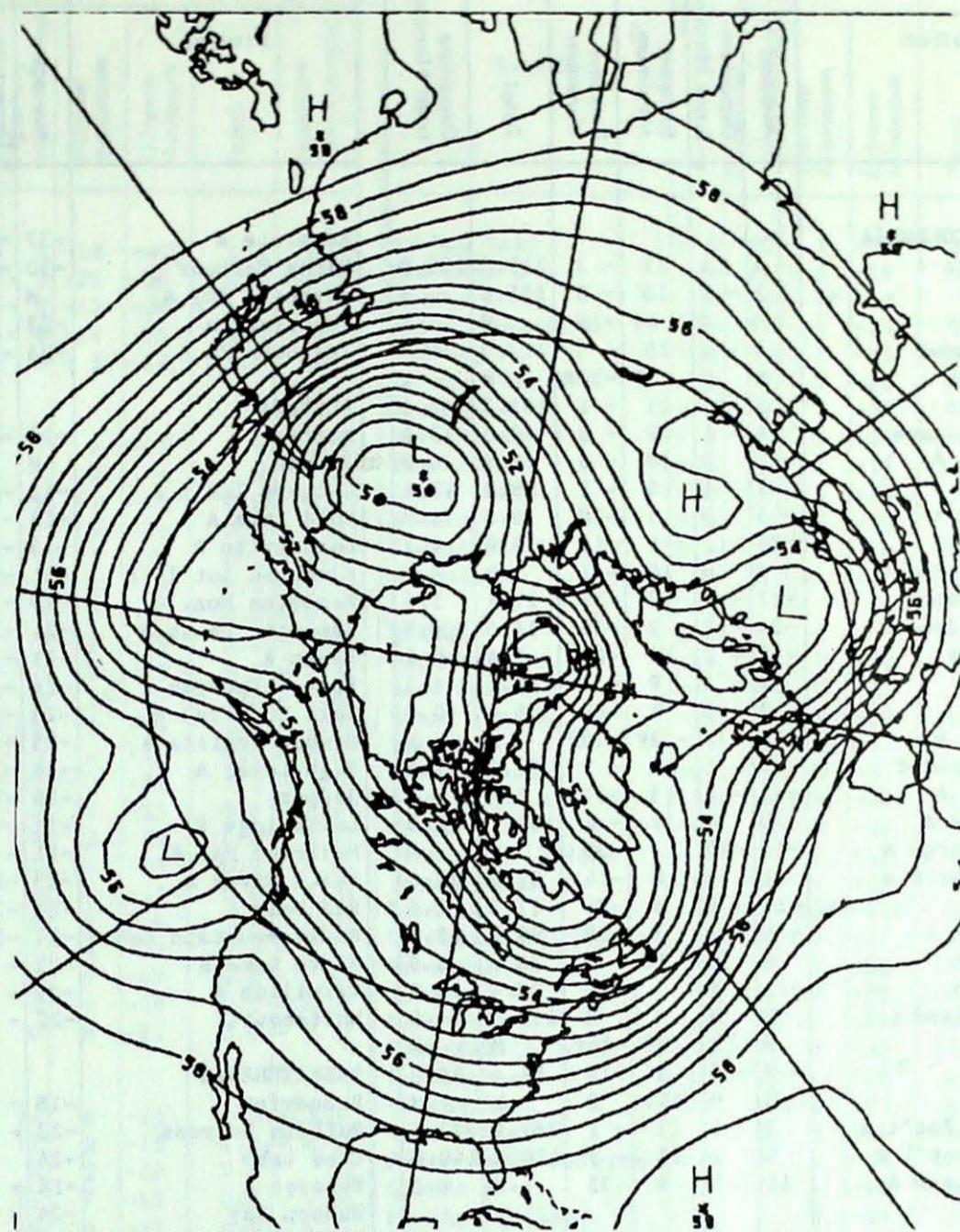
| Station       | Current Temperature Anomaly ( $\Delta T$ ) Forecast |  |
|---------------|---|--|
| Whitehorse    | Much Below Normal                                   | ( $\Delta T < -6.1^{\circ}\text{C}$ )                        |
| Victoria      | Much Below Normal                                   | ( $\Delta T < -2.0^{\circ}\text{C}$ )                        |
| Vancouver     | Much Below Normal                                   | ( $\Delta T < -2.3^{\circ}\text{C}$ )                        |
| Edmonton      | Much Below Normal                                   | ( $\Delta T < -5.1^{\circ}\text{C}$ )                        |
| Regina        | Much Below Normal                                   | ( $\Delta T < -4.3^{\circ}\text{C}$ )                        |
| Winnipeg      | Much Below Normal                                   | ( $\Delta T < -3.7^{\circ}\text{C}$ )                        |
| Thunder Bay   | Much Below Normal                                   | ( $\Delta T < -3.0^{\circ}\text{C}$ )                        |
| Toronto       | Near Normal   | ( $-0.7^{\circ}\text{C} < \Delta T < +0.7^{\circ}\text{C}$ ) |
| Ottawa        | Near Normal   | ( $-0.8^{\circ}\text{C} < \Delta T < +0.8^{\circ}\text{C}$ ) |
| Montreal      | Near Normal   | ( $-0.9^{\circ}\text{C} < \Delta T < +0.9^{\circ}\text{C}$ ) |
| Quebec        | Below Normal  | ( $-2.9^{\circ}\text{C} < \Delta T < -0.9^{\circ}\text{C}$ ) |
| Fredericton   | Near Normal   | ( $-0.9^{\circ}\text{C} < \Delta T < +0.9^{\circ}\text{C}$ ) |
| Halifax       | Near Normal   | ( $-0.7^{\circ}\text{C} < \Delta T < +0.7^{\circ}\text{C}$ ) |
| Charlottetown | Near Normal   | ( $-0.8^{\circ}\text{C} < \Delta T < +0.8^{\circ}\text{C}$ ) |
| St. John's    | Below Normal  | ( $-2.1^{\circ}\text{C} < \Delta T < -0.6^{\circ}\text{C}$ ) |
| Goose Bay     | Below Normal  | ( $-4.3^{\circ}\text{C} < \Delta T < -1.3^{\circ}\text{C}$ ) |
| Frobisher Bay | Much Below Normal                                   | ( $\Delta T < -4.9^{\circ}\text{C}$ )                        |
| Inuvik        | Below Normal  | ( $-4.4^{\circ}\text{C} < \Delta T < -1.3^{\circ}\text{C}$ ) |

Note: Anomaly denotes departure from the 1949-73 mean.

### Atmospheric Circulation Features



7 day Mean 50kPa Height Anomaly  
December 31 to January 6, 1980



50KPa Height Map(decametres)  
7 day mean from Decembre 31 to January 6

After experiencing above normal temperatures across most of Canada during the holiday period, the nation returned once again to more seasonal values.

Those anomalous conditions were the result of a persistent quasi-stationary major upper ridge situated across western Canada that shifted the 50 kPa upper level steering flow and the Arctic surface storm track to a more northerly position across the northern Prairies and Hudson Bay. This effectively blocked the very cold stagnating air in the western Arctic from penetrating southeastward and, at the same time, let the warm moist air from the American South push northward. As a result, mild but also very wet conditions were experienced in the vicinity

of the lower Great Lakes Basin and Gulf of St. Lawrence during the Christmas week.

During the current past period, the upper level steering flow was in transition, as the major upper ridge broke down causing a relatively more zonal or, in other words, west to east upper air flow across Canada. By the end of the period a major long wave trough had established itself over the mid-Continent with a resultant northwesterly upper air flow crossing the western half of the country. This permitted cold Arctic air and associated high pressure to penetrate southwards once again, depressing the storm track to south of the border and dropping temperatures to near or below normal values across most of the country.

Andy Radomski

## TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. DECEMBER 18, 1979

| 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 |              |       |
| BRITISH COLUMBIA      |                  |                       |                 |                 |              |                       | Resolute A           | -37              | -9                    | -29             | -43             | 0.0          | -1.5                  | Pickle Lake           | -22              | -4              | -7    | -37                   | 13.0         | 3.6   |
| Abbotsford A          | 4                | 1                     | 13              | -3              | 216.5        | 169.9                 | Sachs Harbour        | -30              | -3                    | -20             | -38             | 0.0          | -0.4                  | Red Lake A            | -22              | -5              | -7    | -33                   | 7.0          | 1.1   |
| Alert Bay             | 3                | -1                    | 10              | -3              | 115.8        | 71.4                  | Shepherd Bay A       | M                | M                     | -29P            | -43             | 0.0          | -2.9                  | Simcoe                | -1               | 2               | 14    | -13                   | M            | M     |
| Blue River            | M                | X                     | 4P              | -29             | M            | X                     | Tuktoyaktuk          | -23              | 1                     | -13             | -31             | 0.0          | -2.3                  | Sioux Lookout A       | -21              | -5              | -3    | -35                   | 4.0          | 3.4   |
| Bull Harbour          | 4                | -1                    | 10              | -5              | 117.0        | 60.7                  | Yellowknife A        | -25              | -2                    | -17             | -36             | 2.2          | -1.4                  | Sudbury A             | -10              | 0               | 4     | -25                   | 14.7         | 0.1   |
| Burns Lake            | M                | X                     | 1P              | -30P            | M            | X                     | ALBERTA              |                  |                       |                 |                 |              |                       | Thunder Bay A         | -14              | -2              | 2     | -26                   | 2.5          | 9.0   |
| Cape Scott            | 5                | -1                    | 11              | -1              | 105.3        | 3.3                   | Banff                | -13              | -4                    | 1               | -32             | M            | M                     | Timmins A             | -19              | -5              | 0     | -30                   | 4.0          | -13.3 |
| Cape St. James        | 4                | -1                    | 10              | -3              | 49.3         | 13.6                  | Brooks               | M                | M                     | M               | M               | M            | M                     | Toronto Int'l A       | -2               | 2               | 13    | -18                   | 1.4          | -10.6 |
| Castlegar A           | -2               | 0                     | 10              | -9              | 26.9         | 0.3                   | Calgary Int'l A      | -15              | -8                    | 3               | -33             | 7.4          | 4.3                   | Trenton A             | -3               | 1               | 11    | -18                   | 7.7          | -8.5  |
| Comox A               | 4                | 1                     | 10              | -2              | 89.8         | 41.1                  | Cold Lake A          | -23              | -10                   | -12             | -35             | 5.3          | -0.3                  | Trout Lake            | -24              | -3              | -11   | -33                   | 7.2          | 0.4   |
| Cranbrook A           | -5               | 0                     | 5               | -20             | 19.8         | 11.3                  | Coronation A         | -19              | -8                    | -1              | -36             | 5.4          | -0.3                  | Wawa A                | -14              | X               | 1     | -26                   | 10.0         | X     |
| Dease Lake            | -26              | -12                   | -4              | -41             | 9.8          | 4.1                   | Edmonton Int'l. A    | -21              | -9                    | -3              | -34             | 5.0          | 0.9                   | Wiarton A             | -4               | 0               | 11    | -19                   | 32.9         | 9.3   |
| Estevan Point         | M                | M                     | 10P             | -1              | M            | M                     | Edmonton Mun. A      | -19              | -9                    | -5              | -32             | 8.7          | 3.8                   | Windsor A             | -1               | 2               | 14    | -13                   | 8.3          | -5.7  |
| Fort Nelson A         | -27              | -7                    | -17             | -35             | 11.1         | 5.6                   | Edmonton Namao A     | -21              | -10                   | -6              | -34             | 7.9          | 3.8                   | QUEBEC                |                  |                 |       |                       |              |       |
| Fort St. John A       | -24              | -12                   | -2              | -35             | 14.5         | 8.1                   | Edson A              | -21              | -8                    | -4              | -33             | 10.8         | 7.2                   | Bagotville A          | -13              | -2              | 0     | -24                   | 29.9         | 10.6  |
| Kamloops A            | -5               | -2                    | 10              | -19             | 5.4          | -0.1                  | Fort Chipewyan       | -24              | -4                    | -12             | -35             | 12.2         | 5.9                   | Baie Comeau           | -13              | -4              | 1     | -25                   | 21.4         | 0.6   |
| Langara               | 1                | -3                    | 9               | -7              | 46.6         | 4.5                   | Fort McMurray A      | -23              | -5                    | -10             | -32             | 5.4          | 0.3                   | Blanc Sablon          | -12              | -4              | 4     | -23                   | 28.0         | 7.6   |
| Lytton                | -3               | -3                    | 8               | -17             | 55.8         | 40.0                  | Grande Prairie A     | -25              | -13                   | -2              | -43             | 10.9         | 4.1                   | Border                | M                | M               | -9P   | -30                   | M            | M     |
| Mackenzie A           | M                | X                     | -2P             | -28P            | M            | X                     | High Level A         | -26              | -11                   | -14             | -40             | 11.9         | 9.9                   | Chibougamau           | -19              | X               | -3    | -32                   | 19.2         | X     |
| McInnes Island        | 3                | -1                    | 10              | -5              | 57.8         | -7.5                  | Jasper               | -18              | -10                   | -1              | -37             | 43.6         | 37.1                  | Fort Chimo A          | -25              | -8              | -12   | -32                   | 2.7          | -7.4  |
| Penticton A           | -2               | -2                    | 13              | -11             | 5.4          | -0.7                  | Lethbridge A         | -11              | -6                    | 13              | -32             | 5.7          | 0.4                   | Gaspé A               | -9               | X               | 3     | -21                   | 25.8         | X     |
| Port Hardy A          | 3                | 0                     | 9               | -4              | 131.8        | 82.3                  | Medicine Hat A       | -11              | -4                    | 10              | -32             | 2.6          | -1.2                  | Grindstone Island     | -4               | -1              | 7     | -11                   | 30.6         | 12.7  |
| Prince George A       | -18              | -10                   | 3               | -39             | M            | M                     | Peace River A        | -23              | -10                   | -4              | -34             | 8.6          | 4.7                   | Inouedjouac           | -22              | -5              | -12   | -30                   | 2.6          | -2.6  |
| Prince Rupert A       | -1               | -4                    | 8               | -14             | 82.2         | 28.0                  | Red Deer A           | -21              | -10                   | -4              | -37             | 15.9         | 12.0                  | Koartak               | M                | X               | -13P  | -28                   | M            | X     |
| Quesnel A             | -14              | -8                    | 4               | -34             | 11.0         | 0.9                   | Rocky Mountain House | -21              | -12                   | -3              | -42             | 13.0         | 7.7                   | La Grande Rivière A   | M                | X               | -7P   | -29                   | 10.2         | X     |
| Revelstoke A          | -6               | -3                    | 5               | -18             | 99.7         | 63.4                  | Slave Lake A         | -22              | -7                    | -8              | -33             | 9.2          | 3.9                   | Maniwaki              | -10              | 0               | 6     | -26                   | 9.0          | -3.3  |
| Sandspit A            | M                | M                     | 9P              | -7              | 38.6         | 6.9                   | Vermilion A          | -22              | -7                    | -10             | -32             | 2.8          | -2.2                  | Matagami A            | -21              | X               | -2    | -36                   | 18.3         | X     |
| Smithers A            | -15              | -8                    | 1               | -31             | 22.4         | 9.3                   | Whitecourt           | -22              | -9                    | -6              | -38             | 15.8         | 10.1                  | Mont-Joli A           | -11              | -3              | 1     | -20                   | 26.8         | 4.4   |
| Spring Island         | M                | M                     | M               | M               | 150.9        | 54.9                  | SASKATCHEWAN         |                  |                       |                 |                 |              |                       | Montréal (A int.)     | -7               | 0               | 10    | -20                   | 14.2         | -3.9  |
| Stewart A             | M                | X                     | 4P              | -14P            | M            | X                     | Broadview            | -18              | -8                    | 1               | -30             | 1.0          | -3.5                  | Natashquan A          | -12              | -3              | 7     | -24                   | 25.4         | 5.0   |
| Terrace A             | -9               | -6                    | 2               | -19             | 54.6         | 19.6                  | Buffalo Narrows      | -23              | -6                    | -14             | -30             | 4.2          | -2.3                  | Nitchequon            | -26              | -7              | 8     | -38                   | 7.0          | -4.2  |
| Tofino A              | M                | M                     | 11P             | 0               | M            | M                     | Cree Lake            | -26              | X                     | -15             | -37             | 6.2          | X                     | Port Menier           | -11              | -4              | 1     | -25                   | 32.1         | 17.1  |
| Vancouver Int'l A     | 5                | 1                     | 11              | -1              | 161.0        | 123.5                 | Estevan A            | -14              | -2                    | 4               | -27             | 0.2          | -4.6                  | Poste-de-la-Baleine   | -21              | -7              | 9     | -27                   | 19.2         | 8.6   |
| Victoria Int'l A      | 5                | 1                     | 13              | -3              | 170.1        | 140.0                 | Hudson Bay           | -24              | -7                    | -15             | -33             | M            | M                     | Québec A              | -10              | -2              | 3     | -23                   | 36.7         | 14.6  |
| Williams Lake A       | -11              | -4                    | 4               | -33             | 6.5          | 0.5                   | Kindersley           | -18              | -6                    | -3              | -32             | 4.7          | -1.4                  | Rivière du Loup       | -10              | -1              | 4     | -20                   | 17.8         | -8.7  |
| YUKON                 |                  |                       |                 |                 |              |                       | La Ronge A           | -24              | -7                    | -16             | -32             | 8.9          | 2.2                   | Roberval A            | M                | M               | 3P    | -23                   | M            | M     |
| Burwash A             | -33              | -12                   | -20             | -49             | 2.6          | 0.1                   | Meadow Lake A        | -24              | X                     | -12             | -33             | 4.2          | X                     | Schefferville A       | -27              | -8              | 9     | -40                   | 7.9          | -2.8  |
| Dawson A              | -38              | -13                   | -18             | -46             | 2.7          | -3.3                  | Moose Jaw A          | -15              | -4                    | 6               | -30             | 1.0          | -5.2                  | Sept-Iles A           | -15              | -4              | 0     | -26                   | 25.6         | 4.3   |
| Komakuk Beach A       | -21              | 1                     | -8              | -34             | 2.4          | 2.0                   | Nipawin A            | -24              | X                     | -15             | -31             | 3.0          | X                     | Sherbrooke A          | -6               | 2               | 9     | -20                   | 12.6         | -5.0  |
| Mayo A                | -38              | -16                   | -19             | -49             | 1.8          | -4.5                  | North Battleford A   | -22              | -8                    | -11             | -31             | 2.1          | -2.7                  | Ste.-Agathe des Monts | -10              | -1              | 8     | -24                   | 26.8         | -5.1  |
| Shingle Point A       | M                | M                     | -18P            | -31             | 0.0          | -1.9                  | Prince Albert A      | -24              | -7                    | -12             | -34             | 0.7          | -4.2                  | Val d'Or A            | -16              | -3              | 3     | -34                   | 13.0         | -6.4  |
| Watson Lake A         | -32              | -11                   | -16             | -46             | 13.6         | 4.9                   | Regina A             | -17              | -4                    | -1              | -31             | 0.6          | -3.4                  | NEW BRUNSWICK         |                  |                 |       |                       |              |       |
| Whitehorse A          | -28              | -15                   | -17             | -40             | 6.3          | 1.0                   | Saskatoon A          | -21              | -7                    | -8              | -31             | 0.8          | -3.6                  | Charlo A              | -10              | -2              | 4     | -21                   | 30.8         | 0.3   |
| NORTHWEST TERRITORIES |                  |                       |                 |                 |              |                       | Swift Current A      | -15              | -5                    | 8               | -31             | 2.5          | -2.7                  | Chatham A             | -7               | 0               | 9     | -19                   | 41.5         | 22.0  |
| Alert                 | -38              | -7                    | -33             | -41             | 0.0          | -1.5                  | Uranium City         | -24              | -5                    | -16             | -34             | 18.5         | 11.9                  | Fredericton A         | -7               | 0               | 10    | -22                   | 28.1         |       |

## TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. DECEMBER 25, 1979

| 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 |                      | Average          | Departure from Normal | Extreme Maximum | Extreme Minimum | Total        | Departure from Normal |
| BRITISH COLUMBIA   |                  |                       |                 |                 |              |                       | Resolute A           | -30              | 0                     | -18             | -40             | 1.4          | 0.5                   | Pickle Lake          | -9               | 10                    | 2               | -25             | 8.3          | 0.5                   |
| Abbotsford A       | 7                | 4                     | 14              | -2              | 66.1         | 12.6                  | Sachs Harbour        | -30              | -3                    | -26             | -36             | 0.0          | -1.1                  | Red Lake A           | -6               | 11                    | 3               | -19             | 0.3          | 8.5                   |
| Alert Bay          | 6                | 2                     | 10              | 1               | 46.6         | -8.4                  | Shepherd Bay A       | -32              | -2                    | -12             | -50             | 5.0          | 4.5                   | Simcoe               | M                | M                     | 9P              | -9              | M            | M                     |
| Blue River         | M                | X                     | 2P              | -14             | M            | X                     | Tuktoyaktuk          | -29              | -4                    | -24             | -35             | 3.0          | 1.7                   | Sioux Lookout A      | -5               | 11                    | 4               | -19             | 1.8          | -4.4                  |
| Ull Harbour        | 6                | 2                     | 11              | 1               | 75.5         | 13.8                  | Yellowknife A        | -16              | 9                     | -5              | -28             | 4.0          | 0.1                   | Sudbury A            | -8               | 4                     | 2               | -24             | 19.5         | 2.3                   |
| Burns Lake         | M                | X                     | 5               | -12P            | 3.0          | X                     | ALBERTA              |                  |                       |                 |                 |              |                       | Thunder Bay A        | -3               | 9                     | 3               | -16             | 2.7          | -5.2                  |
| Cape Scott         | 6                | 1                     | 10              | 2               | 97.0         | 17.8                  | Banff                | -2               | 7                     | 6               | -19             | 6.8          | -1.6                  | Timmins A            | -7               | 8                     | 2               | -30             | 1.2          | -10.7                 |
| Cape St. James     | 6                | 2                     | 10              | 1               | 46.4         | 7.3                   | Brooks               | M                | M                     | M               | M               | M            | M                     | Toronto Int'l A      | -3               | 3                     | 7               | -14             | 34.1         | 21.0                  |
| Castlegar A        | 2                | 4                     | 6               | -2              | 40.8         | 17.6                  | Calgary Int'l A      | 0                | 8                     | 11              | -14             | 0.0          | -3.9                  | Trenton A            | -5               | 1                     | 7               | -17             | 32.1         | 12.2                  |
| Cmox A             | 7                | 3                     | 14              | -3              | 65.9         | 6.8                   | Cold Lake A          | -7               | 7                     | 3               | -21             | 0.0          | -5.3                  | Trout Lake           | -10              | 11                    | -1              | -33             | 3.5          | -2.3                  |
| Cranbrook A        | 1                | 7                     | 8               | -5              | 2.4          | -9.8                  | Coronation A         | -6               | 7                     | 6               | -18             | 0.0          | -4.8                  | Wawa A               | -5               | X                     | 2               | -23             | 9.3          | X                     |
| Cease Lake         | M                | M                     | 2P              | -24             | 1.3          | -5.4                  | Edmonton Int'l A     | -6               | 10                    | 8               | -19             | 0.0          | -5.9                  | Wiarton A            | -3               | 2                     | 7               | -14             | 51.0         | 28.9                  |
| Stevan Point       | M                | M                     | 11P             | 2               | M            | M                     | Edmonton Mun. A      | -3               | 8                     | 8               | -14             | 0.0          | -4.7                  | Windsor A            | 2                | 5                     | 11              | -11             | 52.7         | 36.4                  |
| Port Nelson A      | -20              | 2                     | -10             | -28             | 0.6          | -4.5                  | Edmonton Namao A     | -4               | 9                     | 7               | -15             | 0.0          | -5.6                  | QUEBEC               |                  |                       |                 |                 |              |                       |
| Port St. John A    | -4               | 10                    | 6               | -19             | 2.3          | -5.2                  | Edson A              | -10              | 2                     | 8               | -27             | 0.0          | -3.3                  | Bagotville A         | -14              | 1                     | 1               | -32             | 3.1          | -14.4                 |
| Sploops A          | 3                | 6                     | 13              | -6              | 1.2          | -8.8                  | Fort Chipewyan       | M                | M                     | 1P              | -22             | 1.8          | -3.6                  | Baie Comeau          | -11              | 0                     | 0               | -27             | 1.4          | -19.6                 |
| Angara             | 5                | 2                     | 10              | 0               | 65.2         | 25.0                  | Fort McMurray A      | -6               | 12                    | 5               | -19             | 2.8          | -2.8                  | Blanc Sablon         | -9               | -2                    | 5               | -20             | 4.8          | -22.0                 |
| Ytton              | 3                | 5                     | 9               | -4              | 20.9         | 7.6                   | Grande Prairie A     | -9               | 5                     | 6               | -21             | 0.2          | -7.6                  | Border               | M                | M                     | -6P             | -27             | M            | M                     |
| McKenzie A         | M                | X                     | 5P              | -11P            | M            | X                     | High Level A         | -15              | 7                     | -3              | -27             | 0.2          | -2.4                  | Chibougamau          | -13              | X                     | 0               | -37             | 2.8          | X                     |
| Innes Island       | 7                | 3                     | 11              | 2               | 81.2         | 5.7                   | Jasper               | -4               | 6                     | 7               | -22             | 0.7          | -7.4                  | Fort Chimo A         | -18              | 2                     | -5              | -30             | 5.4          | -2.5                  |
| Sinticton A        | 4                | 5                     | 10              | -6              | 5.4          | -3.5                  | Lethbridge A         | 2                | 8                     | 12              | -11             | 0.0          | -5.8                  | Gaspé A              | -10              | X                     | 0               | -23             | 4.2          | X                     |
| Port Hardy A       | 6                | 3                     | 11              | 0               | 68.7         | 5.2                   | Medicine Hat A       | 3                | 11                    | 11              | -8              | 0.0          | -4.8                  | Grindstone Island    | -4               | -1                    | 1               | -12             | 2.4          | -21.5                 |
| Prince George A    | -2               | 7                     | 7               | -16             | 5.0          | -7.6                  | Peace River A        | -7               | 9                     | 5               | -20             | 0.0          | -4.3                  | Inouedjouac          | -10              | 9                     | -1              | -31             | 2.2          | -0.3                  |
| Prince Rupert A    | 5                | 5                     | 10              | 1               | 87.2         | 46.8                  | Red Deer A           | -6               | 6                     | 6               | -19             | 0.0          | -4.5                  | Koartak              | M                | X                     | -16P            | -31P            | 0.0          | X                     |
| Seasell A          | -1               | 6                     | 7               | -13             | 8.2          | -3.1                  | Rocky Mountain House | -6               | 4                     | 11              | -25             | 0.0          | -6.1                  | La Grande Rivière A  | -11              | X                     | -1              | -31             | 18.5         | X                     |
| Velstoke A         | -2               | 2                     | 4               | -10             | 42.0         | 12.6                  | Slave Lake A         | -7               | 8                     | 7               | -19             | 0.0          | -4.8                  | Maniwaki             | -10              | 1                     | 2               | -28             | 18.0         | 0.9                   |
| Endspit A          | M                | M                     | 10P             | -1              | 43.3         | 2.0                   | Vermilion A          | -6               | 9                     | 4               | -19             | 0.0          | -4.2                  | Matagami A           | -12              | X                     | 2               | -36             | 0.4          | X                     |
| Others A           | -3               | 6                     | 5               | -14             | 7.4          | -6.2                  | Whitecourt           | -7               | 6                     | 4               | -21             | 0.0          | -5.7                  | Mont-Joli A          | M                | M                     | 1               | -26P            | 3.0          | -15.1                 |
| Ring Island        | M                | M                     | M               | M               | 147.1        | 35.2                  | SASKATCHEWAN         |                  |                       |                 |                 |              |                       | Montréal (A int.)    | -10              | -1                    | 3               | -23             | 18.4         | -0.2                  |
| Swart A            | M                | X                     | 5               | -6P             | 82.4         | X                     | Broadview            | -5               | 11                    | 6               | -15             | 0.0          | -3.6                  | Natashquan A         | -10              | 1                     | -1              | -28             | 6.0          | -11.8                 |
| Race A             | 0                | 5                     | 5               | -5              | 47.0         | -5.6                  | Buffalo Narrows      | -7               | 12                    | 3               | -15             | 1.8          | -4.9                  | Nitchequon           | -15              | 6                     | -1              | -35             | 4.7          | -1.3                  |
| Fino A             | 8                | 2                     | 12              | -1              | 134.9        | 24.0                  | Cree Lake            | -10              | X                     | 2               | -23             | 7.6          | X                     | Port Ménier          | -10              | -1                    | 0               | -26             | 1.0          | -12.2                 |
| Vancouver Int'l A  | 7                | 3                     | 12              | -2              | 38.6         | -5.7                  | Estevan A            | -1               | 11                    | 7               | -10             | 0.0          | -4.0                  | Poste-de-la-Baleine  | -9               | 9                     | 1               | -26             | 9.6          | -0.2                  |
| Victoria Int'l A   | M                | M                     | 12              | -2P             | 19.0         | -21.0                 | Hudson Bay           | -7               | 10                    | 4               | -18             | 0.0          | -4.3                  | Québec A             | -12              | -1                    | 1               | -29             | 9.3          | -14.9                 |
| Williams Lake A    | -1               | 8                     | 6               | -12             | 4.2          | -8.9                  | Kindersley           | -3               | 12                    | 6               | -15             | 0.0          | -5.3                  | Rivière du Loup      | -10              | 1                     | 2               | -24             | 2.5          | -16.9                 |
| KON                |                  |                       |                 |                 |              |                       | La Ronge A           | -10              | 8                     | 3               | -21             | 2.7          | -3.0                  | Roberval A           | -12              | 2                     | 2               | -33             | 6.6          | -6.9                  |
| Swash A            | -32              | -11                   | -21             | -43             | 2.6          | -2.0                  | Meadow Lake A        | -10              | X                     | 3               | -22             | 0.0          | X                     | Schefferville A      | -15              | 5                     | -6              | -30             | 6.6          | -0.8                  |
| eson A             | -26              | -1                    | -20             | -36             | 10.3         | 5.1                   | Moose Jaw A          | -1               | 11                    | 8               | -11             | 0.0          | -5.5                  | Sept-Iles A          | -12              | 0                     | -1              | -28             | 3.0          | -17.0                 |
| nakuk Beach A      | -30              | -8                    | -17             | -36             | 0.0          | -1.7                  | Nipawin A            | -11              | X                     | 2               | -22             | 0.0          | X                     | Sherbrooke A         | -10              | 0                     | 4               | -27             | 12.1         | -9.2                  |
| yo A               | -22              | 2                     | -6              | -34             | 9.2          | 4.9                   | North Battleford A   | -7               | 8                     | 4               | -18             | 0.0          | -4.9                  | Ste-Agathe des Monts | -11              | 1                     | 2               | -31             | 17.4         | -6.7                  |
| ingle Point A      | M                | M                     | -25             | -40P            | 5.6          | 5.0                   | Prince Albert A      | -12              | 6                     | 3               | -23             | 0.0          | -5.5                  | Val d'Or A           | -11              | 4                     | 1               | -32             | 1.0          | -12.2                 |
| son Lake A         | -19              | 5                     | 1               | -30             | 0.5          | -8.1                  | Regina A             | -4               | 10                    | 6               | -10             | 0.2          | -3.9                  | NEW BRUNSWICK        |                  |                       |                 |                 |              |                       |
| itehorse A         | -13              | 4                     | 2               | -31             | 1.6          | -2.3                  | Saskatoon A          | -7               | 8                     | 5               | -17             | 0.0          | -3.9                  | Charlo A             | -12              | -2                    | 0               | -27             | 2.6          | -20.4                 |
| THWEST TERRITORIES |                  |                       |                 |                 |              |                       | Swift Current A      | 1                | 11                    | 10              | -9              | 0.0          | -4.2                  | Chatham A            | -9               | -1                    | 3               | -23             | 1.9          | -16.1                 |
| ert                | M                | M                     | -19P            | -37P            | M            | M                     | Uranium City         | -11              | 12                    | -1              | -26             | 1.6          | -5.6                  | Fredericton A        | -9               | -1                    | 5               | -23             | 6.5          | -16.2                 |
| er Lake            | -24              | 4                     | -11             | -40</td         |              |                       |                      |                  |                       |                 |                 |              |                       |                      |                  |                       |                 |                 |              |                       |

TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. JANUARY 1, 1980

| Station                      | Temperature (°C) |                       |                 |                 | Precip. (mm) |                       |
|------------------------------|------------------|-----------------------|-----------------|-----------------|--------------|-----------------------|
|                              | Average          | Departure from Normal | Extreme Maximum | Extreme Minimum | Total        | Departure from Normal |
| <b>BRITISH COLUMBIA</b>      |                  |                       |                 |                 |              |                       |
| Abbotsford A                 | 6                | 4                     | 11              | -1              | 12.1         | -34.0                 |
| Alert Bay                    | 7                | 3                     | 10              | 2               | 43.4         | 5.3                   |
| Blue River                   | M                | X                     | OP              | -10             | M            | X                     |
| Bull Harbour                 | 7                | 3                     | 10              | 0               | 65.4         | 15.6                  |
| Burns Lake                   | M                | X                     | 8               | -7P             | 2.3          | X                     |
| Cape Scott                   | 7                | 3                     | 10              | 3               | 105.4        | 47.2                  |
| Cape St. James               | 7                | 3                     | 10              | 2               | 57.4         | 21.6                  |
| Castlegar A                  | 1                | 6                     | 3               | -1              | 7.8          | -11.6                 |
| Comox A                      | 5                | 2                     | 9               | -1              | 39.9         | -0.1                  |
| Cranbrook A                  | -2               | 9                     | 4               | -6              | 0.0          | -8.5                  |
| Dease Lake                   | -9               | 9                     | 4               | -26             | 25.3         | 17.7                  |
| Estevan Point                | 8                | 3                     | 12              | 1               | 93.7         | 13.8                  |
| Fort Nelson A                | -15              | 7                     | -4              | -30             | 0.3          | -6.6                  |
| Fort St. John A              | -2               | 13                    | 8               | -14             | 0.0          | -7.4                  |
| Kamloops A                   | 2                | 6                     | 8               | -5              | 2.4          | -4.2                  |
| Langara                      | 6                | 3                     | 10              | 2               | 130.2        | 91.6                  |
| Lytton                       | 3                | 6                     | 8               | -1              | 7.3          | -4.0                  |
| Mackenzie A                  | M                | X                     | 6               | -7P             | 0.8          | X                     |
| McInnes Island               | 8                | 5                     | 11              | 4               | 132.4        | 72.1                  |
| Penticton A                  | 3                | 5                     | 5               | -1              | 1.2          | -4.7                  |
| Port Hardy A                 | 6                | 3                     | 10              | 0               | 59.2         | 12.4                  |
| Prince George A              | -2               | 8                     | 7               | -12             | 6.9          | -6.5                  |
| Prince Rupert A              | 6                | 6                     | 13              | -3              | 151.1        | 99.1                  |
| Quesnel A                    | -1               | 8                     | 9               | -9              | 5.2          | -4.7                  |
| Revelstoke A                 | -1               | 6                     | 3               | -4              | 5.0          | -12.2                 |
| Sandspit A                   | 7                | 4                     | 11              | 0               | 8.0          | -25.5                 |
| Smithers A                   | 1                | 10                    | 8               | -10             | 0.6          | -10.5                 |
| Spring Island                | M                | M                     | M               | M               | M            | M                     |
| Stewart A                    | M                | X                     | 4               | -4P             | 98.0         | X                     |
| Terrace A                    | 2                | 6                     | 7               | -4              | 155.8        | 117.3                 |
| Tofino A                     | 8                | 4                     | 12              | 3               | 83.8         | -1.5                  |
| Vancouver Int'l A            | 6                | 3                     | 9               | -1              | 21.6         | -9.3                  |
| Victoria Int'l A             | 5                | 2                     | 10              | -1              | 8.7          | -19.4                 |
| Williams Lake A              | 0                | 10                    | 6               | -9              | 4.8          | -2.7                  |
| <b>YUKON</b>                 |                  |                       |                 |                 |              |                       |
| Burwash A                    | -20              | -2                    | -2              | -37             | 0.0          | -1.4                  |
| Dawson A                     | -26              | 1                     | -16             | -41             | 11.3         | 5.4                   |
| Komakuk Beach A              | -29              | -4                    | -22             | -33             | 0.0          | -0.3                  |
| Mayo A                       | -17              | 7                     | -1              | -36             | 2.4          | -1.8                  |
| Shingle Point A              | -30              | -4                    | -23             | -35             | 1.2          | 0.0                   |
| Watson Lake A                | -15              | 9                     | -1              | -31             | 10.3         | 2.2                   |
| Whitehorse A                 | -12              | 5                     | -1              | -27             | 8.5          | 5.1                   |
| <b>NORTHWEST TERRITORIES</b> |                  |                       |                 |                 |              |                       |
| Alert                        | -30              | 1                     | -14             | -37             | 0.5          | -0.8                  |
| Baker Lake                   | -21              | 10                    | -10             | -31             | 3.5          | 2.1                   |
| Broughton Island             | -14              | 5                     | -10             | -22             | 0.0          | -4.7                  |
| Byron Bay A                  | -28              | 3                     | -17             | -37             | 18.0         | 17.5                  |
| Cambridge Bay A              | -29              | 3                     | -18             | -38             | 2.0          | 0.8                   |
| Cape Dorset A                | M                | X                     | -7P             | -20P            | M            | X                     |
| Cape Dyer A                  | -16              | 2                     | -6              | -25             | 0.0          | -25.4                 |
| Cape Hooper                  | -15              | 6                     | -11             | -19             | 2.2          | -0.4                  |
| Cape Parry A                 | -27              | 0                     | -21             | -37             | 1.9          | 0.4                   |
| Cape Young A                 | -26              | 1                     | -16             | -36             | 7.0          | 5.7                   |
| Chesterfield Inlet           | -20              | 9                     | -9              | -29             | 2.0          | -1.0                  |
| Clinton Point                | -25              | 0                     | -20             | -33             | 1.8          | -1.3                  |
| Clyde                        | -18              | 8                     | -7              | -25             | 4.6          | 2.7                   |
| Contwoyto Lake               | -19              | 11                    | -9              | -33             | 4.9          | 3.5                   |
| Coppermine                   | -24              | 4                     | -16             | -34             | 24.3         | 22.0                  |
| Coral Harbour                | -16              | 11                    | -10             | -25             | 3.8          | 1.6                   |
| Dewar Lakes                  | -17              | 6                     | -10             | -23             | 12.4         | 11.3                  |
| Ennadai                      | M                | M                     | -5P             | -25             | M            | M                     |
| Eureka                       | -36              | 0                     | -22             | -43             | 0.2          | -0.3                  |
| Fort Reliance                | -12              | 15                    | -4              | -25             | 1.9          | -2.2                  |
| Fort Simpson                 | -14              | 11                    | 0               | -33             | 0.0          | -4.3                  |
| Fort Smith A                 | -10              | 14                    | 2               | -27             | 1.2          | -2.1                  |
| Frobisher Bay A              | -15              | 7                     | -2              | -29             | 7.9          | 0.8                   |
| Gladman Point A              | -29              | 3                     | -18             | -38             | 0.0          | -0.8                  |
| Hall Beach A                 | -19              | 8                     | -11             | -31             | 4.0          | 2.0                   |
| Hay River A                  | -9               | 14                    | 5               | -25             | 0.0          | -4.6                  |
| Inuvik A                     | -30              | -1                    | -24             | -35             | 6.8          | 2.5                   |
| Jenny Lind Island            | -29              | 2                     | -19             | -40             | 1.2          | 1.1                   |
| Lady Franklin Point          | -25              | 3                     | -14             | -36             | 0.0          | -0.6                  |
| Longstaff Bluff              | -18              | 5                     | -10             | -27             | 10.9         | 8.9                   |
| Mackar Inlet                 | -19              | 10                    | -9              | -33             | 0.6          | 0.3                   |
| Mould Bay                    | -33              | 0                     | -24             | -40             | 2.4          | 1.9                   |
| Nicholson Peninsula          | -28              | -2                    | -20             | -38             | 2.4          | 1.6                   |
| Norman Wells A               | -23              | 4                     | -15             | -37             | 0.6          | -3.8                  |
| Pelly Bay                    | -23              | 7                     | -14             | -30             | 3.4          | 2.7                   |
| Pond Inlet A                 | M                | X                     | -11P            | -33             | 8.2          | X                     |
| Port Burwell                 | M                | X                     | M               | M               | M            | X                     |

| Station              | Temperature (°C) |                       |                 |                 | Precip. (mm) |                       |
|----------------------|------------------|-----------------------|-----------------|-----------------|--------------|-----------------------|
|                      | Average          | Departure from Normal | Extreme Maximum | Extreme Minimum | Total        | Departure from Normal |
| <b>RESOLUTE A</b>    |                  |                       |                 |                 |              |                       |
| Sachs Harbour        | -28              | 3                     | -16             | -38             | 0.8          | -0.1                  |
| Shepherd Bay A       | -27              | 2                     | -20             | -37             | 0.0          | -0.9                  |
| Tuktoyaktuk          | -27              | 6                     | -13             | -38             | 6.2          | 6.0                   |
| Yellowknife A        | -27              | 0                     | -20             | -36             | 1.7          | 0.2                   |
| <b>ALBERTA</b>       |                  |                       |                 |                 |              |                       |
| Banff                | -14              | 13                    | -3              | -26             | 0.2          | -3.2                  |
| Brooks               | -6               | 4                     | 1               | -14             | 0.0          | -7.3                  |
| Calgary Int'l A      | M                | M                     | M               | M               | M            | M                     |
| Cold Lake A          | -10              | 6                     | 4               | -18             | 0.0          | -7.0                  |
| Coronation A         | -8               | 5                     | 1               | -15             | 0.0          | -3.9                  |
| Edmonton Int'l. A    | -7               | 8                     | 1               | -15             | 0.0          | -5.1                  |
| Edmonton Mun. A      | -5               | 8                     | 4               | -13             | 0.0          | -7.2                  |
| Edmonton Namao A     | -6               | 7                     | 2               | -14             | 0.0          | -7.7                  |
| Edson A              | -9               | 3                     | 6               | -21             | 0.0          | -1.5                  |
| Fort Chipewyan       | M                | M                     | 5P              | -26             | 0.0          | -3.6                  |
| Fort McMurray A      | -6               | 13                    | 8               | -20             | 0.0          | -7.3                  |
| Grande Prairie A     | -8               | 7                     | 8               | -21             | 0.0          | -7.2                  |
| High Level A         | -9               | 14                    | 8               | -30             | 0.0          | -6.1                  |
| Jasper               | -5               | 6                     | 5               | -15             | 0.0          | -7.4                  |
| Lethbridge A         | 1                | 8                     | 10              | -9              | 0.0          | -4.2                  |
| Medicine Hat A       | -1               | 9                     | 9               | -12             | 0.0          | -3.7                  |
| Peace River A        | -6               | 12                    | 6               | -18             | 0.0          | -5.3                  |
| Red Deer A           | -8               | 5                     | -1              | -14             | 0.0          | -4.1                  |
| Rocky Mountain House | -8               | 2                     | 6               | -19             | 0.0          | -4.9                  |
| Slave Lake A         | -9               | 5                     | 3               | -18             | 0.0          | -4.1                  |
| Vermilion A          | -8               | 7                     | -1              | -16             | 0.0          | -5.1                  |
| Whitecourt           | -8               | 6                     | 5               | -18             | 0.0          | -7.5                  |
| <b>SASKATCHEWAN</b>  |                  |                       |                 |                 |              |                       |
| Broadview            | -8               | 10                    | 0               | -19             | 0.0          | -5.8                  |
| Buffalo Narrows      | -6               | 12                    | 4               | -17             | 0.0          | -3.2                  |
| Cree Lake            | -8               | X                     | 4               | -23             | 0.6          | X                     |
| Estevan A            | -3               | 10                    | 6               | -15             | 0.2          | -5.1                  |
| Hudson Bay           | M                | M                     | OP              | -17             | 0.0          | -5.7                  |
| Kindersley           | -7               | 8                     | 2               | -19             | 0.0          | -4.6                  |
| La Ronge A           | -8               | 10                    | 5               | -21             | 0.0          | -3.5                  |
| Meadow Lake A        | -12              | X                     | 1               | -21             | 0.0          | X                     |
| Moose Jaw A          | -3               | 9                     | 6               | -14             | 0.0          | -4.4                  |
| Nipawin A            | -11              | X                     | -2              | -20             | 0.0          | X                     |
| North Battleford A   | -10              | 7                     | 2               | -17             | 0.0          | -5.9                  |
| Prince Albert A      | -13              | 6                     | -1              | -23             | 0.0          | -6.5                  |
| Regina A             | -7               | 8                     | 3               | -16             | 0.0          | -4.2                  |
| Saskatoon A          | -9               | 7                     | -2              | -20             | 0.0          | -5.6                  |
| Swift Current A      | -3               | 9</                   |                 |                 |              |                       |

## TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. JANUARY 8, 1980

| 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 |              |       |
| BRITISH COLUMBIA  |                  |                       |                 |                 |              |                       | Resolute A           | -36              | -4                    | -29             | -41             | 0.0          | -0.6                  | Pickle Lake           | -21              | 0               | -11   | -31                   | 6.7          | -3.6  |
| Abbotsford A      | 1                | 0                     | 9               | -7              | 26.5         | -25.1                 | Sachs Harbour        | -33              | -2                    | -22             | -39             | 0.0          | -0.4                  | Red Lake A            | -20              | 1               | -12   | -33                   | 4.2          | -4.6  |
| Alert Bay         | 3                | 0                     | 9               | -1              | 38.4         | -8.6                  | Shepherd Bay A       | -35              | -3                    | -27             | -40             | 1.9          | 1.4                   | Simcoe                | M                | M               | 2P    | -13P                  | M            | M     |
| Blue River        | M                | X                     | OP              | -20P            | M            | X                     | Tuktoyaktuk          | M                | M                     | -20P            | -38             | 0.0          | -0.9                  | Sioux Lookout A       | -18              | 0               | -9    | -30                   | 7.2          | -0.6  |
| Bull Harbour      | 4                | 0                     | 9               | -1              | 70.2         | 16.3                  | Yellowknife A        | -27              | 1                     | -19             | -38             | 8.0          | 4.4                   | Sudbury A             | -12              | 1               | -1    | -21                   | 15.0         | 2.8   |
| Burns Lake        | M                | X                     | 1P              | -20P            | 3.6          | X                     | ALBERTA              |                  |                       |                 |                 |              |                       | Thunder Bay A         | -12              | 2               | -1    | -26                   | 27.6         | 19.9  |
| Cape Scott        | 4                | 1                     | 8               | 0               | 78.0         | 21.3                  | Banff                | -11              | 0                     | 1               | -28             | 1.0          | -8.2                  | Timmins A             | -17              | 0               | -7    | -29                   | 12.8         | 0.3   |
| Cape St. James    | 5                | 1                     | 8               | -1              | 32.6         | -3.5                  | Brooks               | M                | M                     | M               | M               | M            | M                     | Toronto Int'l A       | -6               | -1              | 2     | -14                   | 5.6          | -7.4  |
| Castlegar A       | -2               | 4                     | 3               | -12             | 6.9          | -8.7                  | Calgary Int'l A      | -14              | -3                    | 2               | -28             | 2.0          | -3.3                  | Trenton A             | -7               | 0               | 2     | -16                   | 3.8          | -11.3 |
| Comox A           | 3                | 1                     | 10              | -3              | 25.4         | -18.8                 | Cold Lake A          | -18              | -1                    | -10             | -34             | 6.1          | -0.9                  | Trout Lake            | -24              | -1              | -15   | -32                   | 0.4          | -4.8  |
| Cranbrook A       | -8               | 5                     | 2               | -23             | 5.4          | -1.6                  | Coronation A         | -18              | -3                    | -6              | -32             | 7.8          | 3.1                   | Wawa A                | M                | X               | -2    | -27P                  | 20.3         | X     |
| Dease Lake        | -21              | -5                    | -12             | -39             | 12.4         | 5.4                   | Edmonton Int'l. A    | -18              | -3                    | -5              | -35             | 19.0         | 13.0                  | Wiarton A             | -6               | -1              | 2     | -15                   | 15.4         | -3.0  |
| Estevan Point     | M                | M                     | 9P              | -2P             | M            | M                     | Edmonton Mun. A      | -16              | -2                    | -4              | -31             | 20.8         | 15.1                  | Windsor A             | -4               | 0               | 3     | -12                   | 6.1          | -6.7  |
| Fort Nelson A     | -24              | -0                    | -14             | -32             | 7.1          | 2.1                   | Edmonton Namao A     | -18              | -4                    | -4              | -33             | 14.1         | 9.2                   | QUEBEC                |                  |                 |       |                       |              |       |
| Fort St. John A   | -20              | -5                    | -8              | -29             | 8.4          | 2.4                   | Edson A              | -19              | -5                    | -7              | -38             | 2.8          | -4.1                  | Bagotville A          | -18              | -3              | -4    | -28                   | 1.0          | -14.5 |
| Kamloops A        | -4               | 2                     | 8               | -13             | 0.6          | -9.6                  | Fort Chipewyan       | -23              | 1                     | -12             | -36             | 11.6         | 5.7                   | Baie Comeau           | -15              | -3              | -3    | -26                   | 9.6          | -11.8 |
| Langara           | -4               | 1                     | 8               | -1              | 25.4         | -15.6                 | Fort McMurray A      | -21              | 0                     | -10             | -34             | 8.3          | 4.1                   | Blanc Sablon          | M                | M               | -2P   | -26                   | 8.8          | -20.6 |
| Lytton            | -2               | 4                     | 6               | -11             | 4.7          | -3.2                  | Grande Prairie A     | -20              | -5                    | -8              | -39             | 14.5         | 6.8                   | Border                | M                | M               | -3P   | -34P                  | M            | M     |
| Mackenzie A       | M                | X                     | 1               | -25P            | 29.8         | X                     | High Level A         | -25              | 2                     | -13             | -42             | 9.9          | 6.8                   | Chibougamau           | M                | M               | -7P   | -31P                  | M            | M     |
| McInnes Island    | M                | M                     | 9P              | -2              | 65.4         | -24.8                 | Jasper               | -12              | 0                     | 1               | -29             | 0.4          | -8.0                  | Fort Chimo A          | -25              | -3              | -11   | -35                   | 6.8          | 0.3   |
| Penticton A       | -2               | 1                     | 5               | -11             | 2.8          | -5.3                  | Lethbridge A         | -12              | -3                    | 6               | -31             | 11.7         | 6.2                   | Gaspé A               | -12              | X               | -1    | -26                   | 10.3         | X     |
| Port Hardy A      | 3                | 0                     | 8               | -2              | 63.6         | 6.3                   | Medicine Hat A       | -14              | -3                    | 4               | -31             | 12.9         | 8.3                   | Grindstone Island     | -7               | -2              | 1     | -15                   | 6.2          | -19.1 |
| Prince George A   | -10              | 0                     | 2               | -26             | 5.0          | -7.8                  | Peace River A        | -22              | -3                    | -6              | -39             | 2.9          | -1.4                  | Inouedjouac           | -25              | -2              | -14   | -33                   | 0.4          | -2.2  |
| Prince Rupert A   | 1                | 3                     | 9               | -6              | 30.9         | -23.0                 | Red Deer A           | -18              | -4                    | -7              | -34             | 9.1          | 4.5                   | Koartak               | M                | X               | -2    | -33P                  | 3.0          | X     |
| Quesnel A         | -9               | 2                     | 2               | -21             | 2.0          | -12.5                 | Rocky Mountain House | -18              | -7                    | -6              | -37             | 5.2          | -0.6                  | La Grande Rivière A   | -23              | X               | -9    | -34                   | 4.4          | X     |
| Revelstoke A      | -4               | 6                     | 2               | -18             | 3.8          | -14.8                 | Slave Lake A         | -18              | -2                    | -6              | -34             | 4.3          | -4.5                  | Maniwaki              | -13              | 0               | -1    | -22                   | 7.0          | -6.4  |
| Sandspit A        | 3                | 1                     | 9               | -2              | 25.4         | -11.1                 | Vermilion A          | -18              | -2                    | -6              | -34             | 9.2          | 5.3                   | Matagami A            | -18              | X               | -7    | -30                   | 17.1         | X     |
| Smithers A        | -9               | 1                     | 0               | -22             | 5.0          | -7.0                  | Whitecourt           | -19              | -5                    | -9              | -36             | 5.6          | -1.3                  | Mont-Joli A           | -13              | -3              | -1    | -22                   | 5.0          | -13.9 |
| Spring Island     | M                | M                     | M               | M               | M            | M                     | SASKATCHEWAN         |                  |                       |                 |                 |              |                       | Montréal (A int.)     | -9               | 0               | 3     | -17                   | 0.0          | -17.8 |
| Stewart A         | M                | X                     | 3               | -13P            | 4.5          | X                     | Broadview            | -20              | 5                     | -10             | -33             | 9.2          | 4.3                   | Natashquan A          | -16              | -6              | -2    | -29                   | 14.2         | -7.9  |
| Terrace A         | -4               | 1                     | 2               | -11             | 2.2          | -35.5                 | Buffalo Narrows      | -19              | 2                     | -10             | -32             | 5.4          | -1.2                  | Nitchequon            | -25              | -3              | -13   | -37                   | 1.7          | -7.6  |
| Tofino A          | 4                | 0                     | 10              | -3              | 50.7         | -68.8                 | Cree Lake            | -22              | X                     | -13             | -36             | 6.2          | X                     | Port Ménier           | -13              | -4              | -2    | -20                   | 8.8          | -11.4 |
| Vancouver Int'l A | 2                | 0                     | 10              | -6              | 13.7         | -20.5                 | Estevan A            | -16              | -1                    | -8              | -31             | 15.3         | 10.9                  | Poste-de-la-Baleine   | -21              | -1              | -10   | -32                   | 3.2          | -3.4  |
| Victoria Int'l A  | 3                | 0                     | 9               | -6              | 14.5         | -23.0                 | Hudson Bay           | M                | M                     | -9              | -30P            | 2.8          | -3.5                  | Québec A              | -14              | 3               | 0     | -24                   | 6.4          | -14.4 |
| Williams Lake A   | -9               | 1                     | 4               | -22             | 1.1          | -13.9                 | Kindersley           | -17              | -1                    | -3              | -33             | 9.2          | 5.4                   | Rivière du Loup       | -13              | 1               | -3    | -19                   | 2.8          | -10.8 |
| YUKON             |                  |                       |                 |                 |              |                       | La Ronge A           | -20              | 4                     | -13             | -32             | 5.2          | 1.6                   | Roberval A            | -18              | -2              | -3    | -27                   | 10.5         | -9.2  |
| Burwash A         | -26              | -3                    | -8              | -42             | 3.0          | -3.5                  | Meadow Lake A        | -20              | X                     | -10             | -34             | 1.2          | X                     | Schefferville A       | -26              | -3              | -11   | -35                   | 2.6          | -5.4  |
| Dawson A          | -38              | -11                   | -22             | -48             | 7.4          | 1.4                   | Moose Jaw A          | -16              | -2                    | -5              | -32             | 8.7          | 5.0                   | Sept-Iles             | -16              | -4              | -4    | -30                   | 16.6         | -5.7  |
| Komakuk Beach A   | -32              | -7                    | -12             | -39             | 0.0          | -0.1                  | Nipawin A            | -20              | X                     | -10             | -30             | 2.2          | X                     | Sherbrooke A          | -13              | 2               | 1     | -23                   | 1.2          | -9.9  |
| Mayo A            | M                | M                     | -24P            | -47             | 5.6          | 0.1                   | North Battleford A   | -19              | -2                    | -8              | -33             | 9.2          | 5.1                   | Ste. Agathe des Monts | -14              | 1               | -1    | -29                   | 8.0          | -6.4  |
| Shingle Point A   | M                | M                     | -26P            | -40             | 0.0          | -2.2                  | Prince Albert A      | -21              | -1                    | -10             | -32             | 2.2          | -2.3                  | Val d'Or A            | -17              | 0               | -3    | -29                   | 6.2          | -7.7  |
| Watson Lake A     | -27              | -4                    | -14             | -46             | 11.9         | 4.8                   | Regina A             | -18              | -1                    | -7              | -32             | 5.4          | 2.0                   | NEW BRUNSWICK         |                  |                 |       |                       |              |       |
| Whitehorse A      | -26              | -9                    | -15             | -42             | 10.1         | 6.4                   | Saskatoon A          | -20              | -2                    | -9              | -33             | 6.8          | 2.9                   | Charlo A              | -14              | -1              | -6    | -24                   | 5.7          | -11.9 |
| W                 |                  |                       |                 |                 |              |                       | Swift Current A      | -16              | 3                     | -2              | -35             | 10.9         | 5.7                   | Chatham A             | -12              | -3              | 2     | -20                   | 4.4          | -18.6 |
| W                 |                  |                       |                 |                 |              |                       | Uranium City         | -24              | 2                     | -15             | -34             | 7.1          | 1.0                   | Fredericton A         | -10              | -1              | 5     | -20                   | 6.0          | -17.8 |
| W                 |                  |                       |                 |                 |              |                       |                      |                  |                       |                 |                 |              |                       |                       |                  |                 |       |                       |              |       |