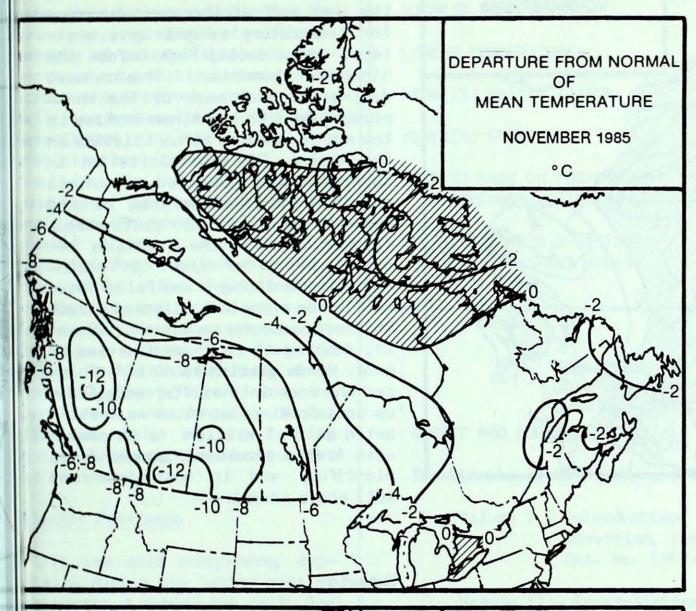
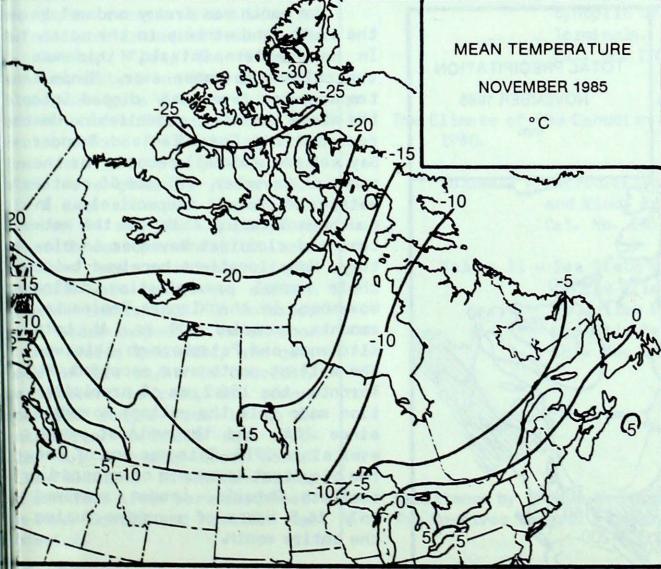
Climatic Perspectives

Monthly Supplement

Vol.7 November, 1985





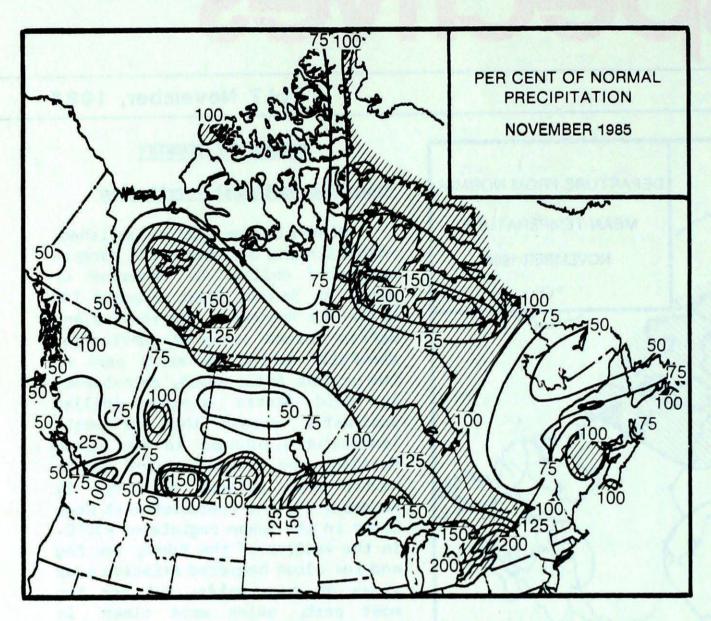
ACROSS THE COUNTRY

Yukon and Northwest Territories

Winter became well established with blinding blizzards and dangerous wind chills. On November 6, winds at Rankin Inlet reached 120 km/h. The Northwest Territories and Baffin Island received substantial snowfalls during the early part of the period After which, an extremely cold Arctic airmass spilled southwards across the northwest. Temperatures plunged to the minus forties, and dangerous wind chills halted most outdoor activity. On November 27, the thermometer at Ross River in the Yukon registered -50°C. In the valleys of the Yukon, ice fog and low cloud hempered aviation near areas of open water, but for the most part, skies were clear. In contrast, temperatures in the eastern Arctic were well above normal. At Frobisher the temperature reached 4°C on November 26.

British Columbia

A very cold airmass plagued most of western Canada during the latter part of the month. During the last two weeks, an intense Arctic outflow pushed its way westwards across the mountains towards the coast Wind speeds in some coastal valleys reportedly reached as high as 150 km/h. Almost all locations had record low mean temperatures for the month. In addition, there were many new November minimum temperature records. Four of these were all-time low values. At nine sites this was the sunniest November ever. Due to the dry nature of this cold airmass, precipitation was light, and mostly in the form of snow. Six communities had record low precipitation amounts. In contrast, southern Vancouver Island was inundated with snow. Victoria Gonzales received 50.2, cm more than twice the previous snowfall record set in 1911.

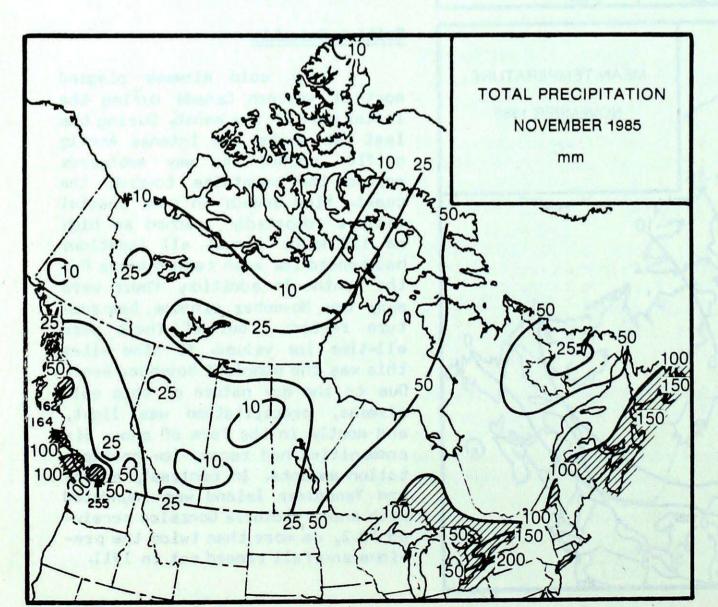


The Prairies

This was the coldest November since the turn of the century. The bitterly cold airmass encompassed most of Alberta by the middle of the month, and affected the rest of the prairies shortly thereafter During the last half of the month numerous low temperature records were shattered, many dating back before the hundreds. Temperatures nineteen during the last week of the month plunged down to the minus forties in the north, and the minus thirties in the south. Total precipitation in Alberta, which included a minimal amount of rain was variable, ranging between 16 and 32 centimetres. Pincher Creek in the foothills received 57 cm of snow. In southeastern Manitoba, snowfalls were double the normal. A blizzard struck southern Manitoba on November 18 and 19, dumping 15 to 25 centimetres of snow. Winds gusting to 60 km/h whipped the snow into drifts, and cleanup cost in Winnipeg alone were estimated at \$1.5 million. As is common with Arctic airmasses, sunshine was plentiful, and in most instances well above normal.

Ontario

The month was dreary and wet in the south, and wintery in the north. In northwestern Ontario, this was the coldest November ever. Minimum temperatures frequently dipped into the minus thirties, establishing new records. Both Geraldton and Thunder Bay set new snowfall records for the month of November, 101 and 86 centimetres of snow, respectively. In southern Ontario, this was the wettest and cloudiest November in history. Many locations received twice their normal precipitation during November. In the Niagara Peninsula, amounts exceeded 200 mm. At both Kitchener and Peterborough this was the wettest month ever recorded. At Toronto, the 186.2 mm of precipitation made this the wettest November since 1840 and the wettest month ever since 1915. This was one of the the claudiest Novembers on record in southern Ontario London received only 16.8 hours of sunshine during the entire month.



Quebec

The month began on a pleasant note. Favourable late autumn weather allowed farmers to complete most of the field work. Weather conditions deteriorated after the first week, and one of nany disturbances moved across the giving significant province, amounts of precipitation. By midnonth, a cold Arctic airmass swept icross the province, and many new faily low temperature records were established. In the south, the recipitation changed to snow, driving esulting in slippery onditions and numerous traffic occidents. On November 8, a plane rashed during a snow storm in entral Québec. On November 20, a ind storm hit the province, riefly pumping record warm air orthwards. Readings soared into he upper teens in southern uébec. In Abitibi southerly winds usted to almost 90 km/h, knocking own trees and damaging roofs. ith the help of snow making quipment, many ski centres opened or the season.

tlantic Provinces

It was cold everywhere, espcially during the latter part of ne month. A number of daily low emperature records were broken in ewfoundland around mid-month. At .. John's, Nfld., the November ean temperature was more than 3°C elow normal, a new monthly reord. In the Maritimes most of the ecipitation fell during rst half of the period. tals were generally below nor-11. A snow storm hit the area on vember 14 and 15. Except along e south coast, rainfall in Newundland was relatively light. owfalls were heavy over eastern rts of the Island. On November a storm dumped 25 cm of snow the Avalon Peninsula, and gave sts of 104 km/h. In Labrador, e weather was cold, but sunny; owfalls ranged from 15 to 16 ntimetres. Sunshine was varile, but generally above normal Newfoundland. In the Maritimes, e sunniest areas were southwestn Nova Scotia and northern New unswick.

CLIMATIC EXTREMES	IN CANADA - NOVEMBER 19	6 5
MEAN TEMPERATURE: WARMEST COLDEST	Windsor, ONT Eureka, NWT	6.0°C -34.7°C
HIGHEST TEMPERATURE:	Wiarton, ONT	19.7°C
LOWEST TEMPERATURE:	Ross River, YT	-50.0°C
HEAVIEST PRECIPITATION:	Hope, BC	255•2 mm
HEAVIEST SNOWFALL:	Cape Dyer, NWT	103.4 cm
DEEPEST SNOW ON THE GROUND ON NOVEMBER 30, 1985:	London, ONT	54.0 cm
GREATEST NUMBER OF BRIGHT SUNSHINE HOURS:	Natashquan, QUE	133 hrs

ADDITIONAL AES CLIMATE PUBLICATIONS Regional Climate Studies

ARCTIC AND SUB-ARCTIC

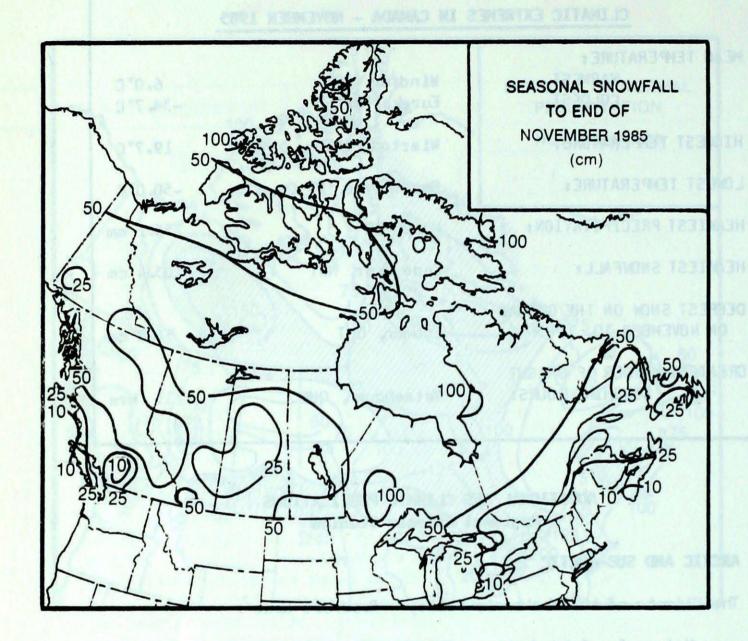
The Climate of the Mackenzie Valley - Beaufort Sea.

- Volume I Introduction, Climatic Controls, The Arctic Inversion, Temperature and Wind. 1973. Cat. No. EN57-7/24-1 \$6.00 copy
- Volume II Precipitation, Snow Cover, Ocean Areas, Ice,
 Synoptic Systems, Cloud, Visibility, Icing and
 Terminals. 1974.
 Cat. No. EN57-7/24-2 \$ 6.00 copy
- The Climate of the Canadian Arctic Islands and Adjacent Waters. 1980.
 - Volume I Introduction and Climatic Controls, Temperature and Wind, Preciptation and Snow Cover Cat. No. EN57-7/30-1 \$35.00 copy
 - Volume II Sea State and Sea Ice, Aviation Related Aspects of the Climate, The Arctic Temperature Inversion, Pollution Potential and Atmospheric Phenomena, Synoptic Systems, Climatic Regions Cat. No. EN57-7/30-2 \$40.00 copy

Available from: Supply and Services Canada Publication Centre Ottawa, Ontario KIA OS9

Remittance by Cheque or Money Order should be made payable to: The Receiver General for Canada

SNOWFALL



SEASONAL SNOWFALL TOTALS (CM)

TO END OF NOVEMBER

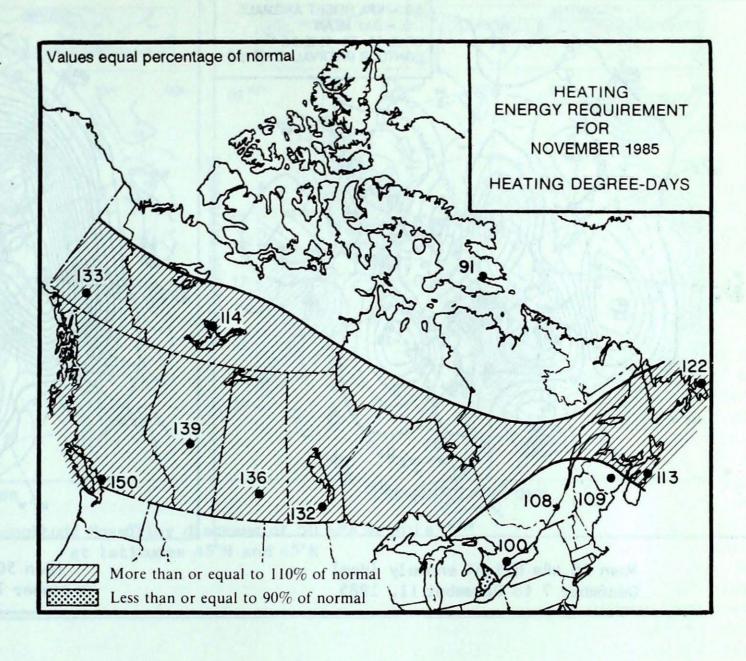
	1005		
	1985	1984	NORMAL
YUKON TERRITORY			
Whitehorse	57.6	43.2	45.2
NORTHWEST TERRI			47.2
	162.2	309.0	241.3
Inuvik	44.6	45.2	75.6
Yellowknife	91.9	65.4	56.7
BRITISH COLUMBI	A		
Kamloops	6.6	28.8	12.0
Port Hardy	7.2	16.0	4.2
Prince George	53.4	65.3	50.0
Vancouver	14.6	2.2	2.8
Victoria	45.8	3.6	2.3
ALBERTA			
Calgary	33.0	46.5	35.7
Edmonton Namao	28.5	66.7	26.5
Grande Prairie	29.4	56.5	42.4
SASKATCHEWAN		and said of	THOUSE
Estevan	37.8	56.2	23.1
Regina	35.4	55.8	24.2
Saskatoon	14.8	75.7	23.4
MANITOBA			
Brandon	78.9	34.1	23.3
Churchill	85.7	77.3	77.3
The Pas	39.7	85.0	43.8
Winnipeg	58.7	29.8	27.3
ONTARTO			
ONTARIO Kapuskasing	78.9	54.0	85.0
London	8.4	3.3	26.3
Ottawa	20.4	6.0	25.5
Sudbury	12.6	9.8	38.6
Thunder Bay	97.6	11.8	33.1
Toronto	11.0	0.6	8.9
Windsor	9.8	11.0	11.6
QUÉBEC			
Baie Comeau	42.6	17.8	41.6
Montréal	14.7	9.0	22.9
Quebec	36.2	7.8	38.3
Sept-Iles	32.5	29.0	61.4
Sherbrooke	33.7	26.4	42.4
Val-d'Or	29.2	64.3	63.7
NEW BRUNSWICK			
Charlo	34.9	16.7	42.9
Fredericton	20.5	8.0	22.7
Moncton	16.9	11.1	24.7
NOVA SCOTIA			
Shearwater	11.3	2.4	9.5
Sydney	33.5	16.2	14.6
Yarmouth	2.2	2.4	8.3
	SLAND	(Harris	
Charlottetown	32.3	17.4	24.2
NEWFOUNDLAND		WUISS B	44.1
Gender	51.6	55.0	44.1 25.6
St. John's	41.7	13.3	27.0

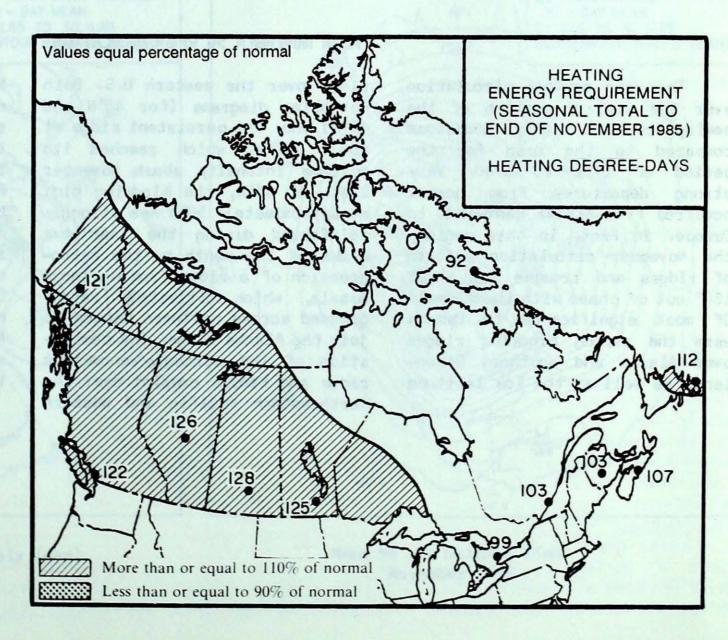
SEASONAL TOTAL OF HEATING

ENERGY REQUIREMENTS

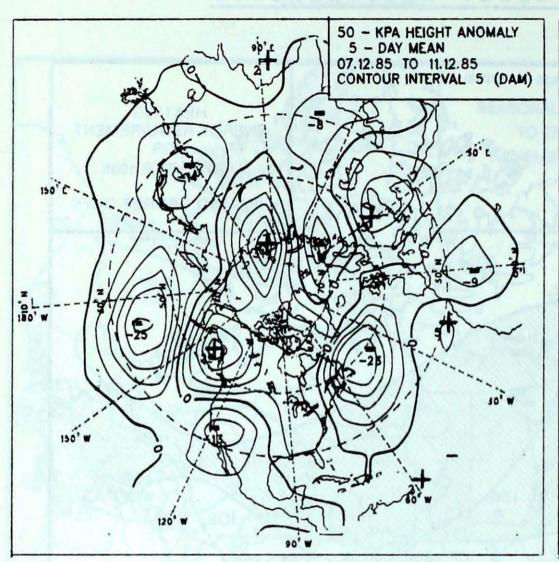
DEGREE-DAYS TO END OF NOVEMBER

Parket Street	1985	1984	NORMAL
BRITISH COLUM	BIA		
Kamloops	1251	1056	931
Penticton	1184	980	875
Prince George	1972	1711	1543
Vancouver	983	832	805
Victoria	1005	929	854
VICCOLIA	1005		
YUKON TERRITO	PV		
Whitehorse	2414	2181	1990
NORTHWEST TER		2101	1//0
	2573	2797	2808
Frobisher Bay	3014	2995	2877
Inuvik			
Yellowknife	2484	2252	2119
ALBERTA			
Calgary	1845	1619	1417
Edmonton Mun	1793	1628	1420
Grande Prairi	e 1996	1988	1600
SASKATCHEWAN			
Estevan	1607	1381	1260
Regina	1757	1552	1373
Saskatoon	1799	1619	1412
MANITOBA			
Brandon	1788	1500	1360
Churchill	2457	2229	2306
The Pas	1903	1684	1572
Winnipeg	1604	1312	1280
urinithed	1004	1712	1200
ONTARIO			
The state of the s	1500	1477	1466
Kapuskasing	1508	1437	1466
London	764	788	824
Ottawa	934	915	945
Sudbury	1167	1141	1190
Thunder Bay	1456	1249	1309
Toronto	803	805	813
Windsor	612	667	691
abaquata una,			
QUEBEC			
Baie Comeau	1459	1447	1438
Montréal	890	927	861
Juebec	1083	1067	1091
Sept-Iles	1517	1478	1517
herbrooke	1114	1190	1185
'al-d'Or	1435	1386	1457
TOST SECTION			
NEW BRUNSWICK			
harlo	1225	1169	1135
rederiction	1047	980	1021
bncton	1050	992	1000
OVA SCOTIA	1000		1000
alifax	870	854	815
	977	945	908
ydney			
armouth	902 TCL AND	860	866
RINCE EDWARD		040	000
harlottetown	978	949	929
EWFOUNDLAND	an in an	1000	1
ander	1358	1289	202
t. John's	1287	1111	1150
1			





ATMOSPHERIC CIRCULATION



50 - KPA HEIGHTS
5 - DAY MEAN
07.12.85 TO 11.12.85
CONTOUR INTERVAL 5 (DAM)

Mean 50 kPa height anomaly (dam) December 7 to December 11, 1985

Mean 50 kPa heights (dam) December 7 to December 11, 1985

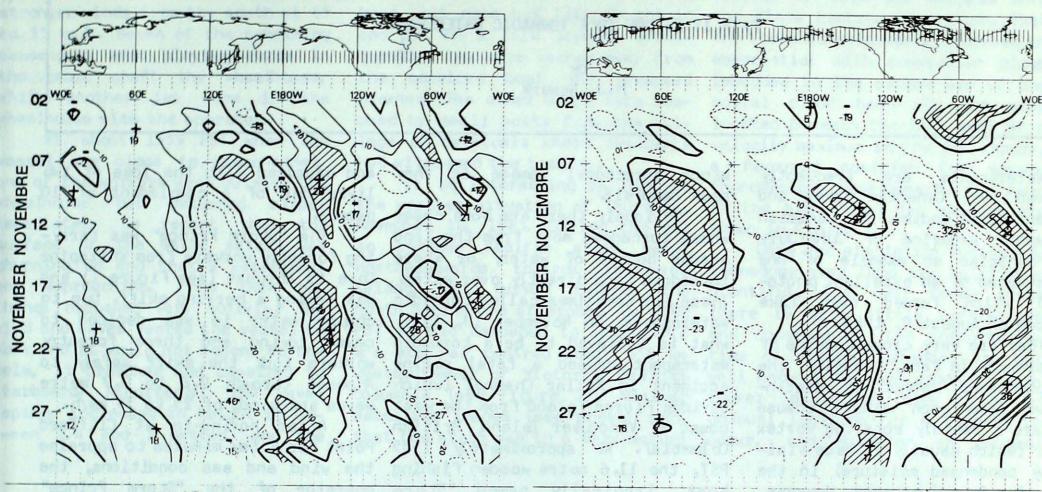
MEAN NOVEMBER 50 kPa CIRCULATION

The mean monthly circulation over the western portion of the hemisphere was highly anomalous compared to the mean for the period of 1951 to 1980. Very strong departures from normal occurred from Alaska eastwards to Europe. In fact, in this region, the November circulation pattern of ridges and troughs was about 180° out of phase with the normal. Of most significance to Canada were the strong blocking ridges over Alaska and southern Greenland, as well as the low latitude

ridge over the eastern U.S. Both Hovmöller diagrams (for 45°N and 65°N) show the persistent ridge at about 150°W, which reached its maximum intensity about November 21st. At 65°N, the blocking high at approximately 50°W was strongly reinforced during the last two weeks of the month by the retrogression of a ridge from northern Russia, which ultimately retrogressed across northern Canada to join the Alaska ridge. The combination of the strongly anomalous ridge and trough couplet over the northeastern Pacific and western

North America resulted in a mean north to northwesterly circulation across western Canada. This in turn drove cold air southwards into British Columbia and the Prairies, producing a record breaking cold wave. Higher than normal heights over Baffin Island resulted in much warmer than normal temperatures in the eastern Canadian Arctic. The anomalously high 50 kPa heights over the U.S. Atlantic seaboard resulted in slightly above normal temperatures in southwestern Ontario.

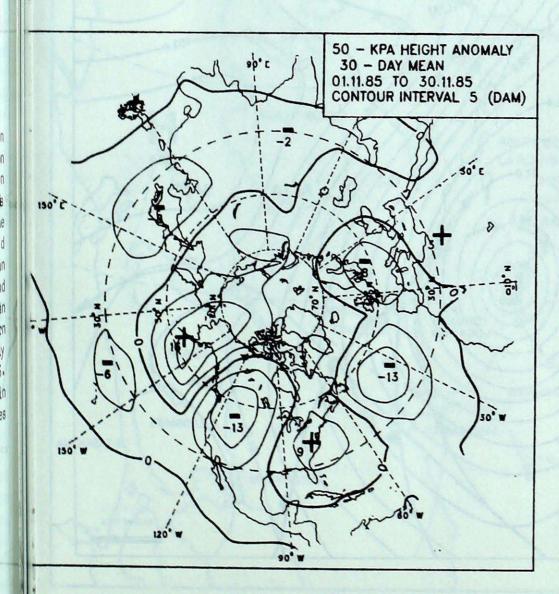
ATMOSPHERIC CIRCULATION



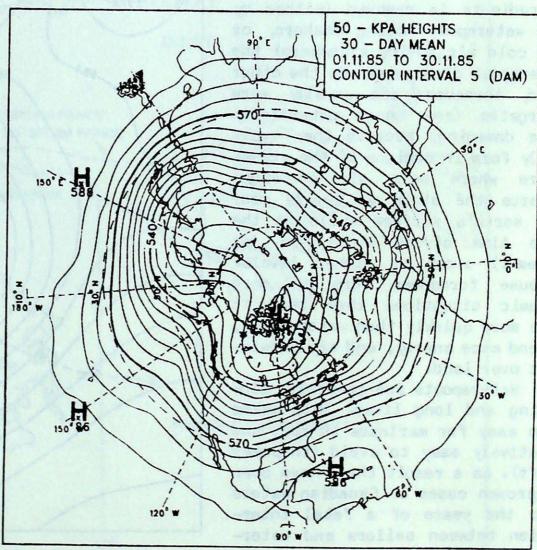
50 kPa 45 N Z = 550 dam

50 kPa 65 N Z = 530 dam

Time-longitude Hovmöller diagrams of 50 kPa heights at latitudes 45°N and 65°N



Mean 50 kPa height anomaly (dam) November 1985



Mean 50 kPa heights (dam) November 1985

FATALITIES DUE TO A TORNADIC WATERSPOUT

by M.J. Newark

frequently Waterspouts are observed over Canadian lakes and adjacent ocean bodies. The Canadian Geographic magazine of June/July 1985 contains an example of one (illustrated by an excellent photograph) which formed over Lake Winnipeg on August 8, 1984.

They are very close cousins of the tornado. In fact, visually, the two phenomena cannot be distinquished from each other because both are a rapidly rotating vortex of air (which usually is made visible by condensed moisture) in the shape of a funnel or cone. However, they form in completely different meteorological circumstances which strongly influence their behaviour and potential for damage. waterspout requires a sustaining marine environment and an atmosphere destabilized by cold air aloft. If one or the other of these ingredients is removed (either by the waterspout moving onshore, or the cold air moving elsewhere) the waterspout dissipates. On the other hand, tornadoes are usually more energetic (and hence potentially more damaging) because they typically form in regions of the atmosphere where warm air converges towards the storm at levels near the earth's surface while at the same time strong winds (or jet streams) occur at higher levels. Because tornadoes form in more dynamic situations they tend to move more quickly than waterspouts, expend more energy, and are persistent over land.

Waterspouts are generally slow moving and long lived. This makes them easy for mariners to spot and relatively easy to avoid (in power craft). As a result there have been no proven cases in Canadian waters over the years of a fatal interaction between sailors and waterspouts. However, they have been known to cause damage to the superstructure of boats, in one case partially lifting a vessel out of the water, and several have caused

minor structural damage as they made landfall.

Obviously there are some cases where tornadoes move from the land across bodies of water, or where tornadoes form directly over water. These are sometimes called tornadic waterspouts. On November 10, 1983, what is believed to be a tornadic waterspout caused a fatal marine accident in Millar Channel (which divides Flores Island from the west coast of Vancouver Island, British Columbia). At approximately 1535 PST, the 11.6 metre wooden fishing Prince", encountered the phenomenon started across Millar Channel in

and capsized with the loss of two lives out of a complement of 10 people.

The "Storm Prince" was ferrying forestry workers from Whitepine Cove to Ahousat (see Figure 1) and was towing a herring skiff. Due to choppy water is was decided to cease towing and three forestry workers took the skiff safely to Ahousat through 0.6 to 0.9 metre waves and winds of 25 to 35 km/h.

After hoving-to at Clifford Point for a few minutes to appraise the wind and sea conditions, the boat, ironically named "Storm operator of the "Storm Prince"

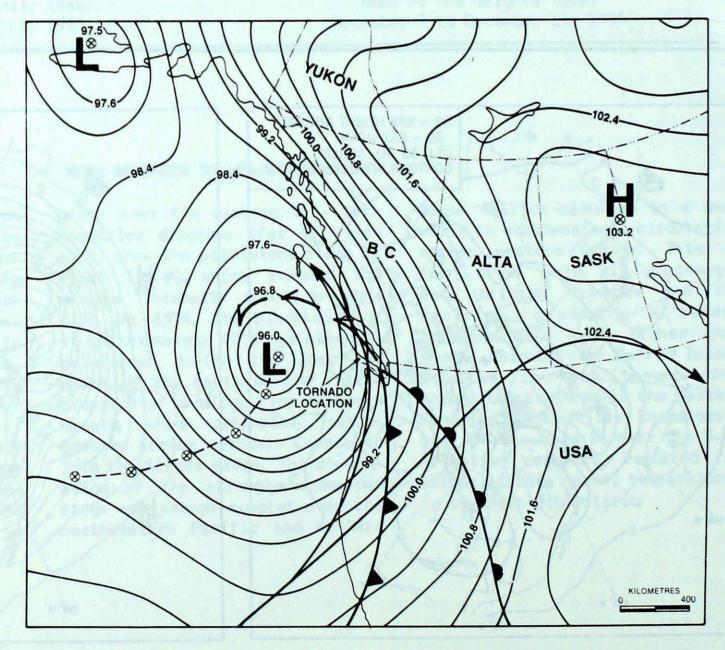


Fig. 1 The synoptic surface weather map for 1600 PST, November 10 1983. The isobars are labelled in kPa and the storm track is shown in 6-hourly intervals. The high level jet axesare indicated by the arrowed lines.

similar sea conditions encountered by the skiff, but with somewhat stronger winds from the south at 45 to 55 km/h. Seven of the remaining passengers were playing cards in the cabin abaft the wheelhouse, while another two were in the wheelhouse with the operator.

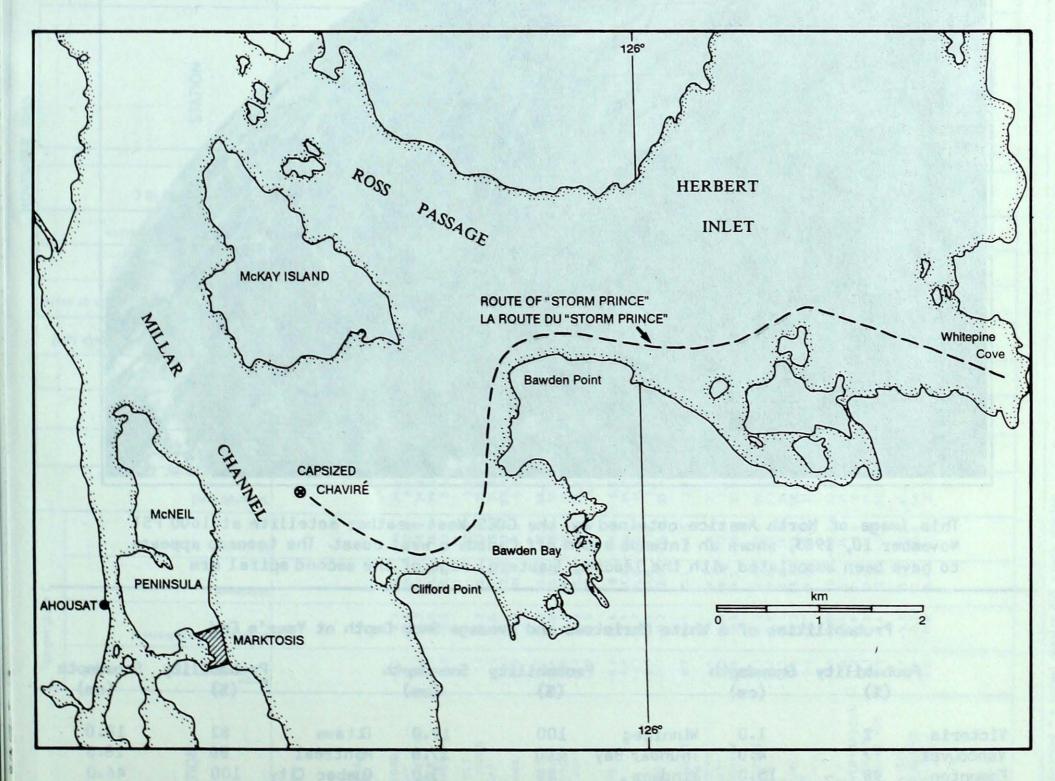
At about 1535 PST when the vessel was close to mid-channel one of the workers went outside the. wheelhouse but returned almost immediately to report that the surface of the water astern was churning up and that a waterspout was approaching. From then on, things happened very quickly. The wind and waves veered the vessel to port and it would not repond to the helm, it broached and capsized to starboard. Reportedly, the waves rapidly increased in height to between 2.4 and 3 metres, and the

wind was at least 110 km/h. All stage of its life cycle, with 22 were able to scramble outside the boat, but none had time to obtain and put on a life jacket. Subsequently, two were washed away from the capsized boat and presumed drowned. The other eight were rescued by small boats from the village of Marktosis where residents had witnessed the tragedy.

It is interesting to look at the weather situation of Thursday, November 10, 1983. During the day an intense Pacific storm swept northeastwards towards Vancouver Island, but curved towards the north during the afternoon By 1600 PST it had deepened to about 95.6 kPa and was centred about 650 km westsouthwest of Victoria, British Columbia (see Figure 2). Weather satellite images (see photo) show that the storm was in a very mature

spirals of warm air wrapped into the storm centre. It appears that the tornadic waterspout occurred in association with convective cloud imbedded in the second arm of the spiral cloud band. It was also located beneath the left exit of a velocity maximum in the jet stream. a favoured position for severe thunderstorm development. The axes of the high level jet streams are shown in Figure 2.

Data and statistics concerning tornadoes over land are relatively plentiful, but over ocean areas there is very little information and consequently the characteristics of marine tornadoes are not well known. The west coast of Vancouver Island may seem to be an unusual location for a tornado to occur, and November an unusual



ig. 2 The location in Millar Channel, British Columbia where the "Storm Prince" capsized after being struck y a tornado

month. However, in the United Kingdom (which experiences Atlantic storms in much the same way that Pacific storms affect Vancouver Island) tornadoes are frequent and the maximum number of tornadoes during the period 1960 to 1982 occurred in November. In fact, on November 23, 1981 a super-outbreak of 102 tornadoes formed in association with a vigorous storm (central pressure 98.6 kPa) centred near the Faero Islands (Elsom and Meaden, 1984).

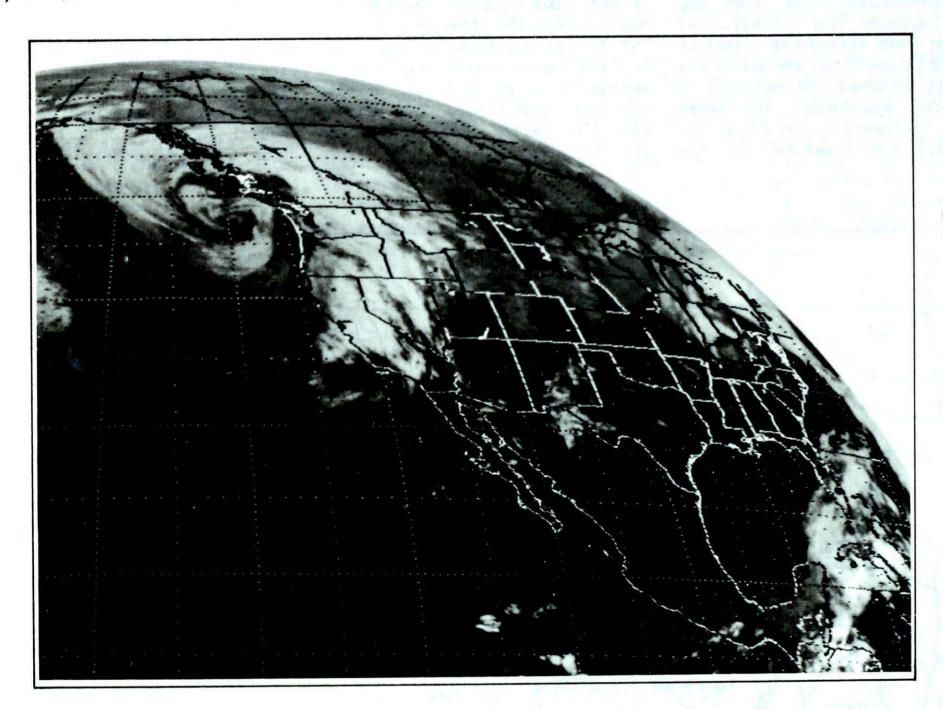
Given the paucity of meteorological reports off Canada's west coast, and the sparse population along most of Canada's Pacific shore, it is possible that tornadoes are more common in those areas than is generally thought to be the case.

Further Reading

Canadian Coast Guard, 1985: Report of Investigation into the Circumstances attending the capsizing and subsequent sinking of the Canadian Fishing Vessel "Storm Prince". Report no. 378, Ottawa.

Elsom, D.M. and G.T. Meaden, 1984:
Spatial and Temporal Distribution of Tornadoes in the
United Kingdom 1960-1982.
Weather, Vol. 39, no. 10, pp.
317-323.

Seath, D.W., 1985: Waterspouts over Lake Winnipeg Canadian Geographic, Vol. 105, no. 3, p. 88.



This image of North America obtained by the GOES West weather satellite at 1600 PST November 10, 1983, shows an intense storm off Canada's west coast. The tornado appears to have been associated with the leading (eastern) edge of the second spiral arm

Probabilities of a White Christmas and Average Snow Depth at Year's End

	Probability (%)	Snowdepth (cm)		Probability (%)	Snowdepth (cm)		Probability (%)	Snowdepth (cm)
Victoria Vancouve	2 7	1.0 4.0	Winnipeg Thunder Bay	Total College	19.0 27.0	Ottawa Montreal	82 80 v 100	18.0 28.0 46.0
Edmonton Calgary Regina Saskatoo	98 65 93 n 100	15.0 7.0 17.0 14.0	Windsor London Hamilton Toronto	48 73 60 56	3.0 9.0 6.0 6.0	Quebec City Saint John Halifax St. John's	68 50	14.0 10.0 13.0

* *													NOVEN	BER 1985													
	Tem	peratur	e C	-	d.				(cm)	nore					Tem	peratur	e C						2	more			
STATION	Mean	Difference from Normal	Maximum	Minimum	Snowfall (cm)	% of Normal Snowfall	Total Precipitation (mm)	% of Normal Precipitation	Snow on ground at end of month (c	No. of days with Precip 1.0 mm or m	Bright Sunshine (hours)	% of Normal Bright Sunshine	Degree Days below 18 C	STATION	Mean	Difference from Normal	Maximum	Minimum	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 o. m	Bright Sunshine (hours)	% of Normal Bright Sunshine	Degree Days below 18 C
BRITISH COLUMBIA					,							200		YUKON TERRITORY	-20.1	-6.7	-2.7	-38.7	0.8	5	6.1	33	5	2	x		1141.9
ABBOTSFORD ALERT BAY AMPHITRITE POINT BLUE RIVER BULL HARBOUR	-0.7 2.1 3.1 -12.3 0.8	-6.3 -3.6 -4.3 -10.0 -5.3	12.2 8.2 11.8 6.0 10.6	-16.7 -12.6 -6.9 -36.9 -13.8	24.6 8.7 24.3 39.6 5.4	447 126 70 131	168.5 76.4 172.1 38.2 163.8	87 36 43 51 60	10 9 15 1	14 13 14 6 12	105 X X 92 X	145	561.3 532.5 448.1 MSG 514.9	DAWSON MAYO WATSON LAKE WHITEHORSE	-25.5 -26.4 -23.2 -18.2	-7.4 -11.2 -9.4 -9.4	-7.0 -5.8 0.6 -0.2	-42.1 -42.0 -47.5 -37.1	20.0 21.8 14.7 24.0	79 85 39 100	12.9 12.8 10.6 13.6	51 52 33 68	22 19 17 15	3 6 6 3	X 49 75	114 128	1298.1 1328.5 1237.7 1083.3
CAPE SCOTT CAPE ST.JAMES CASTLEGAR COMOX CRANBROOK	1.7 -4.9 0.1 -9.7	-5.2 -6.6 -5.2 -7.9	10.3 7 8 13.2 11.1	-10.7 -12.6 -19.5 -13.3 -31.8	2.2 15.0 31.8 33.3 6.3	53 394 105 416 26	125.0 92.6 48.4 70.5 9.4	37 49 59 36 28	3 8 12 4	12 14 13 11 4	X 113 71 X 96	* 124 *	MSG 488.6 685.0 538.1 836.2	NORTHWEST TERRITORIES ALERT BAKER LAKE CAMBRIDGE BAY	-28.0 -20.3 -23.4	-1.4 0.0 0.4	-15.3 -1.9 -11.0	-33.9 -37.0 -36.5	16.8 12.8 4.6	193 73 51	10.2 10.7 2.3	122 64 29	17 19 13	3 6	0 24 14	47	1380.4 1149.6 1241.2
DEASE LAKE ETHELDA BAY FORT NELSON FORT ST.JOHN HOPE	-18.5 -1.4 -17.5 -15.9 -2.9	-10.0 -6.6 -5.5 -9.9 -7.6	2.8 10.0 -4.4 5.0 15.1	-42.5 -18.4 -40.3 -39.2 -21.4	54.8 10.9 18.9 25.4 9.1	157 106 66 82	35.5 163.2 13.9 20.2 255.2	121 41 61 64 114	29 2 26 7 4	8 13 3 7 12	86 X 65 X 29	142 * 99	1094.3 531.8 1066.7 1016.5 624.8	CAPE DYER CAPE PARRY CLYDE COPPERMINE	-11.9 -20.2 -16.8 -22.6	2.8 -1.9 0.6 -2.9	6.2 -4.4 2.0 -4.4	-29.8 -31.5 -33.0 -41.0	103.4 9.2 21.8 26.9	151 60 132 178	67.2 6.8 19.6 17.2	113 70 129 120	21 10 13 18	11 9 7	X X 4 10	95 81	896.9 1146.5 1042.9 1217.4
KAMLOOPS KELOWNA LANGARA LYTTON MACKENZIE	-8.0 -7.4 -5.1 -6.3 -15.1	-9.6 -8.5 -10.7 -8.9 -11.2	8.1 11.4 11.8 11.0 2.0	-28.3 -28.4 -22.3 -27.7 -35.6	6.6 19.2 11.3 3.2 35.0	56 150 198 14 70	10.5 32.0 14.9 6.4 31.4	47 132 7 8 51	3 5	4 6 6 2 11	90 73 X 86 63	127 126 132 130	780.2 760.9 691.2 726.8 992.7	CORAL HARBOUR EUREKA FORT RELIANCE FORT SIMPSON FORT SMITH	-15.6 -34.7 -17.7 -20.2 -17.7	-1.9 -3.2 -3.7 -4.6 -6.1	1.0 -14.1 -2.8 -6.2 -2.2	-34.0 -41.1 -38.3 -41.6 -40.6	0.6	209 200 200 114 130	43.2 0.6 35.0 21.9 20.0	240 24 161 80 76	30 12 27 26 24	8 0 13 6 4	33 0 X 52 34	101 78	1009.7 1580.6 1073.1 1147.2 1069.2
MCINNES ISLAND PENTICTON PORT ALBERNI PORT HARDY PRINCE GEORGE	0.7 -0.4 0.0 -15.4	-5.3 -5.3 -12.5	10.6 14.7 9.3 4.5	-16.8 -16.8 -12.5 -35.7	2.7 21.2 7.2 37.9	45 * 180 95	104.0 50.4 102.3 24.9	33 * 4; 49	0 6 2 10	10 11 13	X 83 118 106	* 190 163	520.5 548.2 544.0 1001.2	FROBISHER BAY HALL BEACH HAY RIVER INUVIK MOULD BAY	-9.6 -20.8 -17.1	3.4 0.7 -5.8	5.2 -0.1 -2.4 -0.5	-25.7 -32.7 -40.8	22.8 16.6 30.7	61 128 78 88	20.0 16.5 30.7	58 130 83 65	12 16 31	7 2 12 4	43 X X	94	828.9 1165.8 1055.3 1162.3
PRINCE RUPERT PRINCETON QUESNEL REVELSTOKE	-3.1 -10.7 -13.5 -6.4	-6.9 -9.8 -11.7 -7.1	8.6 10.8 5.6 5.7	-20.6 -34.5 -36.0 23.6	30.9 23.9 34.2 38.0	351 102 119 74	162.3 26.2 31.6 66.6	60 69 73 78	2 15 5 3	10 10 8 8	119 88 X 79	239 *	634.4 MSG 943.9 730.4	NORMAN WELLS POND INLET RESOLUTE SACHS HARBOUR	-26.8 -21.8 -22.0 -25.2 -21.9	-0.2 -3.6 1.6 -0.7	-13.7 -3.5 -0.5 -10.3	-35.3 -37.1 -34.9 -34.4	18.6 29.8 22.8 3.9	422 139 76 63	9.1 26.2 11.2 3.7	245 125 76 64 50	30 20 25 29 6	7 2 0 2	0 17 X 0	139	1344.5 1195.2 1201.3 1296.4 1187.1
SANDSPIT SMITHERS TERRACE VANCOUVER HARBOUR VANCOUVER INT'L	0.3 -12.1 -7.2 1.2 0.1	-5.2 -9.8 -7.5 -5.6 -5.8	9.8 5.1 5.4 11.7 13.5	-15.6 -32.4 -25.3 -9.9 -14.3	21.6 22.6 37.6 8.4 14.6	58 76 323 521	93.0 16.9 70.2 101.7 84.1	51 28 38 47 56	8 0 3 6	13 6 9 13 13	72 109 X 104	167 157 193 150	533.3 902.4 754.8 504.5 537.5	ALBERTA BANFF	-19.0 -13.7	-4.9 -9.8	6.0	-39.8 -34.5	23.6	73	31.4	128	33	5	39 X	93	1110.5
VICTORIA GONZ, HTS VICTORIA INT'L VICTORIA MARINE WILLIAMS LAKE	1.8 0.7 1.4 -14.4	-5.4 -5.3 -5.2 -11.8	12.2 15.0 12.3 4.4	-11.1 -12.7 -10.8 -41.6	50.2 45.8 54.0 37.1	119	74.0 178.2 28.5	56 95 90	22 20 19 17	16 13 16 5	105 102 X 104	126 131 142	486.1 519.0 497.2 971.5	BROOKS CALGARY INT'L COLD LAKE CORONATION EDMONTON INT'L	-13.6 -12.6 -15.7 -14.2	-10.6 -9.9 -9.5 -9.3 -8.5	9.5 11.6 1.8 8.6	-35.0 -33.8 -34.2 -34.1	23.6 20.0 22.7 7.0	156 122 107 44	17.4 11.2 15.5 5.6	114 88 76 37	7 5 16 2	4 7 2	93 114 80 114	92 84 88	917.4 966.3
														EDMONTON MUNI. EDMONTON NAMAO EDSON FORT CHIPEWYAN	-14.0 -12.9 -14.1 -15.6 -18.2	-8.5 -9.2 -9.2 -9.2 -7.3	7.7 8.1 7.6 8.0 2.5	-34.0 -34.1 -35.4 -39.2 -38.0	11.7 14.1 18.2 51.0 30.8	65 91 108 199 123	11.5 13.7 8.0 33.2 30.8	68 87 44 164 132	6 12 22	5 2 9	92 101 X 88 X	94	960.7 925.9 962.1 1008.1

													NOVEME	ER 1985													
STATION	Jem Jem	Difference from Normal	Maximum	Minimum	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	STATION	Tem	Difference from Normal	Maximum	Minimum	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
FORT MCMURRAY GRANDE PRAIRIE HIGH LEVEL JASPER LETHBRIDGE MEDICINE HAT PEACE RIVER	-16.3 -15.5 -19.9 -14.8 -12.8 -13.0 -17.2	-8.1 -9.5 -8.5 -10.9 -12.0 -11.4 -9.1	6.4 5.7 -3.0 4.5 15.6	-37.1 -39.4 -43.4 -38.8 -34.4 -35.2 -37.8	14.3 21.7 17.1 19.8 36.5 21.7 32.9	, 49 83 58 80 194	22.5 30.1	40 62 53 47 214	17 13 31 19 11	5 10 6 4 11 7	81 95 47 109 77 118 X	97 * 66 * *	1029.6 1004.9 1135.4 972.2 922.7 928.6 1054.9	PORTAGE LA PRAIRIE THE PAS THOMPSON WINNIPEG INT'L ONTARIO	-11.5 -14.3 -17.7 -11.9	-7.4 -6.8 -5.8 -7.4	10.7 4.5 0.5 9.4	-34.5 -35.5 -41.1 -34.0	52.4 15.8 22.5 44.5	455 49 66 203	32.4 14.3 21.9 43.8	110 49 70 173	21 8 10 11	8 4 2 9	X 104 109 113	154 161 124	883.2 970.6 1071.5 897.3
RED DEER ROCKY MTN HOUSE SLAVE LAKE SUFFIELD WHITECOURT SASKATCHEWAN	-13.9 -13.0 -15.1 -13.2 -14.3	-9.3 -9.4 -8.8 * -8.0	7.1 11.2 5.1 15.9 12.6	-34.6 -38.7 -36.1 -36.0 -37.7	16.0 40.0 26.4 10.4 34.0	105 202 112 * 155	13.4 31.4 17.5 9.2 21.9	88 175 73 * 93	10 22 12 4 8	4 9 7 4 9	X X 76 112 X	7,6 x	953.6 976.9 992.1 934.6 969.4	ATIKOKAN BIG TROUT LAKE EARLTON GERALDTON GORE BAY HAMILTON RBG	-10.8 -12.7 -4.3 -10.7 1.6	-6.2 -3.7 -1.8 -5.2 -0.3	6.8 4.8 14.1 8.4 14.6	-37.4 -31.0 -19.2 36.4 -9.5	73.1 18.2 15.1 100.8 26.3	178 * 38 180 102	74.5 23.9 72.3 118.6 115.3	58 102 192 141 350	34 9 3 42 14	13 8 11 14 16	76 87 X X X	105	864.8 920.8 666.3 861.8 495.1
BROADVIEW COLLINS BAY CREE LAKE ESTEVAN HUDSON BAY KINDERSLEY	-13.9 -19.4 -18.6 -11.5 -15.5	-8.4 -6.9 -8.2 -7.9 -8.4	7.6 1.2 2.4 14.4 6.1	-35.2 -33.7 -37.5 -31.5 -38.7	20.8	171 62 61 140 73	25.1 17.5 12.7 12.4 28.6		8 18 17 7 12	7 6 6 3 5	120 73 74 113 94	111 * 117 94 *	955.6 1130.4 1096.6 885.2 1004.3	HAMILTON KAPUSKASING KENORA KINGSTON LANSDOWNE HOUSE LONDON MOOSONEE	4.0 -7.8 -10.3 2.7 -11.7 4.2 -7.7	0.6 -3.4 -5.7 -0.7 -4.3 1.1 -3.2	19.0 14.3 9.2 14.7 4.8 18.9 15.1	-3.5 -23.6 -31.3 -6.0 -33.4 -4.4 -26.2	19.4 66.7 59.8 11.8 46.7 8.4 61.9	34 130	199.4 110.0 58.4 103.6 57.4 149.0 76.2	137 144 123 122 175 114	28 54 50	17 15 14 16 11 17 8	X X 63 X 17 68	81 22 132	422.2 772.7 853.3 462.2 892.3 416.4 770.3 494.3
LA RONGE MEADOW LAKE MOOSE JAW NIPAWIN NORTH BATTLEFORD PRINCE ALBERT REGINA	-15.9 -17.4 -12.7 -16.7 -16.2 -16.7 -13.6	-9.2 -8.0 -10.8 -9.1 * -10.4 -9.5 -8.5	11.2 5.5 2.8 8.2 4.5 5.4 4.0 7.4	-34.2 -37.6 -41.5 -31.5 -37.4 -35.8 -36.8 -32.4	10.0 3.1 14.0 16.8 15.0 13.3 12.4 18.2	98 8 74 89 * 97 71 128	9.0 2.1 13.2 22.9 12.6 12.4 14.1 23.0	7 61 137 * 86 82	3 5 8 4 6 5 6	5 0 6 6 6 4 4 5	92 112 98 X 86 110	* 101 98	972.0 1028.7 1063.9 921.9 1039.6 1025.2 1042.0 948.1	MOUNT FOREST MUSKOKA NORTH BAY OTTAWA INT'L PETAWAWA PETERBOROUGH PICKLE LAKE	1.5 0.8 -1.7 0.3 -0.7 1.8 -12.6	-0.1 -0.3 -0.7 -0.9 -0.6 -0.3 -5.0	17.7 16.3 15.3 18.2 18.0 18.5 5.1	-7.2 -10.6 -14.4 -10.2 -13.6 -7.4 -38.8	13.1 43.5 17.4 20.4 21.7 14.5 80.4	35 107 50 89 114 91 165	125.9 130.9 86.5 63.0 68.9 154.3 58.0	99 81 104 222	8 9 6 4 1 32	14 17 16 15 13 15 11	28 X 69 X X X	105	592.0 532.1 561.0 485.9 929.1
SASKATOON SWIFT CURRENT URANIUM CITY WYNYARD YORKTON	-14.9 -13.8 -17.7 -15.1 -15.0	-9.2 -10.1 -6.4 -9.4 -9.1	6.9 11.7 -0.8 7.0	-33.3 -33.7 -37.6 -35.0 -37.5	8.6 17.8 51.9 16.4 20.0	66 119 118 88 102	8.2 18.0 34.3 23.4 26.7	55 113 119 121	4 9 31 7 9	2 4 14 5 9	X 120 X 85 98	108 90 108	987.9 952.6 1069.5 992.6 990.0	RED LAKE ST. CATHARINES SARNIA SAULT STE. MARIE SIMCOE SIOUX LOOKOUT SUDBURY	-11.9 4.9 4.6 0.2 4.6 -11.2 -2.1	-6.1 0.2 0.4 -0.5 1.0 -5.9 -0.9	8.8 20.9 18.7 13.7 19.0 6.6 14.6	-38.7 -2.3 -3.9 -12.3 -4.0 -35.4 -12.9	43.6 18.0 5.0 47.2 19.5 77.6 12.6	130 219 31 114 119	39.4 210.6 130.9 103.2 234.7 84.9 90.8	338 168 120 296	31 2 16 7 52 6	10 17 18 18 19 17	91 X 25 46 X X	27 71 93	898.0 392.3 400.8 536.0 403.6 866.0 601.7
MANITOBA BRANDON CHURCHILL DAUPHIN GILLAM GIML:	-13.6 -16.8 -13.0 -16.1 -12.0	-7.9 -4.7 -7.8 -4.0 -7.4	8.6 0.2 8.3 1.7 9.5	-31.5 -34.5 -36.2	19.7 49.6 18.4 29.8 43.4	118 119 76 67 151	19.9 46.2 23.9 27.4 50.0	119 94 79	12 6 6 14 24	7 8 9 5	X 102 106 X 113	206 113	949.1 1045.0 930.7 1023.3	THUNDER BAY TIMMINS TORONTO TORONTO INT'L TORONTO ISLAND TRENTON WATERLOO-WELL	-6.9 -6.2 4.4 3.4 5.0 2.7 2.6	-4.3 -2.4 -0.5 0.1 0.4 -0.5 0.0	8.9 14.4 17.8 19.0 17.7 17.7 18.3	-29.0 -22.8 -3.2 -4.5 -3.2 -5.5 -5.7	86.0 39.5 13.8 11.0 10.8 11.6 16.8	288 64 186 137 183 88 117	95.8 81.9 186.2 161.8 176.4 169.3 162.0	181 103 272 258 274 196 224	53 7 0 1 1 2	14 17 16 18 16 15 16	78 X 40 X X	90	746.8 712.2 397.0 437.9 389.5 458.7 462.0 650.0
ISLAND LAKE LYNN LAKE NORWAY HOUSE PILOT MOUND	-12.2 -18.8 -13.9 -12.7	-3.8 -6.5 * -7.6	8.0 0.8 5.8	-34.8 -37.7 -35.9	35.7 10.0 33.0	71 26 * 177	34.3 10.0 32.2 33.8	87 30	12 10 18 24	6 6 3 8	XXX	*	905.4 1102.9 956.7 921.1	WAWA WIARTON WINDSOR	-3.7 3.1 6.0	0.2	15.4 19.7 19.0	-20.4 -5.2 -3.0	47.1 42.9 9.8	108 85	109.3 171.4 156.2	180	3	15 18 19	25 X	41	447.2 358.8

													NOVEME	IER 1985													
	Tem	peratu	re C						(cm)	more					Ten	peratu	re C						2	9			
STATION	Mean	Difference from Normal	Maximum	Minimum	Snowfall (cm)	% of Normal Snowfall	Total Precipitation (mm)	% of Normal Precipitation	Snow on ground at end of month (c	No. of days with Precip 1.0 mm or m	Bright Sunshine (hours)	% of Normal Bright Sunshine	Degree Days below 18 C	STATION	Меап	Difference from Normal	Maximum	Minimum	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
QUEBEC						,								NOVA SCOTIA		-1)						•					
BAGOTVILLE BAIE COMEAU BLANC SABLON CHIBOUGAMAU GASPE	-3.6 -4.0 -3.0 -7.1 1.8	-1.6 -2.2 -2.6 -1.7 2.0	15.1 11.4 9.0 11.1 10.4	-22.7 -18.4 -14.5 -26.2 -14.4	34.6 42.6 12.8 41.0 28.4	73 120 35 77 91	53.4 76.2 30.4 65.0 93.2	72 95 31 84 111	6 9 2 9 2	13 10 8 12 9	X 93 109 52 102	* * 105 *	648.6 658.3 585.8 751.2 592.2	GREENWOOD HALIFAX INT'L SABLE ISLAND SHEARWATER SYDNEY	3.1 3.1 5.8 3.3 2.3	-0.8 -0.3 -1.5 -1.3 -1.5	15.5 13.2 13.8 12.2 11.6	-2.9 -9.2 -2.4 -8.3 -9.2	13.2 11.3 1.4 11.3 26.3	90 94 45 144 219	98.5 113.1 146.2 109.6 105.7	90 74 107 76 65	0 0 0 2	13 11 15 10 14	X MSG 60 86 78	85 79 104	448.5 471.9 367.5 440.9 470.1
INUKJUAK KUUJJUAQ KUUJJUARAPIK LA GRANDE RIVIERE MANIWAKI	-7.0 -8.7 -5.9 -7.5 -1.5	0.2 -0.4 -1.0 * -1.2	6.1 7.3 10.6 10.4 16.4	-22.5 -25.0 -22.3 -24.0 -14.4	45.4 71.8 55.8 89.2 18.2	119 200 106 * 70	42.6 69.2 73.6 83.1 50.0	107 172 120 * 67	29 37 17 31 6	12 16 11 15 10	39 53 56 55 63	140 102 145 * 96	749.0 794.1 717.0 765.2 584.6	TRURO YARMOUTH PRINCE EDWARD ISLAND	1.5 4.6	-1.4 -0.6	14.0 14.5	-11.6 -4.5	29.6 2.2	229 34	112.2 161.9	96 120	3	13	75 100	89 112	495.7 401.0
MATAGAMI MONT JOLI MONTREAL INT'L MONTREAL M INT'L NATASHQUAN	-7.0 -2.3 1.0 -0.5 -2.8	-1.8 -2.0 -1.0 * -1.7	13.5 13.2 18.1 16.7 12.6	-24.5 -13.5 -10.0 -13.5 -13.6	59.1 30.4 14.7 22.4 19.3	139 85 69 * 60	72.5 50.4 74.8 79.0 54.7	113 67 92 * 47	15	16 10 14 12 9	61 85 80 94 133	130 111 93 * 156	750.2 608.3 508.8 554.9 620.7	CHARLOTTETOWN SUMMERSIDE NEWFOUNDLAND	1.2 2.9	-1.7 -0.1	12.6	-10.0 -9.3	23.5 25.1	108	105.4 94.6	87 94	15	12 12	X 82	86	504.4 503.4
NITCHEQUON QUEBEC ROBERVAL SCHEFFERVILLE SEPT-ILES	-9.0 -1.4 -3.8 -9.4 -4.3	-0.7 -1.2 -1.6 -0.4 -1.8	6.0 12.2 15.3 5.9 11.6	-23.9 -17.0 -18.8 -22.5 -18.0	32.8 36.2 27.6 35.9 16.6	64 106 58 58 32	36.4 69.0 50.6 34.9 53.0	57 71 67 53 52	18 13 8 12 4	9 12 10 11 7	62 73 87 56 116	180 98 * * 123	808.0 580.8 646.1 821.0 667.8	ARGENTIA BATTLE HARBOUR BONAVISTA BURGEO CARTWRIGHT	2.2 -3.7 1.0 1.2 -3.1	-2.8 -3.1 -2.4 -2.0 -1.3	12.4 11.0 10.9 11.8 7.0	-6.6 -16.8 -5.6 -7.2 -13.3	27.3 19.8 22.4 11.9 21.6	853 * 200 100 46	99.5 34.0 66.4 118.2 39.4	54 68 66	15	9 9 12 10	X X X 114	143	476.4 627.2 510.8 504.2
SHERBROOKE STE AGATHE DES MONTS ST-HUBERT VAL D'OR NEW BRUNSWICK	-0.4 -2.3 0.5 -5.2	-0.8 -0.8 -1.3 -1.8	18.5 14.7 16.0 14.5	-17.9 -15.1 -12.0 -21.8	33.7 35.3 12.3 24.8	91 85 51 51	108.6 76.9 90.4 74.6	120 75 101 94	10 11 5	13 13 14 10	69 69 MSG 63	* 98 106	535.5 607.7 526.3 694.2	CHURCHILL FALLS COMFORT COVE DANIEL'S HARBOUR DEER LAKE GANDER INT'L	-8.3 -0.7 -0.8 -1.1 -1.2	-0.4 -2.6 -2.6 -2.1 -3.0	6.1 10.7 9.5 9.3 11.0	-21.4 -10.0 -6.5 -11.5 -10.0	23.4 18.6 6.2 32.9 23.6	33 55 23 94 74	21.6 55.4 30.0 70.7 71.8	27 51 29 65 66	15 18 1 1	8 11 10 11 11	83 76 X 73 X 75	119 146 148 112	787.5 567.2 565.3 572.5 575.1
CHARLO CHATHAM FREDERICTON MONCTON SAINT JOHN	-2.4 -1.5 0.2 0.0 1.3	-2.1 -2.4 -1.2 -2.0 -1.0	11.4 11.2 12.8 13.6 12.4	-15.1 -14.8 -14.4 -12.6 -11.6	34.7 31.0 20.5 16.9 12.6	93 118 100 78 148	81.6 112.7 129.1 112.8 136.5	97 110 121 102 93	8 6	11 13 12 16 12	98 84 78 93 84	104 84 * 96 86	729.2 582.9 534.8 539.9 501.6	GOOSE PORT-AUX-BASQUES ST ANTHONY ST JOHN'S ST LAWRENCE	-5.1 1.3 -3.1 0.3 1.5	-1.3 -1.9 -2.2 -3.1 -2.1	8.8 12.0 6.0 10.4 11.1	-19.3 -6.8 -14.6 -7.5 -7.4	17.8 41.6 23.4 30.7 22.1	31 364 51 144 245	24.3 138.2 62.4 103.7 167.3	32 88 54 63 113	6 18 8	9 18 14 14 12	101 79 X 56 X	153 * 81	690.4 498.3 629.9 529.6
elatika					×		No. of Charles and Charles				3			STEPHENVILLE WABUSH LAKE	1.0 -8.7	-1.9 -0.6	11.2	-6.0 -23.3	35.6 34.0	145 49	77.5 34.7	63 45	8 16	15 10	73 70	133	800.1
															1												

148

- 11		Sec. 1	
- 1	7	3227	
007	100 000	1 22	_
- 000		100	-2000000000
	100000000000000000000000000000000000000		
- 1			
	E 76		200
	- 8	5277	111111111111111111111111111111111111111
=	E 00	S=0	
	800	- N	
_		420	40000
- 7	200	=7.	
	20 10		
2883		(
= 1		-350	
- 3			(Display of Party)
	100 0	-	
- 1			
- 1	S. Farmer	681	
- 0	200	100	200
		100	140000
	2 20 200	· 25	100
- 1	4		A 40
1100		3 10	
	35	3 10	16 M
	100	Smit	U.
3	8	3117	
		20	0.000
	170	1030	
- 3	3 SV()	55P.H	All contracts
- 1			
- 1		9 1	
	200		
381	100	1855	
10 1			SSS. 100
1			
2881	2	1000	
-	100	200	
	88		C
	80	300	
0 1	2		
	25	1000	
- 3		1000	4 4
		8-80	
331	7	1. 1	
- 1		S23	Should be
19	7		
		100	
	33	500E	
	200	192	
	900	- 01	
- 0			
	100		
		- 4	
		100	
			1000
		100	

		*	
		7	
2			
2			
.2			
2 6			
.2			
.2			
.2			
.2 .6			
.2			
.2			
.2			
.2			
.2 6			
.2 6			
.2 6			
.2 6			

NO	VFM	RFR	1985

MONENDER DEL

	lemp	erature	C					(cm)			Degree	days
STATION	Mean	Difference from Normal	Maximum	Minimum	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)	This month	Since jan. 1st
BRITISH COLUMBIA						,						
AGASSIZ KAMLOOPS SIDNEY SUMMERLAND	-1.3 -6.0	-7.3 -8.5	14.0	-19.0 -23.0	6.4	176.4	83	0	13	93	17.8	2072.8
ALBERTA												
BEAVERLODGE ELLERSLIE	-15.0 -14.3	-9.9 -9.4	5.0 8.0	-41.0 -38.5	28.0 13.3	23.0	86 81	16 10	8 5	84 98	0.0	1183.8 1224.5
FORT VERMILLION LACOMBE LETHBRIDGE	-12.8	-8.4	8.0	-34.5	13.6	12.1	87	10	6	102	0.0	1376.6
VAUXHALL VEGREVILLE	-15.8	-9.7	5.0	-37.0	15.4	15.4	105	10	8		0.0	1194.9
SASKATCHEWAN INDIAN HEAD MELFORT REGINA SASKATOON SCOTT SWIFT CURRENT SOUTH	-13.6 -16.6 -14.2 -15.4 -16.2 -13.7	-8.5 -9.7 -8.5 -9.9 -10.0 -9.8	8.5 6.0 3.0 7.0 7.0 13.0	-34.5 -36.5 -35.0 -33.5 -35.0 -34.0	23.4 14.8 14.3 7.4 12.8 12.9	24.8 14.8 23.6 9.8 16.6 16.0	145 78 175 61 120 123	8 10 3 4 11 5	5 5 8 4 4 5	66 90 97 101	0.0 36.5 0.0 0.0 0.0	1507.0 1261.0 1333.8 1438.5 1298.8 1582.2
MANITOBA												
BRANDON GLENLEA MORDEN	-13.0 -12.5 -11.2	-8.0 -7.6 -7.7	9.0 10.0 10.5	-36.5 -36.5 -34.0	20.5 26.2 53.8	20.5 33.6 54.4	103 139 213	7 24 22	7 8 6	102 103 101	0.5 0.5 2.0	1537.0 1630.9 1750.5
ONTARIO												
DELHI	4.4	0.7	19.5 17.6	-5.0 -8.2	4.4 8.3	195.1 122.9	237	Ţ	21 16	37	43.7 22.5	2295.8 1908.8

		Temp	erature	e C					(m)			Degree o	lays
									nonth (E		nbove	5 C
	STATION	Mean	Difference from Normal	Maximum	Minimum	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)	This month	Since jan. 1st
	ENCONE CONECENSION SOMEON PART SOMEON												
	GUELPH HARROW KAPUSKASING	2.3 5.7	-0.2 1.2	18.4 17.3	-5.7 -3.5	12.5 8.0	153.5 192.1	205 286	0	20 21	32 34	23.8 66.5	2017.2 2639.6
	MERIVALE OTTAWA	1.2	-0.4	18.1	-9.0	14.2	46.7	63	4	11	68	27.6	2137.1
	SMITHFIELD VINELAND STATION WOODSLEE	3.6	0.6	19.0	-6.0	3.5	192.3	218	0	15		40.8	2220.3
	QUEBEC												
	LA POCATIERE L'ASSUMPTION	5.1 -1.5	0.0	20.3	-1.9 -14.0	18.0 30.6	241.4 59.6	378 76	1 7	16 8	37 81	46.7 3.8	2368.3 1641.2
	LENNOXVILLE NORMANDIN	-0.1	-1.2	16.0	-14.5	19.9	81.1	97	2	11	83	14.2	1940.3
	ST. AUGUSTIN STE CLOTHILDE	-4.8	-1.9	13.5	-24.0	30.8	55.2	94	2	10	92	1.7	1246.1
	NEW BRUNSWICK	-						7					
	FREDERICTON												
	NOVA SCOTIA			100									
	KENTVILLE NAPPAN	3.3 3.3	1.4 -0.7	20.0 15.5	-13.0 -9.5	10.9 6.3	84.2 98.4	105 82	1 T	11 11	68 67	23.8 38.1	2045.4 1887.4
	PRINCE EDWARD ISLAND												
	CHARLOTTETOWN												
10	NEWFOUNDLAND												
	ST. JOHN'S WEST	2.1	-0.9	15.0	-14.0	15.8	015.4	98	2	13	74	35.5	1852.0

ENV. CAN. LIBR./BIB. DOWNSVIEW

Climatic perspectives : a weekly review.

0 0001 00595904 2

ATMOSPHERIC ENVIRONMENT SERVICE
SERVICE DE L'ENVIRONNEMENT ATMOSPHERIQUE
4905 RUE DUFFERIN STREET
DOWNSVIEW, ONTARIO, CANADA
Mª 514

10059590 Uol. 7#26-49 1985 CZ