

# Climatic Perspectives

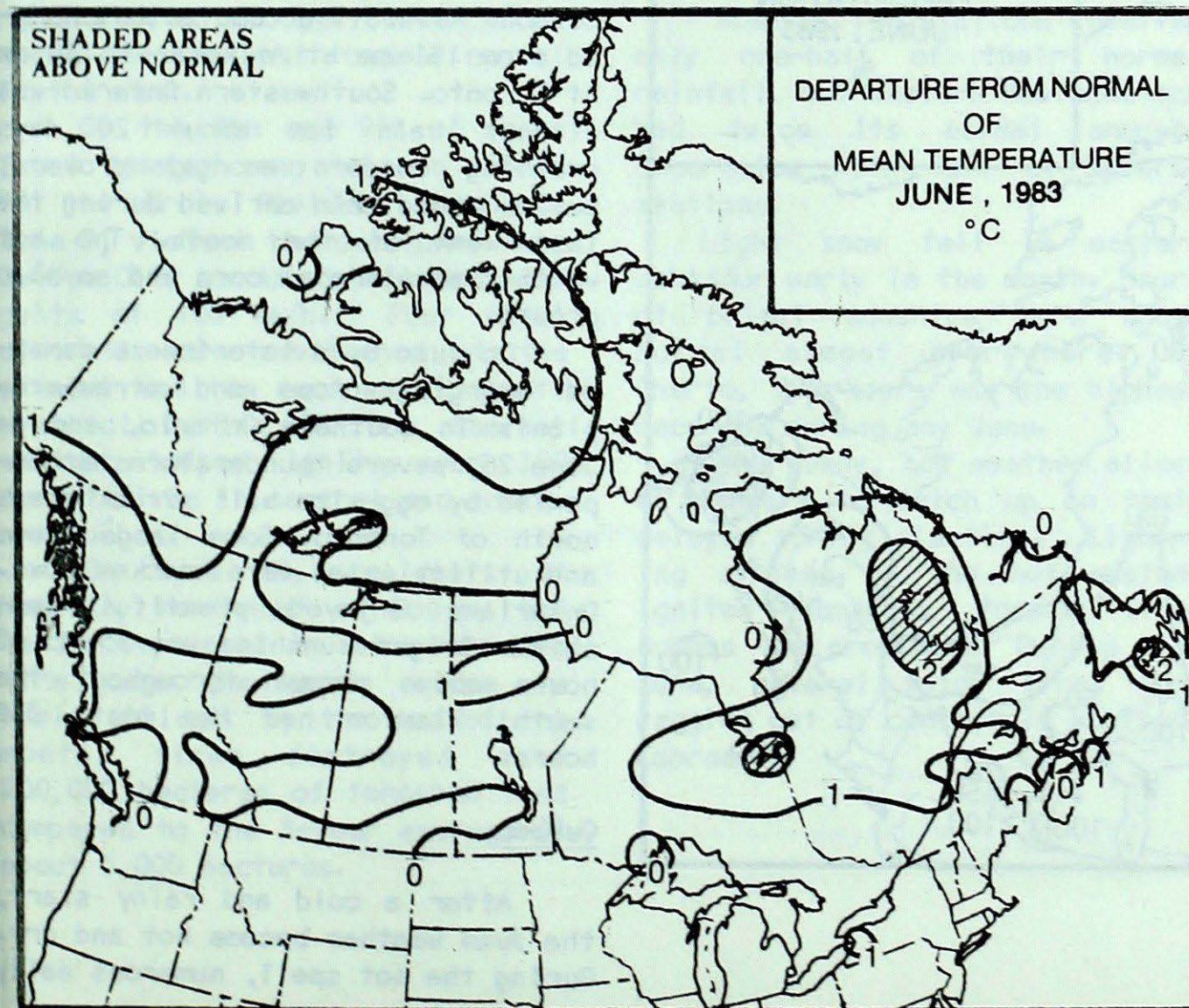
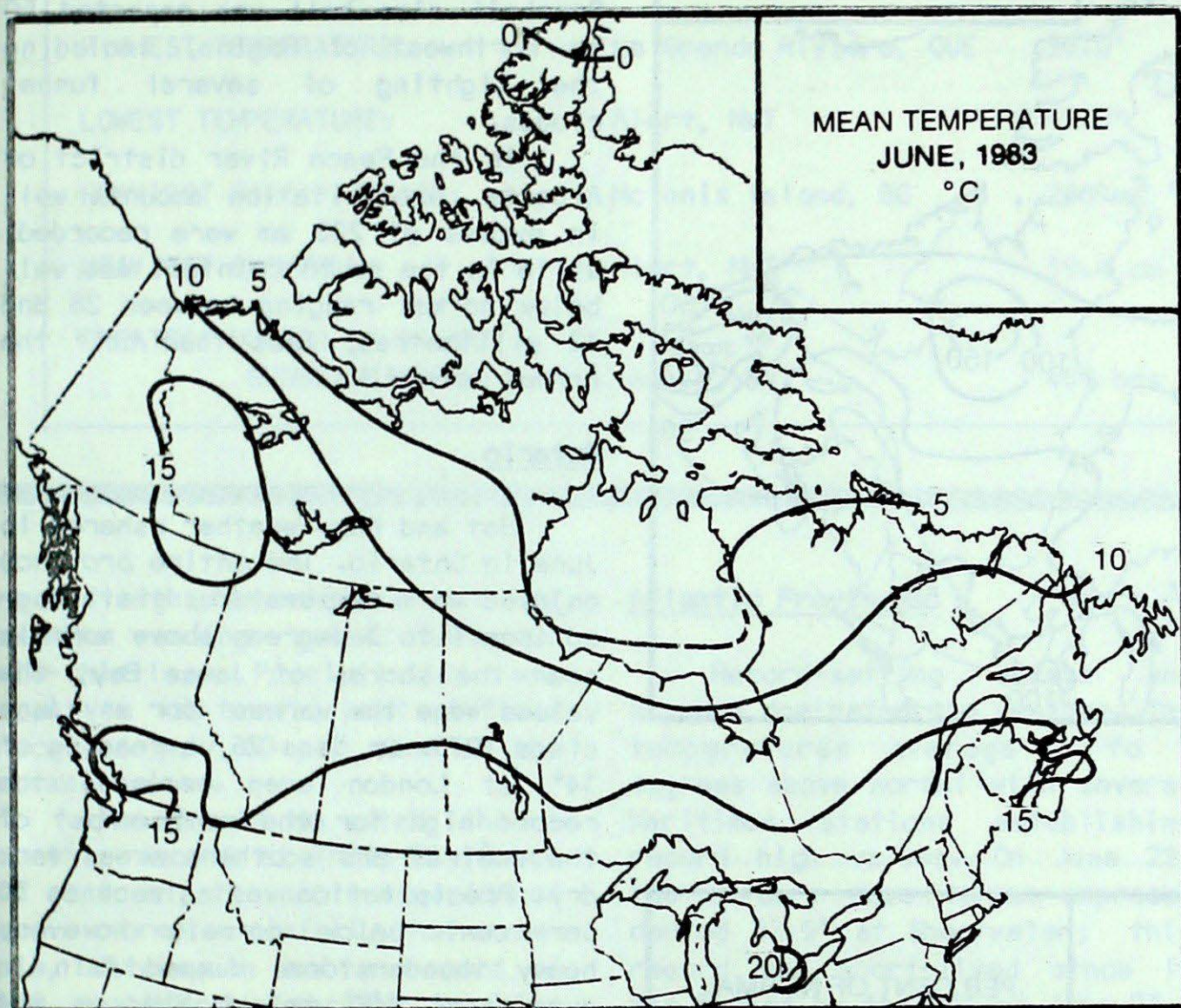
MONTHLY SUPPLEMENT

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## ACROSS THE COUNTRY

### Yukon and Northwest Territories

Mean temperatures were uniformly above normal across the North. On Victoria Island, the average readings were 2° above normal. Alert, NWT was the coldest place in the country with a mean of -0.3°.

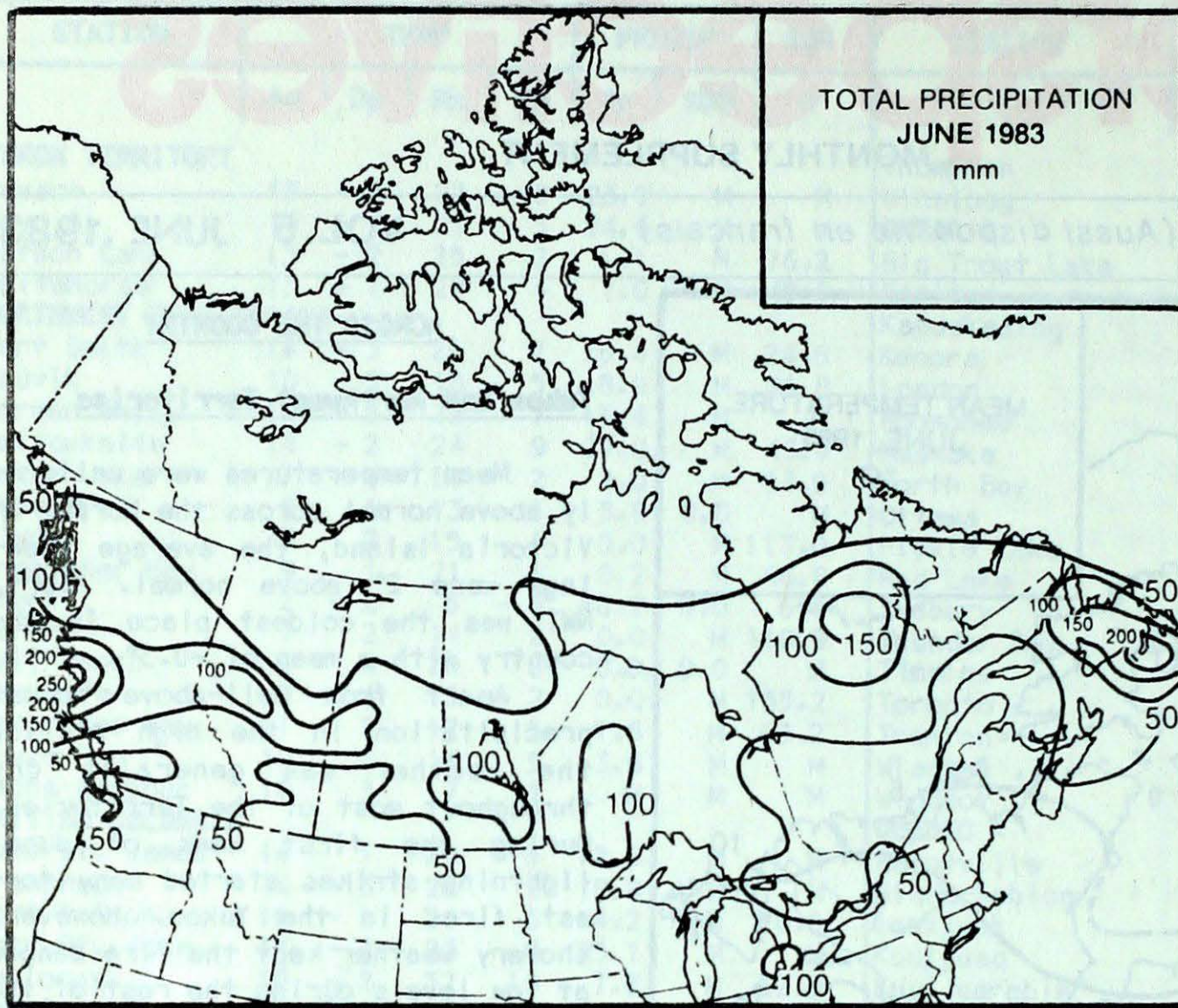
Apart from well-above normal precipitation in the high Arctic, the weather was generally dry throughout most of the Territories. During the first week of June, lightning strikes started many forest fires in the Yukon. However, showery weather kept the fire danger at low levels during the rest of the month. Inuvik, NWT received 409 hours of bright sunshine - the most for any station in Canada this June.

### British Columbia

With the exception of the north, the weather was unsettled. Disturbances kept skies cloudy and produced record precipitation. Several localities along the coast and in the central interior had their wettest June on record with rainfall ranging between 145 to 245 millimetres, which is 120 to 245 per cent of normal. Sunshine totals were as much as 100 hours below normal and nine stations recorded their lowest ever June values.

### Prairie Provinces

It was wet and unsettled across most of the Prairies even though temperatures were close to normal. The combination of a unstable air-mass and numerous disturbances contributed to widespread shower and thunderstorm activity, including heavy downpours, hail and damaging winds. The most significant thunderstorm outbreak occurred during the last half of the month when many



communities in central Saskatchewan were deluged with more than 100 mm of rain in a 24 hour period. Saskatoon was particularly hard hit when 74.6 mm of rain fell in a one hour period, a phenomena which can be expected once every one hundred years. These same storms produced violent weather in other areas. Baseball size hail was reported 50 km northwest of Regina, including the sighting of several funnel clouds.

In the Peace River district of Alberta, precipitation amounts well in excess of 200 mm were recorded, while in the south rainfall was well below normal ranging between 28 and 32 millimetres, less than half the normal amount.

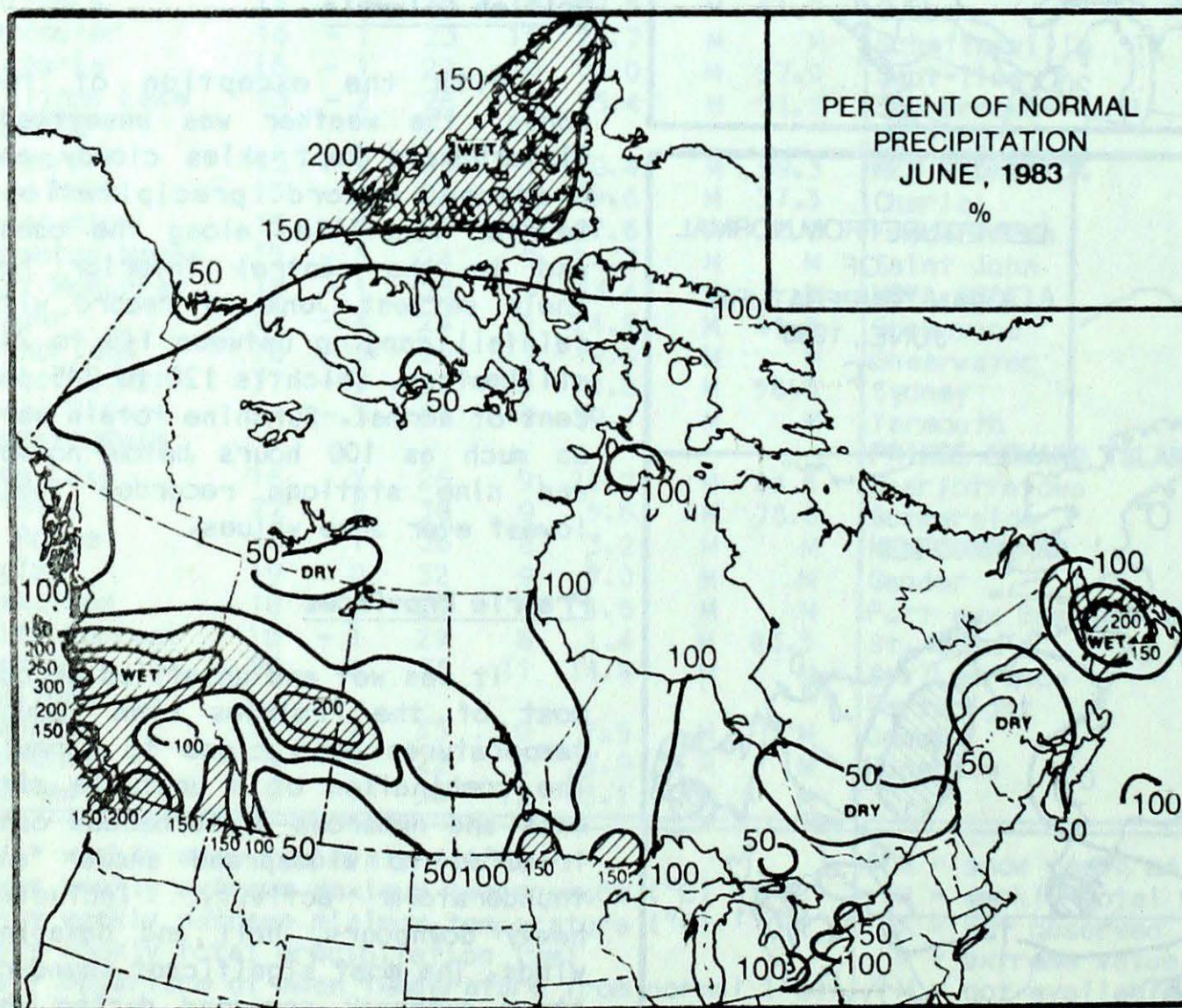
**Ontario**

Hot and hazy weather ushered in June in Ontario. The entire province enjoyed warm temperatures that ranged from 1 to 3 degrees above normal; near the shores of James Bay, the values were the warmest for any June since 1975. On June 26, a reading of 34° at London even exceeded the record high for the month. Most of the central and southern areas were dry. Precipitation was as much as 50 per cent below normal; however, heavy thunderstorms dumped rain in excess of 100 mm at Windsor and London. Rainfall accumulations ranged from 161 mm at Atikokan to 30 mm at Toronto. Southwestern Ontario was without rain for about 20 days creating concern amongst growers, but welcomed rain arrived during the last week of the month. The hot weather accelerated corn and soybean growth.

On June 8, a late freeze damaged emerging crops and strawberry plants in southern Ontario, and on June 26, severe thunderstorms accompanied by egg-size hail struck areas north of Toronto. Some large trees and utility poles were knocked down. Ontarians enjoyed plentiful sunshine. Bright sunshine was 35 to 60 hours above normal throughout the south; Wlarton had the most, 332 hours.

**Québec**

After a cold and rainy start, the June weather became hot and dry. During the hot spell, numerous daily



**CLIMATIC EXTREMES - JUNE, 1983****MEAN TEMPERATURE:**

|         |              |       |
|---------|--------------|-------|
| WARMEST | Windsor, ONT | 20.5° |
| COLDEST | Alert, NWT   | -0.3° |

HIGHEST TEMPERATURE: La Grande Rivière, QUE 35.0°

LOWEST TEMPERATURE: Alert, NWT -9.9°

HEAVIEST PRECIPITATION: McInnis Island, BC 268 mm

HEAVIEST SNOWFALL: Alert, NWT 39.4 cm

GREATEST NUMBER OF BRIGHT  
SUNSHINE HOURS: Inuvik, NWT 409 hrs

**CLIMATIC IMPACTS****Agriculture**

After the cool and damp spring, the warm weather promoted good crop growth east of Manitoba. The corn crop made a rapid recovery to a normal green colour in most Ontario and Québec fields. In Ontario, the hot, dry weather of late June was blamed for the disappointing strawberry harvest. Urgently needed rain arrived in a central and northern Alberta improving the yield potential of the spring seeded crops; however, the prolonged rainy period left many fields saturated. In the Okanagan Valley, heavy rainfall caused splitting of cherries and scab infections on apples.

**Forestry**

Lightning strikes in the hot and dry weather east of the Ottawa Valley started numerous forest fires. During mid-June a record-breaking heat wave kindled over 100 fires in central Québec. Residents of Nemaska, northeast of Rouyn, had to be evacuated when fire came within 2 km of their village. By the end of June, fires ravaged nearly 200,000 hectares of the timber in Québec compared to the 5-year average of about 5,000 hectares. In contrast the return of the cool and showery weather helped control major forest fires in British Columbia. Near the end of June, fires burned nearly 79,000 hectares compared to about 120,000 hectares last year.

**Entomology**

The hot weather has spurred the breeding of mosquitoes in Ontario. Because of the cool and damp spring, the breeding schedule of mosquitoes was delayed about 2 weeks; however, the hot and dry weather brought the mosquito population to about average in southern Ontario. The risk of getting encephalitis from the mosquitoes is very low this year. Flea beetles have damaged a number of vegetable crops in Ontario. Tent caterpillars were rampant in Nova Scotia, especially in east Hants County. These insects have stripped trees of foliage and were crawling on roadways and in homes.

record high temperatures were set as the readings zoomed into the mid-thirties. Precipitation was scant in the south; most stations received only 50 per cent of the normal values.

A meagre 24 mm established a monthly record at Trois-Rivières. In contrast, the north experienced above normal rainfall, for example, Nitchequon set a record of 180 mm. Hours of bright sunshine ranged from 20 per cent above normal in the west to near normal in the east.

On the 8th and 9th of June, frost damaged some tobacco plants in the Trois Rivières area. On June 7, violent thunderstorms near Québec City produced hail and wind gusts of 100 km/h. Four light aircraft were overturned at the airport and the roof was torn off a school. During mid-June, the hot weather helped ignite over 100 forest fires in central and northern Québec.

On June 17, residents of Nemaska, northeast of Rouyn, had to be evacuated by air when the fire came perilously close to their village. By the end of the month, fires destroyed over 200,000 hectares of forested land compared to the 5-year average of about 5,000 hectares.

**Atlantic Provinces**

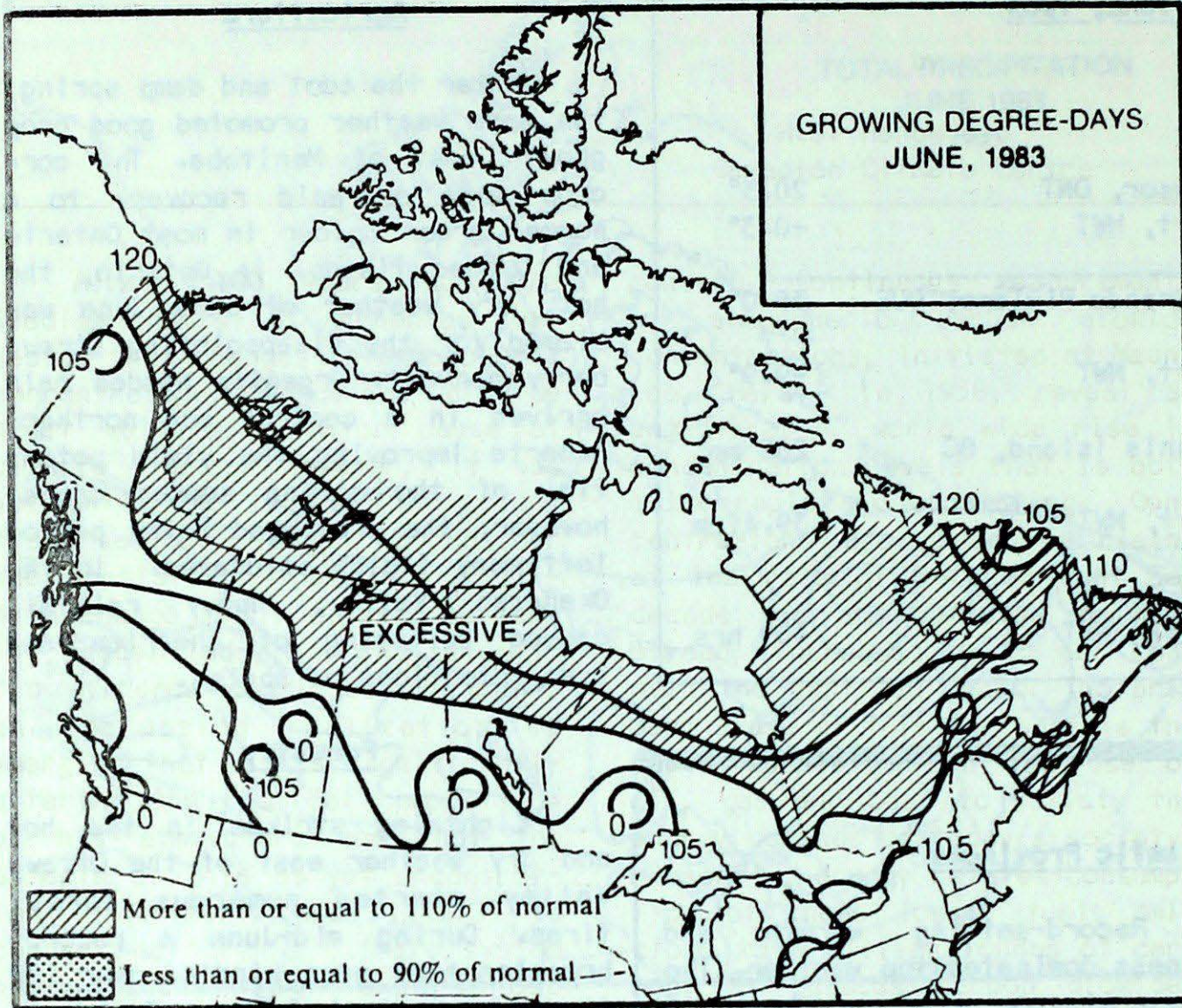
Record-setting warmth and dryness dominated the weather. The temperatures average 1 to 3 degrees above normal with several Maritimes stations establishing record high values. On June 22, the mercury rose to an unprecedented 32.5° at Shearwater; this record was short-lived since it was broken by the 33° on June 23.

Most of the stations received only one-half of their normal rainfall, but eastern Newfoundland had twice its normal amount. Record-low rain fell at several stations.

Light snow fell in eastern Labrador early in the month. Hours of bright sunshine were above normal almost everywhere. At Charlo, 299 hours was the highest recorded during any June.

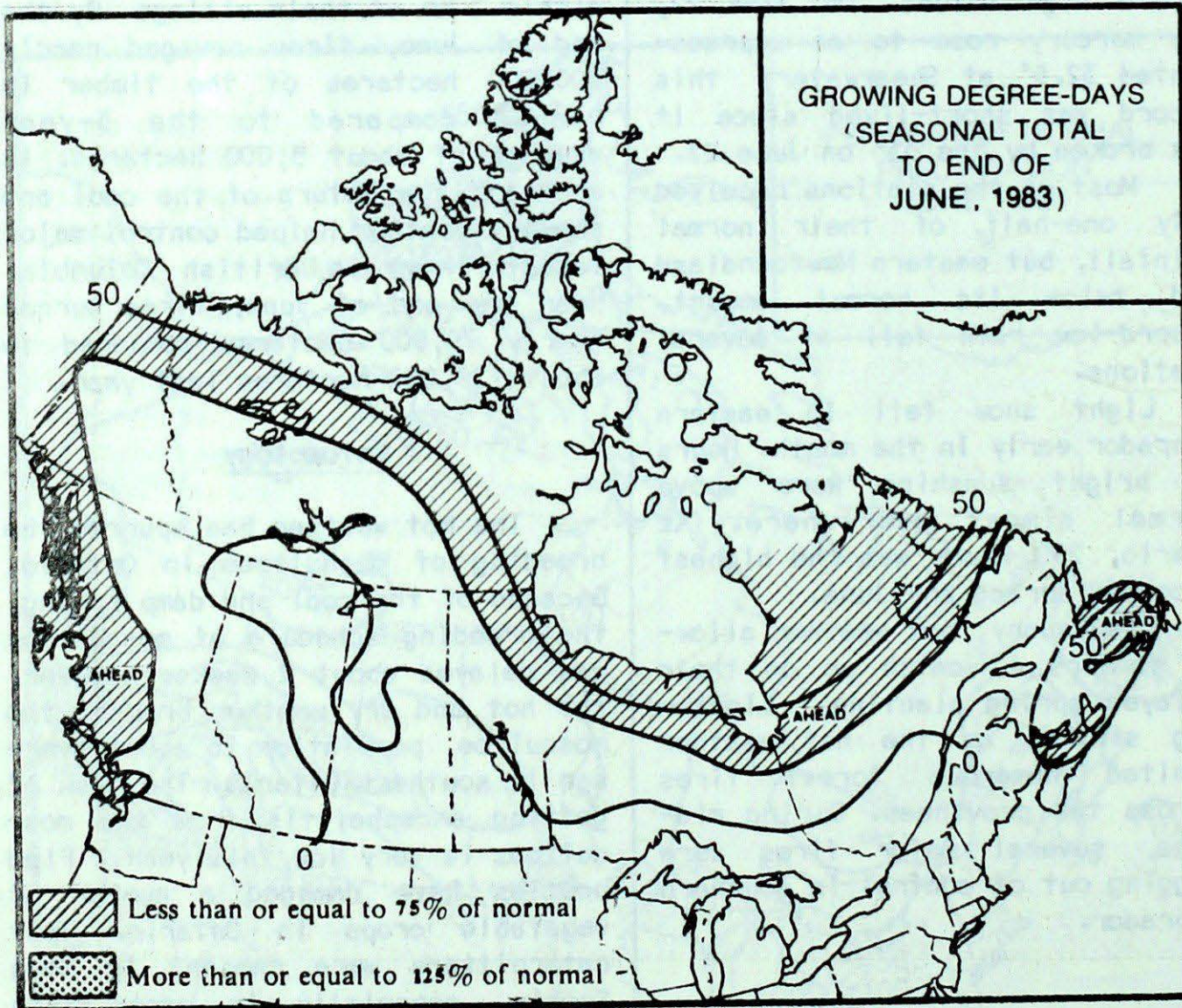
The sunny, hot weather allowed farmers to catch up on their delayed spring planting. Lightning strikes on the hot weather ignited numerous forest fires across the provinces. During mid-June, several major fires were ragging out of control in southern Labrador.

GROWING DEGREE-DAYS



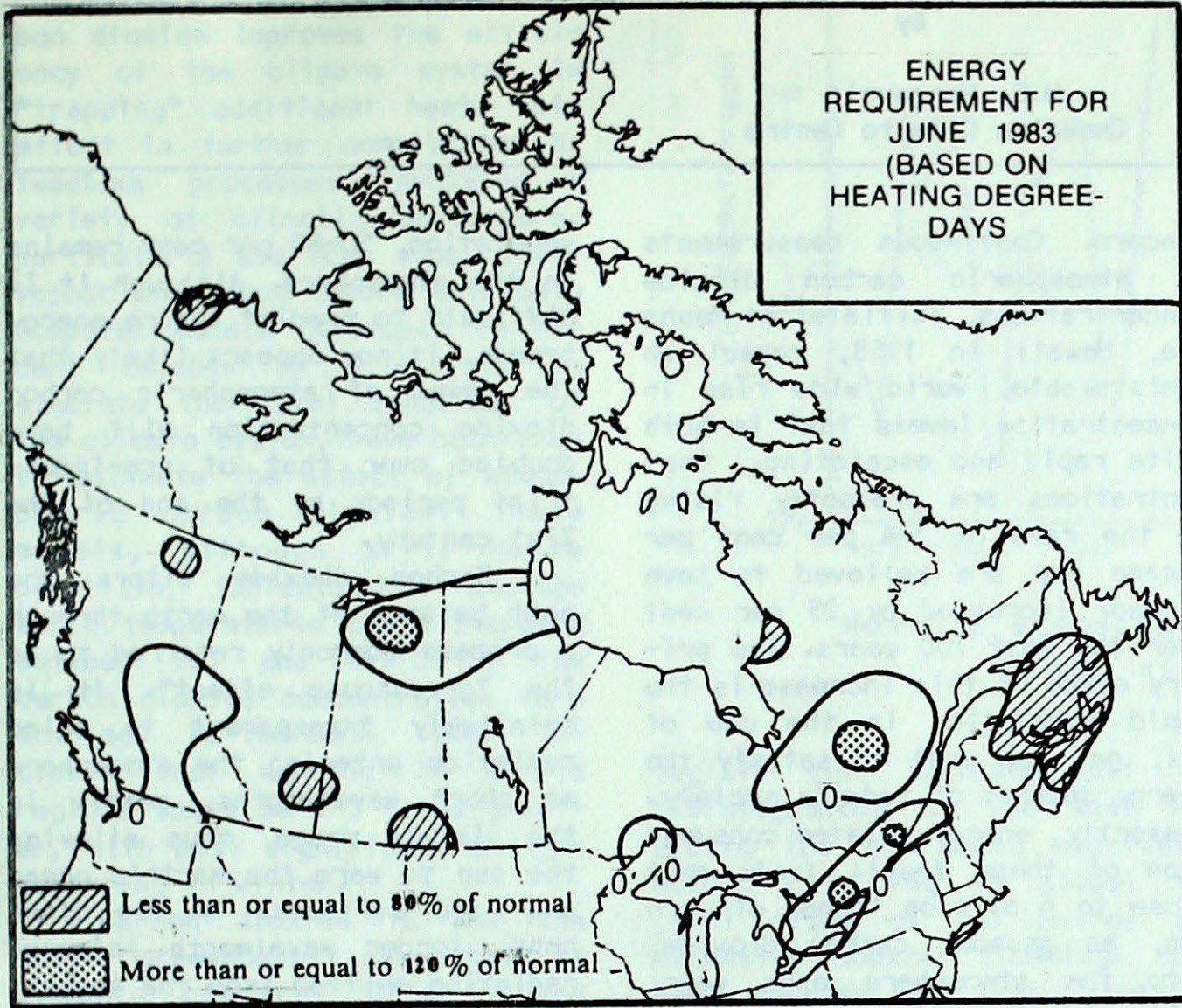
TOTAL TO END OF JUNE

|                             | 1983 | 1982 | NORMAL |
|-----------------------------|------|------|--------|
| <b>BRITISH COLUMBIA</b>     |      |      |        |
| Kamloops                    | 877  | 834  | 814    |
| Pentlcton                   | 829  | 742  | 757    |
| Prince George               | 485  | 473  | 393    |
| Vancouver                   | 865  | 671  | 698    |
| Victoria                    | 797  | 595  | 639    |
| <b>ALBERTA</b>              |      |      |        |
| Calgary                     | 472  | 430  | 400    |
| Edmonton Mun.               | 572  | 547  | 451    |
| Grande Prairie              | 493  | 472  | 428    |
| Lethbridge                  | 555  | 521  | 507    |
| Peace River                 | 456  | 472  | 415    |
| <b>SASKATCHEWAN</b>         |      |      |        |
| Estevan                     | 552  | 468  | 549    |
| Prince Albert               | 422  | 402  | 443    |
| Regina                      | 431  | 537  | 506    |
| Saskatoon                   | 538  | 455  | 507    |
| Swift Current               | 441  | 396  | 484    |
| <b>MANITOBA</b>             |      |      |        |
| Brandon                     | 418  | 507  | 513    |
| Dauphin                     | 388  | 418  | 484    |
| Winnipeg                    | 453  | 581  | 544    |
| <b>ONTARIO</b>              |      |      |        |
| London                      | 601  | 729  | 694    |
| Muskoka                     | 519  | 657  | 547    |
| North Bay                   | 457  | 573  | 514    |
| Ottawa                      | 627  | 735  | 669    |
| Thunder Bay                 | 348  | 407  | 386    |
| Toronto                     | 597  | 653  | 687    |
| Trenton                     | 598  | 662  | 674    |
| Windsor                     | 745  | 891  | 846    |
| <b>QUÉBEC</b>               |      |      |        |
| Bale Comeau                 | 288  | 254  | 302    |
| Montréal                    | 634  | 730  | 682    |
| Québec                      | 517  | 542  | 526    |
| Sept-Îles                   | 268  | 167  | 231    |
| Sherbrooke                  | 502  | 533  | 583    |
| <b>NEW BRUNSWICK</b>        |      |      |        |
| Charlo                      | 422  | 364  | 398    |
| Fredericton                 | 570  | 524  | 521    |
| Moncton                     | 545  | 363  | 438    |
| <b>NOVA SCOTIA</b>          |      |      |        |
| Halifax                     | 499  | 340  | 414    |
| Sydney                      | 419  | 247  | 305    |
| Yarmouth                    | 464  | 427  | 401    |
| <b>PRINCE EDWARD ISLAND</b> |      |      |        |
| Charlottetown               | 517  | 332  | 370    |
| <b>NEWFOUNDLAND</b>         |      |      |        |
| Gander                      | 383  | 154  | 245    |
| St. John's                  | 204  | 90   | 193    |
| Stephenville                | 445  | 282  | 270    |



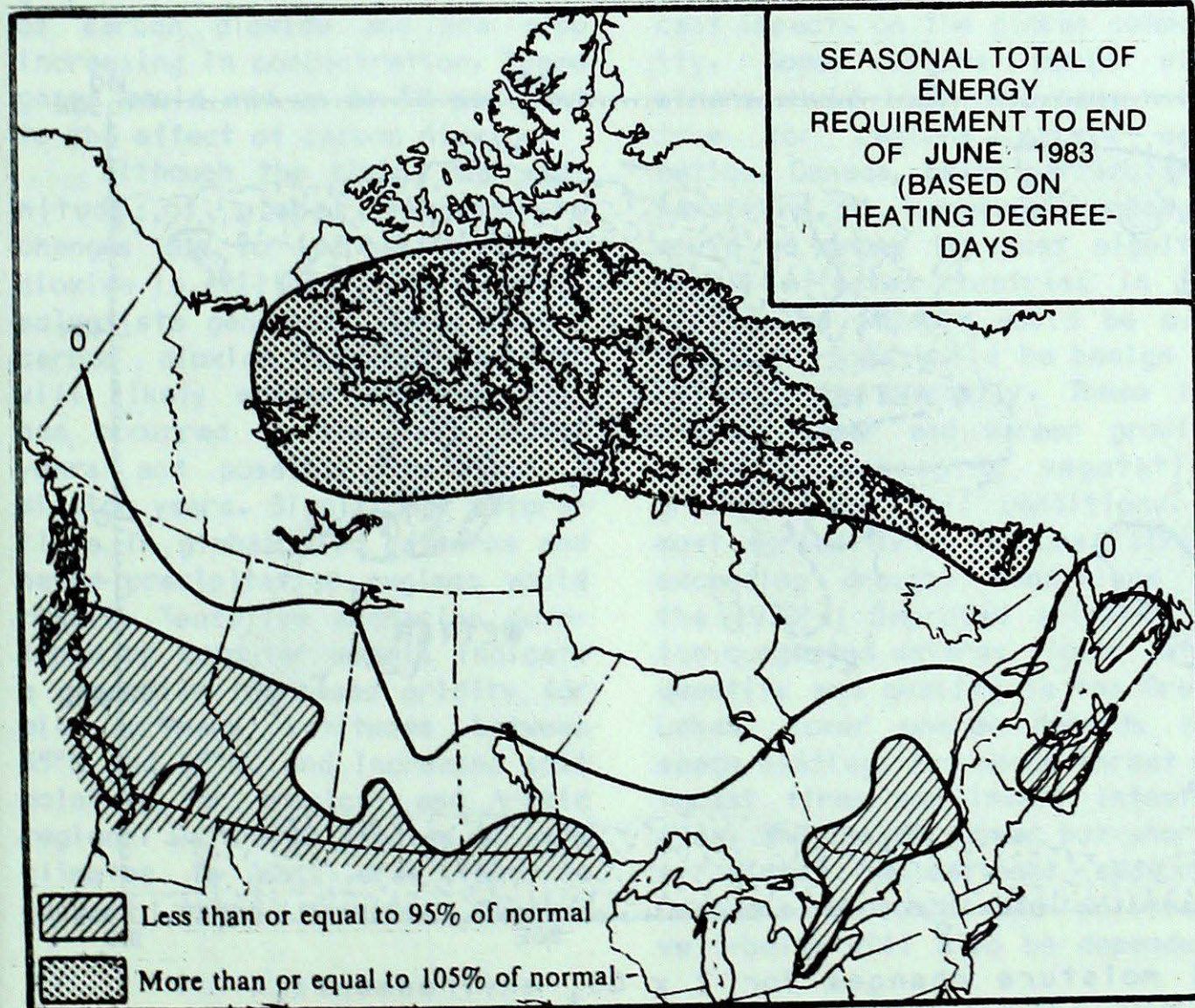
X = Season Ended

**ENERGY REQUIREMENT**



**SEASONAL TOTAL OF HEATING DEGREE-DAYS TO END OF MAY**

|                              | 1983  | 1982 | NORMAL |
|------------------------------|-------|------|--------|
| <b>BRITISH COLUMBIA</b>      |       |      |        |
| Kamloops                     | 3276  | 3708 | 3756   |
| Penticton                    | 3254  | 3452 | 3514   |
| Prince George                | 4799  | 5462 | 5388   |
| Vancouver                    | 2758  | 1987 | 3007   |
| Victoria                     | 2848  | 3144 | 3074   |
| <b>YUKON TERRITORY</b>       |       |      |        |
| Whitehorse                   | 6740  | 7398 | 6879   |
| <b>NORTHWEST TERRITORIES</b> |       |      |        |
| Frobisher Bay                | 10820 | 9653 | 9845   |
| Inuvik                       | 10645 | 9989 | 10174  |
| Yellowknife                  | 8917  | 8630 | 8593   |
| <b>ALBERTA</b>               |       |      |        |
| Calgary                      | 4821  | 5582 | 5345   |
| Edmonton Mun.                | 5060  | 5590 | 5589   |
| Grande Prairie               | 4851  | 6528 | 6145   |
| <b>SASKATCHEWAN</b>          |       |      |        |
| Estevan                      | 5138  | 5796 | 5542   |
| Regina                       | 5569  | 6115 | 5920   |
| Saskatoon                    | 5737  | 6094 | 6077   |
| <b>MANITOBA</b>              |       |      |        |
| Brandon                      | 5723  | 5984 | 6038   |
| Churchill                    | 9565  | 9041 | 9214   |
| The Pas                      | 6750  | 6849 | 6853   |
| Winnipeg                     | 5476  | 5843 | 5889   |
| <b>ONTARIO</b>               |       |      |        |
| Kapuskasing                  | 6361  | 6461 | 6366   |
| London                       | 3770  | 4342 | 4068   |
| Ottawa                       | 4402  | 4796 | 4673   |
| Sudbury                      | 5156  | 5560 | 5447   |
| Thunder Bay                  | 5482  | 5897 | 5746   |
| Toronto                      | 3859  | 4413 | 4082   |
| Windsor                      | 3281  | 3846 | 3590   |
| <b>QUÉBEC</b>                |       |      |        |
| Baie Comeau                  | 5771  | 6010 | 5981   |
| Montréal                     | 4235  | 4746 | 4471   |
| Quebec                       | 4847  | 5325 | 5080   |
| Sept-Îles                    | 6127  | 6262 | 6135   |
| Sherbrooke                   | 4817  | 5401 | 5242   |
| Val-d'Or                     | 5971  | 6275 | 6146   |
| <b>NEW BRUNSWICK</b>         |       |      |        |
| Charlo                       | 5262  | 5466 | 5181   |
| Fredericton                  | 4407  | 4830 | 4699   |
| Moncton                      | 4477  | 4884 | 4709   |
| <b>NOVA SCOTIA</b>           |       |      |        |
| Halifax                      | 3885  | 4279 | 4123   |
| Sydney                       | 4257  | 4744 | 4459   |
| Yarmouth                     | 3991  | 4051 | 4024   |
| <b>PRINCE EDWARD ISLAND</b>  |       |      |        |
| Charlottetown                | 4302  | 4700 | 4623   |
| <b>NEWFOUNDLAND</b>          |       |      |        |
| Gander                       | 4967  | 5204 | 5039   |
| St. John's                   | 4233  | 4933 | 4804   |



## CARBON DIOXIDE AND CLIMATE CHANGE

by

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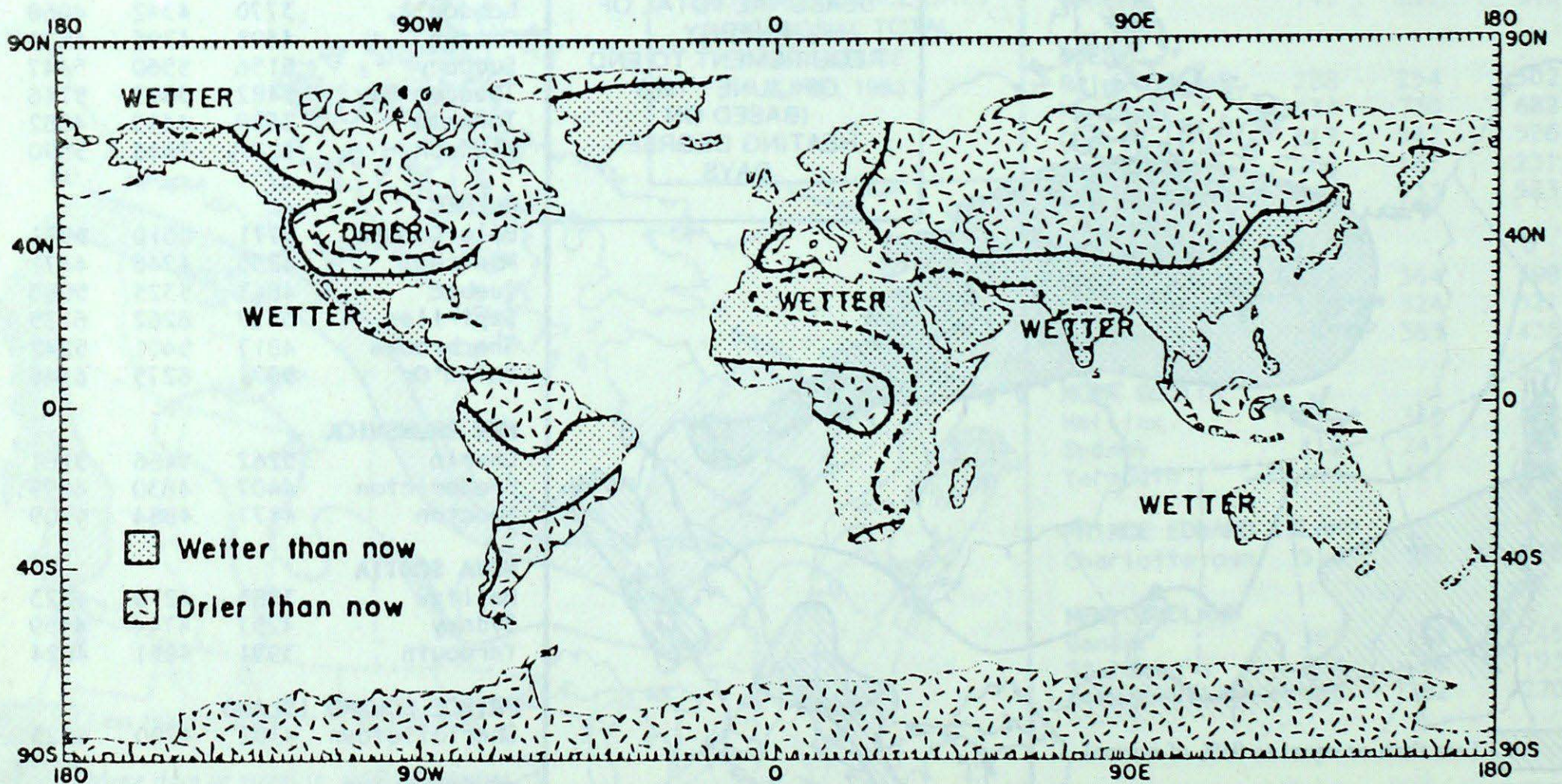
Almost 100 years ago the Swedish chemist S. Arrhenius suggested that changes in atmospheric concentration of carbon dioxide might well be a major cause of climate change. However, it was not until the 1960's that scientists seriously began to consider the possibility that such a climate change might already be taking place. Today, as the scientific evidence continues to mount, an increasing realization is emerging that man is significantly altering the chemical composition of his atmosphere and that the effects of this as yet uncontrolled experiment are likely to change the earth's climate system beyond anything experienced through the history of human civilization.

There are good grounds for

concern. Continuous measurements of atmospheric carbon dioxide concentrations, initiated at Mauna Loa, Hawaii in 1958, reveal an unmistakable, world wide rise in concentration levels that is both quite rapid and escalating. Concentrations are presently rising at the rate of 3-4 per cent per decade and are believed to have already increased by 25 per cent over the past 100 years. The primary cause of this increase is the rapid escalation in the use of oil, gas and coal to satisfy the energy demands of today's society. Presently, energy related consumption of these fossil fuels emit close to 6 billion tonnes of carbon, as gaseous carbon dioxide, into the atmosphere each year. While a portion of these emissions are removed by the oceans and land

vegetation, 50-60 per cent remains in the atmosphere. Although it is difficult to predict future energy trends, it now appears likely that the level of atmospheric carbon dioxide concentration will have doubled over that of pre-industrial periods by the end of the 21st century.

Carbon dioxide alters the heat balance of the earth through a process commonly referred to as the "greenhouse effect". It is relatively transparent to solar radiation entering the atmosphere at short wavelengths, mostly in the visible range, thus allowing the sun to warm the earth's ocean and land surfaces. On the other hand, longer wavelength infrared radiation emitted from the earth's surface towards space is partially absorbed and re-radiated by the

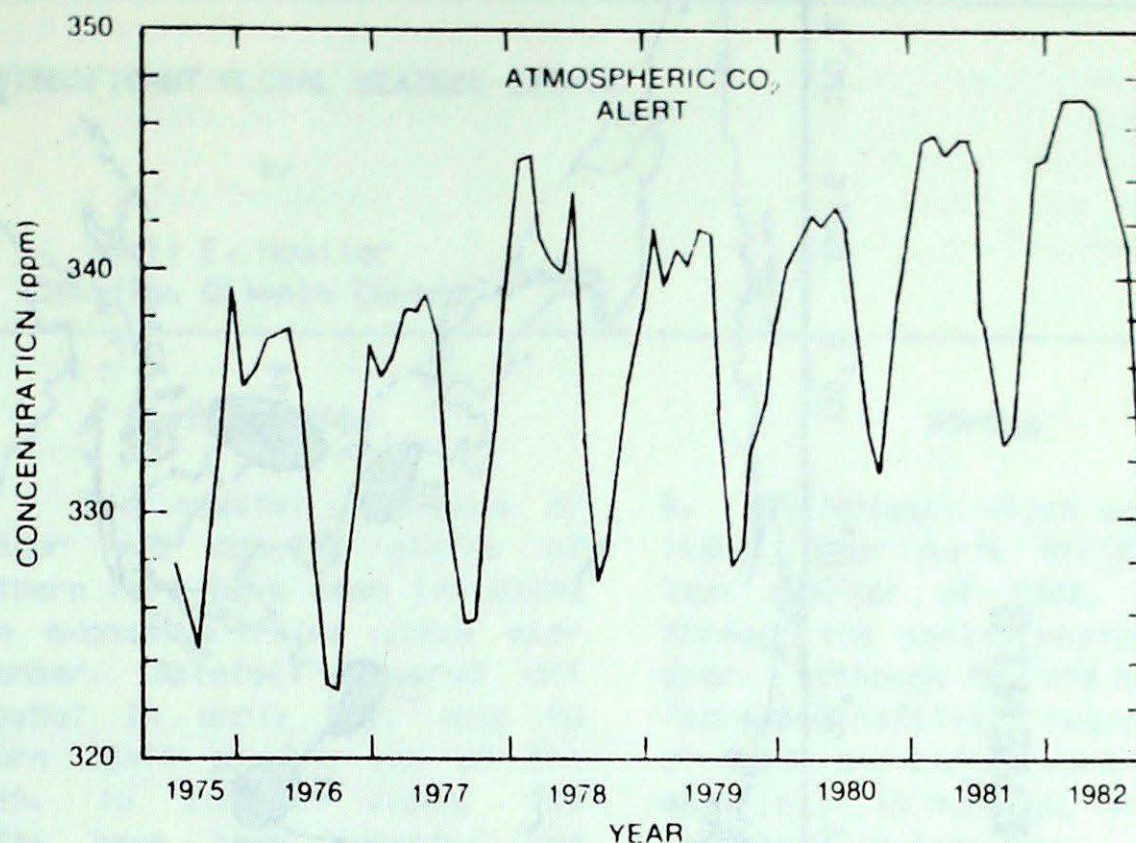


Possible global soil moisture changes for 2 x CO<sub>2</sub> environments, based on paleoclimate, historical and climate model studies (W.W. Kellogg and R. Schwere In "Climate Change and Society", Westview Press, 1981)

carbon dioxide molecules, thus "trapping" additional heat in the lower atmosphere. Increasing the concentration of atmospheric carbon dioxide improves the efficiency of the climate system in "trapping" additional heat. This effect is further complicated by feedback processes involving a variety of climatic parameters, particularly sea ice, snow, water vapour and cloud cover. Intricate computer models developed in recent decades by scientists to simulate the total behaviour of the climate system, have been used to estimate the effect of atmospheric carbon dioxide. These models, although still quite primitive, indicate that average world temperatures could increase between 1.5 and 4.5°C if the carbon dioxide concentration were doubled. Furthermore, they indicate that warming in Arctic regions would be 2-3 times greater, with most significant changes occurring in winter.

Carbon dioxide is not the only "greenhouse" gas that is causing concern. Other minor atmospheric gases, such as methane, freons and oxides of nitrogen, have effects similar to that of carbon dioxide and are also increasing in concentration. These gases could add up to 50 per cent to the effect of carbon dioxide.

Although the timing and magnitude of global temperature changes due to increasing carbon dioxide is still actively debated, scientists generally agree that a carbon dioxide induced warming will likely exceed anything that has occurred in the past 10,000 years and possibly the last 2 million years. Significant alterations in global wind patterns and hence precipitation regimes would result. Tentative scenarios developed by computer models indicate a generally increased aridity for mid northern latitudes between 35°N and 52°N, and increased soil moisture for tropical and Arctic regions. Data from studies of warm climates in past eras tend to support these results. Glacio-



Monthly atmospheric CO<sub>2</sub> concentration trend at Alert, N.W.T.

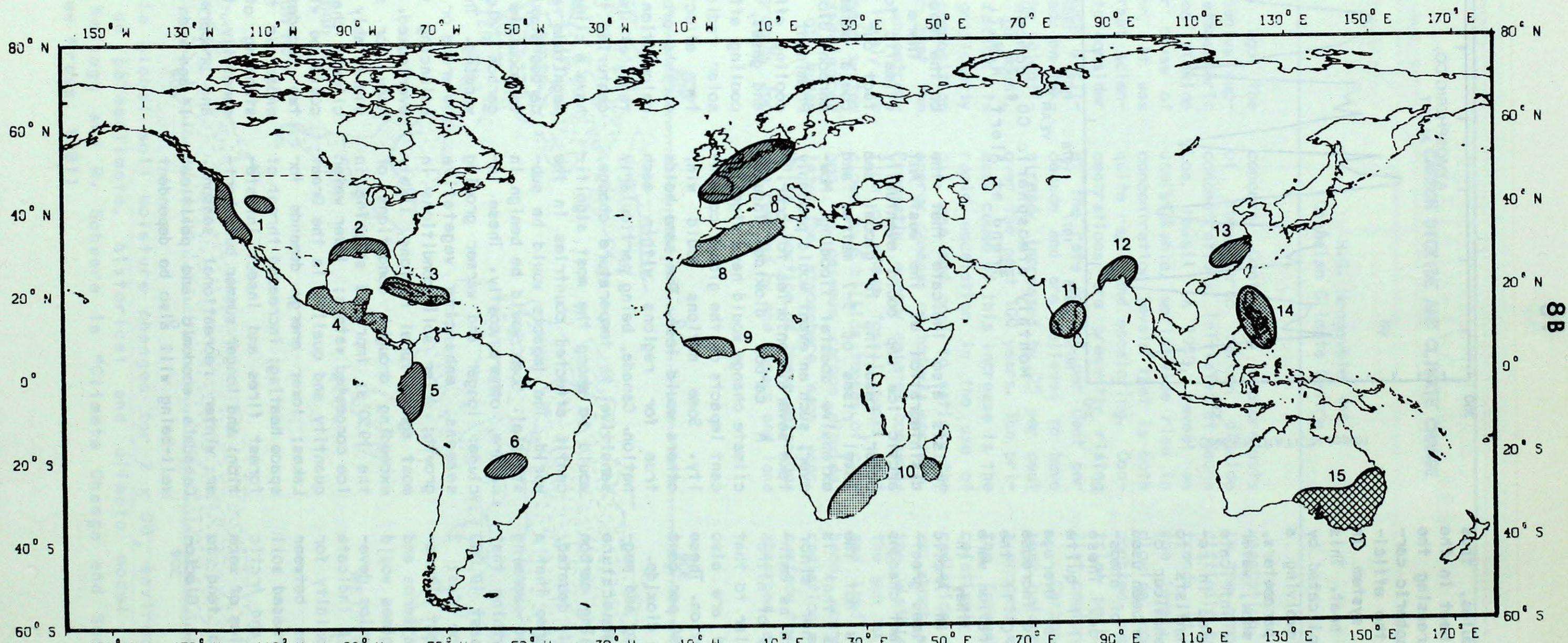
logists also indicate that the disintegration of the west Ant arctic ice cap could eventually occur, resulting in global sea level rises of 5-7 metres and extensive coastal flooding. However, such an event would probably take several centuries to occur.




A carbon dioxide induced climate change would have significant impacts on the global community. Some nations would win, others would lose. The same holds true for regions within each nation. Canada, being particularly sensitive to temperature change, would be among the most significantly affected countries in the world. The impacts would be substantial. Some would be benign in nature, others costly. These include: longer and warmer growing seasons, enhancing vegetative growth; drier soil conditions in most agricultural regions, likely exceeding drought conditions of the 1930's; improved shipping in ice congested waters; lower water quantity and quality in the Great Lakes; lower energy demands for space heating; increased threat of forest fires and insect infestation; and longer summer but shorter winter recreational seasons. Canada's economic and political well-being will also be dependent

on the impact on other countries.

There are, of course, other climatic forces at work that affect our climatic system which could enhance or counteract the carbon dioxide induced effects. Prominent among these are the cooling effects of volcanic dust and gases, the cyclic warming and cooling effects of variations in solar radiation, and the longer term effects of changes in the earth's orbital patterns. Present calculation indicate, however, that at least for the next few centuries these other forces will have a climatic effect an order of magnitude smaller than that for carbon dioxide and would thus tend to modulate the general trend of a carbon dioxide induced global warming. These calculation could be wrong or other possible counter balancing forces may have been overlooked. It is unlikely we will know for sure until the first unmistakably carbon dioxide induced climate change is detected. That could be within the next one or two decades. Meanwhile we must endeavour to improve our understanding of our climate, watch carefully for possible changes, and prepare ourselves to respond if and when necessary.

# RECENT SIGNIFICANT GLOBAL WEATHER EVENTS



- LEGEND**
-  FLOODS
  -  DROUGHT
  -  DROUGHT AND FLOODS

ADAPTED FROM: **NOAA — CLIMATE IMPACT ASSESSMENT FOREIGN — COUNTRIES; JAN.-JUNE 1983.**

NUMBERS ON MAP REFER TO NUMBERS IN TEXT.



## RECENT SIGNIFICANT GLOBAL WEATHER EVENTS

by

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### United States

1. The excessive rains, high winds and heavy surf which began plaguing California, Oregon and Washington states last September, continued into March of this year. At least 45 people died as a result of these storms and combined property and agriculture losses totalled \$1.0 billion.

Unusual warmth in May caused rapid melting of the heavy snow-pack in the Mountains, resulting in flooding and mud slides in Utah, particularly in the vicinity of Salt Lake City.

2. Flooding in Louisiana, Mississippi and Tennessee forced over 50,000 people to abandon their homes in April. In late May, 11,000 fled their homes in Mississippi and Texas due to additional flooding.

### The Caribbean and Central America

3. In Cuba, the period January through March was marked by heavy rains and flooding which destroyed 8,000 hectares of tobacco and more than 454,000 tonnes of sugarcane, in addition to claiming 8 lives. The total agricultural losses amounted to \$150 million and property damage was set at \$20 million. In contrast, rainfall in May was less than 40% of normal, allowing critically dry conditions to develop in some areas.

Haiti and Jamaica have been dry this Spring and some food shortages in Haiti are possible.

4. Tropical Storm Adolph brought some drought relief to Mexico in late May, however drought has continued throughout much of Central America this Spring. Potential agricultural losses induced by drought range between \$50 and \$100 million.

### South America

5. The coastal provinces of Ecuador and coastal plains of northern Peru have been inundated with excessive rains since mid-November. Rainfall tapered off somewhat in early May, only to return again at the end of the month. In Ecuador alone, 100 deaths have been reported and property losses exceeded \$100 million, while agricultural losses could top \$50 million. Economic losses incurred by the immobilization of the fishing industry have yet to be assessed.

In northern Peru, 200 deaths and perhaps \$400 million damage have resulted from flooding and mud slides.

In sharp contrast, central Peru and southern Bolivia, experienced a spring drought resulting in crop and livestock losses nearing \$150 million.

6. Heavy rainfall throughout most of the spring period in north-eastern Argentina and adjacent areas of Brazil and Paraguay, has inflicted widespread crop and property losses. More than 100,000 people in northern Argentina have been reported homeless.

### Western Europe

7. Major river flooding has been a characteristic of this wet Spring in western Europe. In early April and again in the latter half of May, the Rhine River overflowed its banks, flooding the Old City quarter of Cologne, West Germany. Field-work has been delayed due to the wetness. Potential crop damage has been estimated to be in excess of \$100 million.

### Africa

8. The drought which established itself over north Africa in the last quarter of 1982, persisted through the spring months of this year. Although May did bring some increased rainfall, reduced yields of wheat and barley were expected, especially in Morocco, as harvesting began in late May.

9. Drought, which had plagued the west African coastal countries during January, has been eliminated by rain in April and May.

10. Drought has persisted in southern Africa, notably South Africa, Mozambique and Zimbabwe, since last December. Rural and remote areas have reported increased disease, malnutrition and starvation deaths, while crop and livestock losses have been estimated in excess of \$1.0 billion. Maize production is expected to be 50% of normal. Mozambique, the hardest hit area, is experiencing severe food shortages which could continue into June 1984. Crops in the southern Mozambique were almost a total failure.

Rains in late May have alleviated the drought somewhat, but were not timely enough to benefit agriculture.

### South Asia

11. Drought in southern India since last fall has resulted in crop losses totalling \$150 million and \$70 million in energy production losses. Total rice production has been predicted to drop to half the yield required for self-sufficiency. Production losses of 25 to 40 percent have occurred in the cement, fertilizer and caustic soda industries.

The drought which had gripped Sri Lanka from January to April

has been eliminated by ample rains in May.

12. In Bangladesh, floods from heavy rains in April and early May killed 80 people and left 60,000 homeless. Subsistence crops in some regions have been ruined.

#### China

13. Heavy rains and accompanying floods in central and south-eastern China have been reported to have killed several hundred people and injured several thousand this

spring. This type of flooding is reportedly not uncommon and economic and agricultural losses were not expected to be unusual.

#### Southeast Asia

14. A devastating drought has persisted in the Philippines since November 1982, creating serious food and water shortages. About 570 thousand hectares of farmland have been declared unproductive and rice and corn losses have exceeded \$84 million.

#### Australia

15. The severe drought and devastating fires that ravaged south-eastern Australia earlier this year have been replaced by excessive rain and flooding this past Spring. In its wake the drought and fires left 71 people dead, 8,000 homeless, \$500 million in property damage and \$2.5 billion in agricultural losses.

By mid-May the drought had been eradicated but flooding in Queensland and New South Wales threatened 500,000 sheep.

### GREAT LAKES SURFACE WATER TEMPERATURES by George Irbe

Due to a very mild winter, temperature stratification was poorly developed in the Great Lakes. The "thermal bar" ordinarily a long-persisting feature in Lake Ontario and Huron during May and June, was short-lived, or did not develop at all this spring. As a result, water temperatures in

the above named lakes remained slightly above normal even during the spell of cool weather in May and early June. With the onset of very warm weather in the second week of June, surface water temperatures rose rapidly to record values. Similar, but smaller positive departures from normal per-

sisted also in Lake Superior. In Lake Erie, which is much shallower and therefore faster-reacting to anomalous weather conditions, water temperatures were below normal during the May-June cool period, but recovered quickly to above normal values with the onset of very warm weather in June.

|               | April Temp. Dep. |      |     | May Temp. Dep. |       |      | June Temp. Dep. |       |      |
|---------------|------------------|------|-----|----------------|-------|------|-----------------|-------|------|
| Lake Ontario  | 17               | 3.2, | 0.9 | 4              | M,    | M    | 2               | 8.3,  | 0.9  |
|               | 22               | M,   | M   | 6              | 4.5,  | 0.7  | 8               | 10.0, | 1.3  |
|               | 23               | 4.1, | 1.4 | 12             | 7.0,  | 2.4  | 13              | 15.8, | 6.0  |
|               |                  |      |     | 17             | 5.5,  | 0.5  | 14              | 16.9, | 6.9  |
|               |                  |      |     | 24             | 6.6,  | 0.7  | 23              | 21.1, | 8.6  |
|               |                  |      |     |                |       |      | 24              | 19.5, | 6.6  |
|               |                  |      |     |                |       |      | 29              | 18.7, | 4.4  |
| Lake Erie     | 12               | 4.1, | 1.4 | 4              | 6.4,  | 0.2  | 1               | 11.9, | -1.9 |
|               | 21               | 4.0, | 0.1 | 9              | 7.1,  | -0.2 | 8               | 12.9, | -2.2 |
|               | 22               | 5.2, | 1.1 | 24             | 11.4, | -0.2 | 13              | 19.5, | 3.2  |
|               |                  |      |     |                |       | 27   | 22.2,           | 3.3   |      |
| Lake Huron    | 12               | 2.6, | 1.4 | 5              | 3.9,  | 1.0  | 1               | 6.3,  | 0.5  |
|               | 19               | 2.2, | 0.5 | 9              | 4.1,  | 0.7  | 8               | 7.6,  | 0.5  |
|               | 25               | 3.4, | 1.3 | 16             | 4.7,  | 0.8  | 13              | 11.8, | 3.6  |
| Georgian Bay  | 12               | 1.8, | 1.1 | 5              | 2.4,  | 0.0  | 2               | 6.0,  | -0.3 |
|               | 25               | 2.2, | 0.8 | 9              | 3.5,  | 0.7  | 8               | 6.9,  | -0.4 |
|               |                  |      |     | 16             | 4.2,  | 0.5  | 13              | 12.1, | 4.0  |
| Lake Superior | 8                | 1.5, | 1.1 | 2              | M,    | M    | 7               | 4.0,  | 0.6  |
|               | 12               | 0.9, | 0.4 | 8              | 1.8,  | 0.4  | 18              | 4.7,  | 0.4  |
|               | 19               | 1.5, | 0.8 | 15             | 2.9,  | 1.2  | 28              | 7.2,  | 1.7  |
|               | 23               | 2.0, | 1.2 | 16             | 3.1,  | 1.3  |                 |       |      |

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| STATION                                  | Temperature °C<br>Température °C |  |                     |                     | Snowfall (cm)<br>Chute de neige (cm) | Total Precipitation (mm)<br>Précipitation totale (mm) | % of Normal Precipitation<br>% de précipitation normale | Snow on ground at end of month (cm)<br>Neige au sol à la fin du mois (cm) | No. of days with Precip. 1.0 or more (mm)<br>Nombre de jours de préc. 1.0 ou plus (mm) | Bright sunshine (hours)<br>Durée de l'insolation (heures) | Degree Days below 18°C<br>Degrés-jours au-dessous de 18°C | Mean Sea Level Pressure (kPa)<br>Pression au niveau moyen de la mer (kPa) | Mean Vapour Pressure (kPa)<br>Pression de vapeur moyenne (kPa) |
|--|----------------------------------|--|---------------------|---------------------|--------------------------------------|---|---|---|--|---|---|---|--|
|  | Mean<br>Moyenne                  | Difference from Normal<br>Écart à la normale | Maximum<br>Maximale | Minimum<br>Minimale |                                      |   |   |   |  |   |   |   |  |
| BRITISH COLUMBIA<br>COLOMBIE-BRITANNIQUE |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Abbotsford A                             | 15.0                             | 0.3  | 25.7                | 6.8                 | 0.0                                  | 86.8  | 135   | 0   | 13   | 197   | 90.2  | 101.5   | 1.29   |
| Alert Bay                                | 12.0                             | -0.3   | 20.5                | 6.2                 | 0.0                                  | 124.5   | 190   | 0   | 18   |   | 180.1   | 101.6   | 1.20   |
| Blue River                               | 13.4                             | -0.3   | 27.5                | 2.7                 | 0.0                                  | 120.1   | 147   | 0   | 18   | 143   |   |   |  |
| Bull Harbour                             | 12.0                             | 0.6  | 18.2                | 5.8                 | 0.0                                  | 238.9   | 308   | 0   | 22   | 180   | 179.6   | 101.6   | 1.26   |
| Burns Lake                               | 12.2                             | 0.7  | 23.8                | 0.8                 | 0.0                                  | 90.2  | 163   | 0   | 15   | 138   | 174.1   |   |  |
| Cape St. James                           | 12.5                             | 1.9  | 20.6                | 7.5                 | T                                    | 143.2   | 195   | 0   | 15   |   | 166.1   | 101.4   | 1.25   |
| Cape Scott                               | 11.9                             | 0.4  | 17.2                | 7.8                 | 0.0                                  | 244.9   | 237   | 0   | 19   |   | 184.7   | 101.6   | 1.26   |
| Castlegar A                              | 16.2                             | -0.7   | 29.5                | 5.0                 | 0.0                                  | 74.6  | 119   | 0   | 14   | 228   | 64.3  | 101.3   |  |
| Comox A                                  | 15.3                             | 0.3  | 25.3                | 8.1                 | 0.0                                  | 46.2  | 131   | 0   | 12   |   | 83.0  | 101.5   | 1.21   |
| Cranbrook A                              | 14.1                             | -0.4   | 26.1                | 3.1                 | 0.0                                  | 81.5  | 179   | 0   | 12   | 261   | 112.0   | 101.2   | .95  |
| Dease Lake                               | 11.2                             | 0.8  | 27.9                | -1.8                | 0.0                                  | 75.9  | 174   | 0   | 15   | 182   | 203.7   | 101.2   | .89  |
| Etheida Bay                              | 11.8                             | 0.5  | 18.1                | 4.3                 | 0.0                                  | 242.9   | 192   | 0   | 19   |   | 186.0   |   |  |
| Fort Nelson A                            | 15.5                             | 1.1  | 29.7                | 2.4                 | 0.0                                  | 56.3  | 81  | 0   | 11   | 287   | 86.3  | 101.0   | 1.09   |
| Fort St John A                           | 13.9                             | 0.4  | 25.6                | 5.3                 | 0.0                                  | 109.0   | 160   | 0   | 10   |   | 124.4   | 101.2   | 1.02   |
| Hope A                                   | 15.6                             | -0.2   | 26.8                | 8.3                 | 0.0                                  | 118.4   | 183   | 0   | 14   | 156   | 75.3  | 101.6   | 1.27   |
| Kamloops A                               | 17.9                             | -0.1   | 30.6                | 7.2                 | 0.0                                  | 25.5  | 85  | 0   | 7  | 195   | 27.9  | 101.2   | 1.05   |
| Kelowna A                                | 15.9                             | 0.0  | 29.4                | 3.1                 | 0.0                                  | 52.1  | 194   | 0   | 7  | 227   | 70.8  | 101.3   | 1.06   |
| Langara                                  | 11.5                             | 1.4  | 16.8                | 5.3                 | 0.0                                  | 111.8   | 125   | 0   | 17   |   | 194.2   | 101.3   | 1.17   |
| Lytton                                   | 17.5                             | -0.6   | 29.4                | 7.8                 | 0.0                                  | 35.0  | 179   | 0   | 6  | 181   | 36.9  | 101.2   | 1.04   |
| Mackenzie A                              | 12.9                             | 0.4  | 25.3                | 2.2                 | 0.0                                  | 93.6  | 140   | 0   | 12   | 162   | 153.6   |   |  |
| McInnes Island                           | 13.0                             | 1.0  | 19.2                | 8.4                 | 0.0                                  | 268.0   | 219   | 0   |  |   | 152.5   | 101.5   | 1.30   |
| Merry Island                             | 15.7                             | 0.2  | 22.1                | 11.0                | 0.0                                  | 67.7  | 152   | 0   | 15   | 161   | 68.0  |   |  |
| Penticton A                              | 16.6                             | -0.6   | 30.1                | 3.7                 | 0.0                                  | 67.6  | 245   | 0   | 8  | 221   | 53.2  | 101.2   | 1.08   |
| Port Alberni A                           | 14.5                             | -0.3   | 27.7                | 4.6                 | 0.0                                  | 75.4  | 208   | 0   | 10   | 123   | 105.2   |   |  |
| Port Hardy A                             | 12.4                             | 0.6  | 17.4                | 5.5                 | 0.0                                  | 163.1   | 231   | 0   | 19   | 172   | 168.8   | 101.6   | 1.22   |
| Prince George A                          | 12.8                             | -0.1   | 23.4                | 3.5                 | 0.0                                  | 145.6   | 218   | 0   | 23   | 149   | 155.8   | 101.3   | 1.08   |
| Prince Rupert A                          | 12.0                             | 1.2  | 19.4                | 4.9                 | 0.0                                  | 83.8  | 65  | 0   | 16   | 119   | 178.8   |   |  |
| Princeton A                              | 13.9                             | -0.6   | 28.6                | 2.8                 | 0.0                                  | 32.0  | 121   | 0   | 7  | 221   |   |   |  |
| Quesnel A                                | 14.2                             | 0.2  | 25.4                | 5.8                 | 0.0                                  | 137.1   | 217   | 0   | 21   |   | 114.5   | 101.2   | 1.15   |
| Revelstoke A                             | 16.1                             | 0.2  | 29.6                | 5.6                 | 0.0                                  | 78.0  | 120   | 0   | 14   | 187   | 61.1  | 101.2   | 1.18   |
| Sandspit A                               | 12.6                             | 1.0  | 20.6                | 6.1                 | 0.0                                  | 92.0  | 178   | 0   | 19   | 153   | 167.5   | 101.0   |  |
| Smithers A                               | 12.7                             | 0.2  | 26.5                | 3.3                 | 0.0                                  | 82.7  | 207   | 0   | 17   | 161   | 159.1   | 101.2   | 1.09   |
| Stewart A                                | 14.3                             | 1.1  | 28.9                | 4.7                 | 0.0                                  | 85.9  | 142   | 0   | 16   | 119   | 114.1   |   |  |
| Terrace A                                | 13.7                             | -0.0   | 26.9                | 6.2                 | 0.0                                  | 71.3  | 168   | 0   | 19   | 114   | 126.8   | 101.3   | 1.03   |
| Vancouver Harbour                        |                                  |  | 23.6                | 10.5                | 0.0                                  | 101.3   | 162   | 0   | 13   |   |   |   |  |
| Vancouver Int'l A                        | 15.3                             | 0.2  | 24.1                | 9.4                 | 0.0                                  | 63.2  | 140   | 0   | 12   | 180   | 82.7  | 101.5   | 1.29   |
| Victoria Gonzales Heights                | 14.4                             | 0.6  | 25.0                | 8.8                 | 0.0                                  | 20.1  | 100   | 0   | 5  | 232   | 109.1   |   |  |
| Victoria Int'l A                         | 14.6                             | 0.3  | 25.7                | 7.5                 | 0.0                                  | 31.1  | 107   | 0   | 9  | 209   | 102.0   | 101.6   | 1.21   |
| Victoria Marine                          | 13.0                             | 0.5  | 22.2                | 6.1                 | 0.0                                  | 34.5  | 131   | 0   | 6  |   | 148.4   | 101.6   | 1.20   |
| Williams Lake A                          | 12.7                             | -0.3   | 23.5                | 3.8                 | 0.0                                  | 88.8  | 197   | 0   | 16   | 177   | 159.2   | 101.3   | .95  |

| STATION  | Temperature °C<br>Température °C |  |                     |                     | Snowfall (cm)<br>Chute de neige (cm) | Total Precipitation (mm)<br>Précipitation totale (mm) | % of Normal Precipitation<br>% de précipitation normale | Snow on ground at end of month (cm)<br>Neige au sol à la fin du mois (cm) | No. of days with Precip. 1.0 or more (mm)<br>Nombre de jours de préc. 1.0 ou plus (mm) | Bright sunshine (hours)<br>Durée de l'insolation (heures) | Degree Days below 18°C<br>Degrés-jours au-dessous de 18°C | Mean Sea Level Pressure (kPa)<br>Pression au niveau moyen de la mer (kPa) | Mean Vapour Pressure (kPa)<br>Pression de vapeur moyenne (kPa) |      |
|--|----------------------------------|--|---------------------|---------------------|--------------------------------------|---|---|---|--|---|---|---|--|------|
|  | Mean<br>Moyenne                  | Difference from Normal<br>Écart à la normale | Maximum<br>Maximale | Minimum<br>Minimale |                                      |   |   |   |  |   |   |   |  |      |
| YUKON TERRITORY<br>TERRITOIRE DU YUKON             |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |      |
| Burwash A  | 11.5                             | 1.2  | 27.0                | -1.7                | 0.0                                  | 42.1  | 93  | 0   | 7  |   |   | 191.3   | 101.1  | .76  |
| Dawson A   | 14.2                             | 1.3  | 32.9                | -0.6                | 0.0                                  | 38.9  | 90  | 0   | 7  |   |   | 130.1   | 100.9  | 1.02 |
| Mayo A   | 14.6                             | 1.2  | 30.0                | -0.3                | 0.0                                  | 32.2  | 91  | 0   | 8  |   |   | 118.4   | 100.9  | .96  |
| Watson Lake A                                      | 14.0                             | 1.3  | 28.0                | 2.0                 | 0.0                                  | 47.6  | 92  | 0   | 9  | 275   |   | 119.3   | 101.0  | .94  |
| Whitehorse A                                       | 13.0                             | 1.0  | 29.6                | -0.5                | 0.0                                  | 37.3  | 121   | 0   | 8  | 243   |   | 152.4   | 101.1  | .84  |
| NORTHWEST TERRITORIES<br>TERRITOIRES DU NORD-OUEST |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |      |
| Alert  | -0.3                             | 0.7  | 12.3                | -9.9                | 39.4                                 | 31.0  | 256   | 2   | 6  | 287   |   | 549.7   | 101.9  | .48  |
| Baker Lake   | 5.1                              | 1.0  | 23.8                | -3.6                | 1.0                                  | 10.6  | 51  | 0   | 3  | 314   |   | 388.4   | 101.4  | .68  |
| Cambridge Bay A                                    | 3.6                              | 2.1  | 15.2                | -6.5                | 0.6                                  | 5.1   | 39  | 0   | 1  | 354   |   | 433.7   | 101.5  | .64  |
| Cape Dyer A  | 0.9                              | 0.7  | 11.6                | -6.9                | 8.2                                  | 28.2  | 72  | 2   | 6  |   |   | 512.7   | 101.0  | .52  |
| Cape Parry A                                       | 3.4                              | 1.8  | 16.8                | -3.8                | 0.8                                  | 12.3  | 86  | 0   | 4  |   |   | 438.0   | 101.4  | .64  |
| Clyde  | 1.2                              | 0.6  | 9.9                 | -7.3                | 13.6                                 | 15.9  | 127   | T   | 5  | 236   |   | 595.3   | 101.9  | .54  |
| Coppermine   | 5.0                              | 1.2  | 24.5                | -4.2                | 1.0                                  | 14.1  | 83  | 0   | 4  | 402   |   | 390.4   | 101.6  | .68  |
| Coral Harbour A                                    | 2.4                              | 0.3  | 17.0                | -5.8                | 0.6                                  | 31.9  | 119   | T   | 6  | 264   |   | 478.8   | 101.1  | .59  |
| Eureka   | 2.3                              | 0.5  | 11.3                | -4.2                | 8.0                                  | 10.7  | 198   | 0   | 5  | 286   |   | 474.3   | 100.8  | .58  |
| Fort Reliance                                      | 9.3                              | -0.2   | 23.7                | -2.3                | 0.0                                  | 20.1  | 77  | 0   | 4  |   |   | 261.0   | 101.5  | .77  |
| Fort Simpson A                                     | 15.4                             | 1.0  | 30.6                | -0.2                | 0.0                                  | 24.4  | 63  | 0   | 7  | 325   |   | 101.3   | 101.1  | 1.00 |
| Fort Smith A                                       | 14.0                             | 0.4  | 29.3                | 2.2                 | 0.0                                  | 12.5  | 30  | 0   | 5  | 311   |   | 134.4   | 101.2  | .96  |
| Frobisher Bay A                                    | 3.8                              | 0.4  | 12.5                | -4.4                | 0.2                                  | 29.7  | 75  | T   | 2  | 235   |   | 424.7   | 101.0  | .58  |
| Hall Beach A                                       | 1.6                              | 1.6  | 11.8                | -6.0                | 0.4                                  | 19.4  | 116   | T   | 5  |   |   | 490.3   | 100.1  | .59  |
| Hay River A  | 11.4                             | -0.5   | 29.5                | -0.5                | 0.0                                  | 28.5  | 106   | 0   | 5  |   |   | 213.3   | 101.2  | .89  |
| Inuvik A   | 11.6                             | 1.5  | 27.1                | -2.5                | 2.6                                  | 6.3   | 27  | 0   | 4  | 409   |   | 197.7   | 101.2  | .79  |
| Mould Bay A  | 1.0                              | 1.3  | 8.0                 | -4.9                | 13.0                                 | 16.0  | 254   | 2   | 3  | 274   |   | 511.1   | 101.1  | .56  |
| Norman Wells A                                     | 15.5                             | 1.5  | 32.2                | 5.2                 | 0.0                                  | 24.1  | 65  | 0   | 8  | 327   |   | 74.6  | 101.1  | 1.04 |
| Pont Inlet A                                       |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |      |
| Resolute A   | 0.8                              | 1.4  | 7.9                 | -7.0                | 15.4                                 | 22.6  | 187   | 0   | 6  | 242   |   | 517.1   | 101.1  | .57  |
| Sachs Harbour A                                    | 2.1                              | 0.2  | 12.9                | -2.8                | 3.6                                  | 10.7  | 147   | 0   | 4  | 402   |   | 478.3   | 101.4  | .60  |
| Yellowknife A                                      | 13.1                             | 0.2  | 28.0                | 0.5                 | T                                    | 12.2  | 73  | 0   | 4  | 409   |   | 156.0   | 101.3  | .82  |
| ALBERTA  |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |      |
| Banff  | 11.5                             | -0.1   | 24.0                | 1.5                 | 0.0                                  | 92.0  | 150   | 0   |  |   |   |   |  |      |
| Brooks   | 15.4                             | -0.1   | 28.5                | 4.0                 | 0.0                                  | 67.2  | 94  | 0   |  | 235   |   |   |  |      |
| Calgary Int'l A                                    | 14.0                             | 0.5  | 26.7                | 3.4                 | 0.0                                  | 47.8  | 53  | 0   | 9  | 250   |   | 121.4   | 101.1  | .88  |
| Cold Lake A  | 14.2                             | -0.3   | 28.0                | 0.5                 | 0.0                                  | 92.0  | 128   | 0   | 13   | 194   |   | 122.8   | 101.0  | 1.10 |
| Coronation A                                       | 14.0                             | -0.4   | 27.1                | 2.0                 | 0.0                                  | 132.0   | 229   | 0   | 13   | 228   |   | 121.5   | 101.1  | .96  |
| Edmonton Int'l A                                   | 13.6                             | -0.5   | 28.1                | 0.2                 | 0.0                                  | 151.1   | 197   | 0   | 10   | 228   |   | 137.7   | 101.1  | 1.02 |
| Edmonton Municipal A                               | 15.1                             | 0.0  | 28.3                | 1.8                 | 0.0                                  | 188.3   | 244   | 0   | 13   | 236   |   | 98.9  | 101.0  | 1.06 |
| Edmonton Namao A                                   | 14.3                             | -0.4   | 27.6                | 0.8                 | 0.0                                  | 187.4   | 240   | 0   | 12   |   |   | 119.6   | 101.0  | 1.04 |

JUNE 1983 JUIN

| STATION              | Temperature °C<br>Température °C |  |                     |                     | Snowfall (cm)<br>Chute de neige (cm) | Total Precipitation (mm)<br>Précipitation totale (mm) | % of Normal Precipitation<br>% de précipitation normale | Snow on ground at end of month (cm)<br>Neige au sol à la fin du mois (cm) | No. of days with Precip. 1.0 or more (mm)<br>Nombre de jours de préc. 1.0 ou plus (mm) | Bright sunshine (hours)<br>Durée de l'insolation (heures) | Degree Days below 18°C<br>Degrés-jours au-dessous de 18°C | Mean Sea Level Pressure (kPa)<br>Pression au niveau moyen de la mer (kPa) | Mean Vapour Pressure (kPa)<br>Pression de vapeur moyenne (kPa) | STATION               | Temperature °C<br>Température °C |  |                     |                     | Snowfall (cm)<br>Chute de neige (cm) | Total Precipitation (mm)<br>Précipitation totale (mm) | % of Normal Precipitation<br>% de précipitation normale | Snow on ground at end of month (cm)<br>Neige au sol à la fin du mois (cm) | No. of days with Precip. 1.0 or more (mm)<br>Nombre de jours de préc. 1.0 ou plus (mm) | Bright sunshine (hours)<br>Durée de l'insolation (heures) | Degree Days below 18°C<br>Degrés-jours au-dessous de 18°C | Mean Sea Level Pressure (kPa)<br>Pression au niveau moyen de la mer (kPa) | Mean Vapour Pressure (kPa)<br>Pression de vapeur moyenne (kPa) |
|----------------------|----------------------------------|--|---------------------|---------------------|--------------------------------------|---|---|---|--|---|---|---|--|-----------------------|----------------------------------|--|---------------------|---------------------|--------------------------------------|---|---|---|--|---|---|---|--|
|                      | Mean<br>Moyenne                  | Difference from Normal<br>Écart à la normale | Maximum<br>Maximale | Minimum<br>Minimale |                                      |   |   |   |  |   |   |   |  |                       | Mean<br>Moyenne                  | Difference from Normal<br>Écart à la normale | Maximum<br>Maximale | Minimum<br>Minimale |                                      |   |   |   |  |   |   |   |  |
| Edson A              | 12.1                             | 0.3  | 25.4                | -0.5                | 0.0                                  | 114.6   | 130   | 0   | 13   | 201   | 176.3   | 101.1   | .95  | Pilot Mount           | 16.3                             | 0.1  | 30.5                | 0.2                 | 0.0                                  | 77.7  | 98  | 0   | 11   |   | 79.5  | 101.2   | 1.27   |
| Fort Chipewyan A     | 13.4                             | -0.2   | 28.0                | 0.0                 | 0.0                                  | 23.6  | 57  | 0   |  |   |   |   |  | Portage la Prairie A  | 16.8                             | -0.2   | 32.8                | 2.5                 | 0.0                                  | 64.1  | 85  | 0   | 12   |   | 65.5  |   |  |
| Fort McMurray A      | 14.2                             | 0.2  | 29.3                | 0.8                 | 0.0                                  | 40.0  | 62  | 0   | 7  | 221   | 123.0   | 101.1   | 1.01   | The Pas A             | 15.0                             | 0.6  | 32.0                | 2.1                 | 0.0                                  | 72.7  | 115   | 0   | 12   | 274   | 105.8   | 101.1   | 1.12   |
| Grande Prairie A     | 14.0                             | 0.3  | 26.5                | 5.5                 | 0.0                                  | 141.3   | 202   | 0   | 14   | 235   | 121.3   | 101.1   | 1.01   | Thompson A            | 13.3                             | 1.1  | 33.0                | -2.0                | T                                    | 22.5  | 39  | 0   | 6  | 316   | 156.0   | 101.2   | .91  |
| High Level A         | 14.1                             | 0.5  | 29.1                | 0.5                 | 0.0                                  | 29.7  | 56  | 0   | 7  | 296   | 123.0   | 101.1   | 1.00   | Winnipeg Int'l A      | 17.1                             | 0.3  | 32.2                | 0.8                 | 0.0                                  | 139.2   | 174   | 0   | 11   | 273   | 65.6  | 101.1   | 1.32   |
| Jasper               | 12.3                             | -0.1   | 25.2                | 1.5                 | 0.0                                  | 73.8  | 135   | 0   | 12   | 174   | 172.1   | 101.3   | .86  | ONTARIO               |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Lethbridge A         | 15.2                             | -0.2   | 27.6                | 5.3                 | 0.0                                  | 27.9  | 36  | 0   | 8  | 215   | 85.9  | 101.1   | .96  | Atikokan              | 15.2                             | 0.7  | 32.0                | -2.4                | 0.0                                  | 161.2   | 171   | 0   | 12   |   | 114.9   | 101.3   | 1.26   |
| Medicine Hat A       | 16.6                             | 0.0  | 29.4                | 3.2                 | 0.0                                  | 31.1  | 49  | 0   | 6  | 267   | 61.0  | 101.0   | 1.01   | Earlton A             | 16.0                             | 0.8  | 33.6                | 0.1                 | 0.0                                  | 52.0  | 58  | 0   | 8  |   | 103.6   | 101.5   |  |
| Peace River A        | 14.1                             | 0.4  | 26.2                | 3.8                 | 0.0                                  | 108.6   | 182   | 0   | 11   |   | 118.9   | 101.1   | 1.06   | Geraldton             | 14.3                             | 0.8  | 30.7                | -4.6                | T                                    | 64.1  | 70  | 0   | 10   |   | 136.2   | 101.4   | 1.11   |
| Red Deer A           | 13.5                             | -0.1   | 27.4                | 2.8                 | 0.0                                  | 106.3   | 126   | 0   | 11   |   | 135.5   | 101.2   | 1.03   | Gore Bay A            | 16.1                             | 0.5  | 30.5                | 3.2                 | 0.0                                  | 38.4  | 66  | 0   | 6  | 319   | 83.6  | 101.6   | 1.28   |
| Rocky Mountain House | 10.2                             | -2.6   | 26.6                | 1.6                 | 0.0                                  | 95.5  | 91  | 0   | 13   |   | 185.2   | 101.1   | .95  | Hamilton              | 19.2                             | 0.5  | 34.5                | 4.1                 | 0.0                                  | 53.0  | 78  | 0   | 7  |   | 38.2  |   |  |
| Slave Lake A         | 13.6                             | 0.3  | 27.2                | 2.1                 | 0.0                                  | 182.5   | 221   | 0   | 12   | 243   | 135.2   | 101.1   | 1.08   | Hamilton A            | 18.7                             | 0.7  | 31.6                | 3.9                 | 0.0                                  | 88.6  | 137   | 0   | 6  |   | 50.0  |   |  |
| Suffield A           | 16.5                             | 0.5  | 29.2                | 3.5                 | 0.0                                  | 60.0  | 91  | 0   | 6  | 237   | 49.0  |   |  | Kapuskaing A          | 15.8                             | 1.7  | 33.0                | -0.8                | T                                    | 62.5  | 74  | 0   | 11   |   | 118.8   | 101.4   | 1.14   |
| Whitecourt           | 12.9                             | 0.2  | 25.6                | 1.8                 | 0.0                                  | 180.6   | 197   | 0   | 16   |   | 154.1   | 101.1   | 1.09   | Kenora A              | 16.4                             | 0.3  | 29.9                | 2.7                 | 0.0                                  | 79.3  | 95  | 0   | 9  |   | 83.8  | 101.2   | 1.38   |
| SASKATCHEWAN         |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  | Kingston A            | 17.5                             | 0.8  | 29.9                | 5.0                 | 0.0                                  | 39.6  | 62  | 0   | 5  | 302   | 56.8  | 101.6   | 1.51   |
| Broadview            | 15.2                             | 0.3  | 31.4                | 2.2                 | 0.0                                  | 36.9  | 42  | 0   | 9  | 254   | 98.1  | 101.2   | .97  | Lansdowne House       | 15.0                             | 1.5  | 33.2                | -0.4                | 3.0                                  | 77.8  | 96  | 0   | 8  |   | 129.7   | 101.2   | 1.14   |
| Buffalo Narrows      |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  | London A              | 18.4                             | 0.5  | 33.6                | 4.0                 | 0.0                                  | 89.7  | 122   | 0   | 6  | 292   | 18.4  | 101.7   | 1.44   |
| Collins Bay          |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  | Moosonee              | 14.6                             | 2.7  | 34.0                | -2.0                | T                                    | 36.0  | 46  | 0   | 7  | 255   | 170.0   | 101.2   | 1.16   |
| Cree Lake            | 12.3                             | -0.6   | 28.0                | 0.0                 | 1.4                                  | 67.2  | 132   | 0   | 9  | 276   | 175.3   | 101.2   | .92  | Mount Forest          | 16.6                             | 0.7  | 31.0                | 1.0                 | 0.0                                  | 32.0  | 40  | 0   | 6  | 311   | 75.5  | 101.7   | 1.33   |
| Estevan A            | 16.7                             | 0.2  | 34.6                | 3.3                 | 0.0                                  | 38.8  | 50  | 0   | 8  | 282   | 65.6  | 101.2   | 1.11   | Muskoka A             | 16.5                             | 0.6  | 31.8                | -0.5                | 0.0                                  | 46.1  | 56  | 0   | 6  |   | 81.7  |   |  |
| Hudson Bay           | 15.2                             | 0.6  | 31.9                | 2.4                 | 0.0                                  | 91.9  | 128   | 0   | 10   | 259   | 97.0  | 101.1   | 1.12   | North Bay A           | 16.9                             | 1.2  | 30.6                | 2.1                 | 0.0                                  | 63.2  | 74  | 0   | 8  | 312   | 81.6  | 101.6   | 1.26   |
| Kindersley           | 16.0                             | 0.8  | 31.1                | 2.3                 | 0.0                                  | 30.9  | 50  | 0   | 6  |   | 77.3  | 101.0   | .99  | Ottawa Int'l A        | 19.4                             | 1.4  | 33.3                | 5.0                 | 0.0                                  | 52.8  | 72  | 0   | 8  | 316   | 45.1  | 101.5   | 1.30   |
| La Ronge A           | 14.1                             | 0.1  | 28.3                | 1.5                 | 0.0                                  | 106.4   | 126   | 0   | 12   |   | 128.6   | 101.1   | 1.17   | Petawawa A            | 19.6                             | 3.3  | 32.8                | 6.2                 | 0.0                                  | 23.3  | 27  | 0   | 3  |   | 10.7  | 101.7   | 1.51   |
| Meadow Lake          | 14.2                             | -0.7   | 29.5                | -2.3                | 0.0                                  | 73.4  | 99  | 0   | 10   | 192   | 124.5   | 101.0   | 1.10   | Peterborough A        | 17.3                             | 0.5  | 31.5                | -0.1                | 0.0                                  | 50.8  | 84  | 0   | 4  |   | 62.0  |   |  |
| Moose Jaw A          | 16.4                             | -0.2   | 30.9                | 1.3                 | 0.0                                  | 37.1  | 56  | 0   | 4  | 288   | 70.7  | 101.1   | 1.00   | Pickle Lake           | 15.1                             | 1.2  | 32.3                | -2.7                | 1.4                                  | 105.2   | 120   | 0   | 9  |   | 127.3   | 101.3   | 1.10   |
| Nipawin A            | 15.1                             |  | 27.1                | 4.0                 | 0.0                                  | 87.4  |   | 0   | 11   | 248   | 92.6  | 101.1   | 1.16   | Red Lake A            | 14.4                             | -0.9   | 30.6                | -2.5                | 0.0                                  | 96.1  | 114   | 0   | 9  | 224   | 127.4   | 101.2   | 1.16   |
| North Battleford A   | 15.2                             | -0.2   | 29.4                | 1.8                 | 0.0                                  | 139.2   | 231   | 0   | 11   |   | 94.7  | 101.1   | 1.07   | St. Catharines A      | 19.6                             | 0.6  | 32.0                | 4.7                 | 0.0                                  | 68.2  | 100   | 0   | 9  |   | 37.7  |   |  |
| Prince Albert A      | 15.1                             | 0.5  | 29.2                | 0.5                 | 0.0                                  | 57.1  | 83  | 0   | 13   | 218   | 99.8  | 101.2   | 1.09   | Sarnia A              | 18.3                             | 0.2  | 34.3                | 4.1                 | 0.0                                  | 65.2  | 97  | 0   | 6  | 304   | 50.5  |   |  |
| Regina A             | 15.8                             | -0.1   | 31.1                | 0.5                 | 0.0                                  | 73.2  | 92  | 0   | 8  | 276   | 81.9  | 101.1   | 1.03   | Sault Ste. Marie A    | 15.8                             | 1.2  | 31.9                | -1.1                | 0.0                                  | 57.1  | 77  | 0   | 5  | 303   | 93.5  | 101.6   | 1.27   |
| Saskatoon A          | 16.2                             | 0.5  | 31.7                | -0.4                | 0.0                                  | 115.2   | 195   | 0   | 7  |   | 80.8  | 101.1   | 1.04   | Simcoe                | 18.5                             | 0.2  | 31.3                | 3.0                 | 0.0                                  | 67.6  | 101   | 0   | 5  |   | 51.4  | 101.7   | 1.44   |
| Swift Current A      | 15.2                             | 0.1  | 29.7                | -0.8                | 0.0                                  | 33.1  | 44  | 0   | 7  | 233   | 98.2  |   |  | Sioux Lookout A       | 15.8                             | 0.6  | 30.1                | 2.0                 | 0.0                                  | 124.3   | 136   | 0   | 12   |   | 98.3  | 101.3   | 1.20   |
| Uranium City A       | 13.2                             | -0.3   | 32.2                | 3.0                 | 0.0                                  | 25.3  | 72  | 0   | 7  |   | 160.4   | 101.3   | .86  | Sudbury A             | 17.3                             | 1.3  | 31.7                | 0.4                 | 0.0                                  | 38.4  | 46  | 0   | 6  | 285   | 77.4  | 101.6   | 1.16   |
| Wynyard              | 15.5                             | 0.3  | 29.1                | 2.8                 | 0.0                                  | 42.2  | 56  | 0   | 7  | 279   | 90.9  | 101.1   | 1.05   | Thunder Bay A         | 14.0                             | 0.0  | 31.5                | -0.6                | 0.0                                  | 67.9  | 89  | 0   | 9  | 262   | 132.6   | 101.4   | 1.16   |
| Yorkton A            | 15.3                             | -0.2   | 32.6                | 3.5                 | 0.0                                  | 106.8   | 151   | 0   | 10   | 255   | 93.6  | 101.2   | 1.11   | Timmins A             | 15.3                             | 0.7  | 33.3                | 0.0                 | T                                    | 67.2  | 75  | 0   | 6  |   | 119.6   | 101.6   | 1.04   |
| MANITOBA             |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  | Toronto               | 20.0                             | 0.9  | 32.8                | 5.9                 | 0.0                                  | 29.6  | 46  | 0   | 5  | 292   | 36.0  |   |  |
| Bissett              | 15.4                             | 0.1  | 29.7                | -1.7                | 0.0                                  | 81.1  | 86  | 0   | 11   | 225   | 103.5   | 101.1   | 1.26   | Toronto Int'l A       | 18.2                             | 0.5  | 33.1                | 3.2                 | 0.0                                  | 33.0  | 49  | 0   | 7  |   | 50.7  | 101.6   | 1.37   |
| Brandon A            | 15.9                             | -0.2   | 32.7                | 1.2                 | 0.0                                  | 68.0  | 88  | 0   | 9  |   | 84.0  | 101.1   | 1.22   | Toronto Island A      | 18.0                             | 0.9  | 32.6                | 6.5                 | 0.0                                  | 30.9  | 46  | 0   | 6  |   | 45.2  | 101.6   | 1.47   |
| Churchill A          | 5.5                              | -0.7   | 26.5                | -3.5                | 0.2                                  | 58.1  | 134   | 0   | 9  | 205   | 376.4   | 101.2   | .74  | Trenton A             | 18.1                             | 0.3  | 31.8                | 1.9                 | 0.0                                  | 42.5  | 67  | 0   | 6  |   | 51.2  | 101.5   | 1.46   |
| Dauphin A            | 15.4                             | -0.4   | 32.4                | -0.4                | 0.0                                  | 112.9   | 131   | 0   | 13   | 237   | 94.7  | 101.1   | 1.09   | Trout Lake (Big)      | 12.6                             | 0.6  | 29.9                | -2.2                | 1.2                                  | 117.4   | 178   | 0   | 8  |   | 174.1   | 101.2   | 1.02   |
| Gillam A             | 12.1                             | 1.8  | 30.9                | -4.2                | T                                    | 41.2  | 135   | 0   | 9  |   | 207.1   | 101.9   | .95  | Waterloo-Wellington A | 17.7                             | 0.2  | 32.5                | 2.2                 | 0.0                                  | 54.6  | 71  | 0   | 7  |   | 60.2  |   |  |
| Gimli                | 16.0                             | 0.2  | 31.9                | 1.5                 | 0.0                                  | 173.8   | 190   | 0   | 13   | 245   | 85.6  | 101.1   | 1.37   | Wawa A                | 12.5                             |  | 29.7                | -3.0                | T                                    | 46.5  |   | 0   | 7  |   | 164.1   | 101.6   | 1.09   |
| Island Lake          | 14.4                             | 1.2  | 32.8                | -0.3                | 0.0                                  | 56.3  | 121   | 0   | 8  |   | 130.7   | 101.2   | 1.07   | Warton A              | 16.6                             | 1.0  | 29.5                | 2.6                 | 0.0                                  | 48.1  | 72  | 0   | 6  | 332   | 80.0  | 101.6   | 1.36   |
| Lynn Lake A          | 13.2                             | 1.2  | 30.4                | -1.2                | 3.3                                  | 36.9  | 61  | 0   | 8  | 297   | 143.7   | 101.2   | 1.08   | Windsor A             | 20.5                             | 0.8  | 34.3                | 6.7                 | 0.0                                  | 110.5   | 124   | 0   | 6  |   | 27.2  | 101.6   | 1.53   |
| Norway House A       | 14.4                             |  | 32.3                | 1.3                 | 0.0                                  | 23.4  |   | 0   | 6  |   | 121.8   | 101.1   | 1.02   |                       |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |

| STATION                            | Temperature °C<br>Température °C |  |                     |                     | Snowfall (cm)<br>Chute de neige (cm) | Total Precipitation (mm)<br>Précipitation totale (mm) | % of Normal Precipitation<br>% de précipitation normale | Snow on ground at end of month (cm)<br>Neige au sol à la fin du mois (cm) | No. of days with Precip. 1.0 or more (mm)<br>Nombre de jours de préc. 1.0 ou plus (mm) | Bright sunshine (hours)<br>Durée de l'insolation (heures) | Degree Days below 18°C<br>Degrés-jours au-dessous de 18°C | Mean Sea Level Pressure (kPa)<br>Pression au niveau moyen de la mer (kPa) | Mean Vapour Pressure (kPa)<br>Pression de vapeur moyenne (kPa) |
|------------------------------------|----------------------------------|--|---------------------|---------------------|--------------------------------------|---|---|---|--|---|---|---|--|
|                                    | Mean<br>Moyenne                  | Difference from Normal<br>Écart à la normale | Maximum<br>Maximale | Minimum<br>Minimale |                                      |   |   |   |  |   |   |   |  |
| QUEBEC                             |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Bagotville A                       | 16.2                             | 0.7  | 33.9                | 1.0                 | 0.0                                  | 63.8  | 70  | 0   | 12   | 92.1  | 101.3   | 1.18  |  |
| Baie Comeau A                      | 13.3                             | 0.6  | 28.9                | 0.5                 | 0.0                                  | 37.4  | 44  | 0   | 8  | 145.6   | 101.2   | 1.13  |  |
| Blanc Sablon                       | 8.7                              | 1.7  | 16.6                | 0.0                 | 0.0                                  | 107.7   | 115   | 0   | 13   | 231   | 278.4   | .97   |  |
| Chibougamau A                      | 14.4                             | 0.7  | 31.9                | -0.6                | 1.4                                  | 76.8  | 71  | 0   | 10   | 284   | 147.4   | 1.11  |  |
| Kuujujuac A                        | 8.8                              | 1.9  | 26.4                | -1.5                | 3.6                                  | 49.4  | 97  | 0   | 11   | 162   | 279.8   | .73   |  |
| Gaspe A                            | 14.0                             | 0.4  | 32.4                | 0.0                 | 0.0                                  | 37.4  | 64  | 0   | 7  | 271   | 131.3   | 1.20  |  |
| Inukjuac                           | 5.2                              | 0.8  | 18.3                | -2.2                | 0.8                                  | 29.2  | 84  | 0   | 6  | 233   | 392.7   | .71   |  |
| La Grande Rivière                  | 12.3                             | 35.0   | -4.0                | 2.0                 | 65.8                                 |   |   | 0   | 10   | 227   | 167.4   | .98   |  |
| Maniwaki                           | 16.7                             | 0.8  | 33.2                | -0.4                | 0.0                                  | 44.2  | 49  | 0   | 6  | 305   | 83.3  | 1.35  |  |
| Matagami A                         | 14.2                             | 1.0  | 32.1                | -1.0                | T                                    | 59.0  | 61  | 0   | 13   | 281   | 160.2   |   |  |
| Mont Joli A                        | 15.4                             | 1.1  | 32.5                | 4.0                 | 0.0                                  | 31.8  | 51  | 0   | 7  | 305   | 103.7   | 1.22  |  |
| Montreal Int'l A                   | 18.7                             | 0.4  | 31.8                | 4.4                 | 0.0                                  | 39.6  | 48  | 0   | 10   | 283   | 49.5  | 1.47  |  |
| Montreal Mirabel Int'l A           | 17.8                             |  | 32.5                | 0.2                 | 0.0                                  | 26.2  |   | 0   | 6  |   | 26.2  | 1.42  |  |
| Natashquan                         | 11.0                             | 0.5  | 21.4                | 2.5                 | 0.0                                  | 37.4  | 42  | 0   | 5  | 222   | 209.6   | 1.14  |  |
| Nitchequon                         | 11.5                             | 1.7  | 30.0                | 0.0                 | 28.7                                 | 179.8   | 213   | 0   | 18   |   | 212.5   | 1.03  |  |
| Kuujuuarapik A                     | 5.6                              | -0.9   | 31.0                | -2.9                | 12.4                                 | 60.0  | 106   | 0   | 9  | 190   | 289.3   | .90   |  |
| Quebec A                           | 17.5                             | 1.1  | 33.4                | 2.5                 | 0.0                                  | 38.5  | 35  | 0   | 6  | 293   | 65.7  | 1.40  |  |
| Roberval A                         | 17.3                             | 1.8  | 34.9                | 0.1                 | T                                    | 44.5  | 55  | 0   | 9  | 295   | 91.6  | 1.32  |  |
| St. Agathe des Monts               | 16.1                             | 1.1  | 31.5                | -1.0                | 0.0                                  | 39.8  | 40  | 0   | 10   | 289   | 100.4   | 1.33  |  |
| St. Hubert A                       | 18.4                             | 0.2  | 32.8                | 1.3                 | 0.0                                  | 29.3  | 34  | 0   | 7  |   | 56.7  | 1.47  |  |
| Schefferville A                    | 10.6                             | 2.0  | 30.5                | -1.0                | 5.9                                  | 91.5  | 124   | 0   | 16   |   | 238.5   | .89   |  |
| Sept-Iles A                        | 12.8                             | 1.1  | 28.7                | 0.0                 | 0.0                                  | 35.0  | 39  | 0   | 9  | 231   | 166.0   | 1.07  |  |
| Sherbrooke A                       | 15.9                             | 0.4  | 31.1                | -1.6                | 0.0                                  | 35.1  | 36  | 0   | 10   | 281   | 100.8   | 1.39  |  |
| Val d'Or A                         | 15.3                             | 0.7  | 32.1                | -1.0                | T                                    | 40.5  | 43  | 0   | 5  | 294   | 128.8   | 1.12  |  |
| NEW BRUNSWICK<br>NOUVEAU-BRUNSWICK |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Charlo A                           | 15.9                             | 1.6  | 34.8                | 2.2                 | 0.0                                  | 34.2  | 41  | 0   | 9  | 298   | 98.8  | 1.21  |  |
| Chatham A                          | 17.0                             | 1.3  | 34.2                | 4.2                 | 0.0                                  | 36.2  | 44  | 0   | 5  | 280   | 68.0  | 1.24  |  |
| Fredericton A                      | 16.9                             | 0.7  | 34.0                | 3.8                 | 0.0                                  | 29.2  | 34  | 0   | 6  | 250   | 60.7  | 1.28  |  |
| Moncton A                          | 15.9                             | 0.9  | 33.8                | 3.8                 | 0.0                                  | 37.5  | 42  | 0   | 6  | 265   | 83.1  | 1.30  |  |
| Saint John A                       | 14.8                             | 1.0  | 32.0                | 2.4                 | 0.0                                  | 43.9  | 47  | 0   | 4  | 227   | 110.4   | 1.22  |  |

| STATION                                       | Temperature °C<br>Température °C |  |                     |                     | Snowfall (cm)<br>Chute de neige (cm) | Total Precipitation (mm)<br>Précipitation totale (mm) | % of Normal Precipitation<br>% de précipitation normale | Snow on ground at end of month (cm)<br>Neige au sol à la fin du mois (cm) | No. of days with Precip. 1.0 or more (mm)<br>Nombre de jours de préc. 1.0 ou plus (mm) | Bright sunshine (hours)<br>Durée de l'insolation (heures) | Degree Days below 18°C<br>Degrés-jours au-dessous de 18°C | Mean Sea Level Pressure (kPa)<br>Pression au niveau moyen de la mer (kPa) | Mean Vapour Pressure (kPa)<br>Pression de vapeur moyenne (kPa) |
|---|----------------------------------|--|---------------------|---------------------|--------------------------------------|---|---|---|--|---|---|---|--|
|   | Mean<br>Moyenne                  | Difference from Normal<br>Écart à la normale | Maximum<br>Maximale | Minimum<br>Minimale |                                      |   |   |   |  |   |   |   |  |
| NOVA SCOTIA<br>NOUVELLE-ÉCOSSE                |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Eddy Point                                    | 14.3                             | 1.4  | 25.8                | 6.0                 | 0.0                                  | 65.5  | 74  | 0   | 7  | 261   | 113.0   | 101.4   | 1.29   |
| Greenwood A                                   | 15.9                             | 0.0  | 33.1                | 3.2                 | 0.0                                  | 47.2  | 66  | 0   | 6  |   | 82.2  | 101.4   | 1.36   |
| Halifax Int'l A                               | 16.0                             | 1.2  | 32.2                | 7.4                 | 0.0                                  | 53.4  | 60  | 0   | 5  |   | 80.1  | 101.5   | 1.26   |
| Sable Island                                  | 12.3                             | 1.3  | 20.2                | 5.6                 | 0.0                                  | 102.0   | 109   | 0   | 10   | 202   | 171.4   | 101.5   | 1.33   |
| Shearwater A                                  | 15.6                             | 1.7  | 33.0                | 5.8                 | 0.0                                  | 76.7  | 91  | 0   | 7  | 230   | 93.5  | 101.4   | 1.28   |
| Sydney A                                      | 14.0                             | 0.8  | 27.8                | 2.4                 | 0.0                                  | 58.6  | 71  | 0   | 10   | 267   | 119.2   | 101.4   | 1.22   |
| Truro   | 14.8                             | 0.6  | 26.8                | 3.3                 | 0.0                                  | 46.3  | 77  | 0   | 5  | 219   | 99.5  | 101.4   | 1.32   |
| Yarmouth A                                    | 14.0                             | 0.6  | 24.1                | 4.7                 | 0.0                                  | 36.5  | 45  | 0   | 4  | 217   | 124.2   | 101.5   | 1.29   |
| PRINCE EDWARD ISLAND<br>ILE-DU-PRINCE-ÉDOUARD |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Charlottetown A                               | 15.2                             | 0.7  | 28.5                | 6.4                 | 0.0                                  | 38.0  | 48  | 0   | 7  |   | 93.3  | 101.4   | 1.33   |
| Summerside A                                  | 15.8                             | 0.9  | 29.5                | 7.5                 | 0.0                                  | 31.2  | 42  | 0   | 8  | 251   | 79.8  | 101.3   | 1.29   |
| NEWFOUNDLAND<br>TERRE-NEUVE                   |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Argentia                                      | 9.7                              | 0.0  | 19.4                | 1.2                 | 0.0                                  | 145.1   | 194   | 0   | 11   |   | 248.9   | 101.5   | 1.08   |
| Battle Harbour                                | 6.4                              | -0.2   | 21.4                | -0.2                | T                                    | 79.0  | 98  | 0   | 12   |   | 350.0   | 101.1   | .80  |
| Bonavista                                     | 10.9                             | 1.3  | 25.0                | 0.6                 | 0.0                                  | 52.4  | 82  | 0   | 11   |   | 212.2   | 101.3   | 1.03   |
| Burgeo  | 10.1                             | 0.5  | 18.8                | 3.8                 | 0.0                                  | 90.9  | 67  | 0   | 10   | 193   | 237.3   | 101.4   | 1.07   |
| Cartwright                                    | 8.4                              | 0.0  | 27.8                | -1.8                | 1.8                                  | 70.3  | 90  | 0   | 15   | 184   | 288.7   | 101.0   | .84  |
| Churchill Falls A                             | 11.2                             | 1.4  | 29.5                | -2.4                | T                                    | 69.4  | 71  | 0   | 17   | 174   | 210.6   | 101.0   | .95  |
| Comfort Cove                                  | 12.3                             | 0.6  | 28.0                | 0.0                 | 0.0                                  | 69.8  | 88  | 0   | 10   |   | 170.3   | 101.2   | 1.07   |
| Daniel's Harbour                              | 10.8                             | 1.0  | 21.4                | 3.7                 | 0.0                                  | 111.5   | 129   | 0   | 12   | 226   | 216.0   | 101.1   | 1.10   |
| Deer Lake A                                   | 13.6                             | 1.9  | 27.0                | -0.6                | 0.0                                  | 156.4   | 222   | 0   | 9  |   | 139.6   | 101.2   | 1.19   |
| Gander Int'l A                                | 12.6                             | 0.8  | 26.8                | -0.3                | 0.0                                  | 45.8  | 57  | 0   | 9  | 216   | 165.0   | 101.2   | 1.07   |
| Goose A                                       | 11.4                             | 0.1  | 29.6                | 0.7                 | 1.1                                  | 86.8  | 93  | 0   | 16   | 162   | 203.6   | 100.9   | .98  |
| Hopedale                                      | 7.2                              | 0.8  | 27.7                | -1.2                | 1.5                                  | 37.7  | 59  | 0   | 9  |   | 325.7   | 100.9   | .77  |
| Port-aux-Basques                              | 10.3                             | 1.3  | 20.9                | 3.8                 | 0.0                                  | 120.0   | 117   | 0   | 10   |   | 230.1   | 101.3   | 1.09   |
| St. Anthony                                   | 8.5                              | 0.5  | 23.0                | -2.0                | T                                    | 79.6  | 86  | 0   | 13   |   | 282.7   | 101.1   | .91  |
| St. John's A                                  | 11.5                             | 0.6  | 29.3                | -0.7                | 0.0                                  | 85.8  | 100   | 0   | 13   | 189   | 196.7   | 101.4   | 1.05   |
| St. Lawrence                                  | 10.7                             | 2.3  | 20.5                | 1.2                 | 0.0                                  | 200.9   | 188   | 0   | 10   |   | 220.6   |   |  |
| Stephenville A                                | 12.7                             | 0.8  | 24.8                | 4.4                 | 0.0                                  | 157.2   | 182   | 0   | 10   | 238   | 157.5   | 101.2   | 1.17   |
| Wabush Lake A                                 | 12.1                             | 2.0  | 33.3                | 0.1                 | 4.3                                  | 95.5  | 114   | 0   | 17   | 209   | 178.1   | 101.0   | 1.01   |

| STATION   | Temperature °C<br>Température °C |  |                     |                     | Snowfall (cm)<br>Chute de neige (cm) | Total Precipitation (mm)<br>Précipitation totale (mm) | % of Normal Precipitation<br>% de précipitation normale | Snow on ground at end of month (cm)<br>Neige au sol à la fin du mois (cm) | No. of days with Precip. 1.0 or more (mm)<br>Nombre de jours de préc. 1.0 ou plus (mm) | Bright sunshine (hours)<br>Durée de l'insolation (heures) | Degree Days<br>above 5°C<br>Degrés-jours<br>au-dessus<br>de 5°C |   | Mean Dew Point °C<br>Point de rosée moyen °C |
|---|----------------------------------|--|---------------------|---------------------|--------------------------------------|---|---|---|--|---|---|---|--|
|   | Mean<br>Moyenne                  | Difference from Normal<br>Écart à la normale | Maximum<br>Maximale | Minimum<br>Minimale |                                      |   |   |   |  |   | This Month<br>Présent mois                                      | Since Jan. 1st<br>Depuis le 1 <sup>er</sup> janv. |  |
|   |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| AGROCLIMATOLOGICAL STATIONS AGROCLIMATOLOGIQUES |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| BRITISH COLUMBIA<br>COLOMBIE-BRITANNIQUE        |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Agassiz   | 15.4                             | -0.4   | 26.5                | 7.5                 | 0.0                                  | 123.4   | 162   | 0   | 16   | 174   | 313.3   | 994.1   |  |
| Kamloops  |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Sidney  |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Summerland                                      | 16.6                             | -1.0   | 30.0                | 5.5                 | 0.0                                  | 57.2  | 230   | 0   | 11   | 265   | 344.0   | 799.5   |  |
| ALBERTA   |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Beaverlodge                                     | 13.0                             | -0.3   | 25.0                | 3.5                 | 0.0                                  | 135.8   | 220   | 0   | 12   | 223   | 303.6   | 515.4   |  |
| Ellerslie                                       | 13.8                             |  | 27.5                | -0.5                | 0.0                                  | 187.2   |   | 0   | 11   | 238   | 265.5   | 488.3   |  |
| Fort Vermilion                                  |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Lacombe   | 18.8                             | 5.1  | 28.0                | 1.5                 | 0.0                                  | 94.0  | 110   | 0   | 11   | 201   | 250.0   | 447.2   |  |
| Lethbridge                                      |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Vauxhall  |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Vegreville                                      |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| SASKATCHEWAN                                    |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Indian Head                                     | 16.7                             | 1.6  | 31.5                | 2.5                 | 0.0                                  | 70.2  | 90  | 0   | 11   |   |   |   |  |
| Melfort   | 15.5                             | 0.9  | 30.5                | 4.5                 | 0.0                                  | 42.1  | 66  | 0   | 10   | 222   | 308.0   | 459.5   |  |
| Regina  | 15.6                             | 0.6  | 31.5                | -1.5                | 0.0                                  | 38.2  | 51  | 0   | 8  |   | 320.8   | 445.8   |  |
| Saskatoon                                       | 15.5                             |  | 30.0                | 1.0                 | 0.0                                  | 117.2   |   | 0   | 6  | 279   | 319.0   | 516.0   |  |
| Scott   | 14.9                             | 0.7  | 28.5                | 1.0                 | 0.0                                  | 64.8  | 105   | 0   | 9  | 254   | 297.3   | 480.0   |  |
| Swift Current South                             | 15.5                             | 0.7  | 30.0                | -0.5                | 0.0                                  | 29.0  | 35  | 0   | 6  | 276   | 310.6   | 535.2   |  |
| MANITOBA  |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Brandon   | 16.2                             | 0.3  | 33.5                | 0.0                 | 0.0                                  | 70.5  | 84  | 0   | 6  | 235   | 343.2   | 511.1   |  |
| Glenlea   | 19.5                             |  | 32.5                | -1.5                | 0.0                                  | 81.7  |   | 0   | 10   | 259   | 369.5   | 536.0   |  |
| Morden  | 17.5                             | 0.6  | 32.5                | 1.5                 | 0.0                                  | 62.0  | 81  | 0   | 12   | 258   | 374.0   | 580.0   |  |
| ONTARIO   |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Delhi   | 18.8                             | 0.2  | 32.0                | 2.5                 | 0.0                                  | 61.8  | 83  | 0   | 6  | 304   | 334.7   | 681.1   |  |
| Elora   | 17.3                             |  | 32.4                | -0.5                | 0.0                                  | 41.1  |   | 0   | 8  | 303   | 371.0   | 561.5   |  |
| GUELPH  |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Guelph  | 17.2                             | -0.4   | 32.6                | -0.7                | 0.0                                  | 54.0  | 74  | 0   | 8  | 288   | 361.5   | 569.5   |  |
| HARROW  |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Harrow  | 20.5                             | 0.4  | 34.5                | 6.1                 | 0.0                                  | 84.4  | 109   | 0   | 7  | 289   | 459.1   | 599.6   |  |
| KAPUSKASING                                     |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Kapuskasing                                     |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| MERIVALE  |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Merivale  |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| OTTAWA  |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Ottawa  | 19.1                             | 1.0  | 33.1                | 2.5                 | 0.0                                  | 79.8  | 108   | 0   | 7  | 313   | 422.1   | 655.5   |  |
| SMITHFIELD                                      |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Smithfield                                      | 18.6                             | 1.4  | 32.0                | 1.0                 | 0.0                                  | 18.3  | 25  | 0   | 6  |   | 410.0   | 631.0   |  |
| VINELAND STATION                                |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Vineland Station                                | 18.6                             | 0.0  | 32.4                | 4.3                 | 0.0                                  | 83.2  | 126   | 0   | 6  | 318   | 408.2   | 652.9   |  |
| WOODSLEE  |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Woodslee  | 19.7                             | 0.2  | 34.5                | 3.0                 | 0.0                                  | 111.4   | 143   | 0   | 9  |   |   |   |  |
| QUEBEC  |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| La Pocatiere                                    | 15.8                             | 0.2  | 33.0                | 4.0                 | 0.0                                  | 30.6  | 32  | 0   | 5  | 340   | 352.3   | 455.1   |  |
| L'Assomption                                    | 18.4                             | 0.8  | 32.5                | 1.5                 | 0.0                                  | 41.4  | 51  | 0   | 9  | 289   | 404.2   | 619.6   |  |
| Lavaltrie                                       |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Lennoxville                                     | 15.3                             | 0.9  | 31.5                | -1.0                | 0.0                                  | 43.3  | 53  | 0   | 9  | 281   | 307.2   | 396.4   |  |
| Normandin                                       |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| St. Augustin                                    |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Ste. Clothilde                                  | 18.5                             | 0.7  | 32.0                | 0.5                 | 0.0                                  | 33.7  | 39  | 0   | 6  | 297   | 411.2   | 655.7   |  |
| NEW BRUNSWICK<br>NOUVEAU-BRUNSWICK              |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Fredericton                                     |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| NOVA SCOTIA<br>NOUVELLE-ECOSSE                  |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Kentville                                       | 16.5                             | 1.1  | 32.0                | 4.5                 | 0.0                                  | 39.1  | 56  | 0   | 5  | 224   | 345.7   | 641.1   |  |
| Nappan  | 15.6                             | 1.2  | 29.0                | 3.0                 | 0.0                                  | 34.6  | 47  | 0   | 6  | 236   | 302.5   | 563.3   |  |
| PRINCE EDWARD ISLAND<br>ILE-DU-PRINCE-EDOUARD   |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| Charlottetown                                   | 15.6                             | 0.9  | 29.0                | 6.5                 | 0.0                                  | 40.3  | 51  | 0   | 8  | 232   |   | 545.4   |  |
| NEWFOUNDLAND<br>TERRE-NEUVE                     |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |
| St. John's West                                 |                                  |  |                     |                     |                                      |   |   |   |  |   |   |   |  |