Environment Canada | Environnement Canada

Climatic Perspectives

Monthly review | DECEMBER | Vol. 8 1986

CLIMATIC HIGHLIGHTS

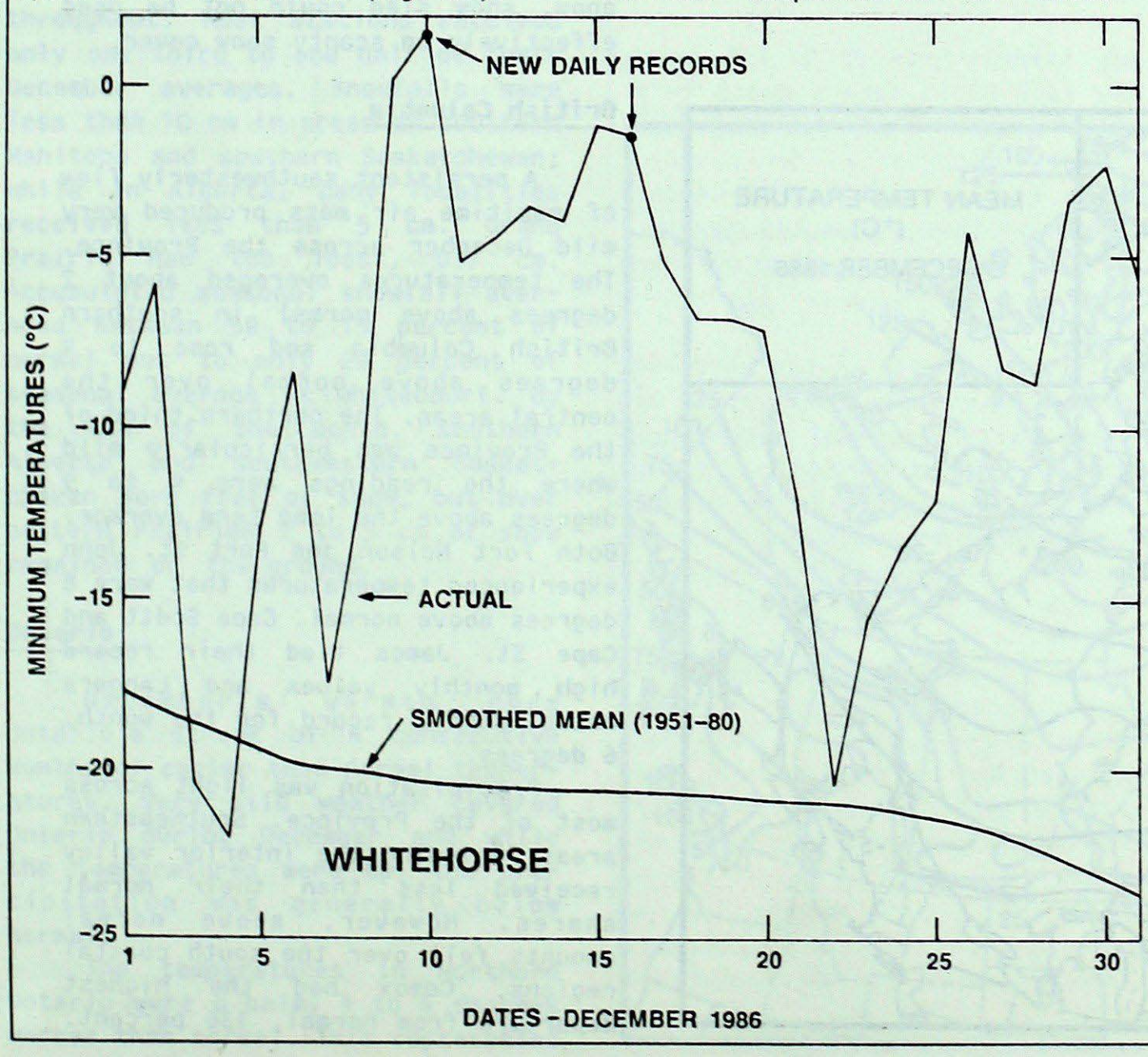
by
P. Scholefield, CCRM

Winter in Retreat as Mild Pacific Air Invades from the West

For most of central and western Canada December was almost a complete reversal of the unusually cold weather that dominated during November. Abnormally low 50 kPa heights in the North Pacific and a strong westerly current across the ocean carried mild Pacific air deep into the heart of Canada (see discussion of the upper atmospheric circulation on page 5B).

The areas with the largest positive monthly mean temperature anomalies were located in the lee side of the major mountain ranges in Alberta, northern B.C. and the southwestern Yukon. In these areas, the mild Pacific air was further warmed adiabatically as it descended to lower elevations.

The rather spectacular effect of this combined ocean and adiabatic air mass warming can be seen by examining the graph of daily minimum temperatures at Whitehorse. Note that minimum temperatures dropped below the seasonal mean on only two days, remained above freezing on two days and two daily high minimum temperatures records were set. Overall it was the 2nd warmest December (mean of -5.1°C) experienced in Whitehorse (warmest mean of -3.9°C occurred in 1943).

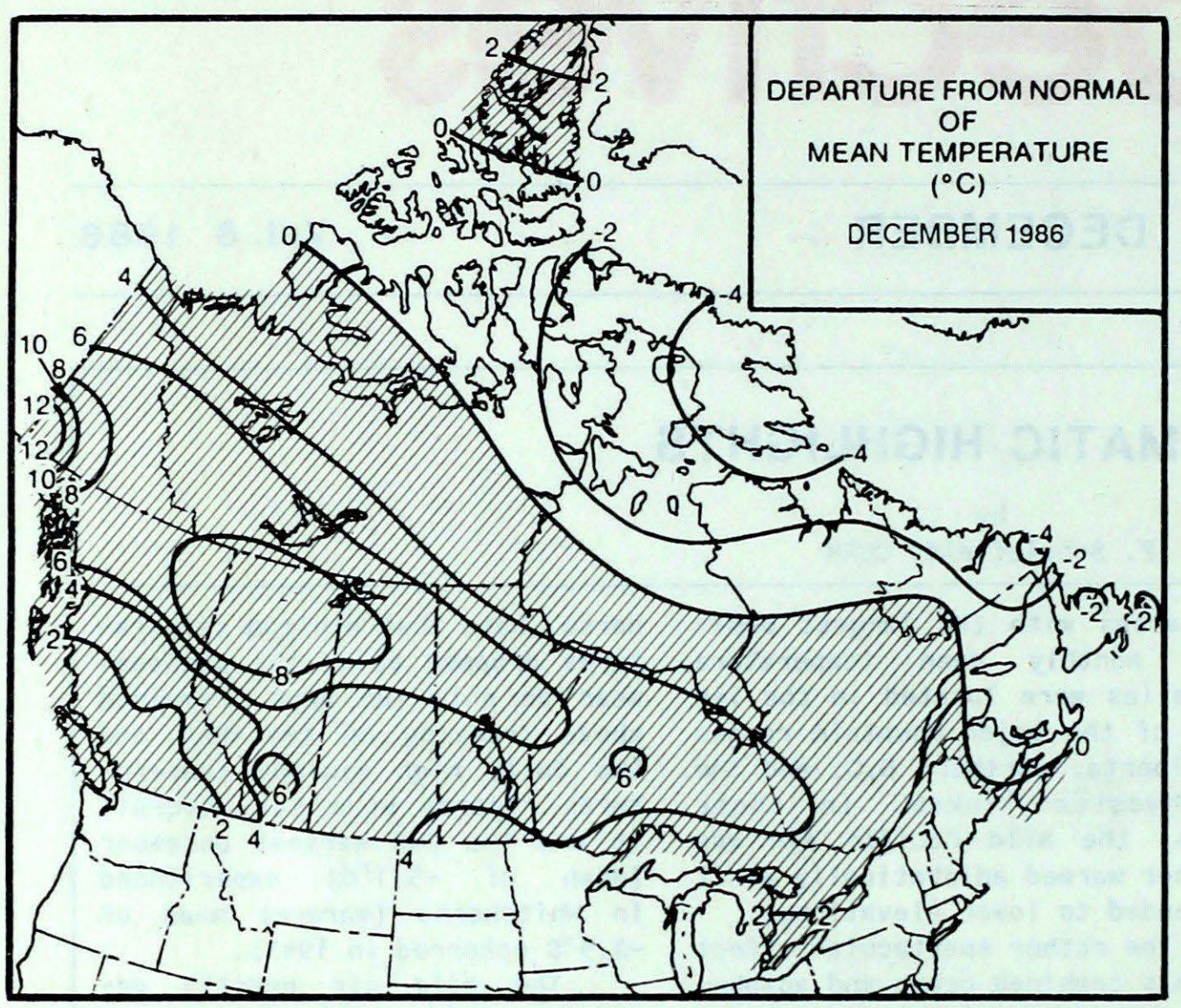


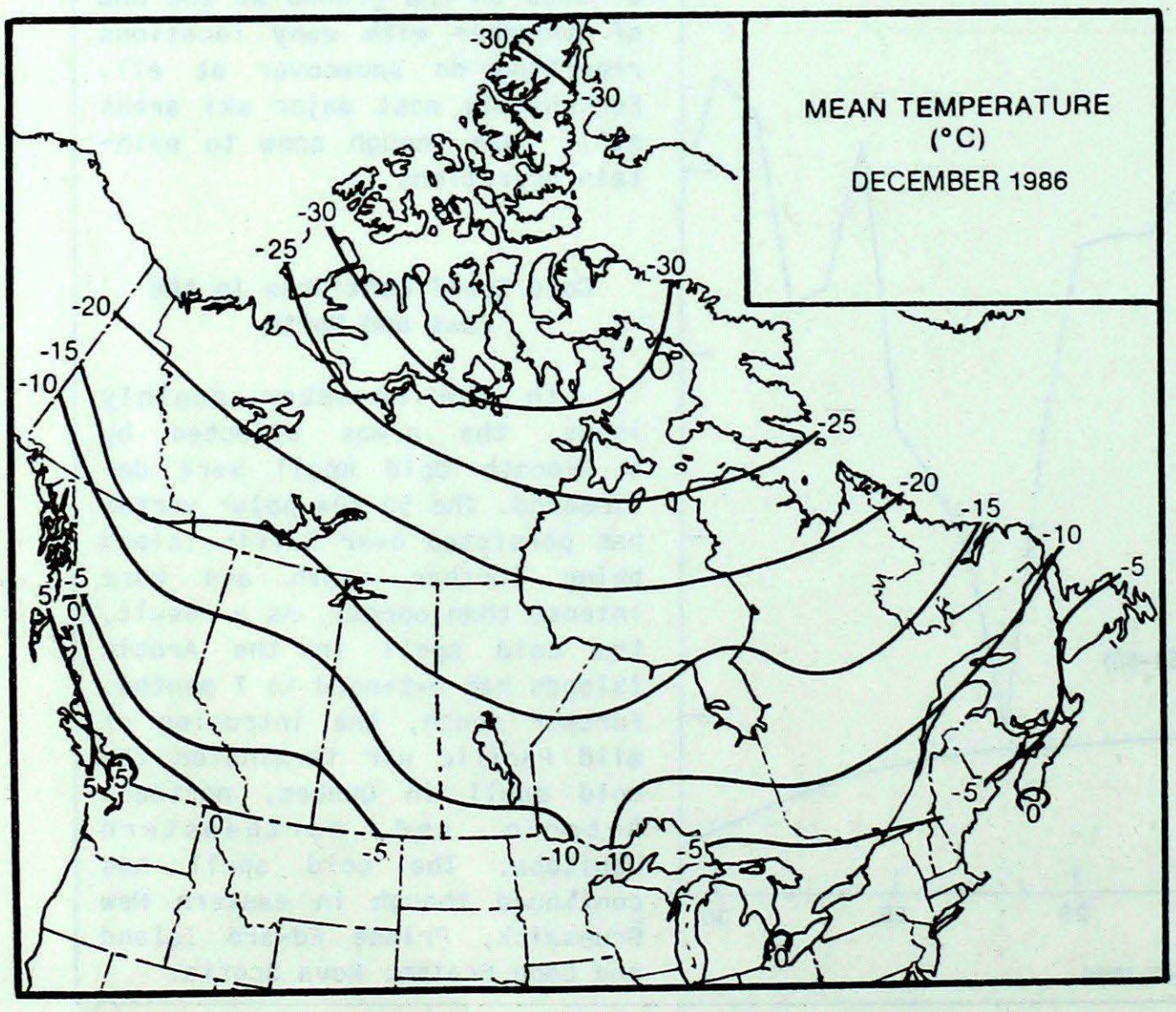
The mild air greatly depleted the snowcover across country. Valleys in southern B.C., southwestern Yukon, most of the southern Prairies and southern Ontario had less than 10 cm of snow on the ground at the end of December with many locations reporting no snowcover at all. Fortunately most major ski areas still have enough snow to maintain operations.

Cold Spell Continues in the East and North

In the November monthly issue, the areas affected by a 6-month cold spell were delineated. The 50 kPa polar vortex has persisted over Baffin Island being further south and more intense than normal. As a result, the cold spell in the Arctic Islands has extended to 7 months. Further south, the intrusion of mild Pacific air terminated the cold spell in Quebec, northern Ontario and northeastern Manitoba. The cold spell has continued though in eastern New Brunswick, Prince Edward Island and Cape Breton, Nova Scotia.

TEMPERATURE





ACROSS THE COUNTRY

Yukon and Northwest Territories

Record breaking warmth arrived over the Yukon and the Mackenzie Valley. The temperatures were 8 to 12 degrees above normal in the Yukon. A reading of 12.5 degrees at Burwash on December 9 was only half a degree shy from the all-time high for the Yukon for December. At Whitehorse, 9.5 degrees proved to be the highest maximum temperature for any December. In contrast, eastern Arctic continued to endure very cold weather. The temperatures were 2 to 4 degrees below normal over Baffin Island and Eureka experienced the coldest December temperature of -46 degrees.

Snowfall was well below normal over western Arctic. At Whitehorse, 10 cm of snow was less than half the normal amount; however, some locations in eastern Arctic received up to 3 times their normal amounts. Trapping for fur in the Yukon was adversely affected by the lack of snow, snow sled could not be used effectively on scanty snow cover.

British Columbia

A persistent southwesterly flow of maritime air mass produced very mild December across the Province. The temperatures averaged about 2 degrees above normal in southern British Columbia and rose to 4 degrees above normal over the central areas. The northern third of the Province was particularly mild where the readings were 4 to 9 degrees above the long term average. Both Fort Nelson and Fort St. John experienced temperatures that were 8 degrees above normal. Cape Scott and Cape St. James tied their record high monthly values and Langara established a record for the month, 6 degrees.

Precipitation was light across most of the Province. Southeastern areas including the interior valley received less than their normal shares. However, above normal amounts fell over the south coastal regions, Comox had the highest departure from normal, 136 percent.

Snowfall was below normal. No snow fell on the South Coast and very small amounts were received in the North. Amounts of bright sunshine were abundant throughout most of the Province, only southwestern sector experienced duller than normal December.

Prairies Provinces

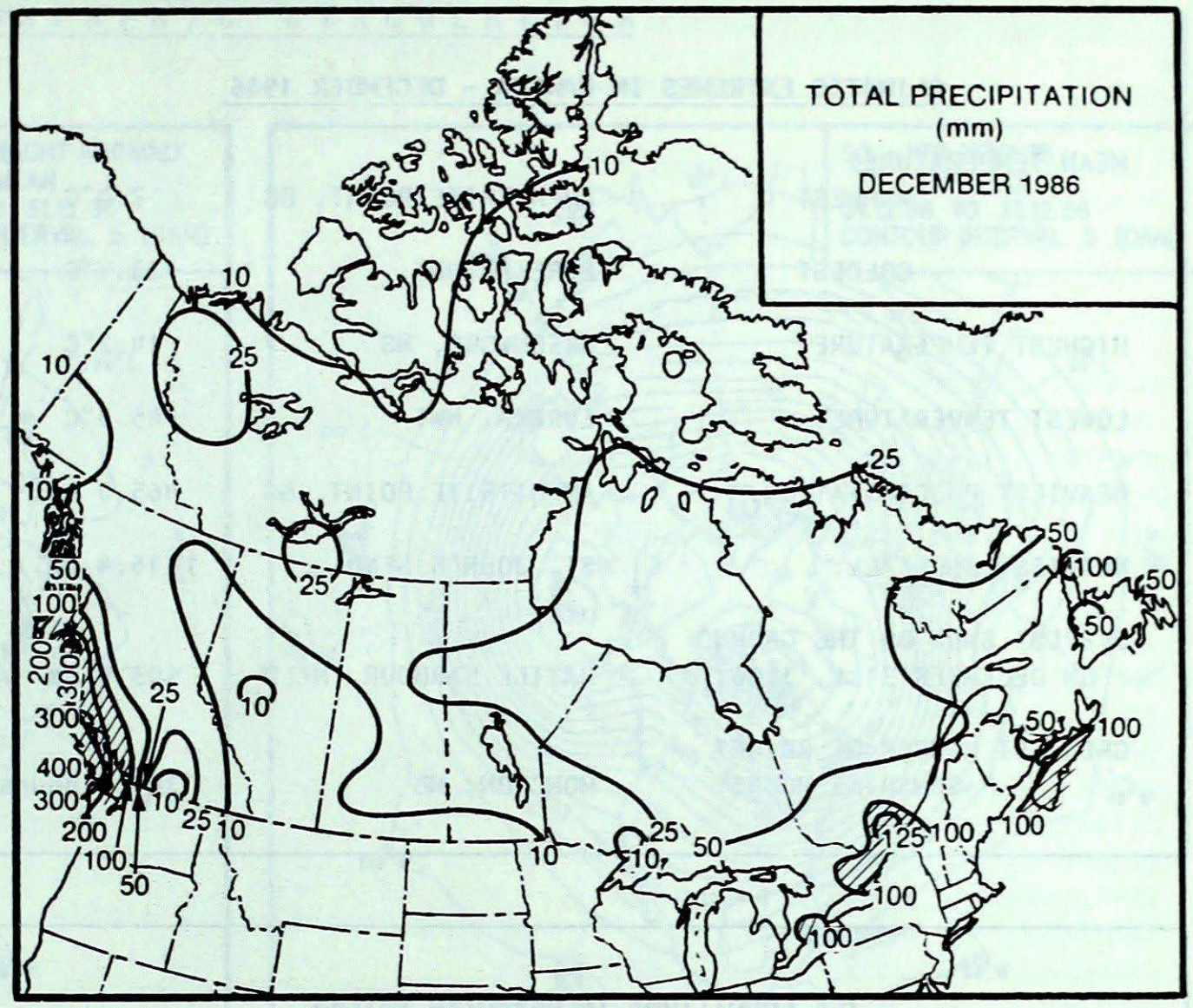
December's warmth brought a welcome relief from November's cold weather over the Prairies. The temperatures were 4 to 8 degrees above normal in the northern areas and 2 to 5 degrees over the long term average in the South. A surge of warm air allowed the mercury to climb to 10 degrees in southern Alberta near the end of the month. The highest reading was 13 degrees at Lethbridge on December 29. Further east, Swift Current reached 7 degrees. In Alberta, colder Arctic air made several brief intrusions sending overnight temperatures near -20 degrees at many locations during the first week.

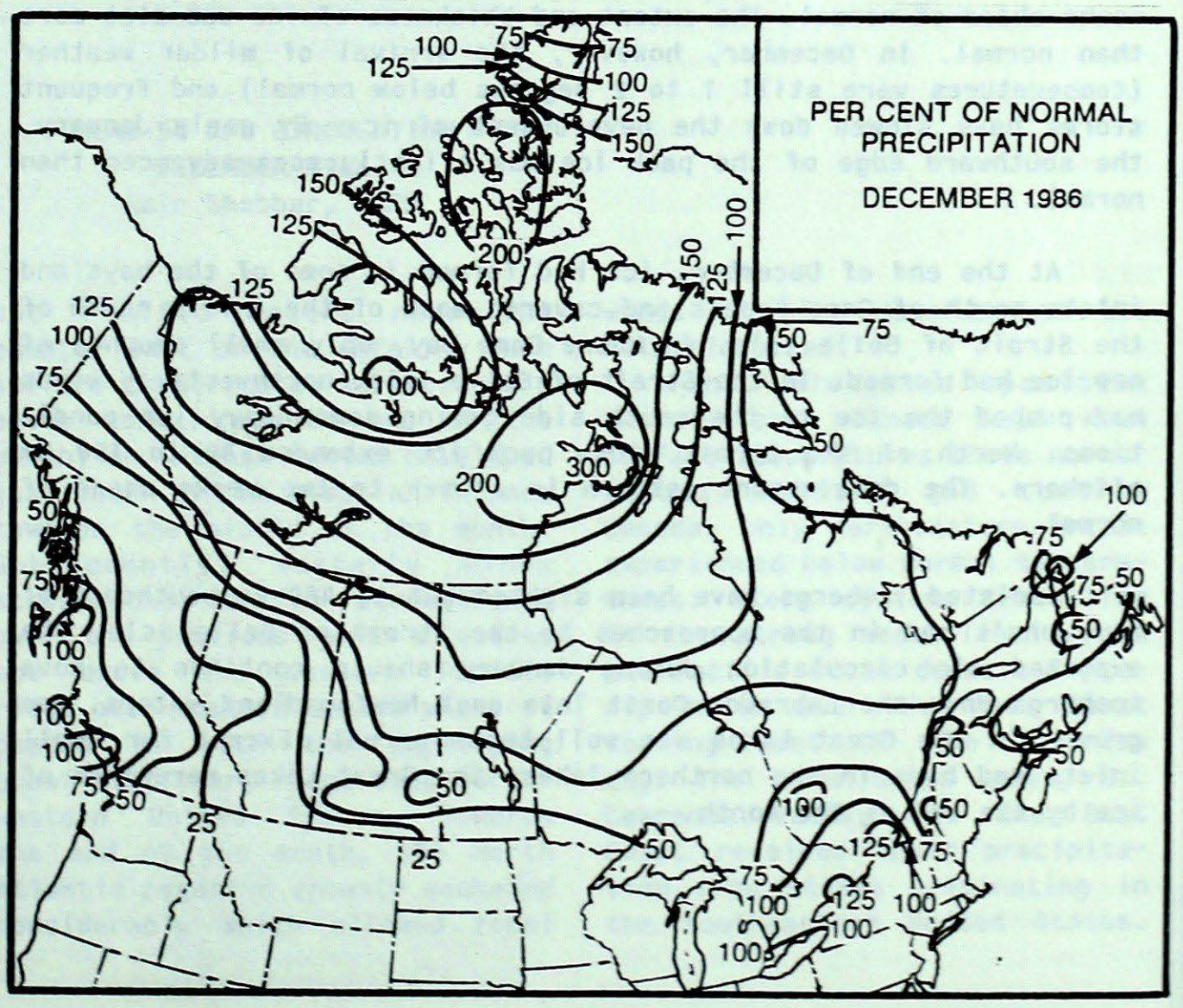
Precipitation was below normal throughout. Most stations received only one third to one half of their December averages. Snowfalls were less than 10 cm in areas of southern Manitoba and southern Saskatchewan; while in Alberta, many localities received less than 5 cm. Grand Prairie had the least, 0.7 cm. Accumulated seasonal snowfall averaged between 50 to 75 percent of normal but to only 20 percent of seasonal average at Whitecourt. By the end of the month, southern Alberta and southwestern Saskatchewan were free of snow, but over eastern Prairies 2 to 5 cm of snow remained on the ground.

Ontario

December's warmth ends Ontario's streak of 4 consecutive months of cooler than normal temperatures. Very mild weather covered Ontario during December and while the temperatures were up, the precipitation was generally below normal.

The temperatures in Northern Ontario were a balmy 4 to 6 degrees warmer than normal. This represented





EXTREMES

CLIMATIC EXTREMES IN CANADA - DECEMBER 1986

MEAN TEMPERATURE:		
WARMEST	AMPHITRITE POINT, BC	7.4°C
COLDEST	EUREKA, NWT	-33.4°C
HIGHEST TEMPERATURE:	GREENWOOD, NS	14.2°C
LOWEST TEMPERATURE:	EUREKA, NWT	-45.8°C
HEAVIEST PRECIPITATION:	AMPHITRITE POINT, BC	465.0 mm
HEAVIEST SNOWFALL:	ST. JOHN'S NFLD	116.4 cm
DEEPEST SNOW ON THE GROUND ON DECEMBER 31st, 1986:	BATTLE HARBOUR, NFLD	103.0 cm
GREATEST NUMBER OF BRIGHT SUNSHINE HOURS:	MONCTON, NB	149 hours

ICE CONDITIONS IN CANADIAN WATERS

Amir Shabbar, CCRM

Owing to below normal autumn air temperatures (2 to 3 degrees below normal), ice development in the East Coast waters was 3 to 4 weeks ahead of normal. The extent and thickness of ice was also more than normal. In December, however, the arrival of milder weather (temperatures were still 1 to 2 degrees below normal) and frequent storms have slowed down the development of ice. By early January, the southward edge of the pack ice was slightly more advanced than normal.

At the end of December, ice had formed in some of the bays and inlets north of Cape Freels and covered most of the inlets north of the Strait of Belle Isle. In Notre Dame Bay, only small amounts of new ice had formed. In the Strait of Belle Isle, northwesterly winds had pushed the ice to the south side giving some heavy ice conditions. North of the Strait close pack ice extended 80 to 150 km offshore. The development pattern is a week to two weeks ahead of normal.

Isolated icebergs have been sighted out to 480 km southeast of St. John's and in the approaches to the Strait of Belle Isle. The expected air circulation during January should continue to move icebergs down the Labrador Coast into east Newfoundland waters. Ice growth in the Great Lakes was well below normal. Except for small inlets and bays in the northern lakes, the Great Lakes were free of ice by the end of the month.

the warmest December since 1979 in the Northwest and the warmest since 1952 in the Northeast. Central Ontario recorded monthly means that were about 3 degrees above their normal values and the readings were 1 to 2 above normal in the southern areas.

Precipitation was only 50 to 80 per cent of normal, continuing the general trend of drier than normal months that began last October. A meagre 10 mm at Thunder Bay was the lowest December amount in 46 years of record. In contrast, precipitation was 10 to 25 per cent above normal south of a line from Ottawa to London due mostly to a rain and freezing rain outbreak on December 24. Snowfall was light, only 30 to 80 per cent of normal fell across the Province. Georgian Bay snow belt, Sudbury and North Bay collected more than their usual allotment of snow; Kingston however, had only 7 cm - the lowest December amount since 1943.

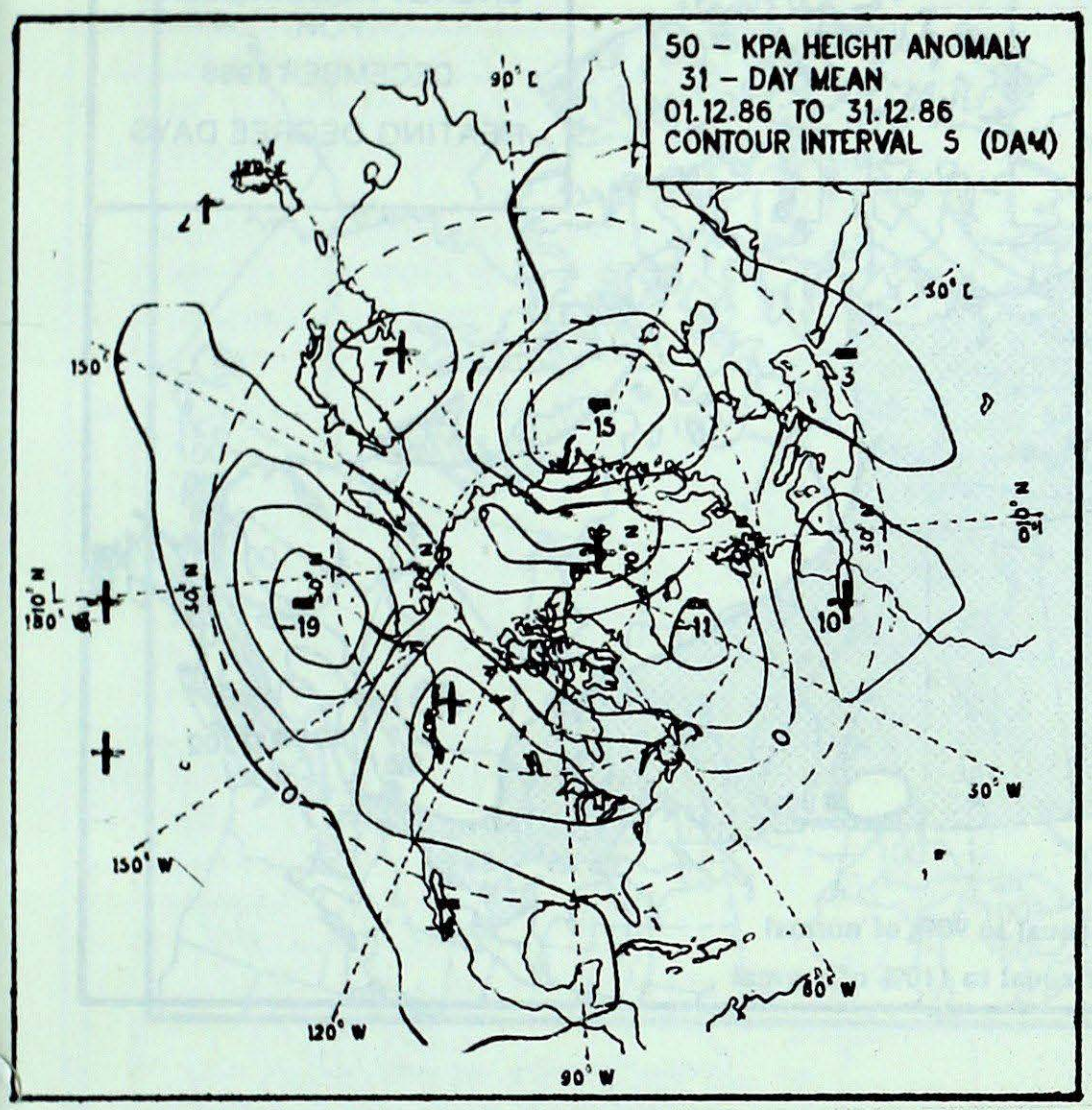
Sunshine hours were also low, London's 29 hours was the lowest since December 1927. The most notable weather event was the severe icestorm that struck Ottawa and the valley on Christmas eve, leaving many homes without electricity.

Quebec

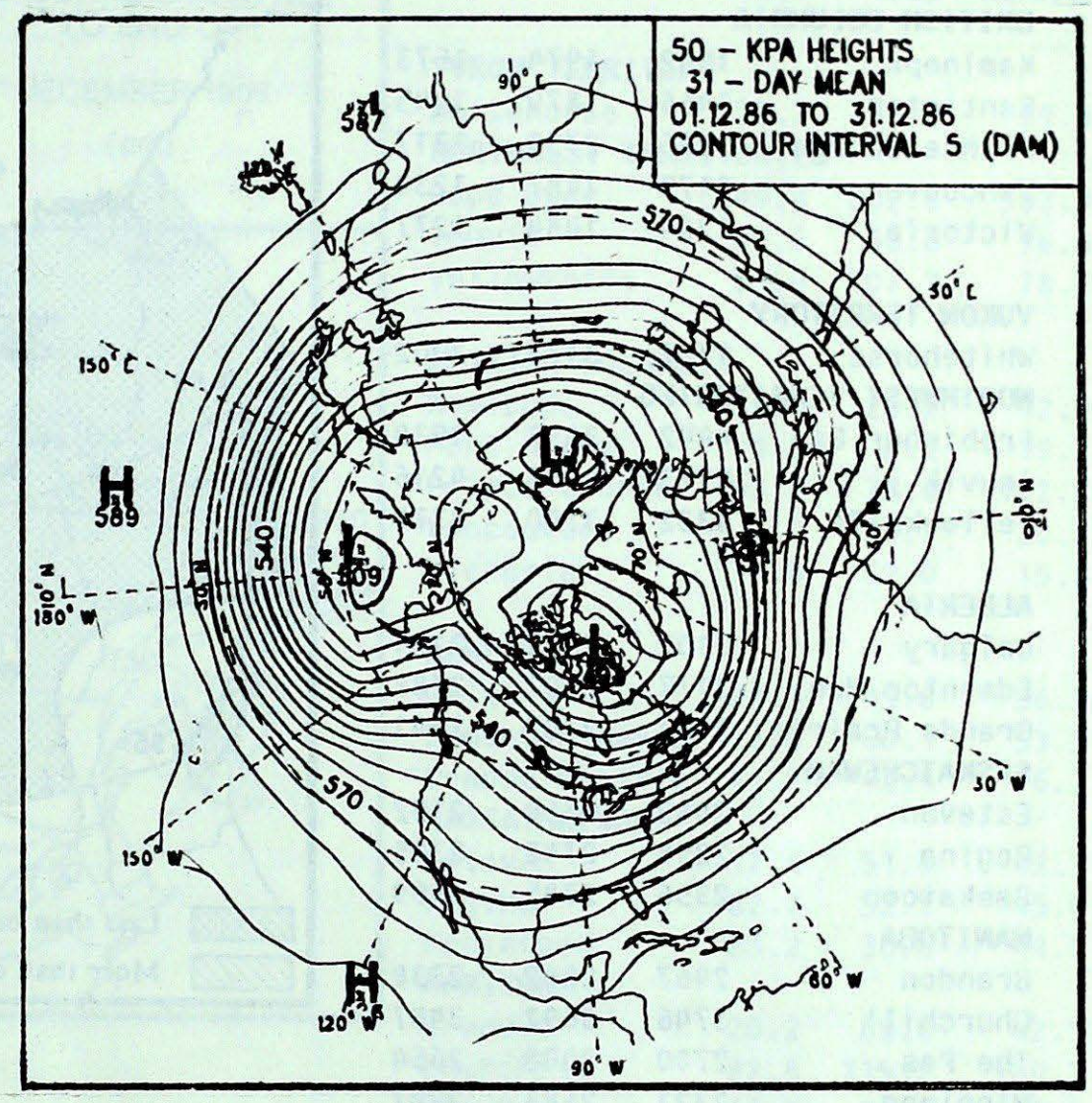
After a long stretch of cold weather, mild temperatures arrived during the second half of the month over southern Quebec. The north shore of the St. Lawrence Valley, the Gaspe area and northern Quebec, however, continued to experience below normal temperatures. The readings ranged from near normal at Natashquan to 3 degrees below normal at Blanc Sablon. Copious amounts of precipitation, exceeding 100 mm, fell over the lower St. Lawrence Valley. At Ste Agathe, 128 mm was 113 percent of normal. Snowfall was light in southern Quebec but exceeded the normal values by about 35 percent in the northern area, Sept-Iles received the most 97 cm. Hours of bright sunshine were above normal over southern Quebec. On Christmas day, southwestern Quebec was hit by a severe

...Continued on 10B, Regions

ATMOSPHERIC CIRCULATION



Mean 50 kPa height anomaly (dam)
December 1986



Mean 50 kPa heights (dam)
December 1986

MEAN 50 kPa CIRCULATION
DECEMBER 1986
Amir Shabbar, CCRM

The December mean 50 kPa circulation was characterized by cyclonic activity across the Pacific and in the North Atlantic Oceans. A large area of positive anomaly stretching from the Yukon southeastward to the Great Lakes kept heights higher than normal across most of North America, the only exception was northeastern Canada where depressed cyclonic circulation persisted. Wave number 3 dominated the flow with lobes of vortices located over southern Baffin Island, the Taymyr Peninsula and over the Aleutian Islands.

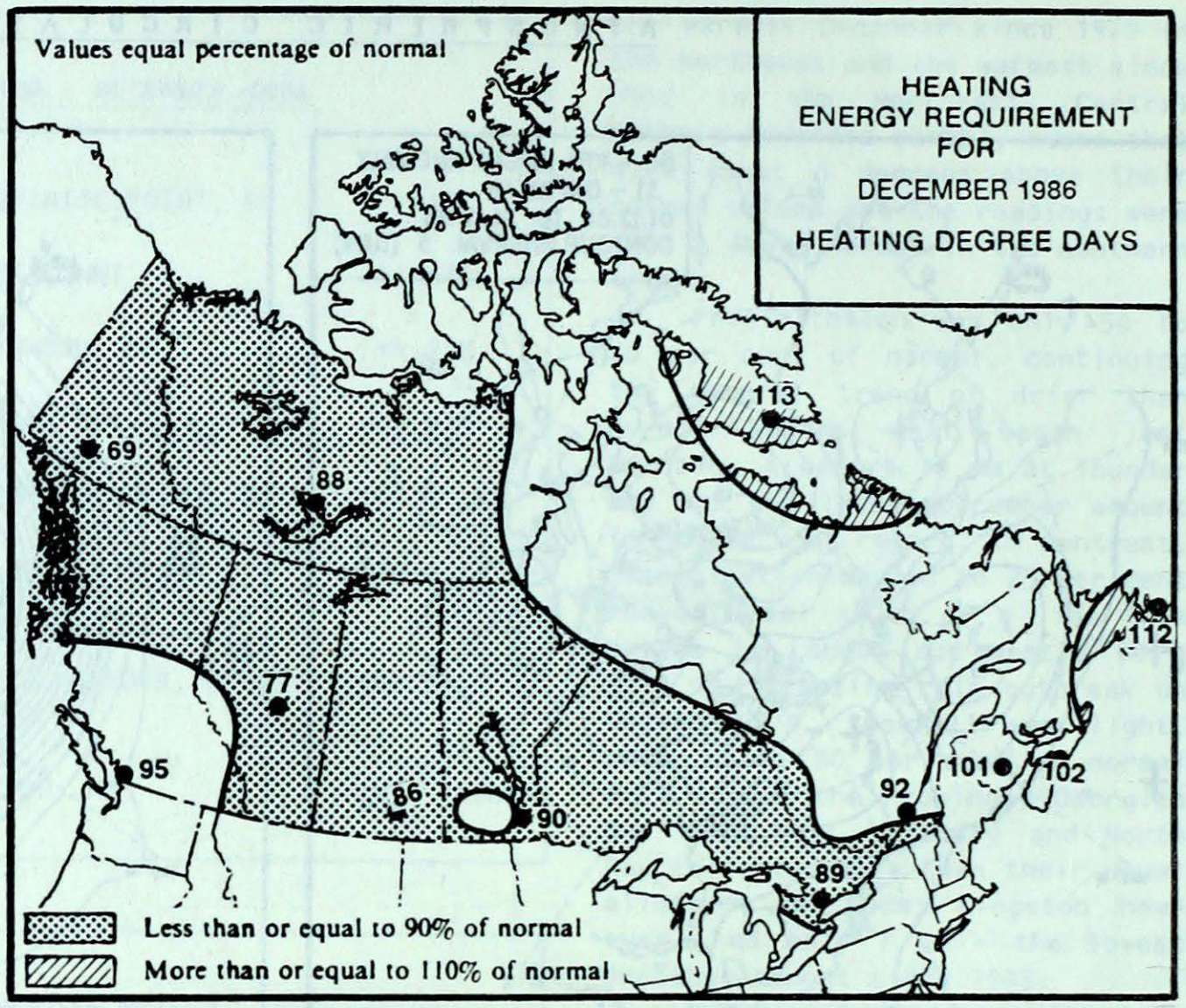
In response to the warming of the Pacific waters near the equator east of the dateline (sea surface temperatures were over 3°C above normal by the end of the month) an intense vortex developed just south of the Aleutian Islands towards the middle of the month. Subsequently, westerly winds across the Pacific strengthened over the previous month's values and drove the eastern Pacific ridge over western Canada where it phased in with the amplifying quasi-stationary ridge over northwestern United States. Towards the end of the month, the North Atlantic negative anomaly weakened considerably which allowed zonal winds to slow down across the Atlantic Ocean.

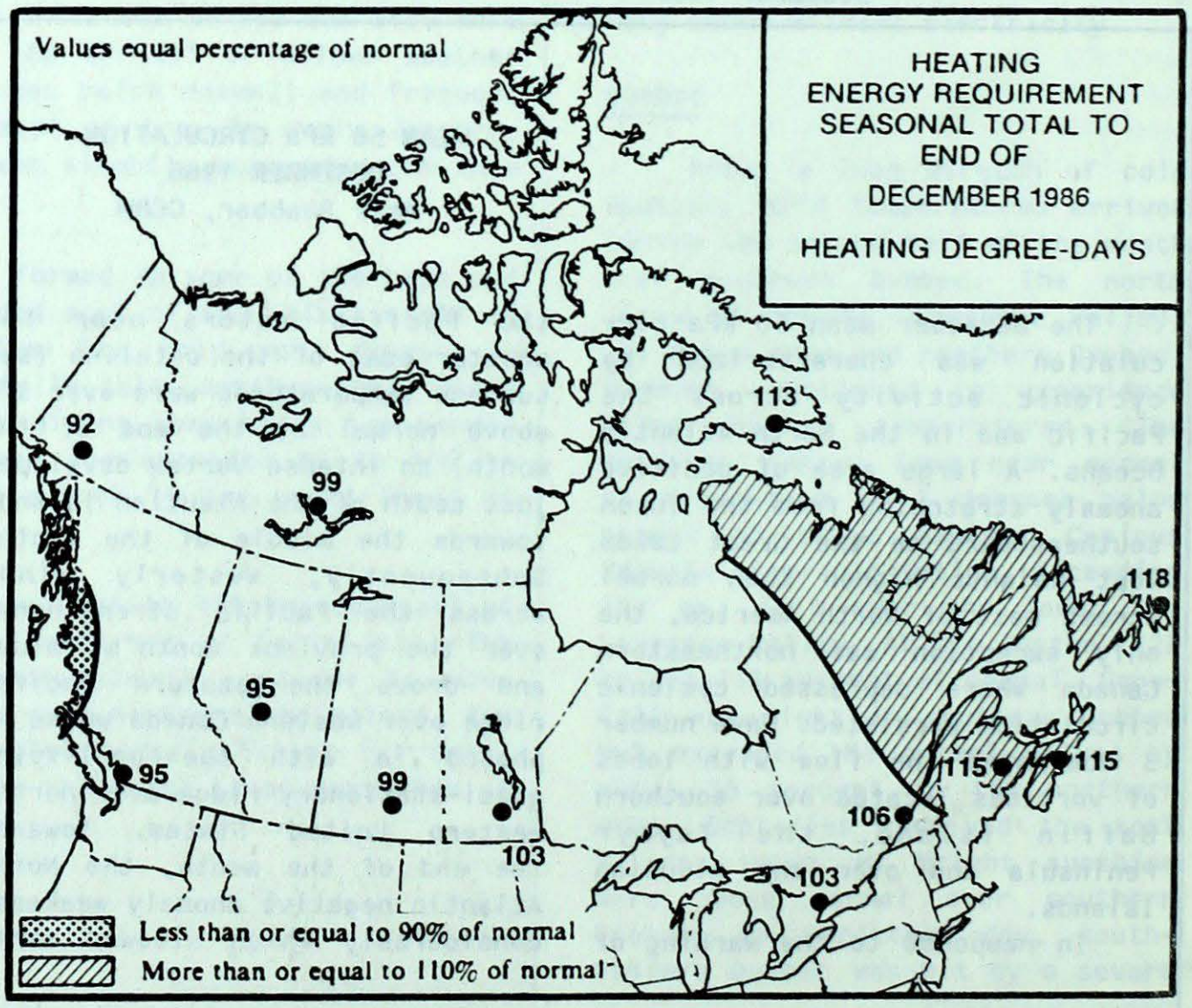
The elongated positive anomaly over Canada kept mean surface temperatures above normal across western and central Canada, only northeastern Arctic experienced below normal temperatures. Storm systems travelling in the strong westerlies across the Pacific Ocean deposited precipitation over the West Coast leaving most of the Prairies dry. The lower Great Lakes, St. Lawrence Valley and the East Coast received their precipitation from storms originating in the southeastern United States.

ENERGY

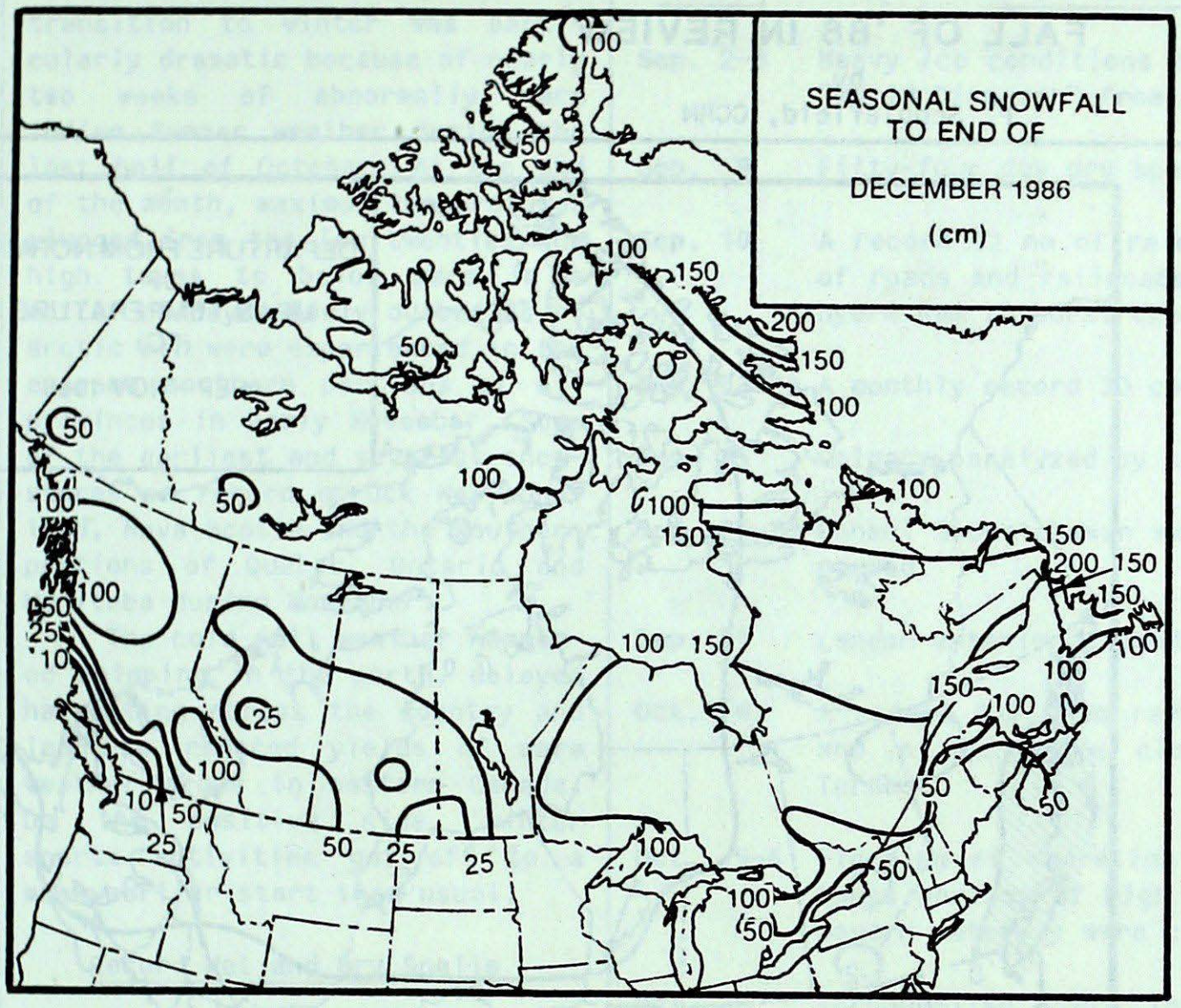
SEASONAL TOTAL OF HEATING DEGREE-DAYS TO END OF DECEMBER

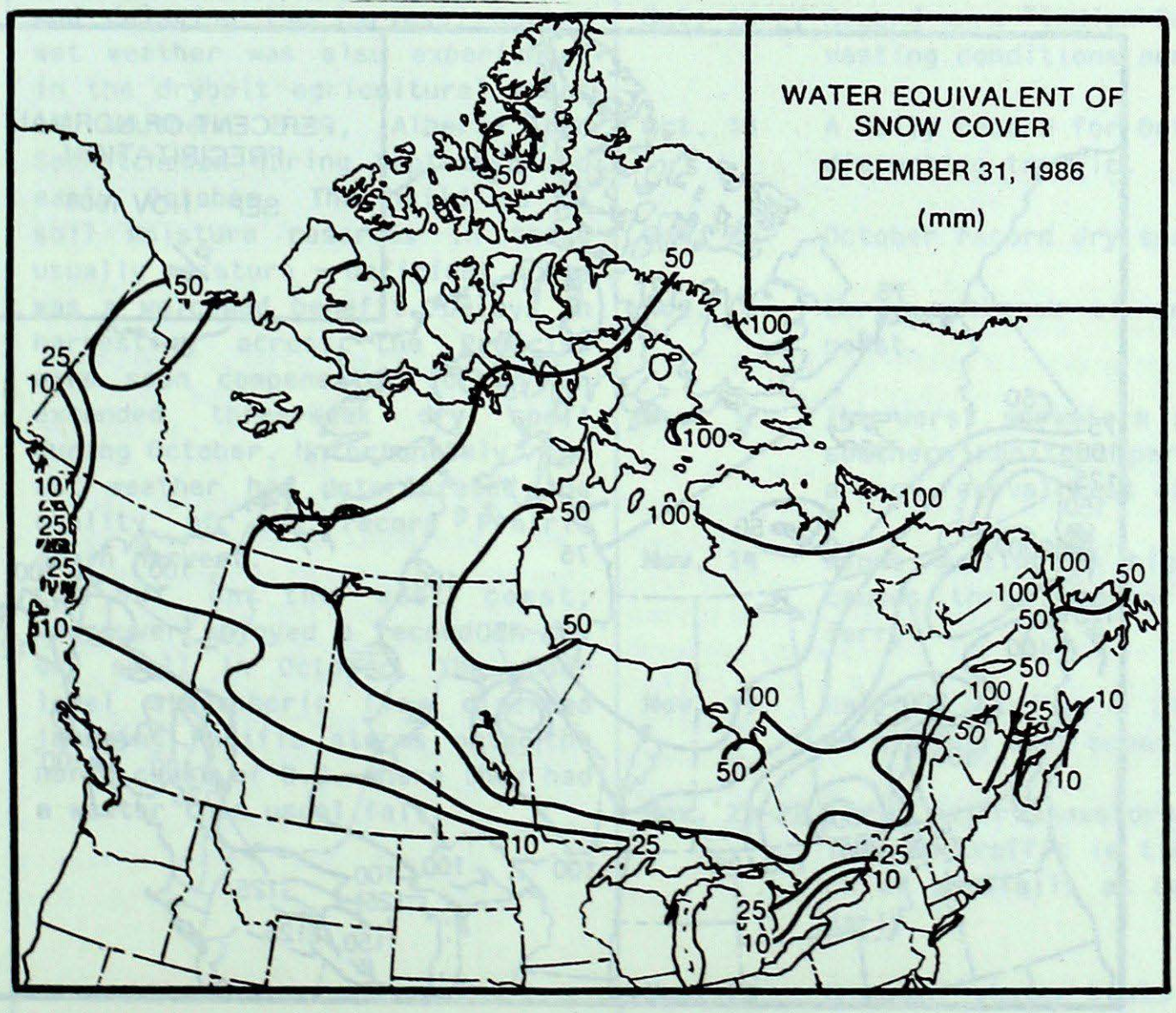
	1986	1985	NORMAL
BRITISH COLUMBIA			
Kamloops	1542	1974	1573
Penticton	1456	1879	1445
Prince George	2236	2750	2317
Vancouver	1173	1487	1234
Victoria	1264	1484	1277
YUKON TERRITORY			
Whitehorse	2757	3177	3002
NORTHWEST TERRITORIES			
Frobisher Bay	4442	3497	3930
Inuvik	4173	4239	4216
Yellowknife	3332	3700	3378
ALBERTA			
Calgary	2107	2491	2181
Edmonton Mun	2177	2502	2288
Grande Prairie	2441	2747	2541
SASKATCHEWAN			
Estevan	2082	2550	2152
Regina	2298	2742	2325
Saskatoon	2356	2745	2399
MANITOBA			
Brandon	2467	2862	2338
Churchill	3746	3692	3487
The Pas	2700	3008	2654
Winnipeg	2321	2683	2247
ONTARIO			
Kapuskasing	2612	2632	2483
London	1515	1495	1499
Ottawa	1777	1767	1746
Sudbury	2084	2131	2057
Thunder Bay	2246	2489	2209
Toronto	1529	1506	1486
Windsor	1272	1322	1312
QUÉBEC			
Baie Comeau	2573	2417	2302
Montréal	1740	1695	1637
Quebec	2094	1953	1910
Sept-Iles	2667	2484	2408
Sherbrooke	2049	1969	2028
Val-d'Or	2534	2506	2392
NEW BRUNSWICK			
Charlo	2332	2129	1936
Fredericton	2021	1915	1763
Moncton	2000	1858	1729
NOVA SCOTIA			
Halifax	1633	1537	1415
Sydney	1884	1661	1520
Yarmouth	1596	1508	1445
PRINCE EDWARD ISLAND			
Charlottetown	1895	1743	1608
NEWFOUNDLAND			
Gander	2207	2081	1876
St. John's	2087	1943	1765





SNOWFALL





SEASONAL SNOWFALL TOTALS (CM)
TO END OF DECEMBER

	1986	1985	NORMAL
YUKON TERRITORY			
Whitehorse	73.2	68.8	69.4
NORTHWEST TERRITORIES			
Cape Dyer	249.4	352.6	303.3
Inuvik	89.6	58.6	96.4
Yellowknife	53.0	107.7	78.7
BRITISH COLUMBIA			
Kamloops	39.0	26.2	42.0
Port Hardy	0.6	8.2	19.7
Prince George	83.2	73.6	102.9
Vancouver	0.0	26.2	20.3
Victoria	0.0	62.0	15.4
ALBERTA			
Calgary	28.3	49.0	56.5
Edmonton Namao	33.8	60.1	53.5
Grande Prairie	41.2	42.4	76.7
SASKATCHEWAN			
Estevan	17.4	51.0	42.7
Regina	82.0	52.1	45.0
Saskatoon	23.2	30.8	44.8
MANITOBA			
Brandon	20.2	89.8	42.9
Churchill	82.8	115.2	100.1
The Pas	61.1	76.0	72.1
Winnipeg	54.2	74.6	48.1
ONTARIO			
Kapuskasing	141.8	140.5	138.8
London	61.8	88.5	77.6
Ottawa	59.8	71.8	81.7
Sudbury	106.0	119.1	95.6
Thunder Bay	51.0	115.8	79.3
Toronto	27.4	36.2	41.4
Windsor	21.3	53.4	40.2
QUEBEC			
Baie Comeau	150.8	113.8	133.5
Montréal	67.9	64.4	81.7
Quebec	109.0	108.0	124.4
Sept-Iles	163.1	109.7	150.5
Sherbrooke	101.6	106.7	111.9
Val-d'Or	148.2	110.6	127.8
NEW BRUNSWICK			
Charlo	115.1	82.4	146.9
Fredericton	45.2	88.9	92.0
Moncton	*	76.6	96.8
NOVA SCOTIA			
Shearwater	50.7	59.8	47.2
Sydney	75.3	148.9	80.2
Yarmouth	33.8	55.5	52.0
PRINCE EDWARD ISLAND			
Charlottetown	65.1	97.2	97.0
NEWFOUNDLAND			
Gander	196.4	21.4	115.0
St. John's	117.7	22.4	90.7

FEATURE

FALL OF '86 IN REVIEW

by
P. Scholefield, CCRM

It was a cool and wet fall across much of southern Canada with the notable exception of southwestern B.C. and a glorious 2-3 week spell of Indian Summer weather across the Western Provinces in October.

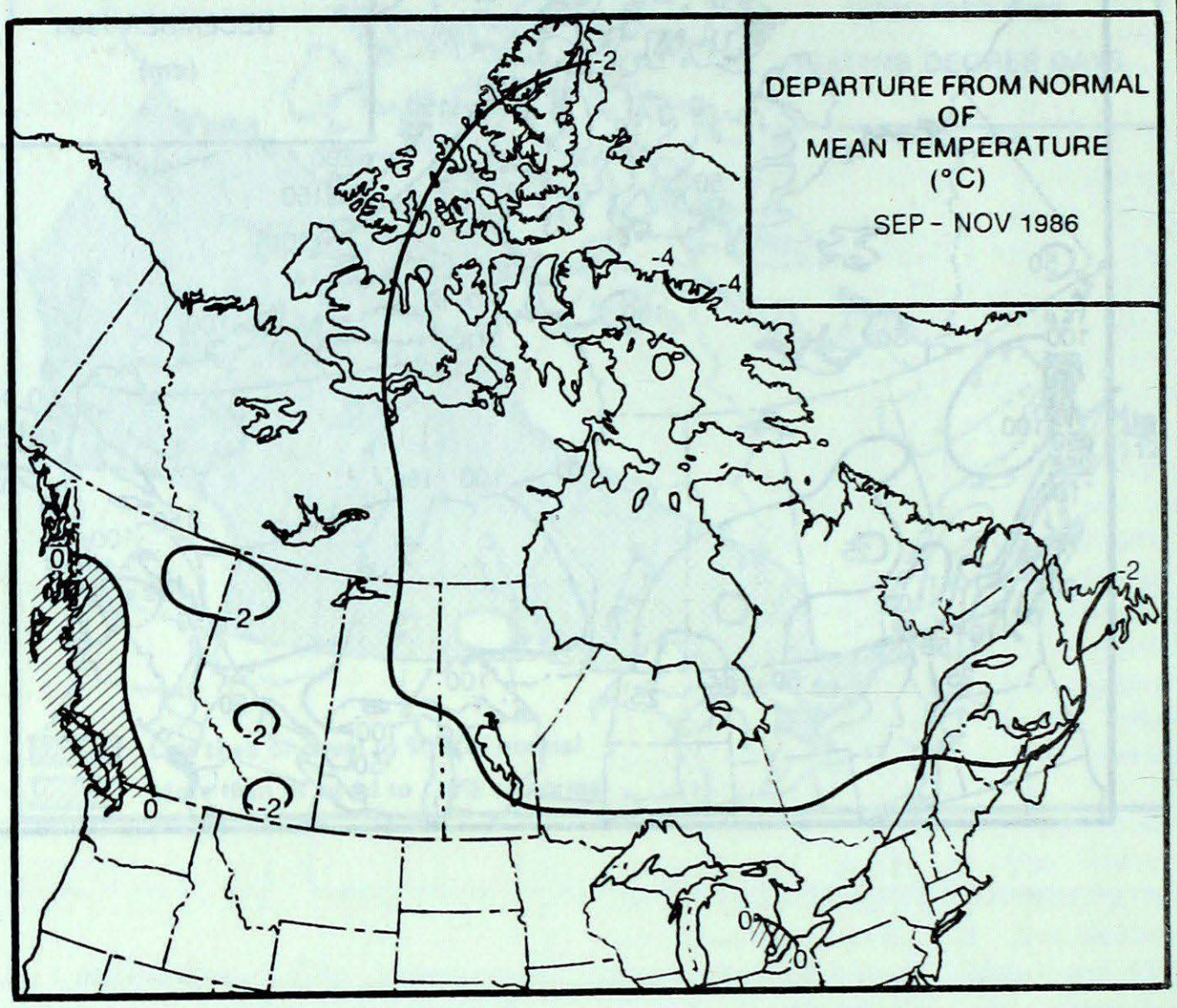
Cold Over the Eastern Half of the Country Continues

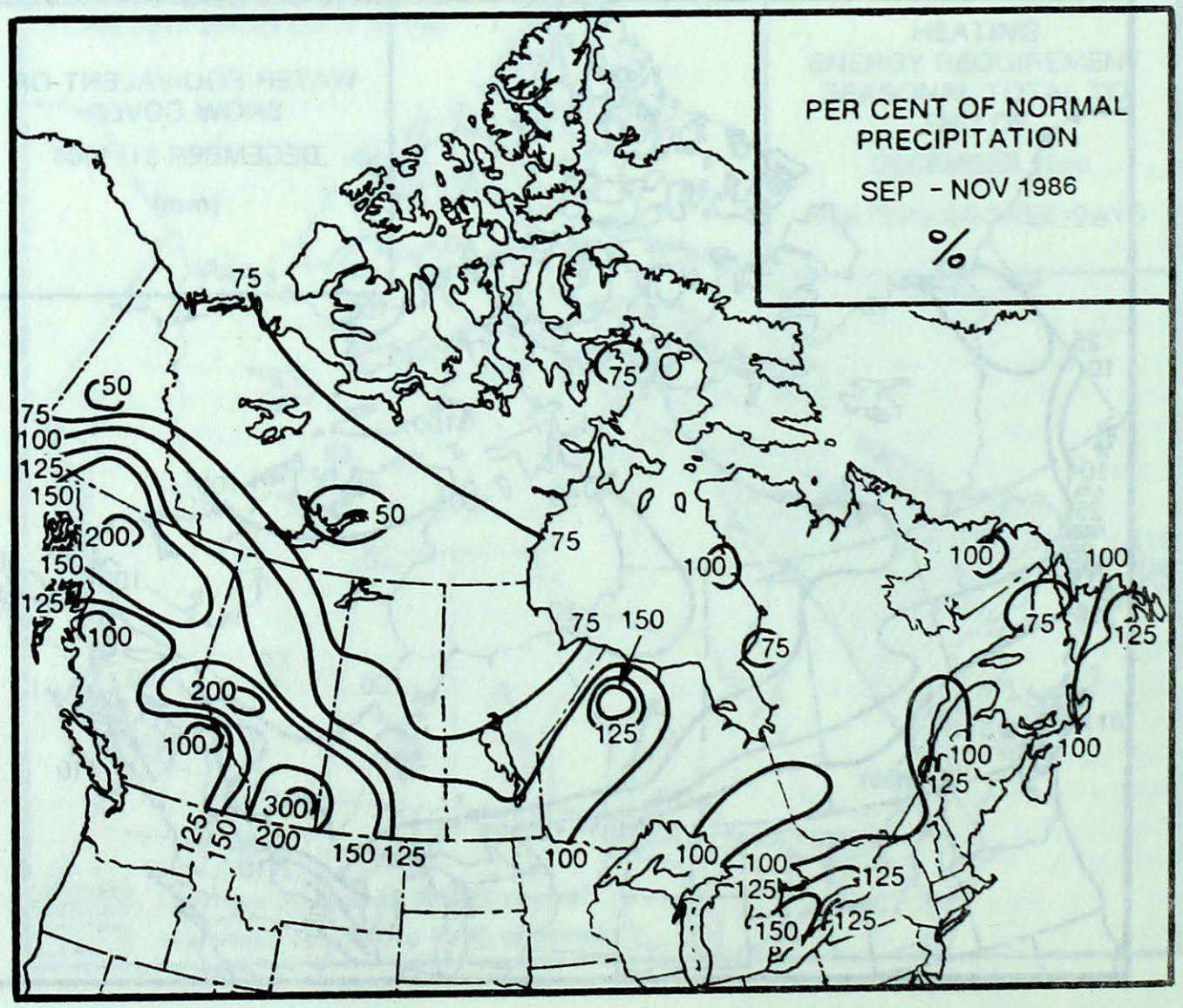
The predominant climatic feature of the fall was the continuation and intensification of the cold spell that had produced a cooler than normal summer over most of Canada. As shown on the accompanying anomaly chart, the area with mean temperatures less than 2°C below normal covers most of the eastern half of the country. Mean monthly temperatures were below normal for the past six consecutive months throughout the Maritimes, central and southern Quebec, extreme northern Ontario and Manitoba and over most of the High Arctic.

The unusual intensity and southward displacement of the polar vortex and its southward extending upper level trough persisted through most of the fall over eastern Canada to cause this extended cold spell. The polar vortex itself moved steadily southward from the North Pole through September and October and finally settled over southern Baffin Island in November.

The accompanying graph of daily minimum temperatures illustrates the intensification of the cold spell near its core at Frobisher Bay. As was the case over most of Eastern Canada, September temperatures were only marginally below normal. The cold spell at Frobisher Bay intensified dramatically in October where minimum temperatures plunged below normal every day of the month and four daily minimum records were established.

In Canada, a colder than usual autumn implies an early start to winter weather and this certainly was the case this year.





FEATURE

Across the southern Prairies the transition to winter was particularly dramatic because of nearly two weeks of abnormally warm Indian Summer weather during the last half of October. At the end of the month, maximum temperatures plunged from the low twenties and high teens to below zero in a matter of days. Early outbreaks of arctic air were experienced in the extreme southern portions of all provinces in early November. Some of the earliest and severest snowstorms on record struck Newfoundland, Nova Scotia and the southern portions of Quebec, Ontario and Manitoba during November.

The cold fall weather hampered shipping in the north, delayed harvesting across the country and lead to reduced yields of warm weather crops in eastern Canada. On the positive side, winter sports activities got off to a much earlier start than usual.

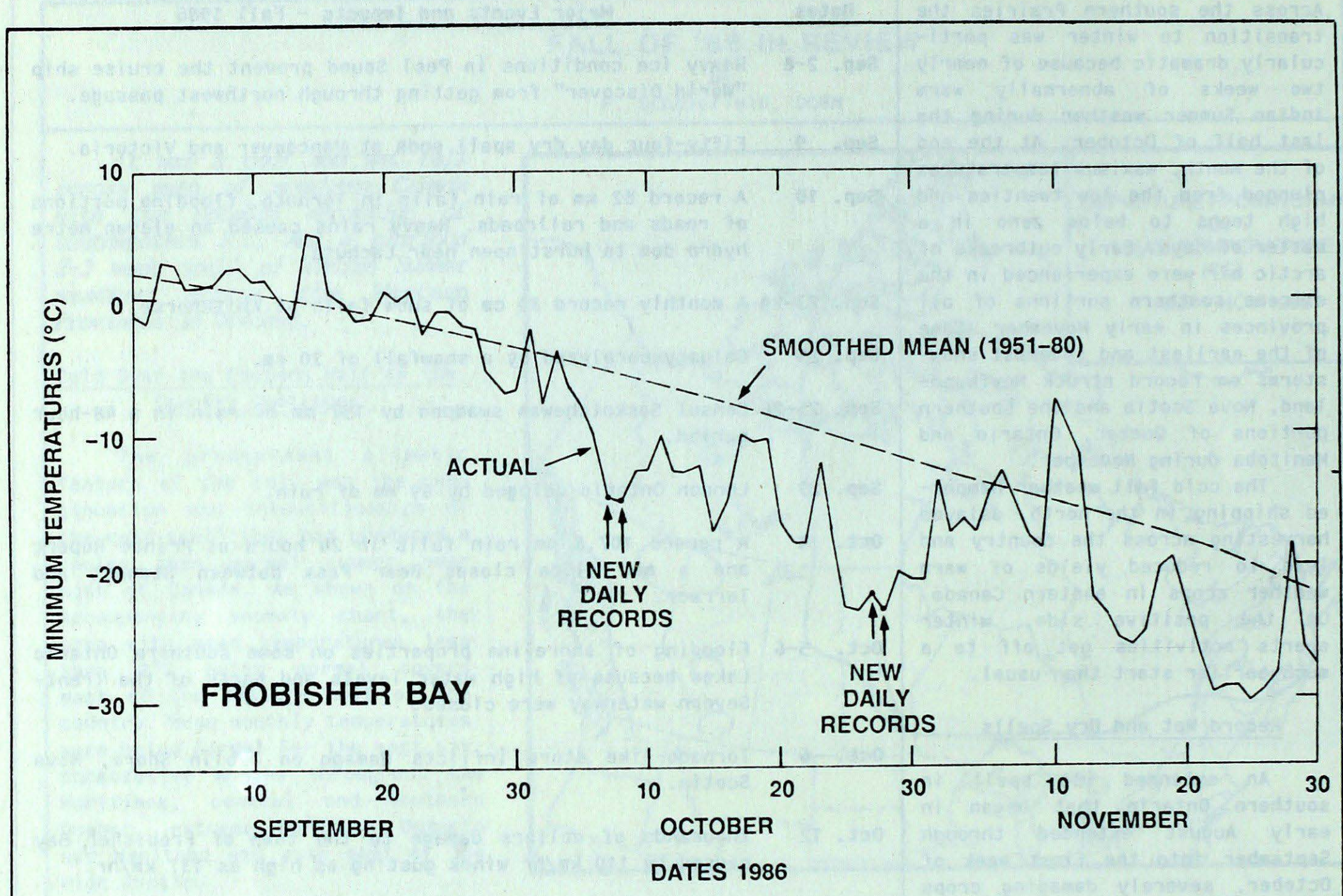
Record Wet and Dry Spells

An extended wet spell in southern Ontario that began in early August extended through September into the first week of October, severely damaging crops and delaying the harvest. Record wet weather was also experienced in the drybelt agricultural areas of southern B.C., Alberta and Saskatchewan during September and early October. The build up of soil moisture reserves in these usually moisture - deficient areas was a welcomed benefit. Delays in harvesting across the Prairies were soon compensated for by an extended three-week dry spell during October. Unfortunately, the wet weather had deteriorated the quality of the record Prairie grain harvest.

Out on the west coast, Vancouver enjoyed a record 24-day dry spell in October. The upper level atmospheric flow diverted incoming Pacific storms onto the north coast of B.C. where they had a wetter than usual fall.

Dates	Major Events and Impacts - Fall 1986
Sep. 2-8	Heavy ice conditions in Peel Sound prevent the cruise ship "World Discover" from getting through northwest passage.
Sep. 9	Fifty-four day dry spell ends at Vancouver and Victoria.
Sep. 10	A record 82 mm of rain falls in Toronto, flooding portions of roads and railroads. Heavy rains caused an eleven metre hydro dam to burst open near Lachute.
Sep. 23-24	A monthly record 30 cm of snow falls at Whitehorse.
Sep. 25	Calgary paralyzed by a snowfall of 20 cm.
Sep. 25-26	Consul Saskatchewan swamped by 157 mm of rain in a 48-hour period.
Sep. 29	London Ontario deluged by 89 mm of rain.
Oct. 4	A record 107.8 mm rain falls in 24 hours at Prince Rupert and a mud slide closes Bear Pass between Stewart and Terrace.
Oct. 5-6	Flooding of shoreline properties on some southern Ontario Lakes because of high water levels and parts of the Trent-Severn waterway were closed.
Oct. 6	Tornado-like storm inflicts damage on Dublin Shore, Nova Scotia.
Oct. 12	Thousands of dollars damage to the town of Frobisher Bay caused by 110 km/hr winds gusting as high as 137 km/hr.
Oct. 15-27	Record warm "Indian Summer" temperatures provide ideal harvesting conditions across the Prairies.
Oct. 18	A daily record for October of 14 cm of snow falls at Gander disrupting traffic.
Oct. 25	October record dry spell of 24 days ends at Vancouver.
Nov. 6	Early outbreak of arctic air invades the southern B.C. coast.
Nov. 7	The worst snowstorm since 1966 dumps 30-50 cm of snow on southern Manitoba paralyzing transportation and inflicting a snow removal cost of 2.5 million dollars on Winnipeg.
Nov. 14	Winds gusting as high as 140 km in a Newfoundland storm causes three tractor trailer units to overturn on a CN ferry.
Nov. 19	Halifax receives a 24-hour November record snowfall of 28 cm closing most schools and businesses.
Nov. 20-22	First major snowstorm hits southern Ontario and Quebec. Toronto traffic is tied up in 20 cm of snow and a record 70 cm of snowfalls at Gaspé. Snow allows ski resorts to open early.
Nov. 24	Several lobster boats are swamped by 100 km/hr winds drowning one fisherman in Nova Scotia.

FEATURE



Regions ... continued from 4b

ice storm. Ice laden tree branches broke hydroelectric lines and damaged cars and properties. Some residents were without electricity.

Atlantic Provinces

Exceptionally sunny and dry weather covered Atlantic Canada. In the Maritimes, 7 locations established record high sunshine hours including 145 hrs at Fredericton which broke the old record of 139 hrs set in 1963. Cold weather continued over Newfoundland and throughout most of Labrador but moderated to near normal conditions in the Maritimes. During a mid-month cold snap, the temperatures plummeted to near -20 degrees in Newfoundland.

Precipitation was below normal throughout the Provinces, several stations received less than one half their normal amounts. Charlottetown had 57 mm, the second lowest December amount since record began in 1943. At Gander, freezing precipitation occurred on ten days. Snowfall was well below normal. Greenwood received 16 cm, second only to the record low of 14 cm set in 1973. Winds were not overly excessive. At St. John's, gusts of 126 km/h were most noteworthy. Surface water runoff varied across the region with deficient flows on Prince Edward Island. In New Brunswick, runoff was slightly above normal in the central and northern areas.

FEATURE

CHRISTMAS EVE ICE STORM PARALYZES THE OTTAWA VALLEY

A Christmas Eve ice storm brought down thousands of tree limbs, blocking streets and knocking out powerlines. The clean up operation required hundreds of utility workers across the Ottawa region. (C.P. photo)

A severe ice storm struck the Ottawa Valley on Christmas Eve. The freezing rain which began on the evening of December 24 lasted nearly 14 hours in Ottawa and the adjacent areas. Extreme southwestern Quebec also received freezing precipitation for a prolonged period of time. Fallen trees and broken branches snapped hydro electric wires and damaged cars and properties. At least 20 thousand residents were without electricity. Power outages in some locations lasted more than 24 hours. Ottawa hydro had 230 linemen at work and Hydro Quebec called in reinforcements from Montreal to repair thousands of downed power lines. One home in four was without power on Christmas Day and many residents in the Ottawa-Hull area had to cope without electricity for the crucial turkey dinner.

Nearly 14 hours of freezing rain deposited about 30 mm of precipitation and ice accretion reached 15 mm in Ottawa.

Climatologically, only 3 percent of the time Ottawa receives freezing precipitation in December, and once in 10 years freezing rain lasts 14 hours in that month.

A. Shabbar

DECEMBER 1986

STATION	Temperature C				Snowfall (cm)	% of Normal Snowfall	Total Precipitation (mm)	% of Normal Precipitation	Snow on ground at end of month (cm)	No. of days with Precip 1.0 mm or more	Bright Sunshine (hours)	% of Normal Bright Sunshine	Degree Days below 18 C
	Mean	Difference from Normal	Maximum	Minimum									
BRITISH COLUMBIA													
ABBOTSFORD	3.3	0.1	12.1	-5.3			157.0	68	0	15	76	140	455.0
ALERT BAY	5.0	1.1	9.7	-0.7	0.0		213.4	91	0	17	X		399.4
AMPHITRITE POINT	7.4	1.9	11.7	0.7	0.0		465.0	102	0	19	X		330.1
BLUE RIVER	-6.7	0.6	4.0	-24.4	71.9	66	78.3	72	64	10	20	67	MSG
BULL HARBOUR	5.3	1.1	10.4	-1.8			324.2	108	0	18	X		395.5
CAPE SCOTT	6.6	1.5	12.1	0.3			361.3	105	0	22	X		353.0
CAPE ST.JAMES	7.2	2.2	10.1	2.3	1.6	13	113.2	59	0	16	63	*	334.6
CASTLEGAR	-0.7	1.2	5.3	-8.7	34.5	45	47.5	47		13	32	104	579.1
COMOX	4.6	0.9	11.2	-3.4			288.4	135	0	16	X		416.3
CRANBROOK	-4.7	1.4	7.5	-20.2	16.6	31	8.1	20	10	3	40	*	703.6
DEASE LAKE	-9.4	6.6	3.0	-20.0	26.1	62	19.9	59	49	7	29	70	847.4
ETHELDA BAY	4.0	0.9	10.2	-4.5	0.0		382.9	105	0	19	X		433.5
FORT NELSON	-13.0	8.0	8.2	-24.4	13.4	49	8.2	38	27	3	70	*	959.2
FORT ST.JOHN	-4.7	8.5	5.4	-19.6	3.7	9	4.1	11	3	1	X		703.0
HOPE	2.3	0.7	10.0	-3.4			119.3	41	0	12	6	157	487.2
KAMLOOPS	-1.4	1.4	10.9	-10.0	7.0	23	18.2	56	0	5	50	104	599.9
KELOWNA	-1.3	1.2	7.2	-10.7	15.0	47	17.8	42	0	5	35	85	598.1
LANGARA	6.0	2.4	9.9	1.4	0.8	3	171.5	81	0	21	X		372.8
LYTTON	-0.8	0.2	9.0	-10.4	29.1	70	54.2	72	0	8	50	112	582.9
MACKENZIE	-7.3	2.8	2.7	-23.4	32.0	40	29.8	33	37	7	18	49	783.6
MCINNES ISLAND	5.7	1.6	11.0	1.0	0.6	3	244.9	81	0	16	X		382.8
PENTICTON	-0.1	0.3	7.4	-9.9	13.1	56	12.2	39	0	4	31	79	561.6
PORT ALBERNI	3.4	*	11.4	-2.4	0.0	*	369.2	*	0	16	11	*	450.5
PORT HARDY	4.6	1.1	9.4	-3.5	0.0		298.6	107	0	17	60	132	416.6
PRINCE GEORGE	-5.5	2.4	7.0	19.4	16.2	30	20.7	36	6	5	58	123	727.0
PRINCE RUPERT	3.9	2.3	12.6	-5.3	4.4	12	165.3	58	0	14	36	112	436.6
PRINCETON	-5.1	0.6	3.6	-17.5	12.0	26	9.8	18	11	3	42	*	MSG
QUESNEL	-4.9	2.2	7.4	-16.7	23.0	46	23.0	45	8	8	X		711.2
REVELSTOKE	1.9	5.7	5.5	-10.3	66.2	47	91.5	63	4	11	16	59	616.9
SANDSPIT	5.4	2.0	10.3	-1.7	0.0		166.2	93	0	16	38	94	390.1
SMITHERS	-5.2	2.4	5.1	-17.8	25.7	45	24.8	41	18	6	33	85	727.1
TERRACE	-0.9	2.5	5.5	-7.4	59.6	56	217.5	113	5	15	29	96	584.1
VANCOUVER HARBOUR	5.8	1.1	12.6	-0.8			272.7	112	0	16	X		378.5
VANCOUVER INT'L	4.6	0.7	11.3	-4.0	0.0		186.3	102	0	18	72	150	414.3
VICTORIA GONZ. HTS	6.2	0.9	11.4	1.5	0.0		32.1	26	0	10	84	143	367.2
VICTORIA INT'L	4.2	0.0	11.4	-3.3	0.0		73.2	46	0	14	59	114	429.1
VICTORIA MARINE	6.0	1.1	12.2	-0.4	0.0		92.2	40	0	14	X		378.5
WILLIAMS LAKE	-5.2	2.5	5.8	-18.5	37.5	75	31.7	76	22	5	63	128	716.9

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	Mean	Difference from Normal	Maximum	Minimum									
YUKON TERRITORY													
BURWASH	-9.4	12.6	12.5	-29.2	10.2	92	5.8	42	2	1	X		855.7
DAWSON	-19.7	6.2	-2.9	-34.8	47.4	134	32.9	81	56	8	X		1167.2
MAYO	-18.9	5.3	-0.6	-30.5	30.6	124	23.5	104	16	11	X		1080.9
WATSON LAKE	-15.9	7.6	3.9	-27.0	23.4	50	16.3	44	34	6	27	86	1052.8
WHITEHORSE	-5.1	11.5	9.5	-22.0	9.8	40	7.8	38	19	3	38	165	714.3
NORTHWEST TERRITORIES													
ALERT	-27.7	2.3	-6.7	-42.0	6.0	72	3.8	48	34	1	0		1415.7
BAKER LAKE	-27.7	0.5	-8.7	-38.5	22.4	257	19.2	234	50	3	11	154	1418.3
CAMBRIDGE BAY	-29.8	0.2	-13.6	-39.9	6.4	101	4.7	87	21	1	0		1482.9
CAPE DYER	-24.7	-4.4	-8.2	-41.3	22.2	35	18.6	32	45	7	X		1324.9
CAPE PARRY	-23.9	1.1	-7.0	-36.3	13.4	132	7.5	110	15	2	X		1300.4
CLYDE	-27.7	-3.3	-10.3	-44.5	13.2	167	13.0	166	32	5	0		1415.0
COPPERMINE	-25.8	0.1	-10.9	-40.7	23.2	201	13.2	118	15	6	0		1353.5
CORAL HARBOUR	-27.9	-2.4	-11.0	-39.2	30.7	284	30.7	300	30	6	20	70	1414.9
EUREKA	-33.4	1.4	-20.8	-45.8	6.0	240	5.4	225	20	3	0		1594.3
FORT RELIANCE	-19.5	4.4	-2.7	-37.8	39.6	207	22.5	150	33	8	X		1162.9
FORT SIMPSON	-17.5	7.0	3.9	-29.0	20.7	86	20.1	85	31	5	32	109	1099.7
FORT SMITH	-14.9	6.7	2.3	-34.0	44.3	177	31.4	141	33	5	19	67	1018.7
FROBISHER BAY	-26.4	-4.6	-7.2	-39.8	18.4	74	15.2	68	24	7	19	96	1376.0
HALL BEACH	-30.9	-3.5	-15.8	-40.5	12.4	134	12.1	139	30	3	X		1514.0
HAY RIVER	-13.7	7.2	4.4	-26.2	29.8	115	30.5	123	35	6	X		981.8
INUVIK	-23.6	3.6	-4.2	-44.9	36.0	173	27.1	155	34	3	0		1290.5
MOULD BAY	-31.6	-0.4	-19.6	-44.0	6.6	165	5.6	155	33	3	0		1537.8
NORMAN WELLS	-19.5	7.0	-4.2	-35.2	38.0	196	28.8	153	17	8	13	98	1161.2
POND INLET	-30.6	-1.9	-10.2	-41.2	19.9	120	14.6	109	11	6	X		1507.2
RESOLUTE	-29.9	-0.6	-15.9	-38.5	4.0	75	4.0	81	14	2	0		1483.4
YELLOWKNIFE	-18.4	5.6	-3.3	-33.3	28.8	130	17.6	96	18	6	24	115	1133.5
ALBERTA													
BANFF	-6.0	2.9	4.5	-23.0	4.4	9	2.6	6	27	1	X		
BROOKS	-3.2	6.3	11.5	-17.5	4.2	19	3.4	17	0		87	*	
CALGARY INT'L	-1.7	6.1	10.5	-15.5	1.8	8	1.2	7	0	1	130	133	609.4
COLD LAKE	-9.2	5.0	3.0	-26.2	10.0	37	7.2	29	11	3	88	115	843.9
CORONATION	-7.5	4.3	3.3	-26.5	6.8	30	5.0	25	10	3	103	123	790.7
EDMONTON INT'L	-6.4	6.7	5.1	-22.9	5.4	20	6.0	27	7	2	102	131	757.9
EDMONTON MUNI.	-4.4	6.0	5.8	-18.3	2.9	10	2.9	11	7	1	110	141	693.3
EDMONTON NAMAO	-4.5	7.3	5.0	-20.0	3.4	12	3.9	14	2	2	X		699.1
EDSON	-8.2	3.8	6.3	-25.8	12.0	53	7.8	48	20	1	102	155	811.6
FORT CHIPEWYAN	-12.3	8.4	5.0	-31.0	19.8	72	19.8	80	25		X		

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	Mean	Difference from Normal	Maximum	Minimum									
FORT MCMURRAY	-8.4	8.6	7.7	-28.2	16.7	56	11.7	46	19	4	67	108	817.7
GRANDE PRAIRIE	-7.0	6.4	5.0	-24.5	0.7	2	1.1	3	9	0	111	*	776.3
HIGH LEVEL	-12.9	7.4	4.2	-26.0	20.2	65	18.8	76	40	4	23	62	955.2
JASPER	-6.6	2.6	6.2	-24.1	12.6	38	8.8	26	20	2	71	*	763.3
LETHBRIDGE	-0.7	5.1	12.9	-21.1	5.0	19	3.8	17	0	2	131	145	577.9
MEDICINE HAT	-2.5	5.1	9.6	-20.1	7.0	36	9.3	57		3	128	147	636.9
PEACE RIVER	-7.0	6.3	6.6	-20.5	4.1	15	4.0	18	5	1	X		774.5
RED DEER	-6.6	4.8	6.2	-22.6	1.2	5	1.7	8	1	0	X		762.4
ROCKY MTN HOUSE	-6.9	2.2	8.4	-25.6	5.6	22	5.0	22	3	2	X		773.4
SLAVE LAKE	-6.6	7.5	6.8	-21.0	3.4	10	6.0	21	7	2	86	149	763.5
SUFFIELD	-3.4	*	8.4	-19.5	12.2	*	13.0	*	TR	3	108		662.4
WHITECOURT	-6.3	6.8	5.4	-21.5	10.1	36	11.4	42	11	2	X		753.5
SASKATCHEWAN													
BROADVIEW	-8.5	5.0	3.3	-30.6	10.8	51	10.6	57	3	2	116	121	
COLLINS BAY	-15.0	7.1	-0.5	-35.2	37.4	98	29.2	94	28	7	37	*	1023.0
CREE LAKE	-12.7	7.4	0.5	-36.9	24.8	76	21.2	89	24	4	*		952.8
ESTEVAN	-5.7	5.4	5.6	-24.6	3.2	16	1.8	9		1	119	115	736.3
HUDSON BAY	-11.0	5.2	1.6	-35.9	31.2	106	22.0	99	24	7	78	*	899.1
KINDERSLEY	-8.7	4.1	2.8	-25.8	8.8	42	6.4	33	9	3	X		793.7
LA RONGE	-11.9	5.5	1.6	-35.5	29.3	106	26.3	120	31	5	X		925.5
MEADOW LAKE	-10.7	4.3	1.7	-35.7	16.2	63	14.8	56	10	6	77	*	890.5
MOOSE JAW													
NIPAWIN	-12.0	*	1.0	-36.9	38.6	*	23.2	*	21	6	78	*	929.9
NORTH BATTLEFORD	-9.3	4.8	2.6	-26.0	5.7	24	5.9	28	5	3	X		855.0
PRINCE ALBERT	-10.7	5.8	2.9	-34.1	17.3	72	16.7	76	12	4	84	118	891.5
REGINA	-8.6	4.2	4.3	-27.4	9.8	47	8.3	49	5	2	112	133	823.3
SASKATOON	-8.4	5.7	2.9	-26.5	7.6	35	7.2	36	8	2	X		818.7
SWIFT CURRENT	-4.9	5.0	7.5	-24.6	11.6	56	12.0	60	2	4	108	126	709.0
WYNYARD	-8.3	5.4	3.2	-33.0	16.2	65	13.1	59	5	4	X 84	94	815.7
YORKTON	-10.1	4.5	2.5	-31.1	11.8	49	9.5	42	7	3	94	108	870.1
MANITOBA													
BRANDON	-11.1	3.3	4.0	-32.8	8.6	43	7.8	40	4	3	X		902.3
CHURCHILL	-18.8	3.4	-0.4	-32.0	30.8	135	22.6	108	22	6	48	86	1139.8
DAUPHIN	-8.6	5.7	4.8	-30.8	14.7	56	12.4	51	5	5	111	119	825.1
GILLAM	-17.2	5.6	-2.1	-35.7	34.4	108	22.0	52	28	7	X		1089.9
GIMLI	-10.3	5.2	2.8	-26.5	15.6	62	11.5	49	18	5	104	102	877.5
ISLAND LAKE	-14.1	5.7	-0.4	-36.8	27.8	47	27.4	62	33	7	X		994.6
LYNN LAKE	-15.6	6.2	-1.6	-39.4	17.4	52	16.0	56	14	5	41	66	1045.5
NORWAY HOUSE	-13.9	*	0.2	-37.6	33.8	*	31.4	*	24	8	*	*	989.8
PORTAGE LA PRAIRIE	-8.6	4.5	2.9	-24.8	13.7	81	10.3	47	5	5	X		822.8

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	Mean	Difference from Normal	Maximum	Minimum									
THE PAS	-12.4	5.2	0.6	-29.7	30.5	107	21.8	99	20	6	69	93	941.9
THOMPSON	-15.6	6.1	-0.9	-40.4	35.4	79	33.4	86	29	6	51	75	1042.0
WINNIPEG INT'L	-10.1	3.9	1.5	-25.7	6.9	33	6.4	33	11	3	114	123	869.8
ONTARIO													
ATIKOKAN	-10.8	3.3	2.7	-33.4	21.6	50	17.2	50	16	6	76	99	892.0
BIG TROUT LAKE	-14.5	5.4	-1.5	-35.6	25.8	*	25.7	87	54	7	49	*	1009.3
EARLTON	-8.6	4.0	2.4	-34.4	47.7	88	46.6	82	26	10	X		823.3
GERALDTON	-9.9	5.5	1.6	-35.5	52.8	152	35.6	91	24	9	X		864.2
GORE BAY	-2.3	3.2	3.7	-20.4	69.4	119	43.3	57	9	11	X		630.4
HAMILTON RBG	-0.1	1.8	5.0	-12.9	13.1	42	91.6	123	0	8	43	*	
HAMILTON	-1.5	1.9	3.3	-13.4	23.0	67	88.2	112	0	9	X		604.3
KAPUSKASING	-9.4	5.3	3.4	-35.6	37.2	69	32.0	60	20	12	X		849.1
KENORA	-9.9	4.2	1.8	-27.3	17.4	56	15.4	49	28	7	X		865.7
KINGSTON	-1.3	2.9	5.1	-17.0	6.8	14	110.2	120	0	8	68	88	597.5
LANSDOWNE HOUSE	-12.3	6.0	-0.5	-33.4	39.6	109	35.2	113	30	10	X		938.2
LONDON	-1.8	1.7	3.4	-15.0	46.2	88	108.3	123	3	12	29	51	615.4
MOOSONEE	-11.2	4.8	2.9	-33.1	35.2	88	25.5	63	40	12	47	80	904.3
MOUNT FOREST													
MUSKOKA	-4.4	2.7	2.4	-25.3	108.8	148	112.5	115	24	17	X		692.4
NORTH BAY	-7.0	2.7	0.8	-26.7	62.7	102	65.3	86	25	12	56	72	773.0
OTTAWA INT'L	-4.8	2.9	4.4	-22.3	36.8	65	93.8	116	14	7	87	*	705.3
PETAWAWA	-6.6	3.1	3.5	-26.7	54.3	100	80.0	123	12	8	X		761.6
PETERBOROUGH	-3.1	2.9	4.6	-19.9	37.7	97	92.5	124	8	7	X		651.9
PICKLE LAKE	-12.2	5.5	-1.0	-34.0	47.0	114	27.8	75	52	6	X		937.6
RED LAKE	-11.9	3.9	0.8	-28.3	25.0	78	19.3	67	40	7	73	*	926.6
ST. CATHARINES	0.3	1.3	6.6	-10.3	10.2	35	105.2	148	0	8	X		550.2
SARNIA	-1.2	1.0	4.2	-9.7	31.6	83	74.8	91	1	11	44	66	594.1
SAULT STE. MARIE	-3.2	3.5	3.7	-19.1	50.6	66	53.5	67	6	12	40	64	658.4
SIMCOE											X		
SIOUX LOOKOUT	-10.5	4.6	0.5	-28.6	22.5	65	22.1	65	22	8	X		884.4
SUDBURY	-6.4	3.8	2.5	-27.8	75.5	132	61.1	94	25	12	63	74	757.8
THUNDER BAY	-7.2	3.9	5.4	-25.8	16.8	36	9.8	23	2	3	80	85	781.2
TIMMINS	-7.7	6.3	4.0	-36.8	41.0	57	34.1	53	25	9	X		832.1
TORONTO	0.4	2.0	5.1	-14.1	21.0	61	107.9	148	0	9			547.4
TORONTO INT'L	-1.2	2.3	3.9	-16.7	13.2	40	67.3	104	0	8	X		594.3
TORONTO ISLAND	0.7	2.6	5.8	-13.6	13.2	45	96.0	133	0	8			535.8
TRENTON	-1.4	3.1	4.6	-17.2	15.2	32	107.8	130	0	7	X		601.7
WATERLOO-WELL	-2.4	1.9	2.6	-15.8	44.0	117	93.8	132	2	11	X		631.2
WAWA	-7.0	*	2.7	-32.8	65.6	*	54.2	*	10	14		*	775.4
WIARTON	-1.7	2.0	3.6	-15.0	71.7	77	79.6	74	2	14	30	64	609.7
WINDSOR	-0.2	1.7	5.6	-10.4	12.3	43	68.1	93	0	11	X		562.6

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	Mean	Difference from Normal	Maximum	Minimum									
QUEBEC													
BAGOTVILLE	-10.5	1.6	2.6	-30.5	47.9	56	47.1	59	10	12	X		883.0
BAIE COMEAU	-9.8	0.6	1.7	-28.1	76.4	99	77.7	85	45	8	97	*	862.3
BLANC SABLON	-10.3	-3.2	2.4	-27.0	91.2	108	94.8	89	50	15	97	*	
CHIBOUGAMAU	-13.2	2.7	0.1	-35.5	88.4	131	71.9	115	59	15	68	87	966.8
GASPE	-7.8	-0.6	6.1	-22.0	42.7	49	50.2	42	34	7	117	*	804.0
INUKJUAK	-19.8	-1.9	-4.1	-31.8	28.0	120	27.6	122	29	7	61	226	1171.3
KUUJJUAQ	-20.1	-1.7	1.1	-32.8	35.2	89	33.2	86	41	12	45	84	1150.9
KUUJJUARAPIK	-15.3	0.6	-0.6	-30.5	33.1	78	33.6	79	25	12	40	78	1029.4
LA GRANDE RIVIERE	-15.0	*	1.2	-33.5	44.6	*	40.2	*	50	13	23	*	1023.8
MANIWAKI	-7.4	2.6	2.7	-27.4	53.8	93	70.6	98	21	9	58	83	786.8
MATAGAMI	-12.4	3.8	1.4	-34.0	60.4	99	42.9	77	50	13	50	74	943.5
MONT JOLI	-7.0	1.3	2.9	-23.0	33.5	37	43.3	45	8	7	85	143	776.4
MONTREAL INT'L	-4.6	2.3	4.4	-19.8	32.0	54	108.9	125	14	6	91	114	700.0
MONTREAL M INT'L	-6.4	*	3.8	-23.1	44.6	*	97.8	*	23	9	100	*	755.5
NATASHQUAN	-9.5	-0.3	2.9	-26.0	56.6	83	80.2	73	26	9			852.9
QUEBEC	-7.7	1.3	2.6	-23.6	46.8	54	79.7	70	35	10	81	107	797.9
ROBERVAL	-10.5	2.2	3.3	-30.4	47.4	59	48.2	60	25	5	86	*	884.1
SCHEFFERVILLE	-18.4	0.6	-2.6	-34.3	61.6	122	57.8	117	88	10	45	*	1129.1
SEPT-ILES	-10.7	0.3	1.0	-27.4	97.2	109	94.8	90	48	11	110	113	891.2
SHERBROOKE	-6.3	1.9	6.9	-24.3	33.2	44	48.2	52	18	8	63	*	748.1
STE AGATHE DES MONTS	-8.3	2.1	1.4	-26.6	81.4	88	127.8	113	54	14	67	87	813.6
ST-HUBERT	-5.1	1.9	4.5	-21.3	34.5	52	91.0	91	10	8	*		717.1
VAL D'OR	-10.0	3.2	1.2	-36.6	78.4	122	71.1	101	42	12	52	61	868.4
NEW BRUNSWICK													
CHARLO	-8.6	-0.2	4.2	-24.7	36.1	39	67.0	65	40	5	134	144	829.4
CHATHAM	-7.6	-0.7	9.3	-23.9	22.2	32	50.4	46	13	7	131	133	792.3
FREDERICTON	-6.8	-0.3	11.7	-23.9	28.3	40	62.7	53	5	7	145	*	767.6
MONCTON	-5.6	-0.2	11.1	-22.1	29.9	41	46.9	38		8	149	164	731.9
SAINT JOHN	-4.8	0.0	11.6	-21.1	23.4	48	110.1	66		8	148	160	704.9

STATION	Temperature C				Snowfall (cm)	% of Normal Snowfall	Total Precipitation (mm)	% of Normal Precipitation	Snow on ground at end of month (cm)	No. of days with Precip 1.0 mm or more	Bright Sunshine (hours)	% of Normal Bright Sunshine	Degree Days below 18 C
	Mean	Difference from Normal	Maximum	Minimum									
NOVA SCOTIA													
GREENWOOD	-2.6	-0.3	14.2	-17.7	16.3	26	60.9	50	1	9	X		638.2
HALIFAX INT'L	-2.9	0.0	11.7	-17.4	20.1	37	113.6	63	6	8	*		646.3
SABLE ISLAND	5.4	2.8	14.0	-4.3	0.4	2	217.6	151	0	15	73	135	376.6
SHEARWATER	-1.6	-0.1	11.4	-16.5	27.9	74	117.3	79	7	9	129	138	606.7
SYDNEY	-3.0	-1.2	10.1	-15.8	32.9	50	67.2	41	0	9	80	120	650.3
TRURO	-4.5	-0.8	11.9	-21.4	20.8	38	69.8	52		10	111	159	701.0
YARMOUTH	0.1	0.4	12.0	-12.0	19.4	44	116.8	82	10	9	116	188	543.9
PRINCE EDWARD ISLAND													
CHARLOTTETOWN	-4.9	-1.0	10.0	-18.5	41.3	56	57.7	44	2	12	X		710.7
SUMMERSIDE	-4.7	-0.7	9.1	-17.6	28.5	47	41.0	38		5	105	142	701.9
NEWFOUNDLAND													
ARGENTIA											X		
BATTLE HARBOUR	-11.4	-4.6	2.0	-27.9			60.7	129	103	10	X		911.5
BONAVISTA	-3.3	-1.8	5.3	-17.2	16.0	41	37.0	38	5	9	X		660.6
BURGEO	-3.6	-2.0	6.3	-17.0	29.7	58	82.3	45		10	*		667.7
CARTWRIGHT	-12.6	-3.5	-0.2	-25.4	48.1	70	43.3	57	79	7	73	120	948.1
CHURCHILL FALLS	-18.1	0.7	-3.4	-34.5	51.5	83	44.9	72	77	101	82	98	1119.9
COMFORT COVE	-6.2	-2.4	5.7	-21.2	39.4	54	57.6	53	19	16	X		755.5
DANIEL'S HARBOUR	-5.4	-1.5	7.5	-20.3	67.1	96	53.3	58	23	14	35	117	725.2
DEER LAKE	-5.9	-0.7	6.0	-24.4	47.2	54	43.3	38	22	12	X		739.2
GANDER INT'L	-5.6	-1.8	6.1	-21.5	58.8	82	68.0	62	18	15	*		73.1
GOOSE	-14.4	-1.4	-0.7	-27.8	47.2	64	38.1	52	63	8	101	137	1005.5
PORT-AUX-BASQUES	-3.1	-1.4	6.2	-16.8	42.2	77	97.2	62	3	16	50	*	652.4
ST ANTHONY	-8.8	-1.1	1.4	-24.8	116.4	*	123.7	*	63	17	*	*	829.7
ST JOHN'S	-3.9	-2.4	5.6	-18.6	50.6	77	80.8	50	2	12	79	139	677.9
ST LAWRENCE											X		
STEPHENVILLE	-4.2	-1.6	6.2	-17.9	66.6	*	69.2	*	16	118	31	*	686.0
WABUSH LAKE	-17.2	1.4	-3.9	-35.4	70.5	*	57.5	*	72	12	70	*	1090.8

AGROCLIMATOLOGICAL STATIONS — DECEMBER 1986

STATION	Temperature C				Snowfall (cm)	Total Precipitation (mm)	% of Normal Precipitation	Snow on ground at end of month (cm)	No. of days with Precip 1.0 mm or more	Bright Sunshine (hours)	Degree days above 5 C	
	Mean	Difference from Normal	Maximum	Minimum							This month	Since jan. 1st
BRITISH COLUMBIA												
AGASSIZ	4.1	1.1	10.0	-6.0	0.0	136.9	52	0	12	65	9.3	2273.1
KAMLOOPS												
SIDNEY												
SUMMERLAND	-0.5	0.6	6.0	-8.0	12.2	13.7	42	0	7	42	0.0	2180.9
ALBERTA												
BEAVERLODGE	-5.0	5.6	5.0	-22.0	0.0	0.0		6	0	97	0.0	1298.5
ELLERSLIE	-6.7	5.5	4.5	-24.0	3.9	5.7	23	12	2	91	0.0	1323.9
FORT VERMILLION												
LACOMBE	-6.4	5.1	5.0	-22.0	1.5	1.8	10	14	1	110	0.0	1261.9
LETHBRIDGE												
VAUXHALL												
VEGREVILLE			3.0	-27.5	7.2	9.2	54	13	3		0.0	1320.2
SASKATCHEWAN												
INDIAN HEAD	-7.8	5.2	3.5	-30.5	15.8	12.6	59	9	5		0.0	1575.0
MELFORT	-10.1	6.4	1.5	-35.0	28.0	28.0	111	26	5	65	0.0	1495.5
REGINA	-9.8	3.2	4.5	-30.0	8.0	7.6	42	10	4		0.0	1438.0
SASKATOON	-8.4	5.8	3.0	-30.0	2.8	2.8	11	7	1	84	0.0	1589.0
SCOTT	-9.5	4.7	2.0	-26.0	6.6	5.7	28	8	1	90	0.0	1350.9
SWIFT CURRENT SOUTH	-4.8	5.5	7.5	-25.0	6.4	7.5	47	5	2	105	0.0	1650.1
MANITOBA												
BRANDON	-10.3	3.8	5.0	-32.8	6.8	6.8	34	10	2		0.0	1739.0
GLENLEA	-11.0	3.4	0.0	-27.5	8.8	8.8	38	32	3	94	0.0	1619.2
MORDEN	-7.3	5.0	4.5	-25.5	3.0	3.0	13	2	1	102	0.5	1935.5
ONTARIO												
DELHI	-1.8	4.2	4.0	-15.5	20.6	112.6	132	0	10	31	0.0	2188.7
ELORA	-3.0	2.0	2.0	-18.0		80.0	112	12			0.0	1810.5
GUELPH	-2.0	2.1	3.0	-16.0	19.0	83.0	117	8	11	33	0.0	1999.4
HARROW	0.1	1.8	5.5	-10.5		90.4	122	0	8	33	0.0	2568.0
KAPUSKASING												
MERIVALE												
OTTAWA			4.5	-22.6	30.8	85.6	118	11	8	87	0.0	2038.9
SMITHFIELD	-1.0	3.0	4.0	-17.0	16.7	122.6	130	0	9	0	0.0	2195.3
VINELAND STATION	0.3	1.3	6.1	-12.2	14.0	96.2	132	0	9	43	0.0	2278.0
WOODSLEE												
QUEBEC												
LA POCATIERE	-6.9	1.3	3.0	-24.0	24.6	69.7	77	18	5	114		
L'ASSUMPTION	-6.4	2.0	3.5	-24.0	40.8	100.2	110	13	8	87	0.0	1866.8
LENNOXVILLE												
NORMANDIN	-12.2	1.9	2.0	-35.5	38.2	43.1	139	16	5	89	0.0	1167.7
ST. AUGUSTIN												
STE CLOTHILDE	-3.9	2.8	5.0	-22.0	25.5	72.0	85	9	8	81	0.0	2026.3
NEW BRUNSWICK												
FREDERICTON												
NOVA SCOTIA												
KENTVILLE	-2.3	0.1	13.0	-16.0	13.4	59.2	46	0	7	92	0.0	1715.2
NAPPAN	-4.6	-0.6	12.0	-24.0	21.9	51.4	43	TR	7	122	0.0	1470.5
PRINCE EDWARD ISLAND												
CHARLOTTETOWN												
NEWFOUNDLAND												
ST. JOHN'S WEST