



# Climatic Perspectives

December 20 to 26, 1988

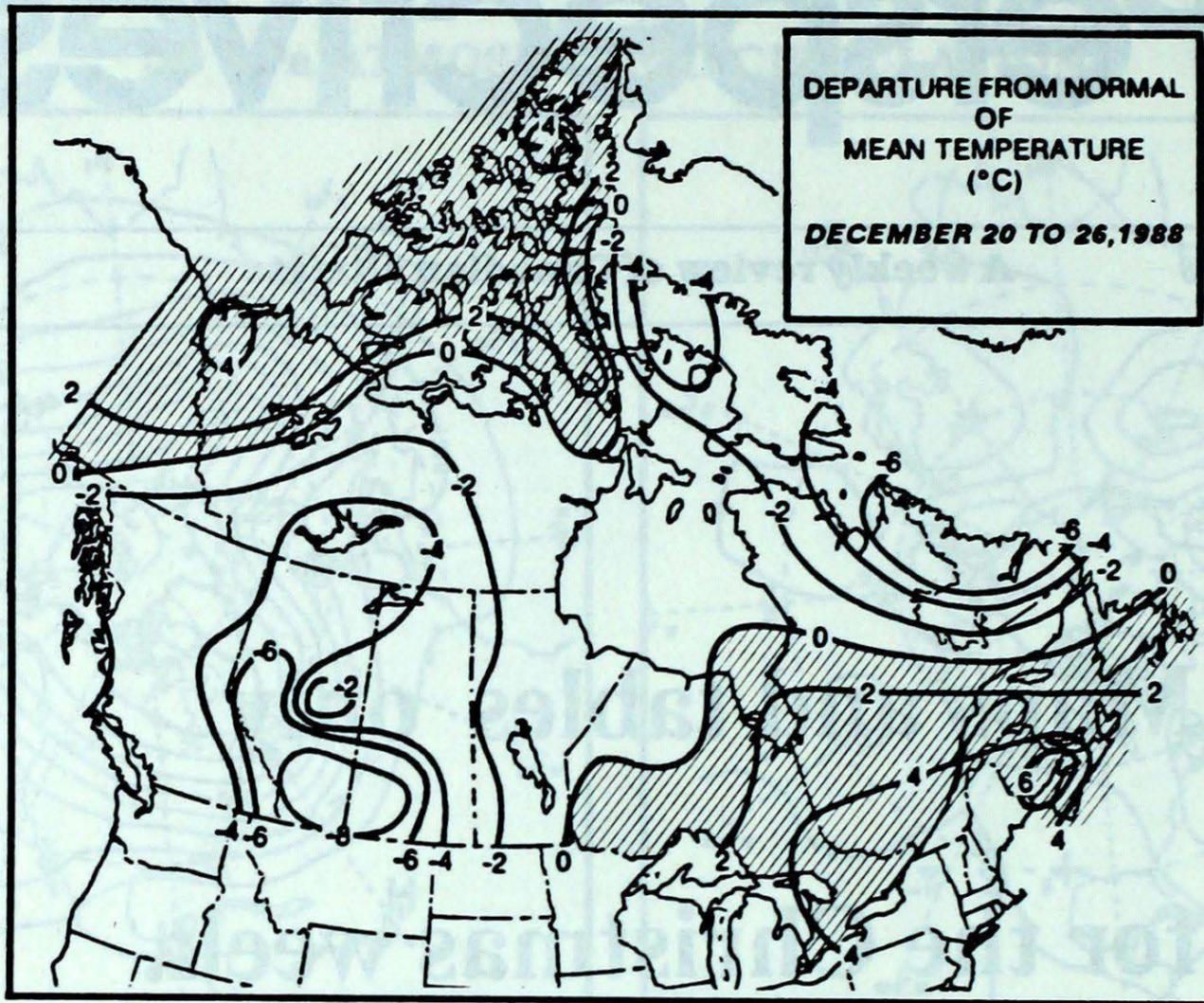
A weekly review of Canadian climate

Vol. 10 No. 52

**Maps and tables only  
for the Christmas week.**

*(Faint, mirrored text from the reverse side of the page is visible through the paper)*

| Province/Territory    | Location       | Minimum Temperature | Maximum Temperature |
|-----------------------|----------------|---------------------|---------------------|
| Yukon Territory       | Kinders Point  | -33                 | -10                 |
| Northwest Territories | Wainwright     | -30                 | -10                 |
| Alberta               | High Level     | -36                 | -10                 |
| British Columbia      | Victoria Int'l | -30                 | 11                  |
| Yukon Territory       | Whitehorse     | -30                 | -8                  |
| Northwest Territories | Cape Hooper    | -42                 | -10                 |
| Alberta               | Edmonton       | -32                 | 11                  |
| Saskatchewan          | Winnipeg Int'l | -32                 | 11                  |
| Manitoba              | Winnipeg Int'l | -32                 | 11                  |
| Ontario               | London         | -32                 | 11                  |
| Quebec                | Shedden        | -38                 | 8                   |
| New Brunswick         | St Stephen     | -19                 | 10                  |
| New Scotia            | Greenwood      | -14                 | 11                  |
| Prince Edward Island  | East Point     | -12                 | 8                   |
| Newfoundland          | St John's      | -32                 | 8                   |

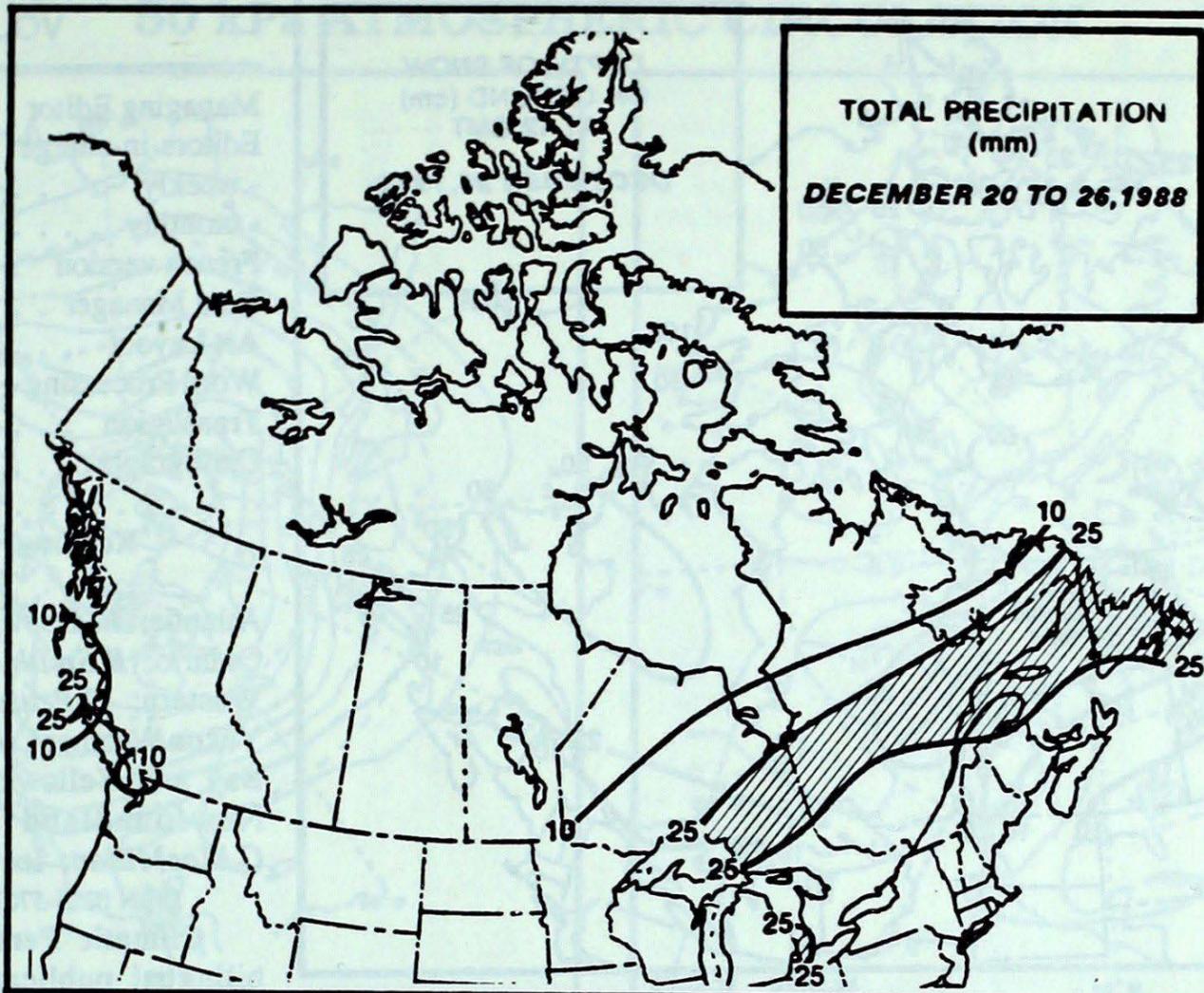


**Weekly Temperature extremes (°C)**

|  | Maximum temperature | Minimum temperature |
|--|---------------------|---------------------|
| <b>British Columbia</b> . . . . .      | Kindakun Point 7    | Dease Lake -33      |
|  | Victoria Int'l      | Fort Nelson         |
| <b>Yukon Territory</b> . . . . .       | Whitehorse -8       | Watson Lake -39     |
| <b>Northwest Territories</b> . . . . . | Cape Hooper -10     | Mould Bay -42       |
| <b>Alberta</b> . . . . .               | Lethbridge 0        | High Level -36      |
| <b>Saskatchewan</b> . . . . .          | Elbow -4            | Kindersley -35      |
| <b>Manitoba</b> . . . . .              | Winnipeg Int'l -1   | Thompson -35        |
| <b>Ontario</b> . . . . .               | Trenton 11          | Armstrong -32       |
| <b>Québec</b> . . . . .                | Sherbrooke 8        | Schefferville -38   |
| <b>New Brunswick</b> . . . . .         | St Stephen 10       | Charlo -19          |
| <b>Nova Scotia</b> . . . . .           | Greenwood 11        | Amherst -14         |
| <b>Prince Edward Island</b> . . . . .  | East Point 6        | Summerside -12      |
| <b>Newfoundland</b> . . . . .          | St John's 8         | Wabush Lake -32     |

**Across The Country...**

|  |                           |
|--|---------------------------|
| <b>Warmest Mean Temperature</b> . . . . .  | Kindakun Point (BC) 4     |
| <b>Coollest Mean Temperature</b> . . . . . | Gladman Point A (NWT) -31 |
|  | Pond Inlet (NWT)          |



**TOTAL PRECIPITATION  
(mm)  
DECEMBER 20 TO 26, 1988**

**Heaviest Weekly Precipitation (mm)**

|  |                      |           |
|--|----------------------|-----------|
| <b>British Columbia</b> . . . . .      | <b>Estevan Point</b> | <b>66</b> |
| <b>Yukon Territory</b> . . . . .       | <b>Watson Lake</b>   | <b>5</b>  |
| <b>Northwest Territories</b> . . . . . | <b>Rankin Inlet</b>  | <b>2</b>  |
| <b>Alberta</b> . . . . .               | <b>Lethbridge</b>    | <b>3</b>  |
|  |                      |           |
| <b>Saskatchewan</b> . . . . .          | <b>Moose Jaw</b>     | <b>10</b> |
| <b>Manitoba</b> . . . . .              | <b>Gimli</b>         | <b>4</b>  |
| <b>Ontario</b> . . . . .               | <b>Wawa</b>          | <b>38</b> |
| <b>Québec</b> . . . . .                | <b>Baie Comeau</b>   | <b>41</b> |
|  |                      |           |
| <b>New Brunswick</b> . . . . .         | <b>Charlo</b>        | <b>30</b> |
| <b>Nova Scotia</b> . . . . .           | <b>Sable Island</b>  | <b>17</b> |
| <b>Prince Edward Island</b> . . . . .  | <b>Charlottetown</b> | <b>26</b> |
| <b>Newfoundland</b> . . . . .          | <b>Deer Lake</b>     | <b>43</b> |

CLIMATIC PERSPECTIVES  
VOLUME 10

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The purpose of the publication is to  
 make topical information available to the  
 public concerning the Canadian Climate  
 and its socio-economic impact.

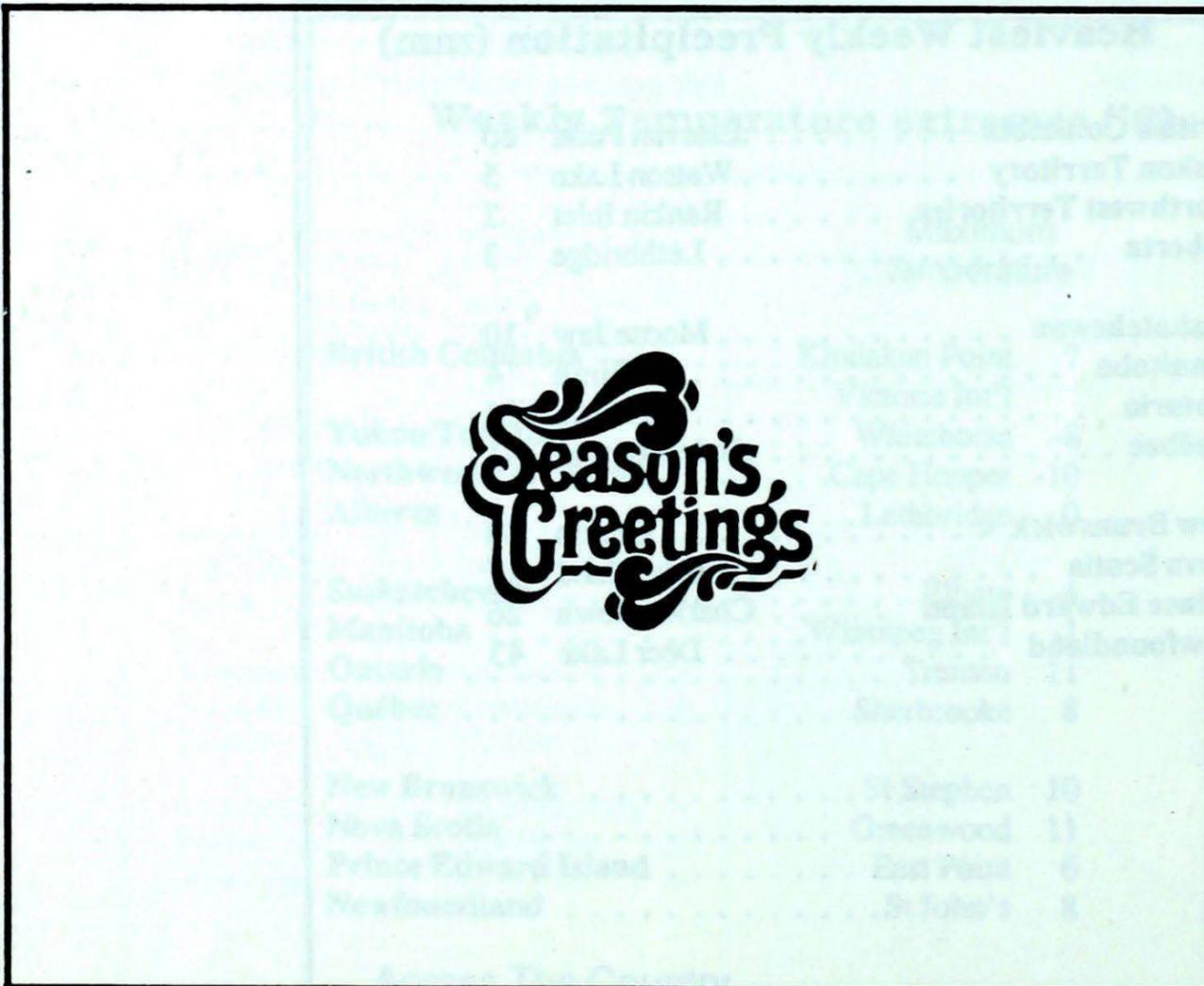
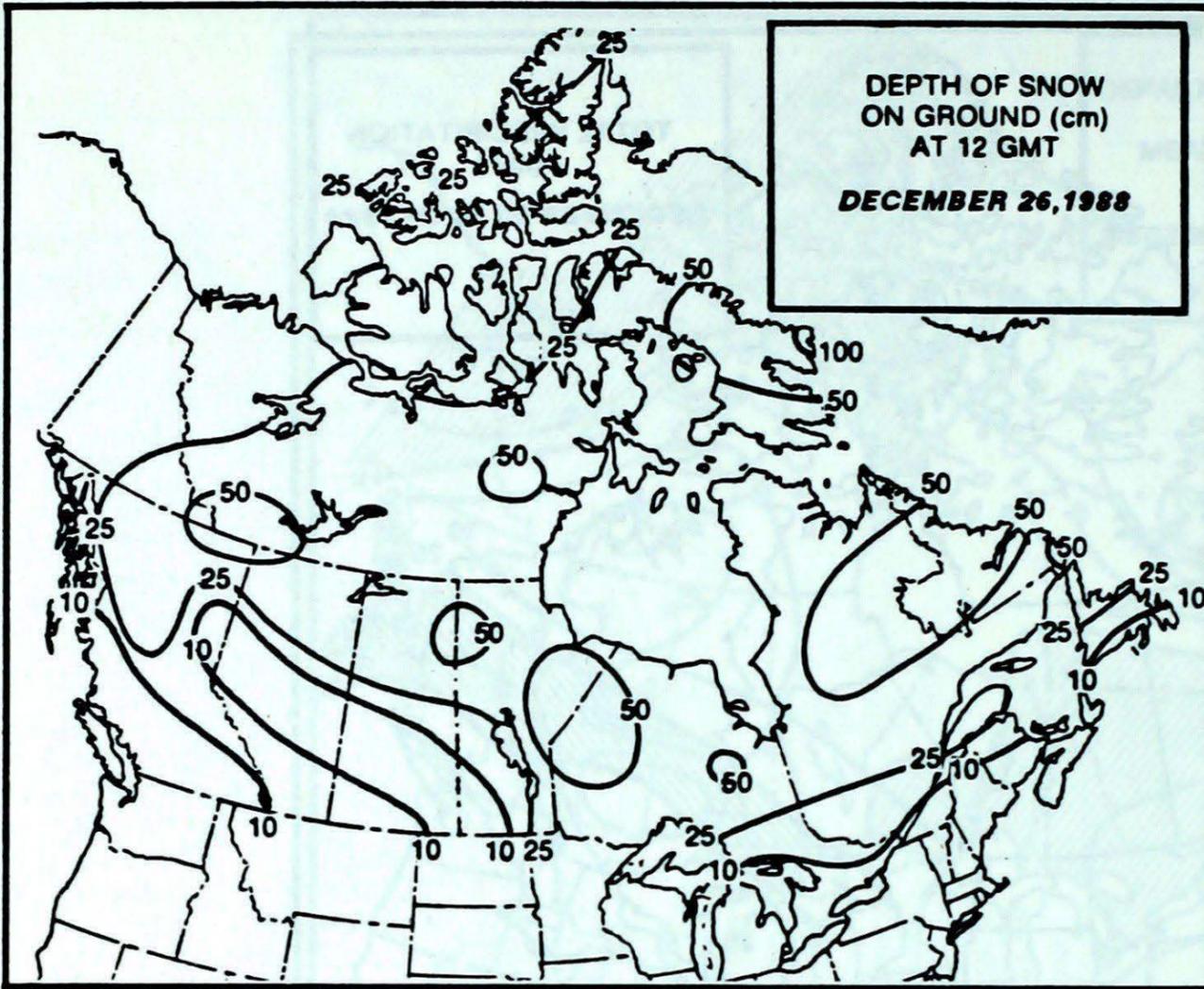
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The data in this publication are based  
 on unverified reports from approximately  
 225 Canadian synoptic weather stations.  
 Information concerning climatic impacts is  
 gathered from AES contacts with the public  
 and from the media. Articles do not neces-  
 sarily reflect the views of the Atmospheric  
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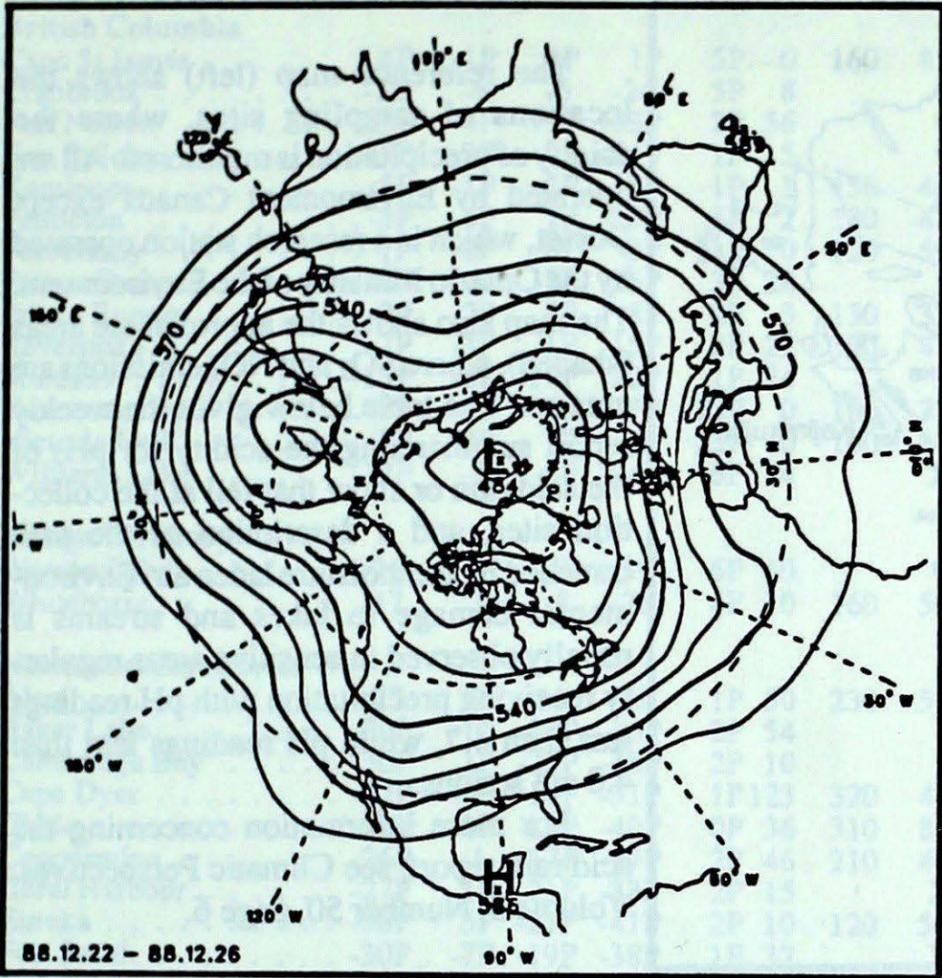


- ++ much above normal
- + above normal
- N normal
- below normal
- much below normal

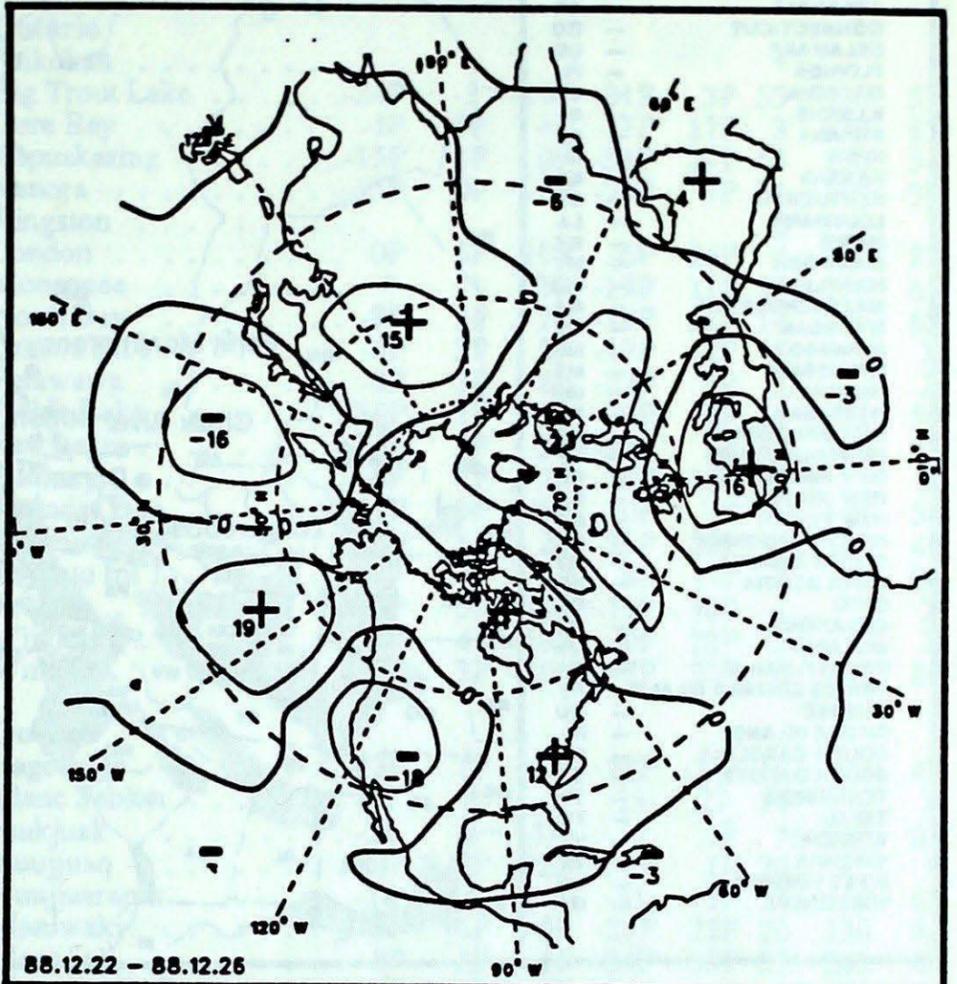
Temperature Anomaly Forecast

This forecast is prepared by searching historical  
 weather maps to find cases similar to the present. the  
 historical outcome during the 15 days subsequent to the  
 chosen analogues is assumed to be a forecast for the  
 next 15 days from now.

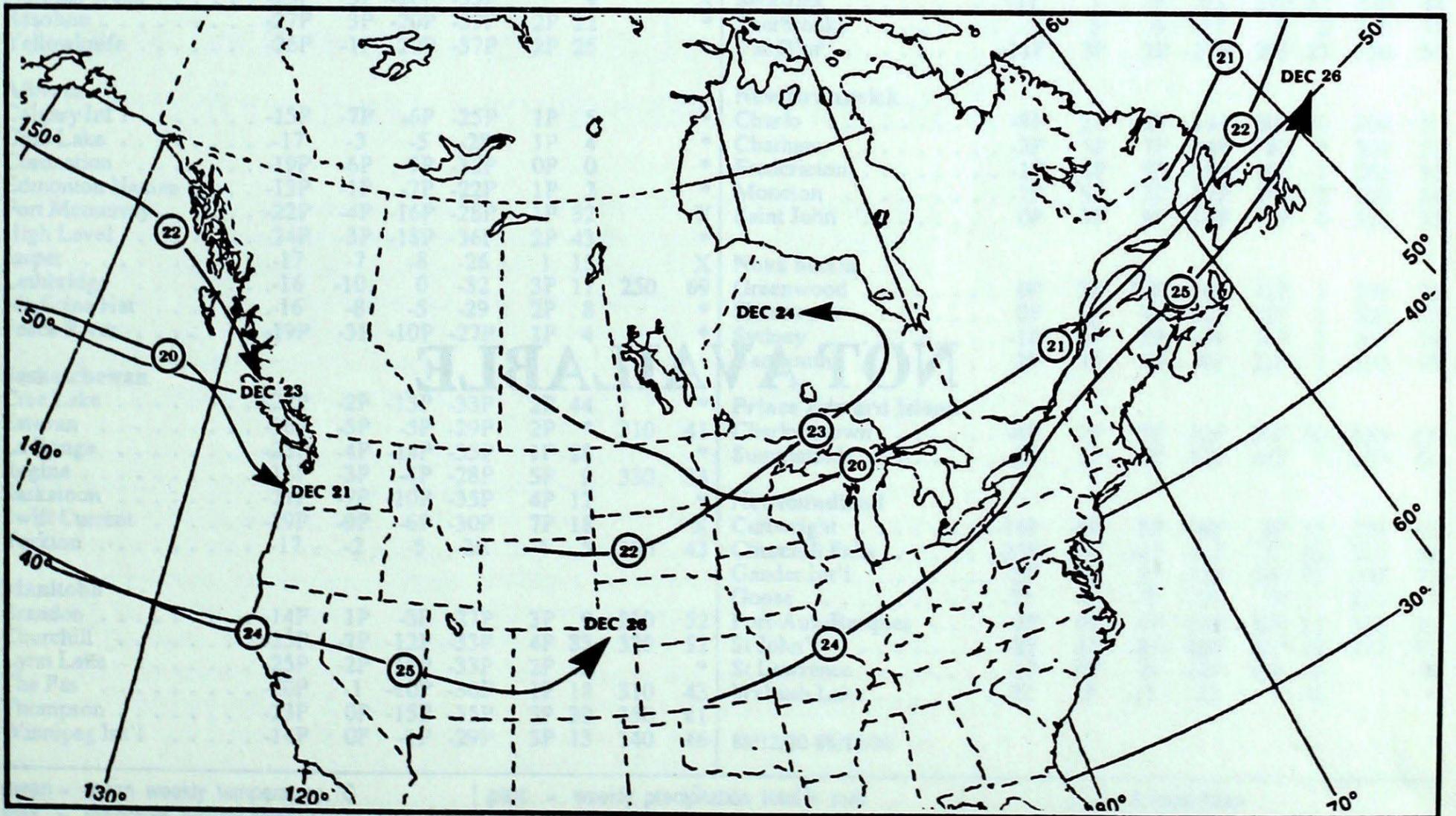
### 50 kPa ATMOSPHERIC CIRCULATION



Mean geopotential height  
50 kPa level (10 decameter intervals)



Mean geopotential height anomaly  
50 kPa level (10 decameter intervals)

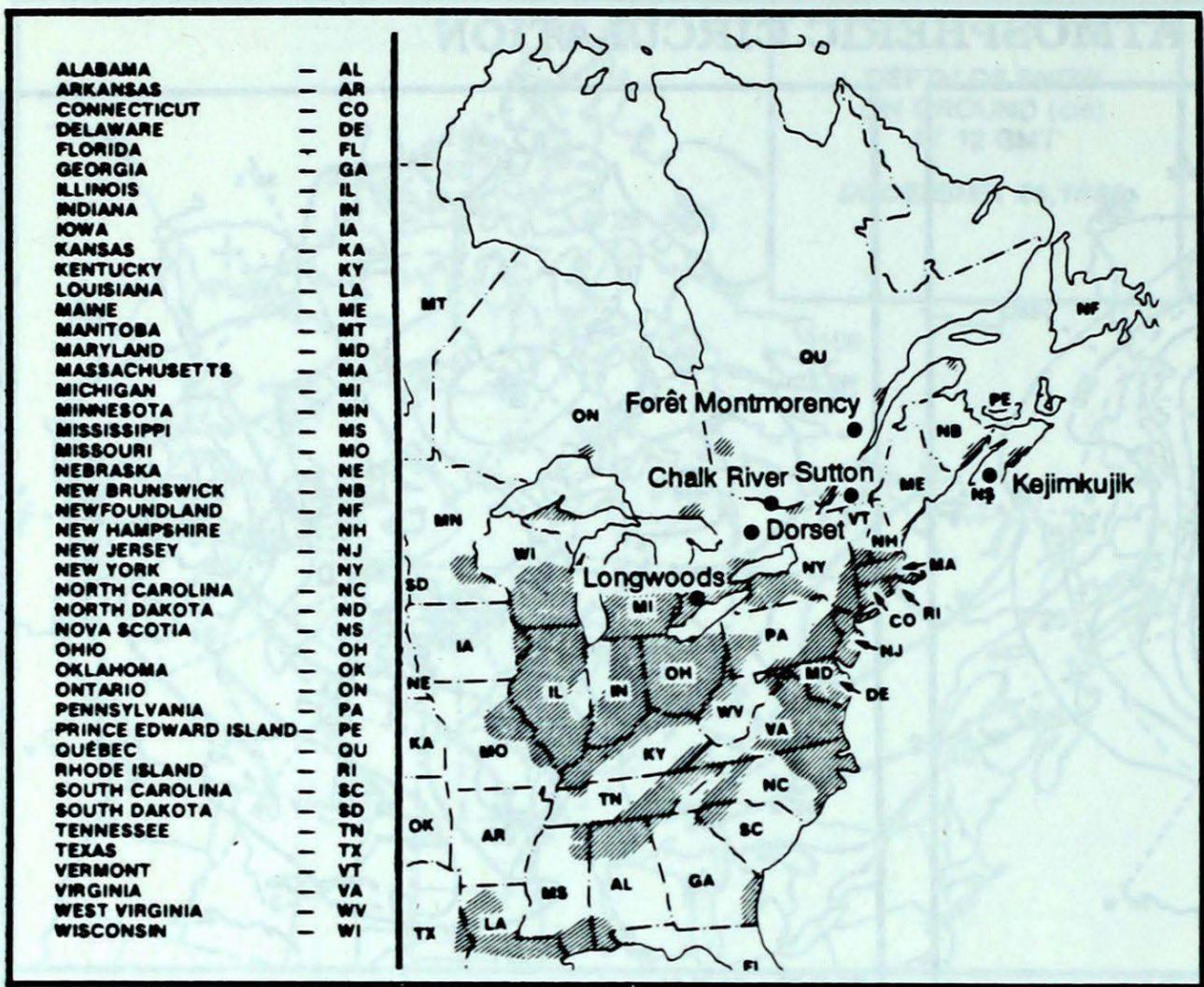


Storm track - Position of storm at 12 GMT each day during the period.

### ACID RAIN REPORT

The reference map (left) shows the locations of sampling sites, where the acidity of precipitation is monitored. All are operated by Environment Canada except Dorset, which is a research station operated by the Ontario Ministry of the Environment. The map also shows the approximate areas (shaded), where SO<sub>2</sub> and NO<sub>x</sub> emissions are greatest. The table below gives the weekly report summarizing the acidity (or pH) of the acid rain or snow that fell at the collection sites, and a description of the path travelled by the moisture laden air. Environmental damage to lakes and streams is usually observed in sensitive areas regularly receiving precipitation with pH readings less than 4.7, while pH readings less than 4.0 are serious.

For more information concerning the acid rain report, see Climatic Perspectives, Volume 5, Number 50, page 6.



# NOT AVAILABLE

| STATION                      | temperature |      |      |      | precip. |     | wind max |     | STATION                     | temperature |      |      |      | precip. |    | wind max |     |
|------------------------------|-------------|------|------|------|---------|-----|----------|-----|-----------------------------|-------------|------|------|------|---------|----|----------|-----|
|                              | mean        | anom | max  | min  | ptot    | st  | dir      | vit |                             | mean        | anom | max  | min  | ptot    | st | dir      | vit |
| <b>British Columbia</b>      |             |      |      |      |         |     |          |     | <b>Ontario</b>              |             |      |      |      |         |    |          |     |
| Cape St. James               | 4P          | -1P  | 7P   | 1P   | 5P      | 0   | 160      | 81  | Atikokan                    |             |      |      |      |         |    |          | *   |
| Cranbrook                    | -12         | -6   | -6   | -24  | 5P      | 8   |          | *   | Big Trout Lake              | -24P        | -3   | -14P | -31P | 3P      | 55 | 330      | 57  |
| Fort Nelson                  | -25P        | -4P  | -19P | -33P | 2P      | 56  |          | *   | Gore Bay                    | -4P         | 3P   | 4P   | -11P | 17P     | 3  | 130      | 65  |
| Fort St. John                | -17P        | -3P  | -7P  | -24P | 1P      | 5   |          | *   | Kapuskasing                 | -15P        | 1P   | 0P   | -31P | 29P     | 55 | 130      | 54  |
| Kamloops                     | -5P         | -1P  | 2P   | -16P | 1P      | 1   | 150      | 46  | Kenora                      | -15P        | 0P   | -2P  | -25P | 7P      | 31 | 140      | 39  |
| Penticton                    | -3P         | -3P  | 1P   | -13P | 5P      | 2   | 180      | 43  | Kingston                    |             |      |      |      |         |    |          | 2   |
| Port Hardy                   | 1P          | -2P  | 6P   | -3P  | 31P     | 0   | 120      | 59  | London                      | 0P          | 5P   | 10P  | -6P  | 26P     | 4  | 240      | 87  |
| Prince George                | -14P        | -4   | -7P  | -26P | 3P      | 28  |          | *   | Moosonee                    | *           | *    | -3P  | -19P | 11P     | 39 | 110      | 65  |
| Prince Rupert                | -2P         | -2P  | 3P   | -8P  | 8P      | 3   | 130      | 33  | North Bay                   | -8P         | 3P   | 2P   | -18P | 21P     | 14 | 150      | 63  |
| Revelstoke                   | -7P         | -3P  | -1P  | -15P | 2P      | 22  | 320      | 41  | Ottawa Int'l                | -6P         | 3P   | 5P   | -17P | 12P     | 8  |          | X   |
| Smithers                     | -15P        | -6P  | -10P | -22P | 1P      | 24  |          | *   | Petawawa                    | -8P         | 3P   | 8P   | -22P | 3P      | 8  |          | X   |
| Vancouver Int'l              | 2P          | -1P  | 7P   | -3P  | 23P     | 0   | 160      | 33  | Pickle Lake                 | -18P        | 1P   | -5P  | -30P | 8P      | 62 | 320      | 50  |
| Victoria Int'l               | 2P          | -2P  | 7P   | -4P  | 23P     | 0   | 100      | 37  | Red Lake                    | -16P        | 2P   | -2P  | -29P | 5P      | 64 | 130      | 35  |
| Williams Lake                | -12P        | -3   | -6P  | -24P | 6P      | 14  |          | X   | Sudbury                     | -8P         | 4P   | 2P   | -18P | 16P     | 8  |          | X   |
| <b>Yukon Territory</b>       |             |      |      |      |         |     |          |     | <b>Thunder Bay</b>          |             |      |      |      |         |    |          |     |
| Watson Lake                  | -26         | -1   | -18  | -39  | 5P      | 40  |          | *   | Timmins                     | -10P        | 6P   | 2P   | -25P | 32P     | 30 | 360      | 46  |
| Whitehorse                   | -17         | 1    | -8   | -26  | 4P      | 10  | 160      | 50  | Toronto Int'l               | -1P         | 4P   | 8P   | -8P  | 11P     | 2  | 250      | 80  |
| <b>Northwest Territories</b> |             |      |      |      |         |     |          |     | <b>Trenton</b>              |             |      |      |      |         |    |          |     |
| Alert                        | -27         | 2    | -18  | -35  | 1P      | 50  | 230      | 52  | Warton                      | -1P         | 4P   | 10P  | -9P  | 28P     | 5  |          | X   |
| Baker Lake                   | -30P        | -1P  | -20P | -36P | 2P      | 54  |          | *   | Windsor                     | 1P          | 3P   | 10P  | -7P  | 27P     | 0  | 240      | 80  |
| Cambridge Bay                | -30P        | 1P   | -22P | -38P | 2P      | 10  |          | *   | <b>Québec</b>               |             |      |      |      |         |    |          |     |
| Cape Dyer                    | -22P        | -3P  | -13P | -31P | 1P      | 123 | 320      | 44  | Bagotville                  | -13P        | 1P   | -1P  | -28P | 28P     | 40 | 270      | 43  |
| Clyde                        | -26P        | -1P  | -14P | -40P | 0P      | 36  | 310      | 87  | Blanc Sablon                | -11         | *    | 0    | -19  | 27      | 18 |          | X   |
| Coppermine                   | -26P        | 1    | -17P | -37P | 2P      | 46  | 210      | 43  | Inukjuak                    | -21         | -1   | -14  | -32  | 1P      | *  | 080      | 67  |
| Coral Harbour                | -27P        | -1P  | -21P | -33P | 2P      | 15  |          | X   | Kuujuuaq                    | -28P        | -9P  | -22P | -34P | 1P      | 28 |          | *   |
| Eureka                       | -30P        | 5P   | -21P | -41P | 2P      | 10  | 120      | 54  | Kuujuuarapik                | -18         | 0    | -9   | -31  | 1P      | 13 | 100      | 65  |
| Fort Smith                   | -30P        | -7P  | -19P | -38P | 1P      | 32  |          | X   | Maniwaki                    | -5P         | 6P   | 6P   | -23P | 22P     | 20 | 130      | 44  |
| Iqaluit                      | -27P        | -4P  | -18P | -33P | 0P      | 12  | 340      | 43  | Mont Joli                   | -8P         | 1P   | -1P  | -24P | 35P     | 33 | 290      | 48  |
| Hall Beach                   | -31P        | -4P  | -25P | -36P | 2P      | 42  | 310      | 37  | Montréal Int'l              | -5P         | 3P   | 4P   | -14P | 10P     | 1  | 150      | 56  |
| Inuvik                       | -21P        | 6P   | -14P | -35P | 1P      | 36  |          | X   | Natashquan                  | -12         | -1   | -1   | -22  | 26      | 19 | 060      | 61  |
| Mould Bay                    | -30P        | 2P   | -19P | -42P | 2P      | 27  |          | X   | Québec                      | -8P         | 3P   | 3P   | -17P | 19P     | 13 | 070      | 52  |
| Norman Wells                 | -23P        | 3P   | -16P | -33P | *       | 9   |          | X   | Schefferville               | -27         | -7   | -17  | -38  | 3P      | 34 |          | *   |
| Resolute                     | -27P        | 3P   | -20P | -39P | 2P      | 22  |          | *   | Sept-Iles                   | -11         | 1    | -3   | -23  | 39P     | 27 | 340      | 44  |
| Yellowknife                  | -26P        | -1P  | -20P | -37P | 2P      | 25  |          | *   | Sherbrooke                  | -5          | 5    | 8    | -17  | 9       | 2  | 260      | 74  |
| <b>Alberta</b>               |             |      |      |      |         |     |          |     | <b>Val D'or</b>             |             |      |      |      |         |    |          |     |
| Calgary Int'l                | -15P        | -7P  | -6P  | -25P | 1P      | 5   |          | *   | Charlo                      | -8P         | 3P   | 0P   | -19P | 30P     | 30 | 300      | 50  |
| Cold Lake                    | -17         | -3   | -5   | -28  | 1P      | 4   |          | *   | Chatham                     | -3P         | 5P   | 7P   | -14P | 8P      | *  | 300      | 50  |
| Coronation                   | -19P        | -6P  | -9P  | -32P | 0P      | 0   |          | *   | Fredericton                 | -1P         | 6P   | 9P   | -18P | 10P     | 1  | 260      | 56  |
| Edmonton Namao               | -13P        | -1P  | -7P  | -22P | 1P      | 2   |          | *   | Moncton                     | -2P         | 5P   | 8P   | -17P | 18P     | 2  | 260      | 54  |
| Fort McMurray                | -22P        | -4P  | -16P | -28P | 1P      | 32  |          | X   | Saint John                  | 0P          | 7P   | 9P   | -14P | 16P     | 0  | 310      | 57  |
| High Level                   | -24P        | -3P  | -18P | -36P | 2P      | 43  |          | *   | <b>Nova Scotia</b>          |             |      |      |      |         |    |          |     |
| Jasper                       | -17         | -7   | -8   | -26  | 1       | 15  |          | X   | Greenwood                   | 0P          | 3P   | 11P  | -14P | 12P     | 1  | 240      | 76  |
| Leihbridge                   | -16         | -10  | 0    | -32  | 3P      | 11  | 250      | 69  | Shearwater                  | 0P          | 2P   | 9P   | -12P | 12P     | 1  | 300      | 67  |
| Medicine Hat                 | -16         | -8   | -5   | -29  | 2P      | 8   |          | *   | Sydney                      | -1P         | 2P   | 8P   | -8P  | 16P     | 1  | 260      | 74  |
| Peace River                  | -19P        | -3P  | -10P | -27P | 1P      | 4   |          | *   | Yarmouth                    | 2P          | 3P   | 9P   | -9P  | 21P     | 1  | 310      | 63  |
| <b>Saskatchewan</b>          |             |      |      |      |         |     |          |     | <b>Prince Edward Island</b> |             |      |      |      |         |    |          |     |
| Cree Lake                    | -22P        | -2P  | -13P | -33P | 2P      | 44  |          | *   | Charlottetown               | -4P         | 2P   | 3P   | -12P | 26P     | 10 | 320      | 56  |
| Estevan                      | -16P        | -5P  | -5P  | -29P | 2P      | *   | 310      | 41  | Summerside                  | -3P         | 3P   | 5P   | -12P | 14P     | *  | 240      | 63  |
| La Ronge                     | -23P        | -4P  | -14P | -35P | 1P      | 28  |          | *   | <b>Newfoundland</b>         |             |      |      |      |         |    |          |     |
| Regina                       | -16P        | -3P  | -4P  | -28P | 5P      | 9   | 330      | 33  | Cartwright                  | -16P        | -6P  | -5P  | -28P | 8P      | 33 | 320      | 65  |
| Saskatoon                    | -21P        | -7P  | -10P | -35P | 4P      | 12  |          | *   | Churchill Falls             | -23P        | -3P  | -14P | -31P | 5P      | 62 | 300      | 39  |
| Swift Current                | -19P        | -9P  | -6P  | -30P | 7P      | 18  |          | X   | Gander Int'l                | -5P         | -1P  | 2P   | -12P | 39P     | 43 | 100      | 72  |
| Yorkton                      | -17         | -2   | -5   | -30  | 4       | 5   | 300      | 43  | Goose                       | -21         | -6   | -7   | -29  | 3P      | 31 | 320      | 31  |
| <b>Manitoba</b>              |             |      |      |      |         |     |          |     | <b>Port-Aux-Basques</b>     |             |      |      |      |         |    |          |     |
| Brandon                      | -14P        | 1P   | -3P  | -27P | 3P      | 9   | 290      | 52  | St John's                   | -2P         | 1P   | 8P   | -10P | 26P     | 8  | 250      | 91  |
| Churchill                    | -25P        | -2P  | -12P | -33P | 4P      | 33  | 330      | 52  | St Lawrence                 | -1P         | 0P   | 7P   | -10P | 20P     | 9  |          | X   |
| Lynn Lake                    | -25P        | -2P  | -18P | -33P | 2P      | 52  |          | *   | Wabush Lake                 | -22         | -3   | -15  | -32  | 7       | 40 |          | *   |
| The Pas                      | -20P        | -1   | -10P | -30P | 1P      | 18  | 310      | 43  | <b>88/12/20-88/12/26</b>    |             |      |      |      |         |    |          |     |
| Thompson                     | -23P        | 0P   | -15P | -35P | 3P      | 39  | 350      | 41  |                             |             |      |      |      |         |    |          |     |
| Winnipeg Int'l               | -14P        | 0P   | -1P  | -29P | 3P      | 13  | 140      | 46  |                             |             |      |      |      |         |    |          |     |

mean = mean weekly temperature, °C  
 max = maximum weekly temperature, °C  
 min = minimum weekly temperature, °C  
 anom = mean temperature anomaly, °C

ptot = weekly precipitation total in mm  
 st = snow thickness on the ground in cm  
 dir = direction of max wind, deg. from north.  
 vit = wind speed in km/h

- Annotations -  
 X = no observation  
 P = less than 7 days of data.  
 \* = missing data when going to printing.