Canada

Canada

Atmospheric Environnement Environment atmosphérique

A WEEKLY REVIEW OF CANADIAN CLIMATE

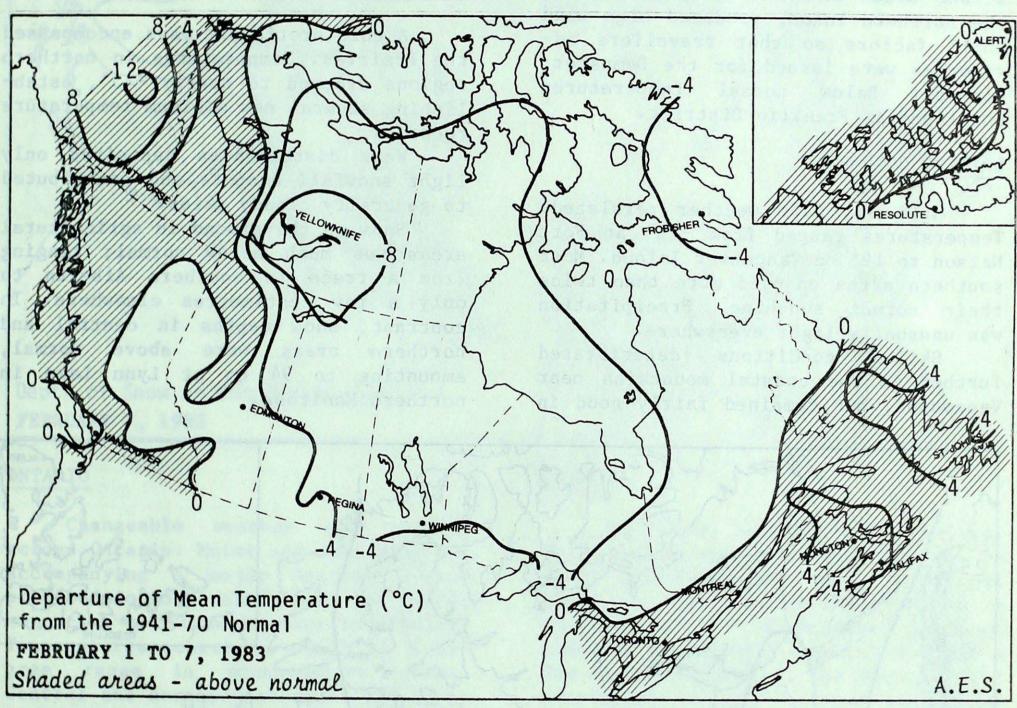
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THE CANADIAN CLIMATE CENTRE, ATMOSPHERIC ENVIRONMENT SERVICE, 4905 DUFFERIN ST., DOWNSVIEW, ONTARIO M3H ST

FEBRUARY 11,1983

(Aussi disponible en français)

VOL.5 NO.6



WEATHER HIGHLIGHTS FOR THE PERIOD - FEBRUARY 1-7, 1983

Torrential rain in southern Québec

across southern Québec. On February 2, of 10 cm provided a good snow cover at some areas received nearly 60 mm in just 24 hours. Hundreds of basements and roads were flooded at Montréal. Water damage to a historic building was estimated at a half million dollars. Before the rain fell, freezing rain plagued southern Québec; approximately 200 traffic accidents were directly related to the treacherous roads in Montréal alone.

Heavy rainfall ushered in February Subsequently, snowfall in excess the Laurentian ski resorts.

> In central Canada, temperatures plummeted to below seasonable values when frigid arctic air covered an area from Saskatchewan to northern Ontario.

> Across the country, temperatures ranged from a high of 12.6° at Greenwood, N.S. to a low of -47.6° at Shepherd Bay, N.W.T. Québec City, P.Q. received 70 mm of rain.

NOTE: The data shown in this publication are based on unverified reports from approximately 225 Canadian and 115 northern United States Synoptic stations.

YUKON AND THE NORTHWEST TERRITORIES

Although cloudy skies persisted in the Yukon there was little precipitation; only the coastal mountain areas received more than 5 cm of snow. Brisk southerly winds from the Gulf of Alaska kept temperatures well above normal, as much as 12° at Mayo.

During the latter part of the week strong winds and cold temperatures in the northern Yukon, produced high wind chill factors so that travellers advisories were issued for the Dempster highway. Below normal temperatures continued in Franklin District.

BRITISH COLUMBIA

Mild and fair weather persisted. Temperatures ranged from -26° at Fort Nelson to 12° on Vancouver Island. Most southern areas enjoyed more than twice their normal sunshine. Precipitation was unusually light everywhere.

Skiing conditions deteriorated further in the coastal mountains near Vancouver, but remained fairly good in the interior because of the good snow base. Early spring flowers are in bloom in Victoria and along the southern coast of the mainland.

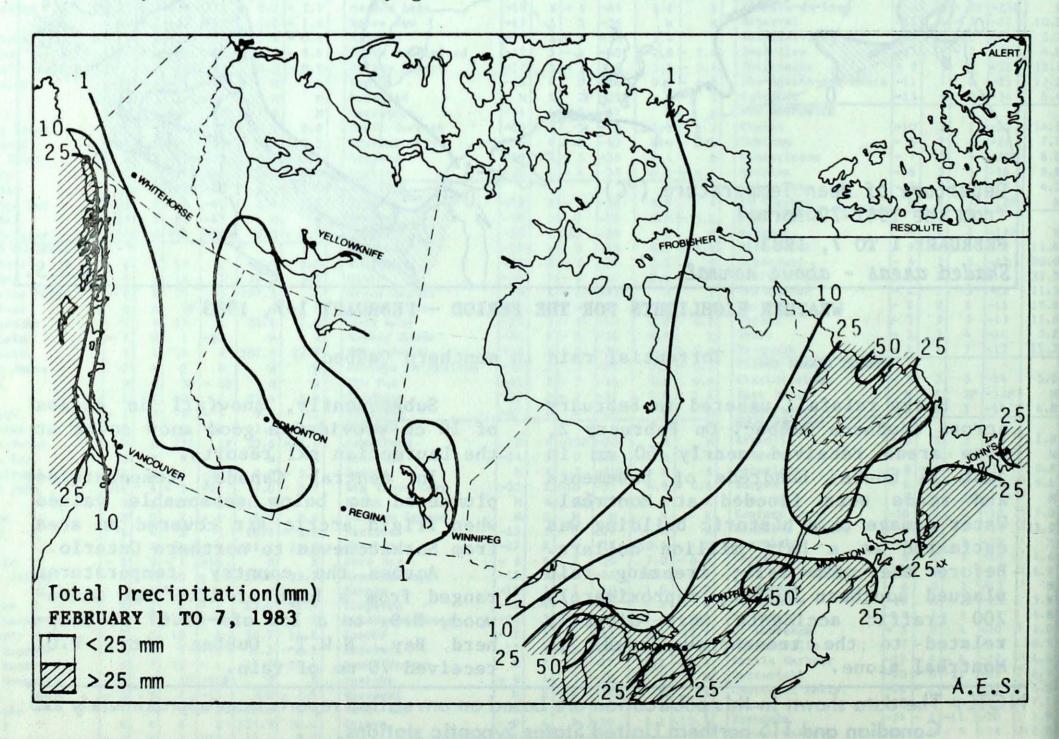
Many southern communities had their warmest January on record. In Vancouver the new January temperature of 6.3° exceeded even the normal mean March temperature.

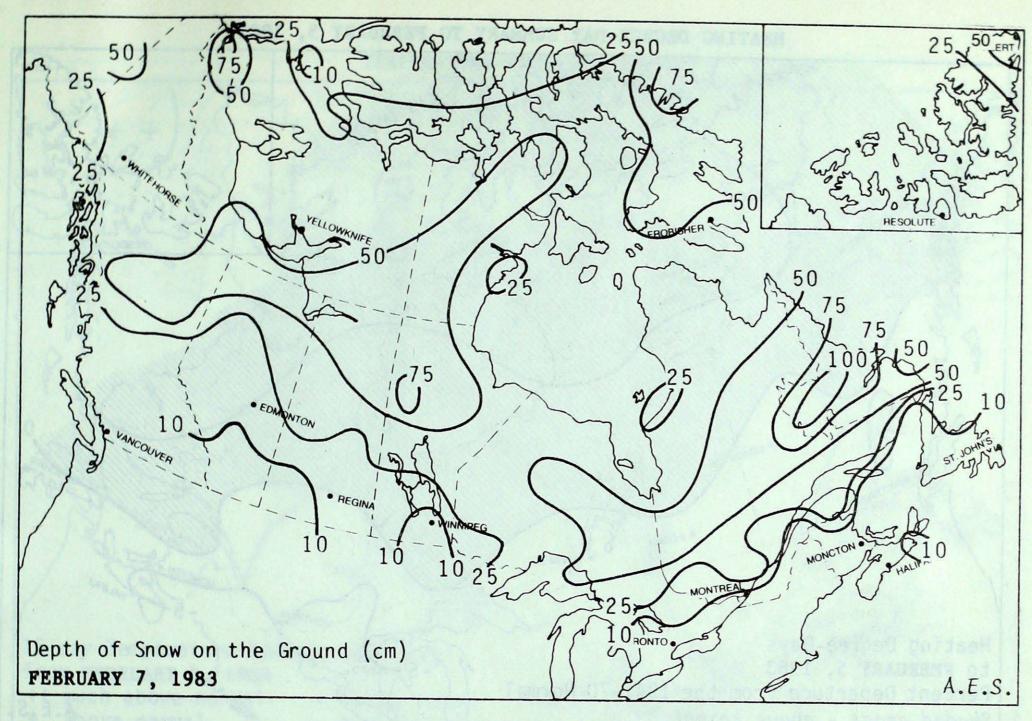
PRAIRIE PROVINCES

A cold arctic air mass encompassed the Prairies. Temperatures in northern regions dropped to nearly -45°, establishing several new minimum temperature records.

Weak disturbances deposited only light snowfall amounts and contributed to generally cloudy skies.

Snow on the ground in agricultural areas was much below normal, ranging from a trace in southern Alberta to only a few centimetres elsewhere. In contrast, snow depths in central and northern areas were above normal, amounting to 94 cm at Lynn Lake in northern Manitoba.





ONTARIO

Changeable weather was evident across Ontario. Moist and very mild air accompanying a major weather system produced copious rainfall in the south, amounting to 40 mm in some localities. Temperatures soared in the 5 to 9 degree range southwestern areas. in Central and northern sections had 15 to 25 cm of snow from the same disturbance. In addition, several hours of freezing rain created treacherous roads at North Bay, and numerous multi-car accidents resulted. Opening ceremonies of the annual Winterlude carnival in Ottawa had to be postponed until colder weather arrived on February 4.

Subsequently, frigid arctic air covered the entire province; temperatures plummeted to the -40° mark in northern areas during the week-end. Although some snow fell in the south on February 7, snow cover was still inadequate for recreational activities. A large portion of Georgian Bay, and western Lake Erie have extensive ice cover. Otherwise, the Great Lakes were mostly open water.

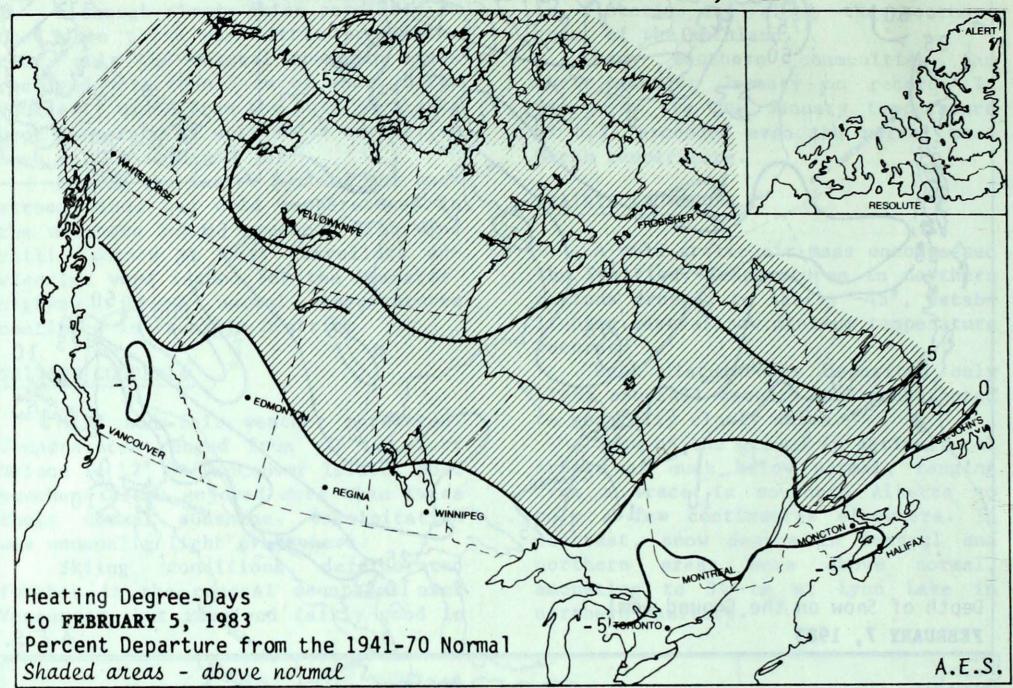
QUÉBEC

Torrential downpours in southern areas during mid-week were followed by ample snowfall. Extremely mild and humid air that covered the province on the 2nd and 3rd of February produced numerous record high temperatures and a few record rainfalls. The record 24-hr precipitation, for February was 59 mm at Québec City (old record: 51 mm set in 1976) and 45.8 mm at Montréal (old record 42.9 mm set in 1969). Owing to heavy rains, hundreds of basements and roadways were flooded in Montréal. Flood damage to a historic building at Mascouche, northeast of Montréal was estimated at a half million dollars. On February 2, extensive freezing rain plagued southern Québec. In Montréal alone over 200 traffic accidents were attributed to treacherous roads. A motorist unable to negotiate icy roads drove into the frigid waters of the St. Lawrence river and drowned.

On February 7, more than 10 cm of snow in southern and southeastern areas

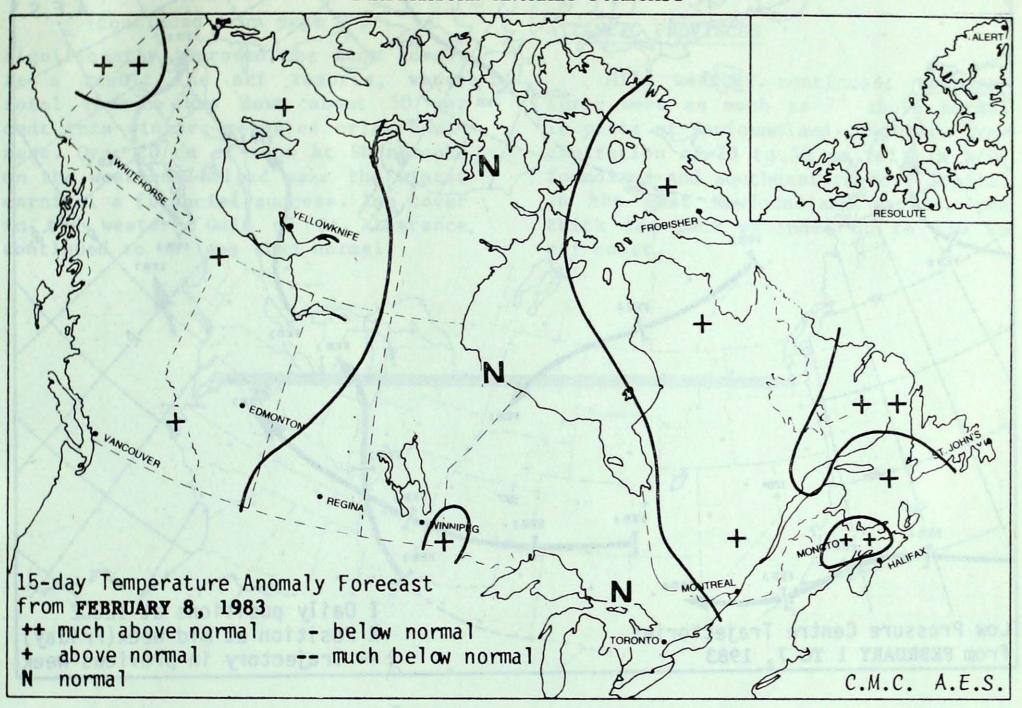
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HEATING DEGREE-DAY SUMMARY TO FEBRUARY 5, 1982

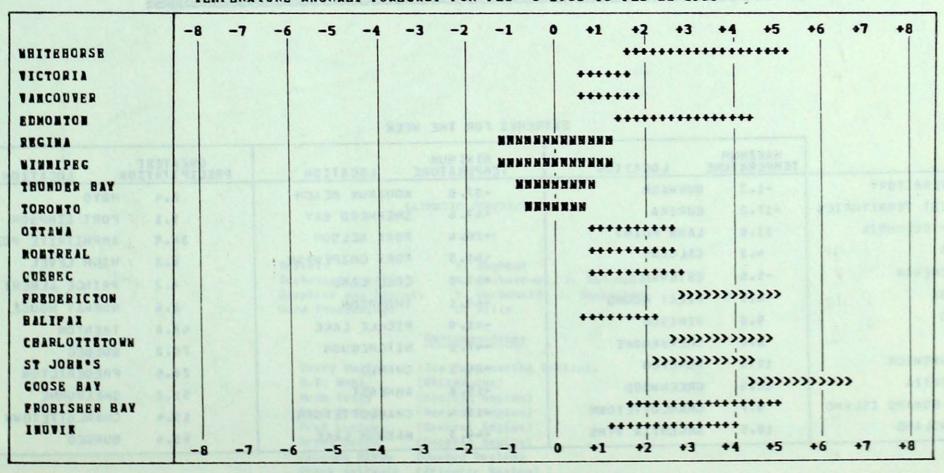


STATION	MONTHLY CUMULATIVE TOTAL	MONTHLY DIFF. FROM 1941-70 NORMAL	SEASONAL TOTAL	SEASONAL DIFF. FROM 1941-70 NORMAL	SEASONAL PERCENT OF NORMAL
Resolute	259.0	-1.0	7570.0	358.0	105
Inuvik	249.5	4.5	6284.5	263.5	104
Whitehorse	134.0	-37.0	4310.0	35.5	101
Vancouver	80.0	7.0	1725.5	-23.5	99
Edmonton	143.5	-7.5	3199.5	-156.0	95
Calgary	126.5	14.5	2972.5	-152.5	95
Regina	184.0	11.0	3422.0	-97.5	97
Winnipeg	196.0	14.0	3351.0	-107.0	97
Thunder Bay	169.0	4.0	3263.0	-50.5	98
Windsor	100.5	-14.5	1847.0	-204.5	90
Toronto	104.0	-21.0	2166.5	-145.5	94
Ottawa	131.5	-13.5	2554.5	-192.5	93
Montreal	115.0	-29.0	2470.0	-143.0	95
Quebec	122.5	-30.5	2810.5	-156.0	95
Saint John	91.0	-44.0	2484.0	-169.0	94
Halifax	80.0	-35.0	2065.0	-109.5	95
Charlottetown	87.5	-47.5	2383.0	-108.5	96
St John's	91.0	-29.0	2152.0	-35.0	98

TEMPERATURE ANOMALY FORECAST



TEMPERATURE ANOMALY FORECAST FOR FEB 8 1983 TO FEB 22 1983

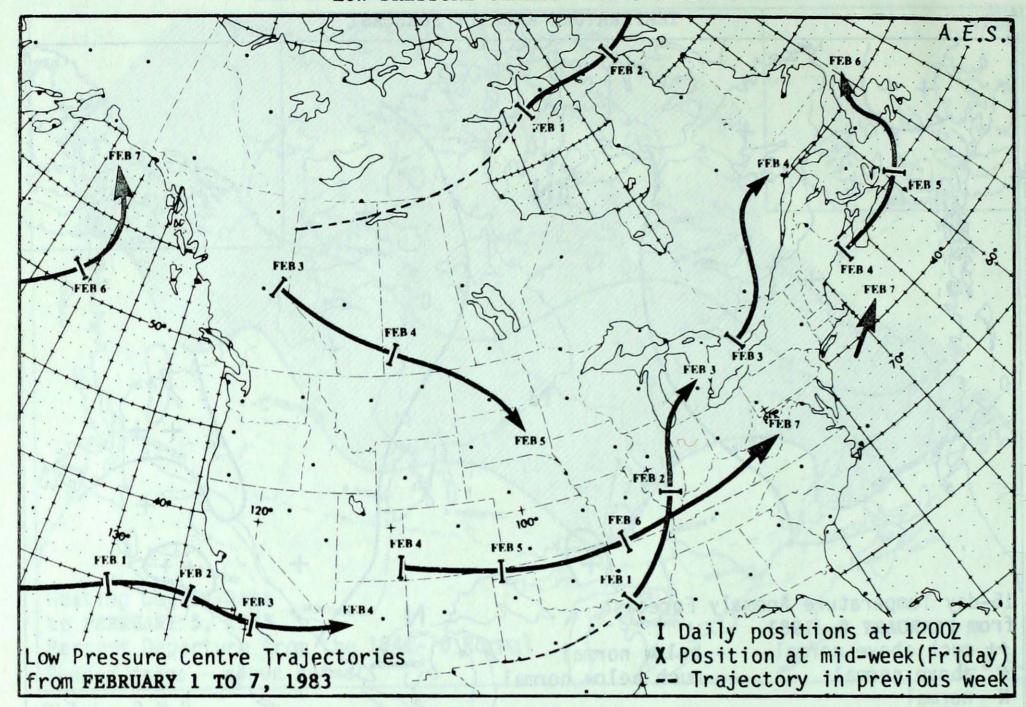


CCCC MUCH BELOW NORMAL BELOW NORMAL

NNNN NEAR NORMAL

>>>> MUCH ABOVE WORNAL

LOW PRESSURE CENTRE TRAJECTORIES



EXTREMES FOR THE WEEK

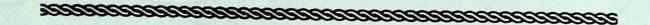
EXTREMES FOR THE WEEK								
	MAXIMUM TEMPERATU		MINI MUM TEMPERATUR	RE LOCATION	GREATEST PRECIPITATI	ON LOCATION		
YUKON TERRITORY	-1.3	BURNASH	-37.0	KOMAKUK BEACH	2.4	HAYO		
NORTHWEST TERRITORIES	-17.2	EUREKA	-47.6	SHEPHERD BAY	9.1	FORT SIMPSON		
BRITISH COLUMBIA	12.0	LAWN POINT	-26.4	FORT NELSON	34.9	AMPHITRITE POIN		
ALBERTA	4.3	CALGARY	-41.5	FORT CHIPENYAN	6.3	HIGH LEVEL		
SASKATCHEHAN	-5.6	ESTEVAN	-45.0	CREE LAKE	4.2	PRINCE ALBERT		
MANITCBA	-4.5	PILCT MOUND	-43.1	THOMPSON	2.6	NORWAY HOUSE		
ONTARIO	9.0	HINESOR	-41.9	PICKLE LAKE	48.8	TRENTON		
QUEBEC	8.0	SHERBROOKE	-47.1	NITCHECUON	70.0	QUEBEC		
NEH BRUNSHICK	10.5	HONCTON	-24.1	CHARLO	26.6	FREDERICTON		
NOVA SCOTIA	12.6	GREENWOOD	-15.8	AMHERST	51.2	SHELBURNE		
PRINCE EDHARD ISLAND	9.7	CHARLOTTETOWN	-15.4	CHARLOTTETOHN	15.4	CHARLOTTETOWN		
NEWFOUNDLAND	10.5	ARGENTIA VTMS	-44.3	WABUSH LAKE	51.4	BURGEO		

(continued from page 3)

significantly improved the snow cover. As a result the ski resorts, whose total revenue was down about 50 per cent this winter, reported brisk business. Over 20 cm of snow at Sherbrooke on the week-end helped make the winter carnival a financial success. Ice cover in the western Gulf of St. Lawrence continued to be less than normal.

ATLANTIC PROVINCES

Mild weather continued; temperatures were as much as 7° above normal in parts of Newfoundland. Moderate precipitation of 25 to 50 mm fell in Newfoundland and southeastern Nova Scotia. In the east Newfoundland waters, the thick ice pack extended up to 130 km off coast.



CLIMATIC PERSPECTIVES

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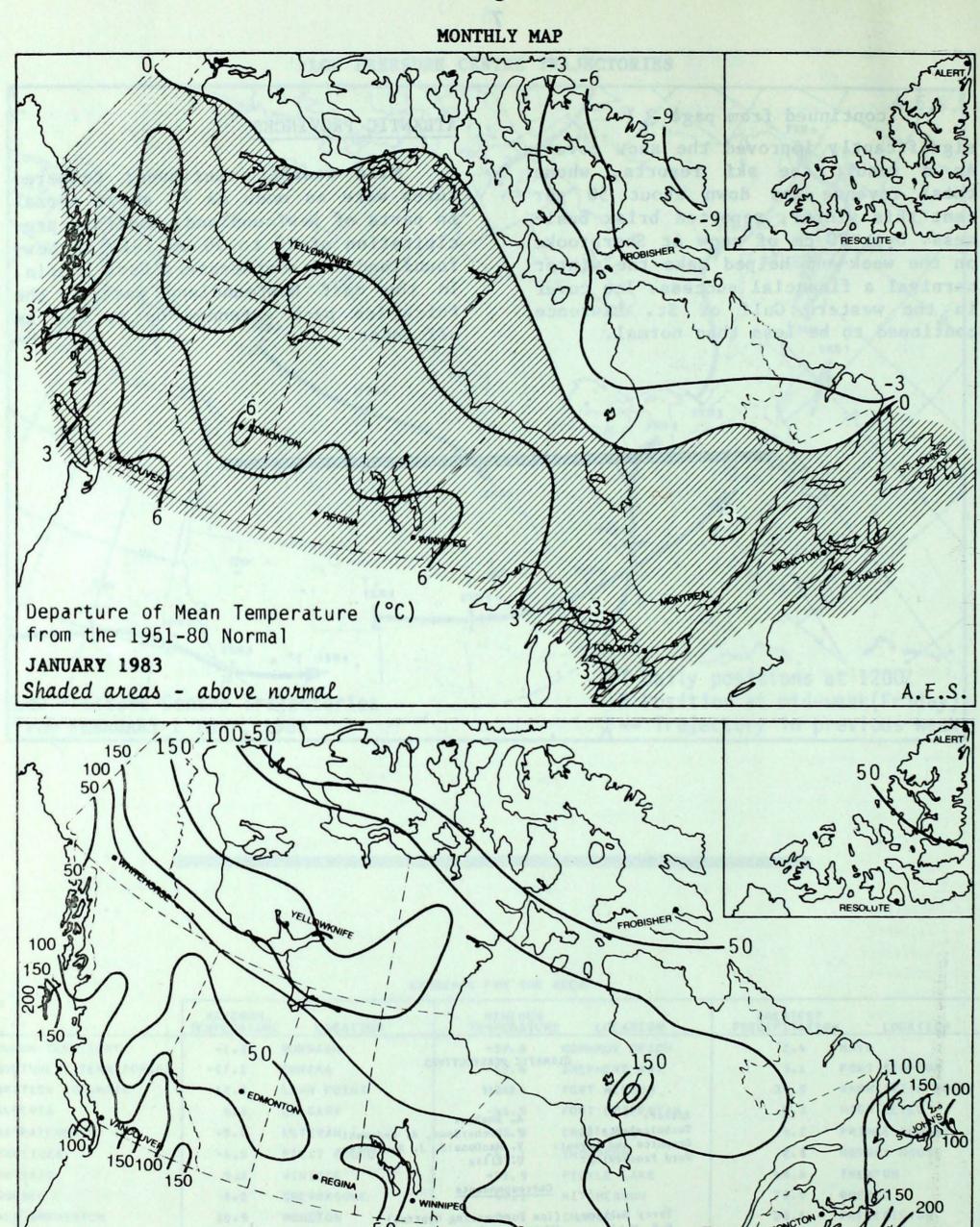
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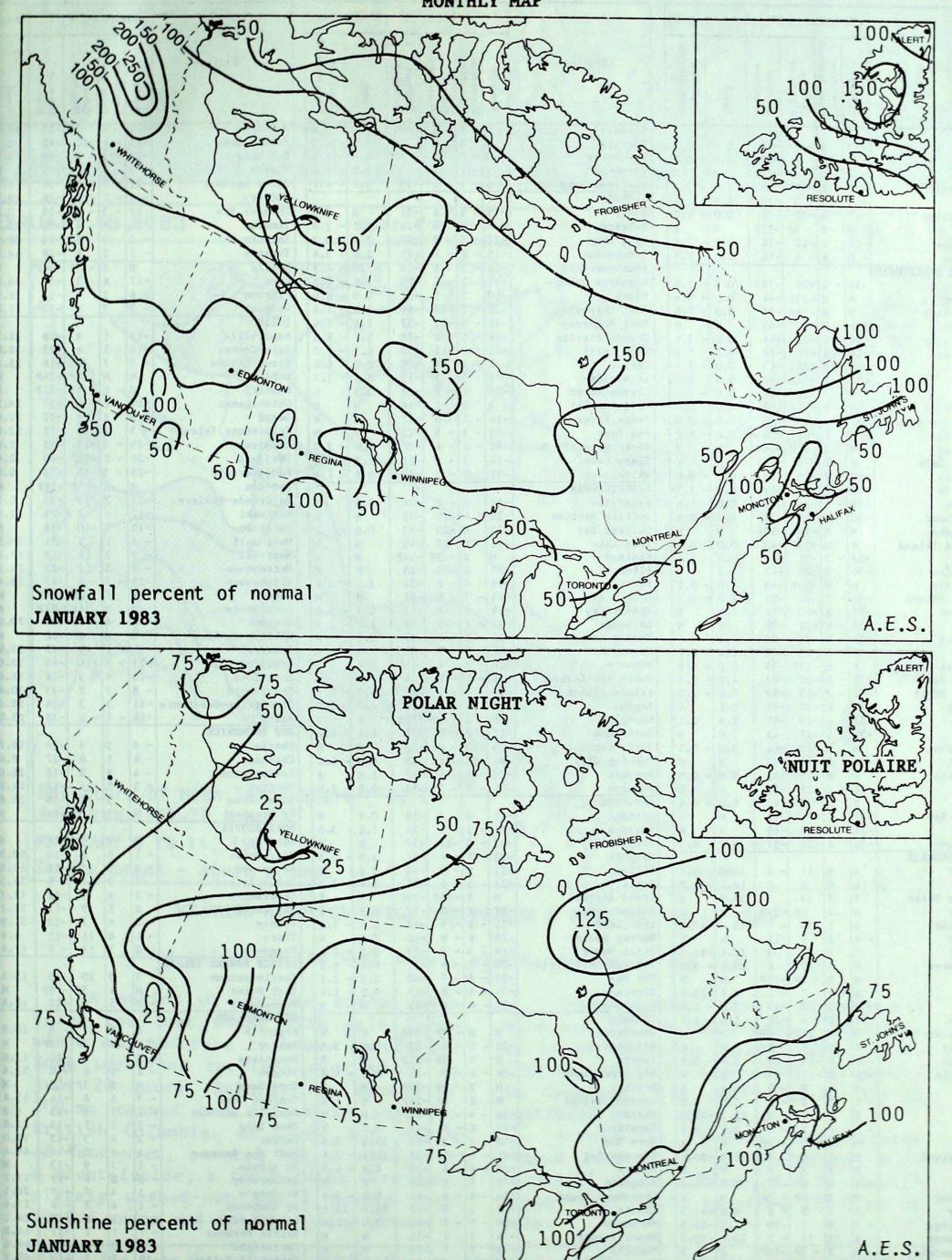


2100

A.E.S.

Total Precipitation Percent of 1951-80 Normal

JANUARY 1983



	TEMPERATURE AND PRECIPITAT							
	Te	mper	ature	Precip. (mm)				
Station	Average	Departure from Normal	Extreme	Extreme Minimum	Total	Departure from Normal		
YUKON Burwash Dawson Faro Komakuk Beach Mayo Shingle Point Teslin Watson Lake Whitehorse NORTHWEST TERRITORIES	-13 -17 M -30 -10 -29 M -19 - 8	8 10 X 1 12 0 X 3 8	- 9P -24 - 3 -25 - 9P -12	-26 -28 -23P -37 -23 -35 -23P -29 -16	0.0 0.0 M 0.0 2.4 0.0 M 0.7	- 2.2 - 3.6		
Cape Parry Cape Young Clinton Point Coppermine Fort Reliance Fort Simpson Fort Smith Hay River Inuvik Lady Franklin Point Nicholson Peninsula Norman Wells Port Radium Robertson Lake Tuktoyaktuk Yellowknife Baker Lake Coral Harbour Ennadai Lake Jenny Lind Island Pelly Bay Rankin Inlet Shepherd Bay Broughton Island Cape Dorset Cape Dyer Cape Hooper Clyde Dewar Lakes Frobisher Bay Longstaff Bluff Pond Inlet Alert Eureka Gladman Point Hall Beach Mackar Inlet Resolute Byron Bay	-34 M -36 -39 -24 -33 -32 -30 M -31 -27 -38 -30 -37 -38 -30 M -39 -36 M -39 -36 M -30 -27 -28 -31 -32 -32 -33 -36 M -32 -37 -38 -30 M -31 -30 M M -39 -36 M M -39 -36 M M -39 -37 -38 -30 M M -30 -37 -38 -30 M M -30 -31 -30 -31 -30 -31 -30 -31 -30 -31 -30 -30 -31 -30 -30 -30 -31 -30 -30 -30 -30 -30 -30 -30 -30	M 1 1 X X 2 2 - 10 - 4 1 M M 5 X M 7 X - 6 6 - 4 M - 5 X M - 7 X - 1 M M - 1 M M - 1 M	-29P -19P -25 -32 -20 -24 -22 -23 -31P -23 -21 -22P -34P -26 -30 -23 -19 -28P -27 -20 -33P -27 -20 -21 -26 -25 -27 -22 -23 -31P -25 -20 -21 -26 -25 -27 -20 -21 -25 -27 -27 -27 -27 -27 -27 -27 -27 -27 -27	-42P -35 -43 -44 -38 -39P -43 -45 -42 -48 -35 -32 -39 -36 -40 -39 -42 -38 -42 -39 -42 -44 -39 -42 -44 -39 -42 -43 -42 -44 -39 -42 -43 -44 -42 -44 -44 -44 -44 -44 -45 -46 -46 -46 -46 -46 -46 -46 -46 -46 -46	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	- 1.0 - 3.9 5.3 - 3.9 - 4.6 - 2.5 0.0 - 0.8 - 4.2 X - 1.0 - 3.5 - 1.6 - 2.8 M - 0.8 - 0.2 - 0.7 X M 0.7 - 0.2 - 0.9 - 2.7 - 2.0 X - 0.5 M - 0.7 - 0.9 - 0.7 - 0.9 - 0.7 - 0.9 - 0.7 - 0.9 - 0.7 - 0.9 - 0.7 - 0.9 - 0.9 - 0.7 - 0.9 - 0.		
Cambridge Bay Mould Bay Sachs Harbour BRITISH COLUMBIA Abbotsford Alert Bay Amphitrite Point Blue River Bull Harbour Burns Lake Cape Scott Cape St James Clinton Comox Cranbrook Dease Lake Estevan Point Ethelda Bay Fort Nelson Fort St John Hope Kamloops Langara Lytton Mackenzie McInnes Island Nanaimo Penticton Port Alberni Port Hardy Prince George Prince Rupert Puntzi Mountain Quesnel Revelstoke Sandspit Smithers	-37 -34 -30 4 4 7 M 6 -4 7 8 M 2 -6 -14 M 6 -19 -16 3 -1 6 M 4 -1 6 M 6 M 7 M 6 M 7 M 6 M 7 M 7 M 7 M 7 M	1 2 0 0 0 X X 1 X 2 3 X 0 0 X 1 X 1 X 0 X 1 0 3 X 0 0 4	-28 -24 11 8 12 OP 10 1 11 12 - 2P 7 2 - 6 11P 8	2 -26 -25 - 2 - 8 3 - 7 -17P 3 M	10.1 34.9 M 12.6 M 22.4 29.9 M 4.2 3.8 1.6 M 3.6 M 10.4 0.0 25.2 3.0 M 18.3 M 2.0 M 6.6 1.0 20.1 M 0.0 25.1	-33.7 -31.7 X X -47.6 X -41.7 - 9.8 X -38.0 - 1.1 - 4.8 M X - 2.8 M X - 4.0 -12.3 - 0.9 X -60.0 X -41.3 -14.0 -50.7 X -11.7 - 9.8		

11	ION DATA FOR THE			oture (Precip. (mm)			
	Station	Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal	
	Stewart Terrace Vancouver Victoria Williams Lake	0 0 3 3 - 6	X 3 - 2 - 1 - 3	5 4 9 9	- 5 - 4 - 4 - 3 -13	6.8 1.0 4.8 2.8 0.0	X -54.3 -31.9 -28.6 - 4.7	
	ALBERTA Banff Calgary Cold Lake Coronation	- 9 - 7 -17 -15	- 2 1 - 5 - 2 - 2	- 1 - 4 - 9 - 7	-21 -16 -27 -25	M 1.2 3.7 1.0	M - 2.0 - 0.2 - 3.4	
	Edmonton Intl Edmonton Namao Edson Fort Chipewyan Fort McMurray	-14 -13 -10 -32 -24	- 3 2 - 7 - 6	- 6 - 7 - 1 -23 -15	-24 -20 -21 -42 -37	1.0 1.9 0.0 1.3 1.8	- 4.9 - 4.5 - 6.0 - 1.6 - 2.4	
	Grande Prairie High Level Jasper Lethbridge Lloydminster	-16 -21 - 7 - 6 -16	- 2 6 - 1 - 1 X	-10 -15 14 3 - 9	-28 -32 -20 -13 -23	1.2 6.3 0.0 2.1 3.5	- 6.3 - 2.8 - 6.6 - 1.7	
	Medicine Hat Peace River Red Deer Rocky Mountain House Slave Lake	- 8 -16 -12 -11 -14 -12	0 - 2 - 1 - 2 1	1 -10 - 5 - 4 - 5 - 3	-16 -27 -25 -27 -26 -20	M M 0.4 1.9 0.6	- 3.0 - 0.6 - 7.4	
	Whitecourt SASKATCHEWAN Broadview Buffalo Narrows Collins Bay Cree Lake	-12 -21 -25 -32 -31	- 4 X X	- 6 -14 -23 -19	-36 -41 -43 -45	2.4 M 0.0 M	X M X	
	Eastend Elbow Estevan Hudson Bay Kindersley	M -17 -18 -24 -14	X X - 4 - 7 - 2	- 8P -10 - 6 - 8 - 8	-14P -25 -31 -41 -22	M M 2.5 M 0.4	X X - 0.9 M - 5.0	
	La Ronge Meadow Lake Moose Jaw Nipawin North Battleford	-27 -21 -17 -26 -16	- 7 X - 6 X - 1 - 5	-13 - 9 - 8 - 8 - 9	-43 -37 -28 -42 -24	1.2 2.7 M 0.4 M 4.2	- 2.8 X M X M - 0.1	
	Prince Albert Regina Rockglen Saskatoon Swift Current	-22 -19 M -17 -13 -34	- 4 X - 2 - 3 -10	- 9 - 9 - 8P - 8 - 8	-26 -20P -25 -22 -42	1.8 M 1.4 M	- 3.7 X - 4.8 M - 6.4	
	Uranium City Wynyard Yorkton MANITOBA Bissett Brandon	-23 -24 -22 -21	- 8 - x - 5	- 9 - 7 - 7 - 5	-37 -38 -39 -34	1.6 2.8 0.4 1.3	- 2.6 X - 3.5	
	Churchill Dauphin Gillam Gimli Grand Rapids	-32 -23 -31 -22 M	- 5 - 7 X - 5	-22 - 7 - 9 - 6 -16P	-37 -37 -40 -35 -39P	1.0 0.8 1.4	- 5.5 X - 3.2 X	
	Island Lake Lynn Lake Norway House Pilot Mound Portage la Prairie The Pas	-27 -31 -29 -19 -20 -27 -31	X - 6 X - 3 - 5 - 8	-10 -18 - 8 - 5 - 6 - 7	-39 -43 -42 -29 -31 -40 -43	0.2 0.0 2.6 0.2 0.0 1.6 0.2	X - 2.5 X - 4.0 - 6.2 - 2.1 - 1.4	
	Thompson Winnipeg ONTARIO Armstrong Atikokan Barrie	-21 M -20 M	- 4 M - 1 X	- 6 - 9P - 6 3P	-31 -39P -37 -21P	м о.о м	M - 3.8 X	
	Big Trout Lake Britt Caribou Island Earlton Geraldton	-28 M M -16 -23	- 6 X X - 1 X	- 9 - 3P - 0P - 5 - 4 - 2	-40 -29P -14P -34 -41 -23	0.6 M M M 0.2	- 4.8 X X M X 3.4	
	Gore Bay Kapuskasing Kenora Kingston Lansdowne House London	-10 -21 -19 - 5 -26 - 3	- 1 - 5 - 4 3 - 6	- 2 - 5 - 8 - 6 - 9	-23 -35 -29 -19 -41 -12	11.1 0.4 M 0.0 24.9	- 1.4 - 6.4 M - 5.9	
	Moosonee Mount Forest Muskoka Nagagami North Bay	-24 - 6 - 8 M -12	- 5 3 2 X 0	- 7 4 - 3P - 1	-40 -15 -24 -39P -26	0.0 M M M	-11.4 M M X 5.8	
	Ottawa	-10	1	3	-20	45.9	31.6	

WARY 8, 1983									
	Te	mper	Precip. (r						
Station	Average	Departure, from Normal	Extreme Maximum	Extreme	. Total .	Departure			
Petawawa Pickle Lake	-13 -25	- K	1 -10	-25 -42	28.8				
Red Lake	-23	- 5 3	- 8 7	-40 -11	0.9	-			
Simcoe Sioux Lookout	- 3 -22	- 5	- 8	-39	0.8	_ 4			
Sudbury Thunder Bay	-14 -17	- 1 - 3	- 6 - 4	-26 -29	19.7	- :			
Timmins Toronto	-18 - 3	- 3 3	- 4 5	-35 -14	23.3	1			
Trenton	- 5	2	6	-18	48.8	3			
Upsala Wawa	H −17	X	- 7P - 3	-34P -30	26.7				
Wiarton Windsor	- 6 - 2	2 2	4 9	-12 -10	26.9 17.8	1			
QUÉBEC Bagotville	-13	1	4	-26	22.3				
Baie-Comeau Blanc-Sablon	-10 - 5	5	4	-23 -16	38.0				
Border	M	M	OP	-24P	M				
Chevery Chibougamau	-19	X	3P - 6	-21P -37	24.2				
Gaspé Grindstone Island	- 6 - 3	X 4	6 5	-22 -12	22.8				
Inukjuak Kuujjuaq	-29 -26	- 3 - 2	-15 -15	-35 -40	1.0	-			
Kuujjuarapik	-28	- 5	-15	-38	0.8	- 1			
Lac-Eon La Grande-Riviere	-27	X	1P -13	-26P -39	0.2				
Maniwaki Matagami	-12 -19	1 X	2 -10	-24 -38	42.2 M	2			
Mont-Joli Montréal	- 9 - 7	2 3	8	-21 -18	20.5	3:			
Natashquan	- 8 -25	3 - 3	3 - 9	-25 -47	24.2	10			
Nitchequon Parent	M	X	2P	-34P	н				
Port-Menier Québec	- 8	M 4	4P 5	-27P -20	70.0	50			
Rivière-du-Loup Roberval	-15	- M	8P	-20 -27	29.9	1			
Schefferville Sept-Iles	-25 -10	- 3	-10 3	-45 -26	18.0	1			
Sherbrooke	- 8	3	8	-23 -26	30.4	11			
Ste-Agathe-des-Monts Val-d'Or	-11 -16	- 1	- 6	-28	23.0	1			
NEW BRUNSWICK Charlo	- 8	5	4	-24	18.7				
Chatham Fredericton	- 4	5	8 9	-17 -16	9.4	-1: -			
Moncton Saint John	- 3 - 3	5	11	-17 -16	11.8	-10			
St Stephen	М	X	10P	-16	M				
NOVA SCOTIA Amherst	м	x	9P	-16P	М				
Eddy Point Greenwood	- 1 - 1	X 5	9	-10 -12	50.9	-10			
Sable Island Shearwater	1 - 1	2	10	- 6 -12	36.3	-2			
Shelburne	0 - 2	X 4	9	-11 -10	51.2 31.8				
Sydney Truro	- 1	6		-15 - 9	4.9	-18 -13			
Yarmouth PRINCE EDWARD ISLAND									
Charlottetown East Point	- 3 M	5 X	10 5P	-15 - 9P	15.4 M				
Summerside NEWFOUNDLAND	- 3	5	9	-15	12.4	- 5			
Argentia	0 M	X	11 7P	- 8 2P	10.8 M				
Badger Bonavista	- 2 - 2	2 5	6	-10 -10	13.8	- 9			
Burgeo Cape Race	М	X	3P	- 7	M				
Comfort Cove Daniel's Harbour	- 3 - 1	5	6	-14 -15	15.4	- 4 - 3			
Deer Lake Gander	- 2 - 2	7 4	7 5	-13 -13	12.8	- 9			
Port aux Basques St Albans	- 1 - 1	4 7	5 9	-10 -13	48.6 M	15			
St Anthony	- 5 - 1	X 4	4 7	-19 - 9	11.2	- 8			
St John's St Lawrence	- 1	4 5	7 8	- 9 -10	23.4	- 6			
Stephenville Battle Harbour	- 1 - 7	1	1	-21	16.8	- 4 - 3			
Cartwright Churchill Falls	- 9 -19	3	9	-25 -40	14.6	25			
Goose Hopedale	-11 -15	4	- 7	-32 -32	26.9	35			
Wabush Lake	-20	0	2	-44	30.2	13			