Environment Canada Environnement Canada

Climatic Perspectives MONTHLY SUPPLEMENT

lian Climate Centre

UDC: 551.506.1(71)

(Aussi disponible en français)

VOL.5 OCTOBER 1983

ACROSS THE COUNTRY

Yukon and Northwest Territories

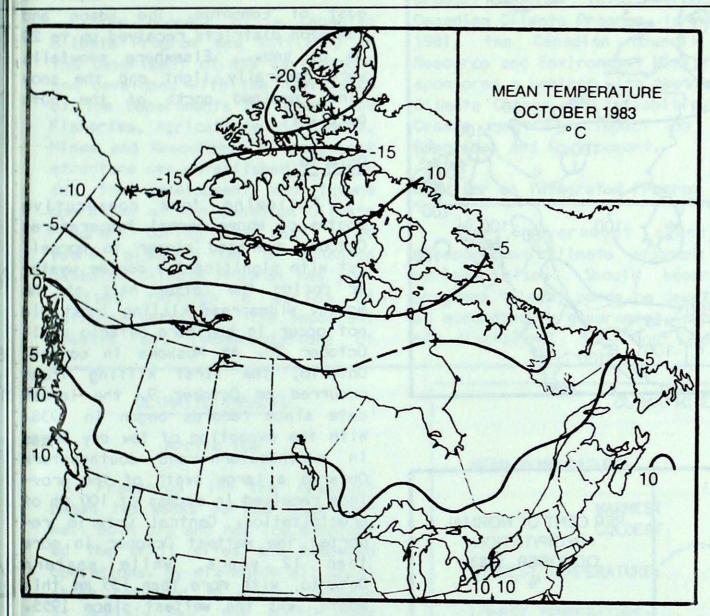
Temperatures were near normal across the north except in the Mackenzie District, where values were 2 to 4 degrees below normal. Temperatures during the latter half of the month were unseasonally cold and thus favoured an early freeze up in the Beaufort. The coldest temperature was at Eureka, -41°. cover in the Yukon was two to three weeks early this year. By the end of the month snow depths ranged between 20 and 50 centimetres in the north. Precipitation varied widely this month. Heaviest amounts, approximately 50 mm, fell in the Keewatin District. Precipitation at Fort Reliance was 175% of normal, while Cape Dyer on Baffin Island had only 14 per cent of its normal precipitation.

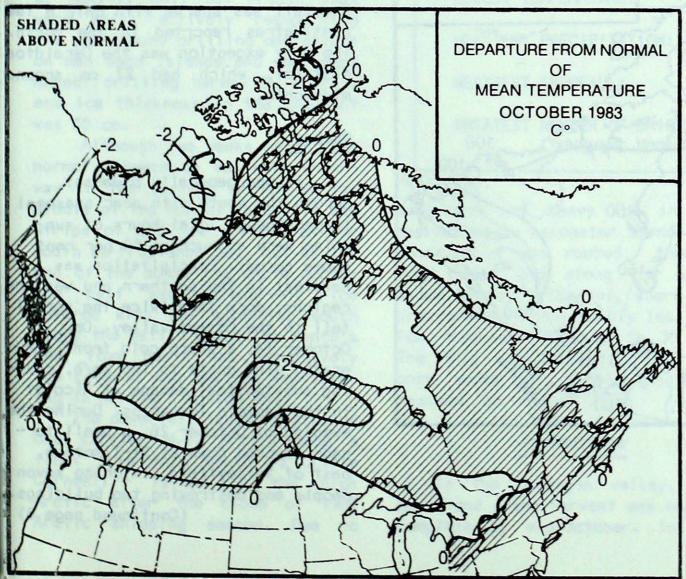
British Columbia

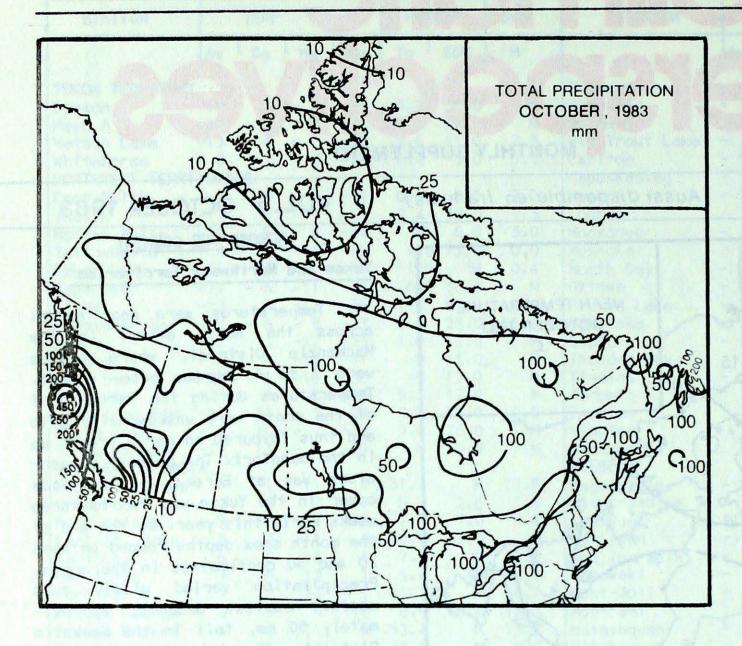
Overall it was pleasant with near seasonal mean temperatures. Hours of bright sunshine were marginally above normal in the south, but below normal elsewhere. It was a relatively dry month along the coast and in the southern interior. Pentiction in the Okanagan, had only 5 mm of rain, while Princeton received 6 mm, 25 per cent of its normal. Heavier precipitation fell in the central interior, especially during the first half of the month, causing delays in the harvest. Precipitation totals in the Peace River District were 179 per cent of normal.

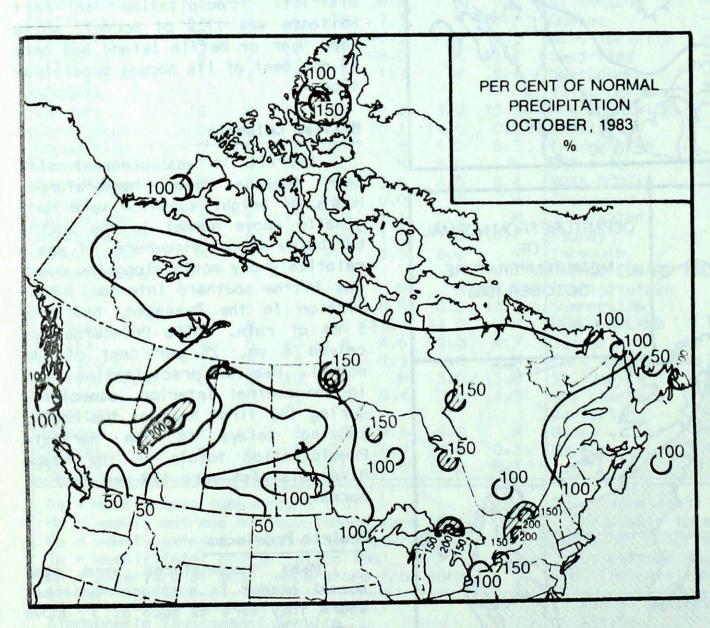
Prairie Provinces

Mean temperatures were near normal except in northern Manitoba, where they were as much as 3° above normal. The month began on the cool side with record low temperatures, but near the end of the month temperatures rebounded to above normal values. Both Swift Current and









Medicine Hat reached 27° on October 26. The driest area was southern Alberta, where there was less than 20 per cent of the normal precipitation. The northern half of Alberta and a small part of southern Manitoba had above normal values. On October 27, a significant snowfall occurred in a line from Jasper to east of Edmonton. The Edson and Edmonton districts received up to 20 Elsewhere snowfalls cm of snow. were generally light and the snow line remained north of the 60th parallel.

Ontario

Following four consecutive months of above normal temperatures October averaged closer to normal, but with significantly cooler weather during the latter half of the month. Widespread killing frost did not occur in southern Ontario until October 20. At Muskoka in central Ontario, the first killing frost occurred on October 9, the latest date since records began in 1938. with the exception of few dry areas in northwestern and southwestern Ontario a large swath of the province received in excess of 100 mm of precipitation. Central Ontario reported the wettest October in more than 12 years, while eastern Ontario, with more than 135 mm this month, was the wettest since 1955. Snowfall was sparse with only a few centimetres reported in the north. The only exception was the Geraldton district, which had 27 cm around mid-month.

Quebec

It was generally pleasant across the south with near seasonal temperatures. Total hours of sunshine were as much as 50 per cent above normal. Precipitation was heaviest in the southern and western regions; more than twice the normal fell in the Ottawa valley. On October 14, a sharp cold front generated wind gusts to 140 km/h, causing substantical damage at Nicolet in the Eastern Townships. During the evening of October 28, a small tornado touched down at St-Timothée, east of Valleyfield, injuring seven people and destroying two buildings. (Continued page 8)

THE CANADIAN CLIMATE PROGRAMME

J. Sandilands
Canadian Climate Centre

A National Climate Program

The concept of a Canadian Climate Program was initiated in the Department of the Environment and developed with the assistance of the Departments of Oceans and Fisheries, Agriculture and Energy, Mines and Resources. A management structure was established to oversee the development and future operation of the Canadian Climate Program. During the past three years, planning for an enhanced Canadian Climate Program has progressed through a series of national workshops. The important results and recommendations of

these national workshops have been brought together into a proposed Canadian Climate Program. In March 1981, the Canadian Council of Resource and Environment Ministers sponsored a seminar with the theme Climate Change and Variability in Canada and its Impact on our Resources and Environment.

Need for an Integrated Program

Many government agencies already have climate programs of various sizes. Should separate programs to meet needs be developed according to government, sector of discipline, the cost would

prove prohibitive. On the other hand, the sharing of systems would save finanical and human resources and allow powerful technologies to be used at affordable costs. A Canadian Climate Program Office, operating through committee structures, promotes the integration and coordination of activities to ensure that the benefits of cooperative action are achieved.

Facilities or technologies that could be developed and shared on an integrated basis include:

- Centralized data banks of standard, non-standard and proxy data with direct access (Continued page 8)

CLIMATIC IMPACTS

Arctic Ice

Freeze-up in the Beaufort began two weeks earlier than normal. Both old and new ice enveloped the drill sites and hampered operations. By mid-month all drill ships returned to winter harbour at McKinly Bay, but Arctic tugs were still actively resupplying the year-round drilling operations on man made islands and semi-permanent drilling berms. By month's end ice thickness in the Beaufort was 35 cm.

Although two weeks later than normal, freeze up was well under-way in the eastern Arctic by the middle of the month. In Baffin Bay strips of old ice drifted as far south as Frobisher Bay, but by the end of the month the whole northern half was extensively ice covered with ice extending south along the Baffin Coast. By month's end, Foxe Basin was extensively ice covered and new ice was forming in Northern Hudson Bay.

The powerfull ice-strengthened ore carrier M.V. Arctic made a final trip this month to Little Cornwallis Island in the high Arctic after the close of 1983 Arctic shipping season. Due to

CLIMATIC EXTREMES - OCTOBER, 1983

MEAN TEMPERATURE:

WARMEST COLDEST	Sable Island, NS Eureka, NWT	12.2° +24.5°
HIGHEST TEMPERATURE:	Windsor, ONT	27.7°
LOWEST TEMPERATURE:	Eureka, NWT	-41.1°
HEAVIEST PRECIPITATION:	Ethelda Bay, BC	450 mm
HEAVIEST SNOWFALL:	Dawson, YT	61.7 cm
GREATEST NUMBER OF BRIGHT SUNSHINE HOURS:	Medicine Hat, ALTA	202 hrs

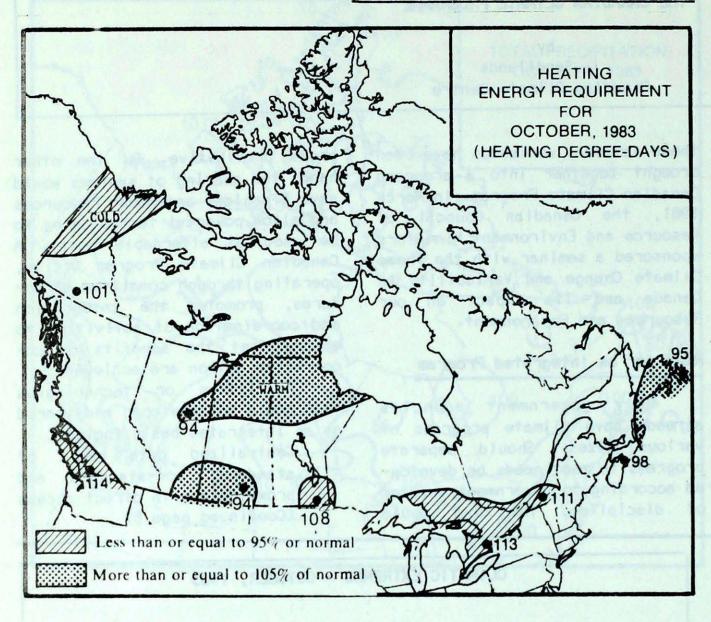
dangerous and heavy ice in the approaches to Lancaster Sound, the round trip was routed through Pond Inlet and along the north shore of Parry Channel, where ice pressure was considerably less and ice thickness were up to 35 cm. The trip was uneventful and the open water of Baffin Bay was reached on October 31.

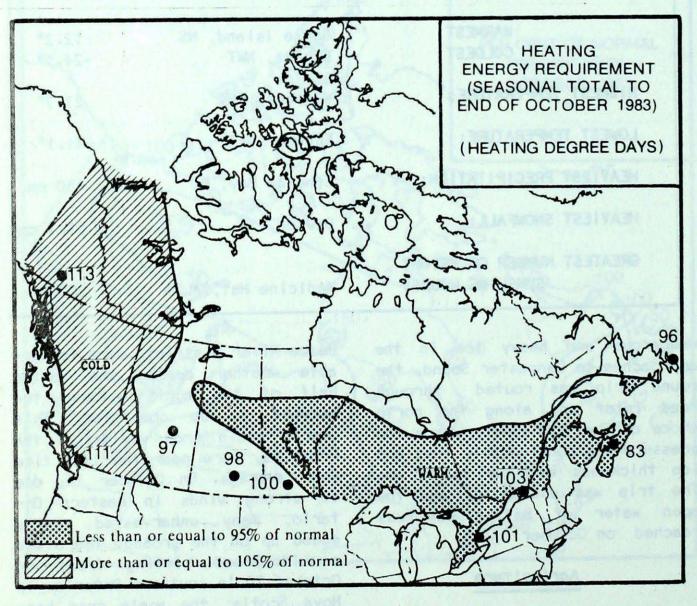
Agriculture

In the Okanagan valley, the apple and grape harvest was nearly complete by mid-October. In the

Peace River District, more favourable weather during the latter half of the month allowed the harvest to be completed. This year's grain crop yields in the Prairies, were near the last five year average. On October 14, due to strong winds in eastern Ontario, many unharvested apples ended up on the ground. There was a widespread killing frost on October 20 in southern Ontario. In Nova Scotia, the apple crop harvest was about two weeks ahead of schedule and the quality was reported as good to excellent.

ENERGY REQUIREMENT





SEASONAL TOTAL OF HEATING

SEASONAL	TOTAL (IING
DEGREE-DAYS	TO EN	OF O	CTOBER
	1983	1982	NORMAL
BRITISH COLUMBI Kamloops	A 462	360	395
Penticton	474	372	385
Prince George Vancouver	920 471	700 387	825 397
Victoria	519	427	458
YUKON TERRITORY			
Whitehorse NORTHWEST TERRI	1277	1098	1053
Frobisher Bay	1835	1815	1700
Inuvik Yellowknife	1825 1178	1501	1501
ALBERTA Calgary	746	653	697
Edmonton Mun. Grande Prairie	705 868	591 786	662 775
SASKATCHEWAN			
Estevan Regina	581 658	509 581	526 602
Saskatoon	685	594	624
MANITOBA			
Brandon Churchill	644 1253	610 1260	584 1248
The Pas	705	709	713
Winnipeg	594	553	534
ONTARIO	600	770	770
Kapuskasing London	682 359	778 384	738 349
Ottawa Sudbury	402 537	425 577	407 556
Thunder Bay	584	667	624
Toronto Windsor	382 277	381 267	346 254
QUEBEC Bale Comeau	771	858	774
Montréal	393 516	426 528	360 490
Quebec Sept-lles	863	910	829
Sherbrooke Val-d'Or	586 675	622 758	594 709
NEW BRUNSWICK Charlo	619	644	552
Fredericton Moncton	474 477	499 530	472 474
		130	
NOVA SCOTIA Halifax	345	417	381
Sydney	458	520	451
Yarmouth	435	496	456
Charlottetown	SLAND 424	481	437
NEWFOUNDLAND Gander	673	718	637
St. John's	653	670	652

THE 1983 FOREST FIRE SEASON IN QUEBEC

André Sévigny, Pierre St. Croix
Forest Meteorology Unit Québec Weather Centre

As was widely reported in the media, the 1983 forest fire season was the worst Québec experienced in fifty years. Nearly 220,000 hectares of forest were destroyed in some 1,620 fires south of the 51st parallel - the area of greatest forest fire concern. These figures are much higher than the annual average of about 1,000 fires and 80,000 hectares. Usually, about one quarter of these fires are due to lightning, the rest are caused by human beings.

One of the best ways of assessing climatic conditions during the forest fire season is the severity index. This index takes into account all the past and present meteorological parameters that can affect forest fires. It shows how readily fires can start, how rapidly they can spread, and how easily they can be controlled. For practical purposes, the severity index is divided into four classes, ranging from low to extreme. Table 1 shows, for the years 1978-1982, the percentage of the total number of fires and the percentage of the total area affected for each class, for a large portion of Québec.

TABLE 1

Severity Class	Percentage of Fires	Percentage of Burned Area
Extreme	13%	60%
High	50%	35%
Moderate	25%	04%
Low	12%	01%

The trend of the data for the past five years suggests that the second half of May should provide climatic conditions conducive to forest fires. At this time of the year, the new vegetation has not yet appeared, and the water content of the foliage is at its lowest. In addition, the large volumes of ice and snow in the North have not yet melted, so that limited moisture is

available from this source. It is during this part of the forest fire season that the air masses are generally driest. In May of 1983, however, conditions were against the trend. Rainfall was plentiful, and there were no major forest fires.

Starting in mid-June, however, high and extreme severity conditions occurred, making it easier for fires to start and harder to put them out. In addition, very heavy thunderstorm activities were reported especially between June 15th and 18th and on June 23. Fires caused by lightning commonly occur in less accessible areas and are harder to detect than fires caused by human being. Table II shows the severity index and the number of lightning-caused forest fires for the period June 15 to 24.

TABLE II

Date	Severity	Fires Caused by Lightning	Number of burned
15/06	Hi gh	27	40 636
16/06	High	30	64 943
17/06	High	15	38 391
18/06	High	09	32 013
19/06	Hi gh	05	47
20/06	High	03	43
21/06	Extreme	02	3
22/06	Extreme	00	0
23/06	Extreme	34	40 661
24/06	Extreme	08	443
Total		131	217 180

Even though fires caused by lightning accounted for only 8 per cent of the total number of fires this season, these fires burnt more

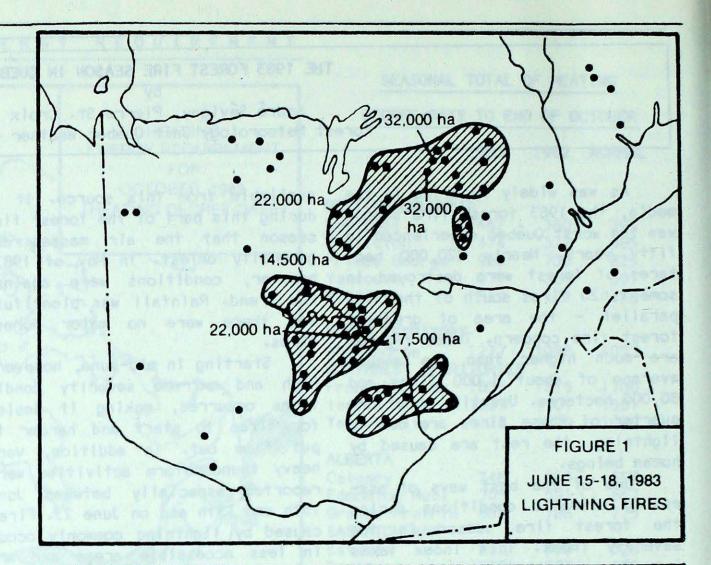
Satellite Photo June 16, 1856 G.M.T.

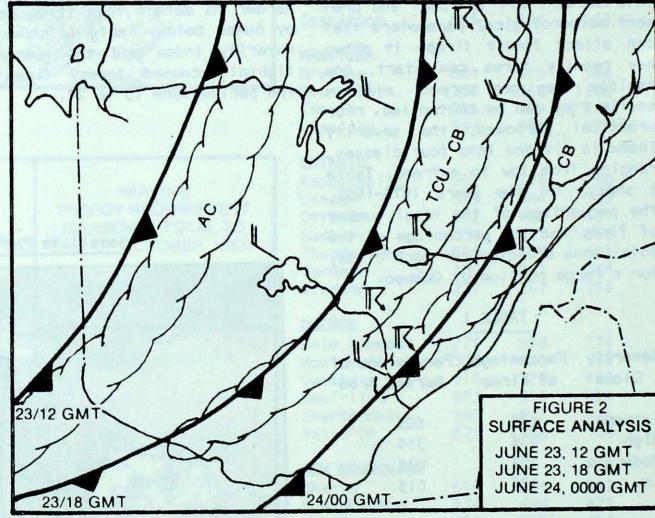


than 90 per cent of the forested area. These fires were confined mainly in the Québec City-Mauricie and Saguenay-Lac St-Jean regions, where conditions of extreme severity coincided with very heavy thunderstorm activity. As the table shows, the incidence of lightning-induced fires was especially high on June 15 to 18 and June 23. The synoptic situation for these days are outlined below.

Between June 15th and 18th there were two major synoptic effects contributing to the proliferation of thunderstorm cells in Quebec. Satellite photo N-7, taken at 1856 G.M.T. on June 16, shows an active convection zone running from north to south over the Saguenay area. This convergence zone was caused by a "backdoor" cold front that had been situated over the lower St. Lawrence on June 14. The vertical movement produced by this unusual westward thrust of cold air into a warm, unstable air mass generated numerous active thunderstorm cells that persisted for several hours. The photo also shows a long cold front on a line from Petawawa to Chibougamau, moving across the western part of the province. Between June 17th and 19th, this front remained nearly stationary along a line from Petawawa to Lac weather systems Weak aloft contributed further to thunderstorm activity along this front. Thus for a long period, activity was very thunderstorm heavy and severity conditions were extreme in these parts of Quebec, as confirmed by the density of lightning-induced forest fires, which destroyed over 160,000 hectares (see Figure 1).

On June 23, a large number of forest fires broke out in the Mauricie, Lac St-Jean, Saguenay, and North Shore regions. They were caused by the passage of a cold front from the northwest (see Figure 2). At 12 G.M.T. on this day there was virtually no thunderstorm activity in the Abitibi area. Daytime warming, however, caused the formation of a narrow band of very warm, most air (temperature 34°C, dew point 19°C) in the northern part of the Mauricie region and over Lac St-Jean. At





the same time, the winds behind the cold front shifted to the northwest and increased to 25 to 40 km/h. The strong upward motion resulted when this front came in contact with the potentially unstable warm air mass and caused thunderstorms to break out suddenly west of Lac St-Jean. The weather stations in the area reported intense storm activity, but since there was only sporadic rainfall, lightning started a number of

forest fires in Mauricle and North Shore areas.

Many people will remember the summer of 1983 for its ideal recreational weather, but very few will recall what damage it caused in the forests of Québec. There were nearly 1,620 forest fires, and they destroyed over 220,000 hectares of forest. This gives a grim meaning to the old saying that one man's meat is another man's poison.

CLIMATE AND THE 1983 GROWING SEASON IN CANADA

G.D.V. Williams and P. Sajecki Canadian Climate Centre

In spite of cool, wet spring and unusually hot summer in many parts of the country, agriculture as a whole did not fare too badly In Canada In 1983, although crop yields were generally somewhat lower than in 1982. Prairie wheat yields were lower than in 1982, as were corn yields in Ontario and Québec. Overall, hay yields were very little different from those of 1982. An increase in the area sown to wheat on the Prairies largely made up for the yield reduction of nearly 10 per cent, so that Prairie wheat production was only slightly below the 1982 record crop.

In British Columbia, wet late June and early July weather caused serious damage to the cherry crop in the Okanagan Valley. This has been a common problem in recent years. There was also some hail damage to fruit.

Because of heavy July rainfall, there was a reduction in the crop area harvested in parts of north-central Alberta. Elsewhere in that province, the growing season conditions were fairly good, and hay yeilds were up considerably from last year, but grain yields were somewhat reduced, especially for barley and oats.

In Saskatchewan and Manitoba, crop yields were generally above average although not as good as they were in the previous year. Hot summer weather reduced yields somewhat but provided good harvest conditions and generally tended to reduce disease problems and promote good quality in the grain produced. An unusually large number of hectares of wheat were grown in Saskatchewan and Manitoba In 1983. This year, 8,336,000 hectares were grown in Saskatchewan and 1,862,000 in Manitoba; the areas in 1982 were 7,932,000 and 1,619,000 respectively, This increase in crop area, together with moderately high yields, made the

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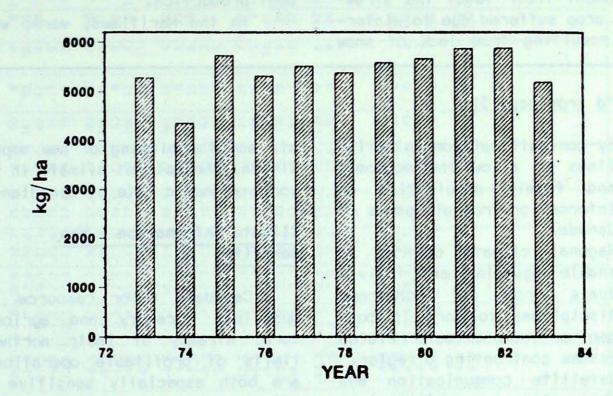
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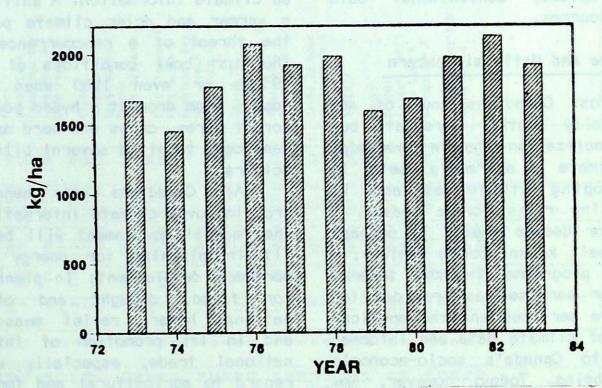
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CANADIAN CORN YIELDS



PRAIRIE WHEAT YIELDS



1983 wheat crop their second largest on record.

In Ontario, cool and wet conditions in spring and early summer seriously delayed spring operations and depressed growth in grains, particularly corn, and it reduced yields or delayed growth of vegetables. Late frost and cool spring weather caused some damage in the Niagara Peninsula. Then drought from the second week of June until near the end of July further depressed Ontario's agriculture. Among fields crops, most

yields were down significantly from those of the previous year except in the case of fall sown grains such as winter wheat and rye. Corn yields were down 14 per cent from 1982, soybeans 20 per cent and hay 4 per cent.

Late cool, wet spring conditions followed by a dry summer adversely affected all field crops in Québec. Corn yields were about 20 per cent below normal and the corn was of poorer quality than usual. Yields were down from last year's by 7 per cent for oats and

9 per cent for hay. The cool wet spring conditions delayed early growth. The dry summer weather reduced pasture productivity to the extent that in some cases farmers had to feed hay to the livestock during the summer to supplement their feed. The strawberry crop suffered due to winter-kill resulting from lack of snow

cover the previous winter, and blueberry yields suffered for the same reason and also from the wet spring and summer drought conditions. The slow spring was good for maple syrup quality, and the year was also a good one for sugar beet production.

In the Maritimes, warm, wet

weather in May, dry weather in June and warm wet weather later were conducive to the production of good yields and quality hay crop. The wet spring weather generally delayed early field work; however, wet weather later contributed to plant diseases. Weather in September and October provided good harvest conditions.

(Cont'd from page 3)

by conventional communication lines to allow the economic and timely acquisition of information from all parts of Canada.

- Regonal climate centres to enable agencies and individuals from all concerned disciplines to work in concert on those climate related issues confronting a region.
- Satellite communication and observational capabilities to augment, and where possible replace, conventional data sources.

Climate and National Concern

Most Canadians know of and use daily weather forecasts but the realization that a knowledge of climate is extremely useful in developing strategies and in assessing risks for a season, a year or decade ahead, is perhaps less well known. For a century, a small programme in the federal weather service has provided for climate services and the application of climate data and information to Canada's socio-economic well being. Today, however, new circumstances demand a rethinking

of, and the placing of new emphasis on, the role of climate in the socio-economic life of Canadians.

Climate Information - Who Benefits?

Canada's major resource industries, forestry and agriculture, already at their northern limits of profitable operations, are both especially sensitive to climate and climate change and would benefit greatly from improved climate information. A shift to a warmer and drier climate poses the threat of a reoccurrence of the dust bowl conditions of the 1930's or even 1980 when the losses from drought - hydro power, forest fires, crops and herd maintenance - totalled several billion dollars.

All Canadians will benefit from improved climate information. The federal government will benefit in planning for energy and northern development; in planning for flood, drought and other national hazard relief measures and in its promotion of international trade, especially with regard to agricultural and forest products.

Program Payoffs

The Canadian Climate program will address the urgent social and economic issues arising from climate and its variations. From a national Canadian Climate Program will come:

i) more rational planning and management in the natural resources sector - water resources, forestry, agriculture and in energy distribution - through the availability of monthly and seasonal climate predictions,

ii) better strategic planning in northern development and energy production through knowledge of the consequences of continued increases of atmospheric carbon dioxide.

iii) improved industrial productivity and employment opportunities through the availability of more and better climate data and methods of applications.

iv) more advantages in international trade through knowledge of global climates.

Climate and climate change can be transformed into assets provided we have the knowledge and initiative to do so.

(Cont'd from page 2)

Atlantic

It was a relatively pleasant and dry month. This was the twelfth consecutive month that mean temperatures were above normal at several locations. Precipitation amounts varied widely, but were significantly below normal in

only half their normal monthly precipitation, while at Gander, a total of 42 mm, was the second lowest on record. Only the Avalon and Great Northern Peninsula received above normal amounts. Snow-

falls ranged from a trace in many localities to 6 cm at Port Aux Basque. Snowfalls in Labrador were significantly higher, but with the exception of coastal region, amounts were below normal.

		Temperati Temperati						(wa)	more (mm) u plus (mm)			(88)	
STATION	Moveme	Difference from Normal Ecart a ta normale	Maximum Maximale	Minimum	Snowfall (cm) Chure de neige (cm)	Total Precipitation (mm) Precipitation totale (mm)	T of Normal Precipitation T de précipitation normale	Snow on ground at end of month (cm) Neige au rol à le fin du moit (cm)	No. of days with Precip. 1.0 or more (mm) Nombre de jours de préc. 1.0 ou plus (mm)	Bright winshine (hours) Durée de l'insolation (heures)	Degree Days below 18"C Degrets jours au-dessous de 18"C	Mean Sea Level Pressure (kPA) Pression au niveau moyen de le iner (kPa)	Mean Vapour Pressure (kPa) Pression de vapeur moyenne (kPa)
BRITISH COLUMBIA COLOMBIE-BRITANNIQUE													
Abbotsford A Alert Bay Blue River A Bull Harbour Burns Lake	9.0 7.9 4.3 8.8	-1.1 -1.4 -0.7 -0.6	16.9 14.2 14.6 13.6	0.0 0.4 -8.0 1.6	0.0 0.0 5.2 0.0	97.3 158.9 90.0	63 76 118	0 0 0 0	10 15 13 20	135 80	279.6 309.3		1.04
Cape St. James Cape Scott Castlegar A Comox A Cranbrook A	10.0 10.0 7.9 8.4 6.0	0.1 0.2 0.1 -0.8 0.6	14.4 14.9 19.5 14.1 18.6	4.8 4.8 -2.7 0.0 -4.8	0.0 0.0 0.0 0.0 0.0	207.9 191.3 44.3 84.0 8.2	105 53 78 66 45	0 0 0 0 0	19 20 8 11 3	125 140	248.8 312.0 299.3	101.4 101.1 102.0 101.8 101.9	1.0
Dease Lake Ethelda Bay Fort Nelson A Fort St. John A Hope A	1.4 8.0 0.8 4.7 9.5	0.1 -0.8 -0.3 0.4 -0.9	12.0 15.3 19.3 17.9 18.4	-9.8 -1.5 -11.0 -7.2 2.2	5.8 0.0 5.4 26.3 0.0	16.6 450.3 13.9 49.7 121.3	47 111 57 179 71	T 0 3 0	6 20 2 6 12	79 114 103	311.5 534.5	101.2 101.1 101.3 101.9	.4
Kamloops A Kelowna A Langara Lytton Mackenzie A	8.7 7.6 9.0 9.7 3.6	0.3 0.9 0.0 -0.4 -0.2	23.4 19.8 13.5 19.3 13.5	-3.8 -4.3 3.7 -0.1 -6.2	0.0 0.0 0.0 0.0 8.8	8.1 11.6 228.2 21.9 60.8	53 60 86 71 121	0 0 0 0	2 3 25 7 13	137 140 127 74			.7
McInnes Island Merry Island Penticton A Port Alberni A Port Hardy A	10.0 10.3 8.7 9.1 8.0	0.5 -0.4 0.0 -0.7 -0.7	14.4 14.2 19.9 18.7 14.9	6.2 5.6 -3.6 -1.8 -0.4	0.0 0.0 0.0 0.0 T	248.2 67.8 5.4 153.5 169.5	74 62 35 87 69	0 0 0 0	23 12 1 12 16	114 155 94 104	277.0	101.8	
Prince George A Prince Rupert A Princeton A Quesnel A Revelstoke A	4.9 8.2 6.6 5.4 6.4	0.1 0.1 0.0 -0.3 0.1	14.5 13.8 19.4 16.7 15.7	-6.1 -1.5 -6.2 -6.4 -1.4	0.2 0.0 0.0 0.5 T	48.0 389.0 5.6 49.4 83.6	106 25 102	0 0 0 0	10 25 2 9 12	65 169	303.7	101.6 101.3 101.7 102.0	.9
Sandspit A Smithers A	9.5 4.6	0.5	15.0 14.3	1.6	0.0	251.0 40.6		0	17			101.3	
Stewart A Terrace A Vancouver Harbour	6.4	0.0		-3.0 4.8	10.2	152.4 117.4			18 12		359.2 240.5	101.4	
Vancouver Int'l A Victoria Gonzales Heights Victoria Int'l A Victoria Marine Williams Lake A	9.4 10.3 9.1 9.0 4.9	-0.6 -0.5 -0.8 -0.7 -0.2	16.0 16.0 14.9	2.3	0.0 0.0 0.0 0.0 0.4	32.7 46.7 88.2	52 60 76	0 0 0	14 9 10 11 7	140 125	239.0 277.6 268.6	101.9	1.0

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STATION	Mean	Difference from Normal Ecert à la normale	Maximum Maximele	Minimale	Snowfail (cm) Chure de neige (cm)	Total Precipitation (mm) Pracipitation totals (mm)	% of Normal Precipitation % de précipitation normale	Snow on ground at end of month (cm) Neige au sol à le fin du mois (cm)	No. of days with Precip 1 0 or more (mm) Nombre de jours de préc. 1.0 ou plus (mm)	Bright sunshine (hours) Durbe de l'impletion (heures)	Degree Days below 18°C Degree jours au dessous de 18°C	Mean Sea Level Pressure (VPs) Pressuon au niveau moyen de la mer	Mean Vapour Pressure (174) Pression de rapour moyenne (174)
YUKON TERRITORY TERRITOIRE DU YUKON													
Burwash A Dawson A Mayo A Watson Lake A Whitehorse A	-2.6 -5.8 -3.2 -0.5 0.4	0.0 -0.4 -0.9 -0.4 -0.5	11.5	-20.2 -22.3 -17.5 -17.4 -21.2	8.6 61.7 34.1 7.9 19.2	12.4 65.6 33.3 26.6 19.6	77 235 118 76 91	1 33 12 3 2	5 12 10 8 6	73 97	616.9 736.9 653.4 572.7 545.2	100.9	.50
NORTHWEST TERRITORIES TERRITOIRES DU NORD-OUEST													
Alert Baker Lake Cambridge Bay A Cape Dyer A Cape Parry A	-20.5 -6.0 -11.5 -9.2 -10.1	-0.8 1.7 0.2 -1.5 -3.3	2.6	-32.7 -18.6 -21.1 -21.6 -23.4	15.7 47.7 10.0 19.0 17.6	6.7 51.1 9.6 13.8 15.0		9 20 17 11 5	12 4 5 3	6 35 39	913.0 842.5	101.2 101.2 101.2 100.9 101.1	.36
Clyde Coppermine Coral Harbour A Eureka Fort Reliance	-8.6 -9.3 -7.0 -24.5 -0.9	-1.7 -2.7 0.8 -2.4 0.9	-0.9 1.8 2.4 -11.7 6.4	-20.8 -26.4 -22.5 -41.1 -11.0	37.6 43.3 19.6 17.4 36.8	28.4 38.3 23.2 13.0 48.5	63 186	55 15 8 12 18	8 9 8 2 11	37 60 8	846.7 773.7 1312.1	101.0 101.2 101.2 101.2 101.1	.3
Fort Simpson A Fort Smith A Frobisher Bay A Hall Beach A Hay River A	-4.8 1.0 -5.6 -9.3 0.4	-3.2 0.7 -0.6 1.2 -0.5	14.3 12.7 2.7 0.4 10.7	-8.8 -22.0 -22.5	24.6 23.7 37.5 15.1 13.3	27.2 45.4 30.2 13.2 16.0	171 68 62	14 0 15 12 T	4 9 6 3 5	93	526.7 733.6 846.2	101.1 101.0 101.1 100.9	.5.
Inuvik A Mould Bay A Norman Wells A Pond Inlet A Resolute A	-12.6 -19.0 -7.4 -10.7 -14.5	-4.5 -1.4 -2.8 -0.5 0.6	-1.8 5.9 0.4	-29.2 -34.8 -20.0 -26.6 -27.6	4.8 17.5 40.4	28.7 19.1	36 107 116	19	7 1 11 9 4	61 39	786.4 890.3	101.0	3 .1
Sachs Harbour A Yellowknife A	-14.2 -1.5	-2.6 0.1		-28.8 -12.4			139		6 9			101.2	
ALBERTA													
Banff Brooks Calgary Int'l A Cold Lake A Coronation A	4.8 6.8 6.0 4.3 4.7	0.4 0.5 0.5 -0.2 -0.1	25.0 23.4 16.3	-8.0 -8.1 -7.0	0.0 1.0 T		2 16 23 71	0 0	3	3	371.9 426.2	101.6	5 .5
Edmonton Int'l A Municipal A	4.6 6.3	-0.1 0.5							3 5			101.	

STATION	Mesen	Difference from Normal Ecart & la normale	Maximum Maximale	Minimale	Snowfall (cm) Chute de neige (cm)	Total Precipitation (mm) Precipitation totale (mm)	% of Normal Precipitation % de précipitation normale	Snow on ground at and of month (cm) Neige au sol à le lin du mois (cm)	No. of days with Precip. 1.0 or more (mm) Nombre de jours de préc. 1.0 ou plus (mm)	Bright sunshine (hours) Ourse de l'insolation (heures)	Degree Days below 18°C Degresjours au-dessous de 18°C	Mean Sea Level Pressure (kPa) Pression au niveau moyan de la mer	Mean Vapour Pressure (kPa) Pression de vapeur moyenne (kPa)
Edmonton Namao A Edson A Fort Chipewyan A Fort McMurray A Grande Prairie A	5.6 3.0 1.9 3.6 5.0	0.5 -0.7 0.6 0.3 0.8	17.3 20.5 13.5 17.7 19.6	-5.0 -10.4 -8.0 -9.0 -6.7	6.4 18.0 2.3 6.8 3.5	23.7 44.6 19.4 39.6 18.9	131 228 69 141 71	0 8 T 0	4 7 3 5	130 149 134	464.4	101.4 101.5 101.3 101.4	
High Level A Jasper Lethbridge A Medicine Hat A Peace River A	1.2 4.8 8.4 9.0 4.0	-0.8 0.1 0.9 1.6 0.3	15.0 17.2 24.5 26.5 16.4	-16.0 -6.5 -8.5 -5.3 -9.8	13.0 1.6 0.0 0.0 4.9	21.4 53.0 3.4 3.1 27.2	149 182 19 19	0 0 0 0 0	5 6 1 1 4	138 116 169 202	521.4 407.5 296.5 279.8	101.1 101.7 101.5 101.5 101.3	.51 .57 .59
Red Deer A Rocky Mountain House Slave Lake A Suffield A Whitecourt	4.2 3.8 5.4 8.6 4.2	-0.4 -1.1 1.2 1.6 0.8	20.1 20.1 16.0 25.7 17.9	-10.4 -9.5 -5.0 -6.4 -6.8	3.2 6.0 0.2 0.0 10.4	7.3 16.8 46.1 3.8 28.1	35 74 186 102 58	0 0 0 0	4 6 4 1 5	133 200	440.0 433.2 294.7	101.6 101.7 101.3	.54 .53 .56
SASKATCHEWAN													
Broadview Collins Bay Cree Lake Estevan A Hudson Bay	5.2 1.2 2.6 6.7 5.0	0.9 2.1 1.4 0.3 1.1	19.9 11.1 13.3 23.4 17.8	-9.8 -13.8 -8.5 -8.1 -11.9	1.4 26.5 12.2 0.0 1.4	14.3 31.2 18.6 8.2 8.6	58 82 48 37 32	0 0 0 0	4 6 5 2 2	182 106 147 194 169	522.4 478.9 349.8	101.8 101.3 101.3 101.8 101.6	.54 .55 .68
Kindersley KY La Ronge A Meadow Lake Moose Jaw A Nipawin A	5.8 3.7 3.7 7.1 4.4	0.5 1.1 0.9 0.7	23.0 15.1 18.0 24.0 17.5	-8.5 -8.2 -18.6 -7.3 -9.7	T 0.6 T T 0.6	8.1 9.9 7.0 5.7 7.6	58 29 40 31	0 0 0 0	3 3 3 2 2	147 186 173	443.6 444.5 337.0	101.5 101.5 101.5 101.6 101.6	.57 .55
North Battleford A Prince Albert A Regina A Saskatoon A Swift Current A	4.9 4.5 6.0 5.6 6.7	0.0 0.8 0.8 0.7 0.9	19.1 17.6 22.1 20.3 27.1	-8.0 -10.4 -7.9 -8.1 -6.6	0.0 1.2 0.0 0.0 0.0	3.9 9.3 9.7 9.0 6.3	52 52	0 0 0 0	2 2 4 3 2	186	422.9 372.7	101.5 101.6 101.7 101.6	.56
Wynyard Yorkton A	5.6	1.1	19.7 19.6	-9.5 -8.2	0.6	13.4 31.4		0	3 6			101.6	
MANITOBA													
Bissett Brandon A Churchill A Dauphin A Gillam A	5.2 5.1 0.0 5.7 2.5	0.9 -0.1 1.5 0.2 3.2	20.7 10.2 21.4	-8.7	1.0 18.5 3.2	15.2 39.5 34.3	71 324 119	3 0	8 5 9 6 5	68 163	399.9 528.2 383.1	101.7 101.8 101.2 101.7 101.4	.65 .56
Gimli Island Lake	5.9 4.4	0.3	16.0 16.5						8 7			101.7	

9 15 17 19		Temperati Températi						Ē	• (mm) us (mm)			(0.0)	
STATION	Mean	Difference from Normal Ecert à la normale	Maximum Maximale	Minimum Minimale	Snowfail (cm) Chute de neige (cm)	Total Precipitation (mm) Précipitation totale (mm)	% of Normal Precipitation % de précipitation normale	Snow on ground at end of month (cm) Neige au sol à la fin du mois (cm)	No. of days with Precip. 1.0 or more (mm) Nombre de jours de préc. 1.0 ou plus (mm)	Bright sunshine (hours) Durée de l'insdistion (heures)	Degree Days below 18°C Degrée-jours au-dessous de 18°C	Mean See Level Pressure (kPa) Pression au niveau moyen de la mer	Mean Vapour Pressure (kPa) Pression de vapeur moyenne (kPa)
Lynn Lake A Norway House A Pilot Mound Portage la Prairie A The Pas A	2.2 4.1 5.5 5.9 4.7	2.7 0.0 -0.6 1.1	12.4 13.1 20.9 18.6 15.4	-7.8 -4.7 -6.0 -8.9 -8.0	2.4 T 5.4 0.0 0.0	24.1 18.6 25.2 19.9 12.8	51 86 65 39	0 0 0 0	7 4 4 4 5	106 172	489.5 429.9 386.6 376.0 411.0	101.4 101.6 101.9	.58 .65 .70
Thompson A Winnipeg Int'l A	2.7 5.6	3.0	14.4 15.7	-8.2 -8.9	0.0	17.6 21.6	33 70	0	6 6	117 146	475.5 383.4	101.5 101.8	
ONTARIO Atikokan Earlton A Geraldton Gore Bay A Hamilton	3.2 5.1 3.8 8.1 11.0	-1.3 -0.3 0.1 -0.2 0.3	12.4 23.4 17.6 20.3 26.6	-3.7 -8.2 -9.4 -1.3 -2.4	8.2 0.4 27.1 0.0 0.0	47.6 89.0 110.9 148.1 77.4	61 127 219 113	0 0 0 0	11 11 13 13 6	146	456.8 397.8 438.7 306.1 226.5		.67
Hamilton A Kapuskasing A Kenora A Kingston A Lansdowne House	9.7 4.8 5.5 9.2 4.3	0.3 0.4 -0.1 0.2 1.5	24.9 23.5 14.3 23.5 14.2	-4.0 -6.1 -4.1 -5.7 -5.9	0.0 3.1 0.4 0.0 8.2	83.4 77.5 32.2 142.2 49.4	136 100 79 173 76	0 0 0 0 0	8 9 9 10 10	163	374.9 275.5	101.9 101.7 102.0 101.7	1.00
London A Moosonee Mount Forest Muskoka A North Bay A	9.6 4.4 7.3 6.2	0.2 0.3 -0.5	24.5 22.2 23.8 24.7 22.3	-5.2 -7.0 -4.8 -7.1 -4.4	7.0 1.4 0.0 0.2	62.0 141.5 89.4 99.4 138.6	84 190 108 106 158	0 0 0 0 0	14 13 14 14 12	127 98 131 136	421.6 323.9 334.4	102.1 101.7 102.1 102.1 102.0	.69 .93 .90
Ottawa Int'l A Petawa A Peterborough A Pickle Lake Red Lake A	7.6 3.6 4.4	0.0 0.1 0.9 0.4	24.8 24.0 14.2 14.3	-3.9 -7.3 -7.7 -6.2	0.4 0.0 10.2 0.8	69.2	140 110	0	12 14 10 8		321.4 446.1	102.1 101.8 101.8	.64
St. Catharines A Sarnia A Sault Ste. Marie A Simcoe Sioux Lookout A	10.8 10.4 7.7 9.7 4.9	0.1 0.5 0.1 0.2 0.2	26.7 27.6 24.2 25.0 15.6	-2.4 -4.0 -3.7 -5.0 -4.1	0.0 0.0 T T 3.7	100.3	92 135 143	0	11 5 13 11	123 150	260.2	101.9 102.1 101.9	1.00
Sudbury A Thunder Bay A Timmins A Toronto Toronto Int'l A	6.1 5.5 4.3 10.9 8.9	-0.2 -0.2 -0.5 -0.1 -0.4	21.3 20.0 23.4 24.7 25.9	-3.6 -6.7 -8.5 -0.8 -5.0		74.7 79.4 86.8	136 116 143	0	12 13 13 9 9	136	386.4 418.0 224.8 285.1	102.7	.74 .70 .96
Toronto Island A Trenton A Trout Lake (Big) Waterloo-Wellington A Wawa A	10.7 8.7 4.3 8.1 5.4	0.6 -0.5 2.5 -0.1	23.7 25.0 18.5 23.8	0.2 -5.6 -8.0 -6.0 -7.4	6.4	143.0 92.9 68.3	204 166 102	0	7 10 13 11 13	116	292.7 423.7 309.2 391.5	101.9	.93 .69
Wiarton A Windsor A	11.3	0.2	23.9	-0.8	0.3				11 6		297.4 215.1	102.0 102.0	1.05

### STATION Part P			Tempera Tempera						=	(mm)			(848)	
Bagotville A	STATION	Moyenne	Difference from Normal Ecart à la normale	Maximum	Minimum Minimate	Snowfall (cm) Chure de neige (cm)	Total Precipitation (mm) Precipitation totale (mm)	% of Normal Precipitation % de précapitation normale	Snow on ground at end of month (cm) Neige au sol à le fin du mois (cm)	No. of days with Precip. 10 or more firm) Nombre de jours de préc. 1.0 ou plus (mm)	Bright sunshine (hours) Ourse de l'insolation (heures)	Degree Days below 18"C Degres-jours au-dessous de 18"C	Mean See Level Pressure (NPa) Pression au niveau moyen de la mer	Mean Vapour Pressure (kPa) Pression de vapeur movenne (kPa)
Baie Comeau A Blanc Sablon S.9 Clauding Sablon	QUEBEC													
Inukjuak A	Bale Comeau A Blanc Sablon Chibougamau A	4.8 5.9 3.6	0.5 2.2 1.0	18.2 13.0 22.1	-6.2 -5.6 -7.2	4.8 T 7.8	56.3 117.9 72.6	63 120 84	0 0 T	9 13 14	134 108	408.6 417.6 446.8	101.9 101.5 101.9	.74 .73 .73 .71
Montreal Int'l A 8.6 -0.1 26.3 -4.2 0.0 85.3 113 0 8 175 297.1 102.0 Montreal Mirabel Int'l A 7.3 25.8 -6.7 T 118.6 0 10 176 334.0 102.1 Natashquan 4.5 0.4 14.0 -6.9 3.0 84.0 78 T 14 140 418.6 101.7 Kuujjuarapik A 2.6 0.6 10.6 -2.9 51.5 98.0 118 12 15 526.5 101.7 Kuujjuarapik A 2.6 0.6 10.6 -2.9 31.4 118.4 161 0 14 43 478.4 101.5 Quebec A 7.0 0.4 24.1 -4.5 0.4 100.8 111 0 11 143 342.5 102.1 Ste. Agathe des Monts 5.6 0.3 22.4 -6.8 4.4 140.8 150 0 12 137	Inukjuak A La Grande Riviere Maniwaki	0.9 2.0 6.3	1.3	6.1 14.6 24.2	-7.7 -6.1 -8.0	10.6 40.2 T	55.5 168.3 95.3	121	1 0	14 18 12	50 142	529.7 482.0 363.6	101.3	.73 .55 .58
Ouebec A Roberval A Roberval A Ste. Agathe des Monts 7.0 0.4 24.1 -4.5 0.4 100.8 111 0 11 143 342.5 102.1 Ste. Agathe des Monts 5.6 0.3 22.4 -6.8 4.4 140.8 150 0 12 137 384.0 102.1 St. Hubert A 7.8 -0.6 26.9 -6.1 T 86.1 112 0 10 321.1 102.0 Schefferville A Sept-Iles A 3.3 -0.3 12.1 -6.6 6.6 77.3 80 2 11 131 455.0 101.8 Sherbrooke A 6.5 0.1 24.2 -9.1 T 98.9 108 0 11 140 359.0 102.2 Val d'Or A 4.8 0.2 23.8 -8.4 1.4 77.6 94 0 13 124 408.7 102.0 NEW BRUNSWICK NOUVSAU-BRUNSWICK NOUVSAU-BRUNSWICK NOUVSAU-BRUNSWICK NOUVSAU-BRUNSWICK NOUVSAU-BRUNSWICK NOUVSAU-BRUNSWICK NOUVSAU-BRUNSWICK NOUVSAU-BRUNSWICK NOUVSA	Montreal Int'l A Montreal Mirabel Int'l A Natashquan	8.6 7.3 4.5	-0.1	26.3 25.8 14.0	-4.2 -6.7 -6.9	0.0 T 3.0	85.3 118.6 84.0	113 78	0 0 T	8 10 14	175 176	297.1 334.0 418.6	102.0 102.1 101.7	.77 .91 .84 .73
Sept-Iles A 3.3 -0.3 12.1 -6.6 6.6 77.3 80 2 11 131 455.0 101.8 Sherbrooke A 6.5 9.1 24.2 -9.1 T 98.9 108 0 11 140 359.0 102.2 Val d'Or A 4.8 0.2 23.8 -8.4 1.4 77.6 94 0 13 124 408.7 102.0 NEW BRUNSWICK "NOUVSAU-BRUNSMICK NOUVSAU-BRUNSMICK 10.2 23.8 -4.7 2.3 53.2 58 0 9 128 366.3 101.9 Charlo A 7.3 0.2 25.8 -5.4 0.2 43.6 56 0 6 147 333.7 101.9 Fredericton A 7.7 0.2 25.5 -8.2 T 45.4 47 0 6 170 321.9 102.4 Moncton A 7.9 0.3 24.3 -4.1 0.4 56.3 57 0 8 151 313.9 101.9	Quebec A Roberval A Ste. Agathe des Monts	7.0 5.9 5.6	0.4 0.7 0.3	24.1 25.8 22.4	-4.5 -5.3 -6.8	0.4 1.0 4.4	100.8 80.7 140.8	111 126 150	0 0	11 11 12	143 133	342.5 374.6 384.0	102.1 101.9 102.1	.58 .75 .74 .77
Charlo A 6.2 0.8 23.8 -4.7 2.3 53.2 58 0 9 128 366.3 101.9 Chatham A 7.3 0.2 25.8 -5.4 0.2 43.6 56 0 6 147 333.7 101.9 Fredericton A 7.7 0.2 25.5 -8.2 T 45.4 47 0 6 170 321.9 102.4 Moncton A 7.9 0.3 24.3 -4.1 0.4 56.3 57 0 8 151 313.9 101.9	Sept-Iles A Sherbrooke A	3.3 6.5	-0.3	12.1	-6.6 -9.1	6.6 T	77.3 98.9	80 108	2	11	140	455.0 359.0	101.8	.47 .74 .82
Chatham A 7.3 0.2 25.8 -5.4 0.2 43.6 56 0 6 147 333.7 101.9 Fredericton A 7.7 0.2 25.5 -8.2 T 45.4 47 0 6 170 321.9 102.4 Moncton A 7.9 0.3 24.3 -4.1 0.4 56.3 57 0 8 151 313.9 101.9	NEW BRUNSWICK NOUVEAU-BRUNSWICK													
	Chatham A Fredericton A Moncton A	7.3 7.7 7.9	0.2 0.2 0.3	25.8 25.5 24.3	-5.4 -8.2 -4.1	0.2 T 0.4	43.6 45.4 56.3	56 47 57	0 0	6 8	147 170 151	333.7 321.9 313.9	101.9 102.4 101.9	.75 .83 .85 .91
								D.EK						

		Températ						Ē.	fmm t			3	
STATION	Mean	Difference from Normal Ecart à la normale	Maximum Maximale	Minimum Minimale	Snowfell (cm) Chute de neige (cm)	Total Precipitation (mm) Precipitation totals (mm)	% of Normal Precipitation % de précipitation normale	Snow on ground at end of month (cm) Neige au sof & le lin du most (cm)	No. of days with Precip. 1.0 or more time. Nambre de Jours de préc. 1.0 ou plus finm	Bright sunshine (hours) Ourse de l'insplation (hourse)	Degree Days below 18°C Degree jours au dessous de 18°C	Mean Sea Level Pressure (1Pa) Pression au niveau moyen de la mer	Mean Vapour Pressure (17s)
NOVA SCOTIA NOUVELLE-ECOSSE													
Eddy Point Greenwood A Halifax Int'l A Sable Island Shearwater A	9.8 9.0 9.0 12.2 10.1	0.7 0.4 0.4 0.7 0.6	21.3 14.2 23.4 20.6 23.9	-0.7 3.4 -1.4 2.8 -0.2	5.0 T T 0.0 T	112.3 51.1 82.6 142.2 88.6	104 52 62 122 73	0 0 0 0	12 7 8 12 8	150 137 156	284.5 278.2 179.1	102.1	1.02
Sydney A Truro Yarmouth A	9.4 8.2 9.5	1.0 0.4 0.0	21.7 22.0 20.5	-1.7 -4.6 -2.0	I I I	103.0 51.8 69.0	84 47 59	0 0	9 7 12	133 126 164	267.8 302.7 252.6	101.9 102.0 102.1	1.00
PRINCE EDWARD ISLAND ILE-DU-PRINCE-EDOUARD													
Charlottetown A Summerside A	8.9 9.1	0.8	22.2	-1.5 -1.5	4.9	70.4 52.4	66 56	0	11	131	280.3 277.5	101.9	.98
NEWFOUNDLAND TERRE-NEUVE													
Argentia A Battle Harbour Bonavista Burgeo Cartwright	8.9 4.0 8.1 7.9 3.1	0.5 0.2 0.9 1.0 0.0	19.2 17.8 18.0 15.9 17.2	0.4 -6.3 -0.2 -1.0 -6.3	0.2 3.0 1.6 4.1 16.8	148.6 83.6 111.6 87.8 90.5	165 113 109 54 126	0 2 0 1 8	13 9 17 11 13	129	433.4 307.4 312.2	101.8	.98 .67 .91
Churchill Falls A Comfort Cove Daniel's Harbour Deer Lake A Gander Int'l A	0.2 7.0 6.7 6.3 6.9	1.0 1.2 0.8 0.9 0.9	14.2 21.8 17.7 20.4 19.6		33.6 2.4 4.8 0.4 0.0	85.0 47.0 137.6 92.2 42.2	102 40 152 80 40	10 0 0 T	16 13 16 11	76 113 109	343.4 349.2 360.9	101.3 101.8 101.6 101.8 101.8	.82
Goose A Hopedale Port-aux-Basques St. Anthony St. John's A	2.6 1.8 8.0 4.3 7.7	-0.1 -0.2 1.0 1.1 0.8	17.9 14.1 16.5 15.1 19.6	-10.6 -7.1 -1.7 -4.5 -2.5	24.7 17.4 6.0 3.5 1.2	76.6 47.0 74.2 139.8 214.6		7 2 T 0 0	10 10 13 10 18	109 122 101	500.6 309.4 419.2	101.5 101.3 101.9 101.5 101.8	.55 .54 .93 .71
St. Lawrence Stephenville A Wabush Lake A	8.2 7.8 0.2	1.0 0.8 0.9	17.8 19.7 13.8	-2.0 -4.0 -12.8	T 3.6 33.9	134.6 65.9 85.2	91 59 100	T T 4	15 16 15	107 93		101.7 101.7	.87

OCTOBER 1983 OCTOBRE

		Tempera Températ						nth (cm)	ou plus fmm)		Degré au-d	o Days o 5°C s-jours essus 5°C	
STATION	Meen	Difference from Normal Ecert à la normale	Maximum Maximale	Minimum Minimale	Snowfell (cm) Chute de neige (cm)	Total Precipitation (mm) Précipitation totale (mm)	% of Normal Precipitation % de précipitation normale	Snow on ground at end of month (cm) Neige au sol à la fin du mois (cm)	No. of days with Precip. 1.0 or more (mm) Nombre de jours de préc. 1.0 ou plus (mm)	Bright sunshine (hours) Durée de l'insolation (heures)	This Month Présent mois	Since Jan. 1st Depuis le 1 ^{et} janv.	Mean Dew Point *C Point de rosée moyen *C
A	GROCLIMA	TOLOG	ICAL	STATIO	ONS A	GROCLI	мато	roe I	NUES				
BRITISH COLUMBIA COLOMBIE-BRITANNIQUE	28							- 1				101 1	
Agassiz Kamloops	9.7	-1.2	18.0	1.5	0.0	112.8	64	0	13	122	147.0	2191.4	
Sidney Summerland	9.2	0.2	19.5	0.0	0.0	5.0	28	0	2	161	129.0	2048.0	
ALBERTA	5.0	0.4	10.5	-8.0	1.0	13.7	48	0	4	138	30.2	1226.0	
Beaverlodge Ellerslie Fort Vermilion	5.0	0.4	19.5	-7.0	1.8	14.9		0	3	151	30.6	1369.8	
Lacombe Lethbridge	8.3	0.2	20.0	-9.0 -7.0	0.5	11.6	66 24	0	5 2	141	110.4	1754.9	
Vauxhall Vegreville	7.5 4.3	0.6	25.5 17.5	-9.0 -7.0	0.0	3.6 20.4	27 131	0	2 5	174	19.7	1676.9	
SASKATCHEWAN													
Indian Head Melfort Regina Saskatoon	5.5 5.1 4.4 5.3	0.2 0.9 -0.1	21.0 18.5 22.0 20.0	-9.0 -8.5 -11.0 -9.0	1.4 1.6 0.0	6.4 6.4 12.5 6.4	26 24 68	0 0 0	1 3 4 2	171	207.0	1551.3	
Scott	3.6	-0.6	18.0	-10.5	0.0	4.6	34	0	2	158	43.5 13.6		
Swift Current South	7.1	1.2	27.5	-8.5	0.0	3.7	23	0	2	158	87.8	1841.9	
Brandon Glenlea Morden	5.1 5.0 6.7	-0.5 -0.8 -0.3	21.0 15.5 19.5	-9.5 -9.5 -6.0	0.0	12.7 23.0 33.4	54 61 106	0 0	4 5 6	158 140 159	37.5	1742.6 1342.5 2010.6	
ONTARIO	0.7	-0.5	13.3	-0.0	0.4	33.4	100			133	75.5	2010.0	
Delhi Elora	10.4	0,5	25.0 23.4	-5.5 -5.8	0.0	82.3 76.2	110	0 0	11 14	138 119	48.6 117.0	2277.2 1949.5	
100	-												
Maria La Santal								1					

これ、大声を大きされては、大きなないというとうというというにはなっているとなっているとなっているともなっているともなっているともなっているというない。 大きなない 大きなない はんしょう はんしょう はんしょう はんしょう はんしょう はんしょう はんしょう はんしゅう はんしゅん は

		Tempera						1	(mm)		Degre	Days 5°C	
		Tempére	ture C					cm)			Degré au-d	e-jours sesus 5° C	
STATION	Mean	Difference from Normal Ecert à la normale	Maximum Maximale	Minimum Minimale	Snowfell (cm) Ohute de neige (cm)	Total Pracipitation (mm) Pracipitation totale (mm)	% of Normal Precipitation % de précipitation normale	Snow on ground at and of month (or Neige au sol à la fin du mois (cm)	No. of days with Precip. 1.0 or more Nambre de Jours de préc. 1.0 ou plus	Bright sunshine (hours) Durée de l'insoletion (heurse)	This Month Prifeent mole	Since Jan. 1st Depuis le 1 ⁶⁷ jans.	Mean Dew Point °C Point de roade mayen °C
Guelph	8.7 11.5	-0.5 0.2	24.5	-8.1 -2.0	0.0	71.1 85.5	97 153	0	13	140	135.5	2018.5 2341.7	
Harrow Kapuskasing	11.3	0.2	20.3	-2.0	0.0	65.5	133	0			201.3		
Merivale Ottawa	8.3	-0.2	25.4	-3.5	Т	138.4	203	0	16	164	115.3	2154.1	
Smithfield Vineland Station Woodslee	9.6 11.2 11.2	0.7 0.2 0.3	24.0 26.0 27.5	-5.5 -2.0 -3.0	0.0 0.0 0.0	180.8 118.4 70.2	223 201 124	0	12		141.2	2150.7	
QUEBEC	13.4												
La Pocatiere L'Assomption Lavaltrie	7.0 7.6	0.1	24.5 26.0	-7.0 -4.5	0.0	80.2 96.2	112	0	9	158 156	97.7 77.5	1675.0 2014.8	
Lennoxville Normandin	5.0	0.4	26.5	-7.0	2.0	63.1	106	0	9	137			
St. Augustin Ste. Clothilde													
NEW BRUNSWICK NOUVEAU-BRUNSWICK													
Fredericton NOVA SCOTIA													×
NOUVELLE-ECOSSE KENTVILLE	9.9	0.8	24.0 22.0	-4.0 -5.0	0.0	42.2 58.4	41 58	0	6 7	137	151.9	2016.1	
PRINCE EDWARD ISLAND ILE-DU-PRINCE-EDOUARD								7					
Charlottetown	9.4	0.7	22.0	-1.9	4.2	64.4	62	Т	9	123	143.4	1836.9	
NEWFOUNDLAND TERRE-NEUVE								7			118 - 11 241 - 11 241 - 11		
St. John's West	8.2	1.1	19.0	-3.0	0.0	222.7	153	0	22	100	114.1	1375.2	
Control of the Contro													
Company of the Company					E.								
Non-American American					7.71						34		
Processor, A.													
			-								70.0		