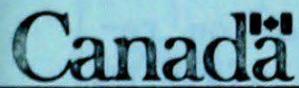


# CLIMATIC PERSPECTIVES



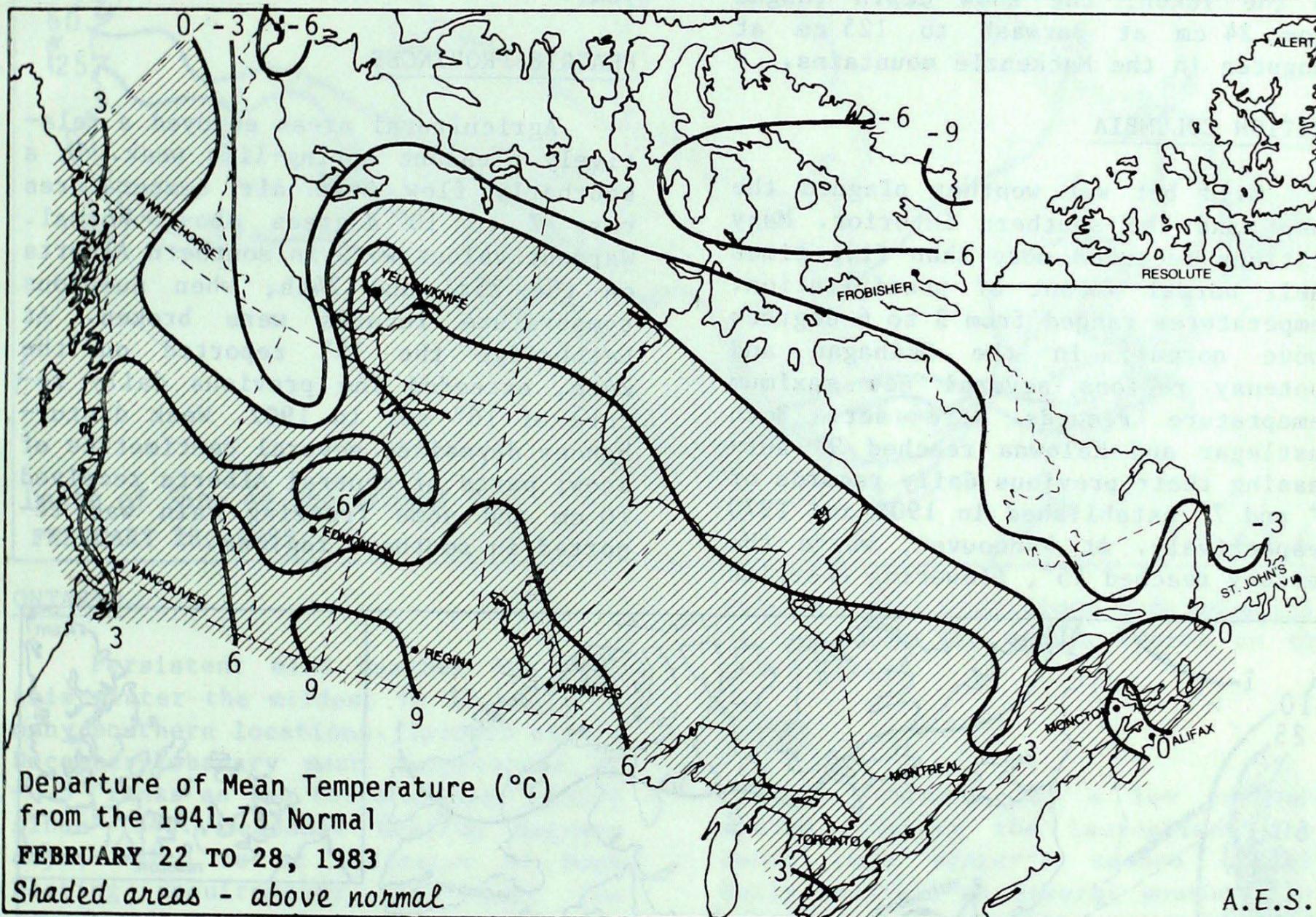
THE CANADIAN CLIMATE CENTRE,  
ATMOSPHERIC ENVIRONMENT SERVICE,  
4905 DUFFERIN ST., DOWNSVIEW, ONTARIO M3H 5T4



MARCH 4, 1983

(Also available in English)

VOL. 5 NO. 9



### WEATHER HIGHLIGHTS FOR THE PERIOD - FEBRUARY 22-28, 1983

- \* Heavy pack ice off Eastern Newfoundland disrupts local shipping... /page 7
- \* Parts of southern Ontario enjoys mildest winter in 30 years... /page 3
- \* Two major winter storms batter the Atlantic Provinces... /page 7
- \* Record winter rainfall in Vancouver... /page 2

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

Participants at the Annual Rendezvous festival in the southern Yukon enjoyed unseasonably mild weather. In contrast, Franklin District remained 5 to 10 degrees below normal. Snowfall was generally light throughout the territories. Hay river, N.W.T. received the highest weekly snowfall, 23.9 cm. In the Yukon, the snow depth ranged from 24 cm at Burwash to 125 cm at Tungsten in the Mackenzie mountains.

BRITISH COLUMBIA

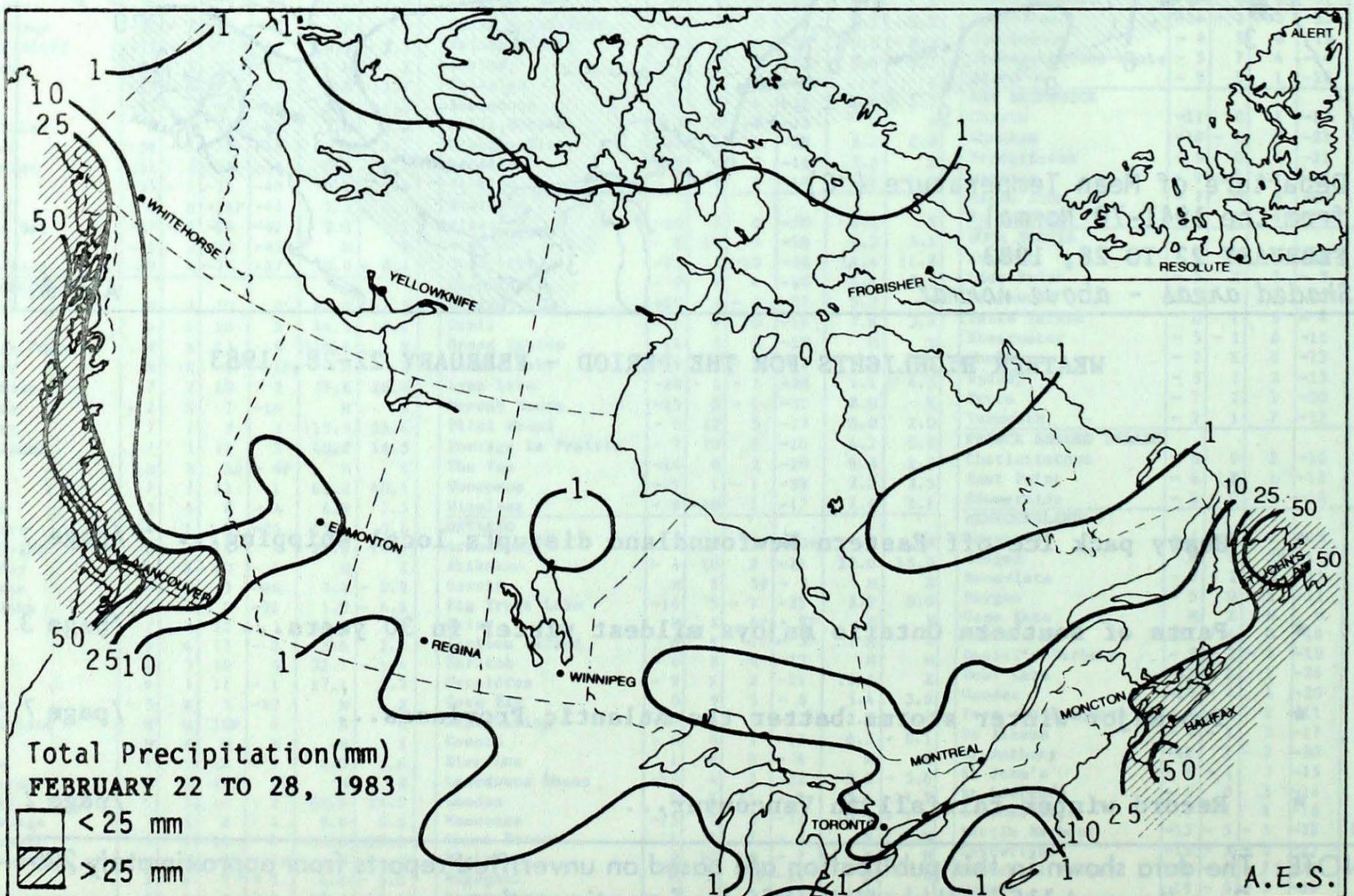
Mild but wet weather plagued the coast and the southern interior. Many stations recorded more than five times their normal amount of precipitation. Temperatures ranged from 3 to 6 degrees above normal; in the Okanagan and Kootenay regions several new maximum temperature records were set. Both Castlegar and Kelowna reached 9° surpassing their previous daily records of 8° and 7° established in 1908 and 1970 respectively. At Vancouver, where the mercury reached 15°, flowering cherries

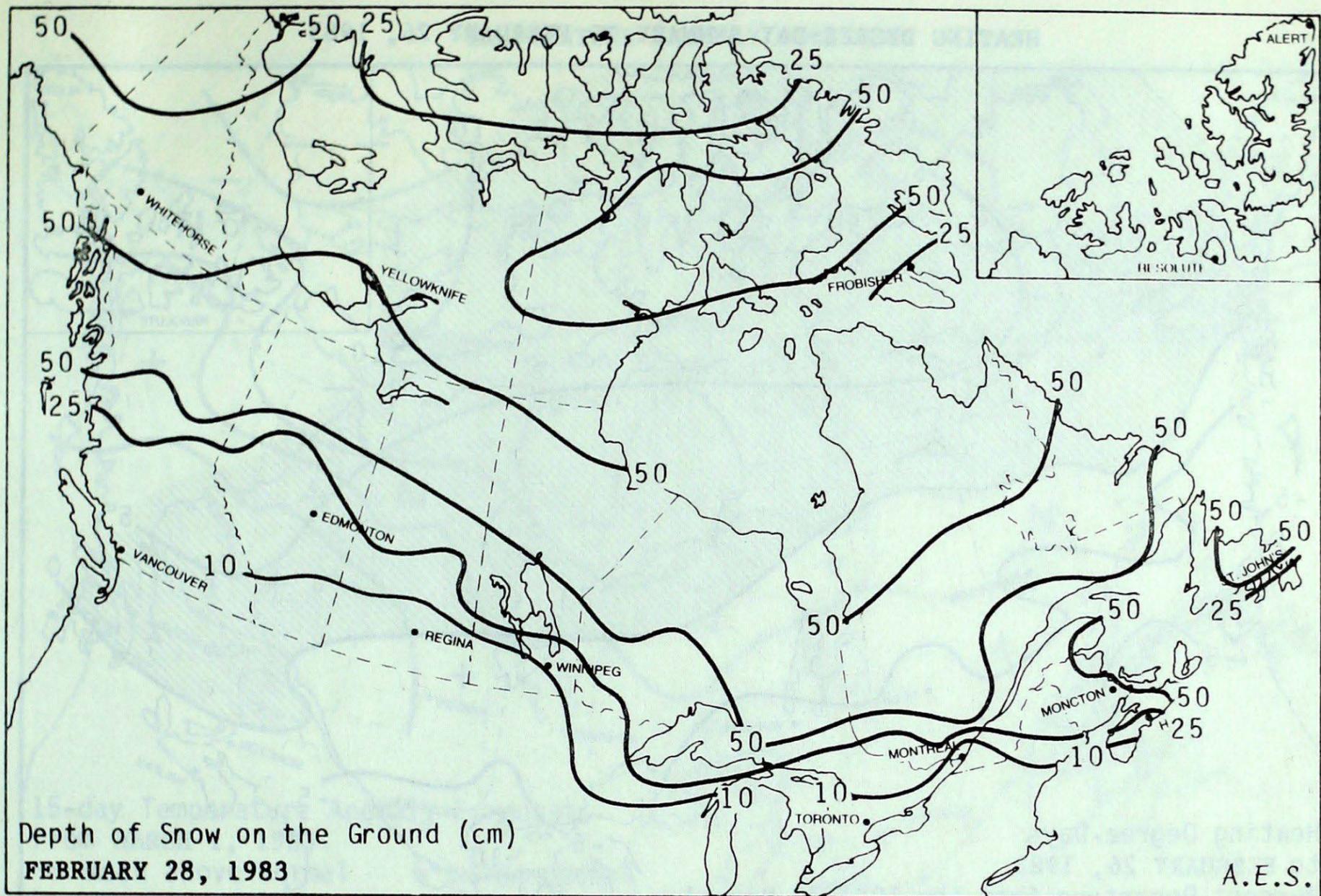
are now in full bloom, approximately two weeks earlier than normal. Skiing events at the B.C. winter games held at Kelowna and Penticton were hampered by the mild, wet weather. Ice on many inland rivers is breaking up.

This winter is the wettest on record at Vancouver. A total of 688.9 mm of rain fell, surpassing the previous record 651.2 mm established just last year.

PRAIRIE PROVINCES

Agricultural areas enjoyed a relatively pleasant spring-like week. In a southerly flow mean air temperatures rose 7 to 10 degrees above normal. Warmest values were in southern Alberta on the 23rd and 24th, when numerous temperature records were broken. At Lethbridge the 19° reported on the 24th, exceeded the previous daily record of 16° set in 1902. Weak disturbances deposited several centimetres of snow; parts of central Alberta received 10 cm and some freezing rain was reported in southern regions.





#### ONTARIO

Persistent mild weather has made this winter the mildest in 30 years in many southern locations. Toronto city's December-February mean temperature of  $-0.5^{\circ}$  ranks as the third mildest winter since 1840. Seasonal heating degree-days, which is an indicator of home heating requirements, has been the lowest in over 50 years in Toronto. The winter temperatures have also been the mildest in half a century at several northern stations.

Seasonal snowfall continued to be below normal. However, mid-week snowfalls in areas north of a line from Muskoka to Ottawa were 10 to 15 cm. On February 22, rainfall sometimes mixed with freezing rain in the south ranged from 10 to 20 mm.

Because of the lack of snow in southern areas, many winter carnivals and outdoor winter activities were cancelled. The very mild temperatures have hastened an early start to the Maple syrup season in southern Ontario. Ice cover on the Great Lakes continued well

below normal; conditions were especially hazardous for winter sports on the Great Lakes.

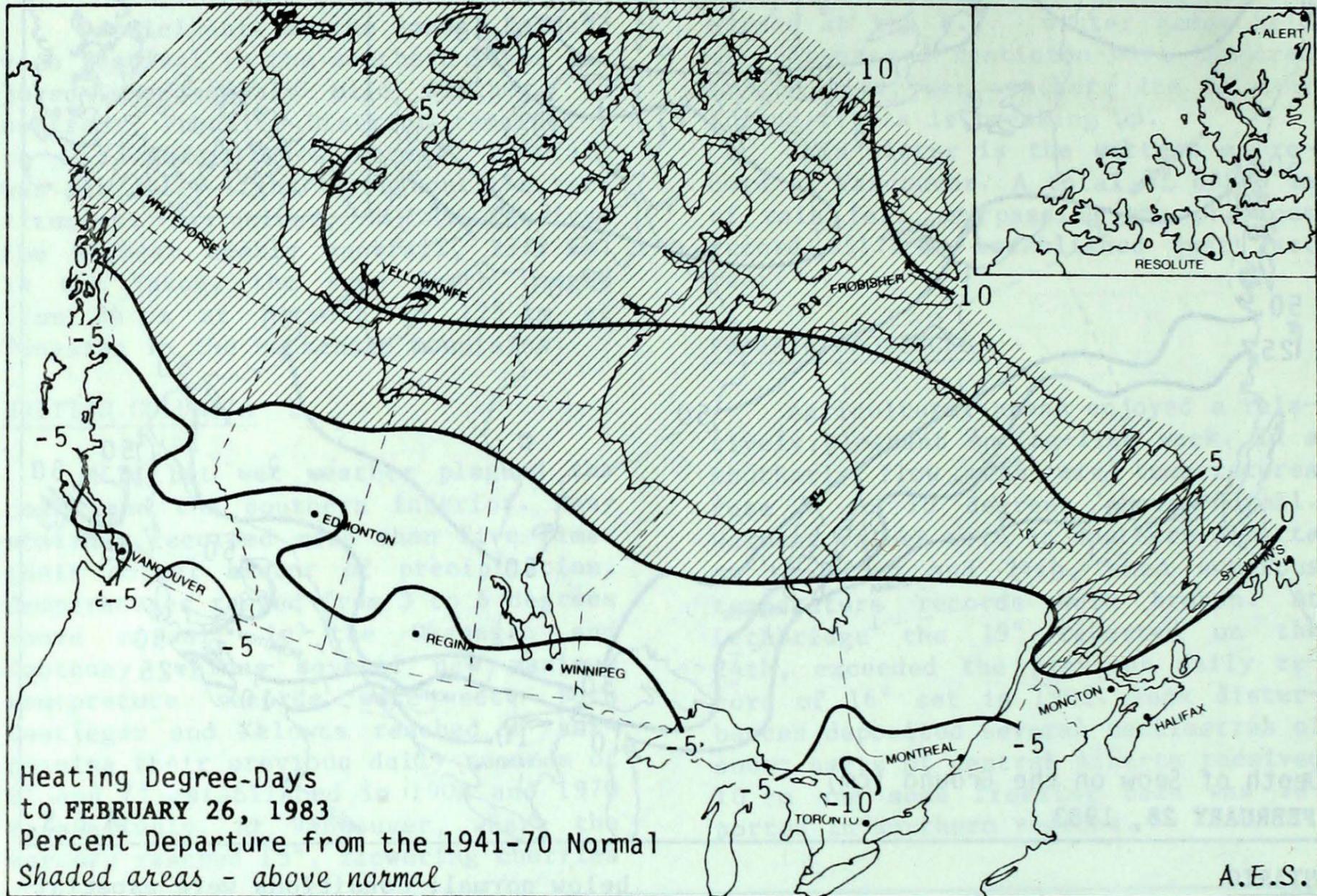
#### QUÉBEC

On February 23, a low pressure system crossing the Laurentians produced this winter's second highest daily snowfall at several southern localities; for example, the 10.9-cm snowfall at Sherbrooke is second only to the 19.8-cm snowfall of February 7. Otherwise, precipitation was light. Recent snowfalls have significantly improved the snow base at all the ski resorts. The Stonchan ski resort was operating at full capacity for the first time this winter. Balmy weather during the week was ideal for many Québécois to venture into outdoor activities.

Insufficient snow cover at Mont St-Anne forced the Women World ski championship Meet to be moved to Mont Tremblant, 120 km northwest of Montréal. Ice jams in the Gulf of St. Lawrence near Anticosti Island continued to hinder ship navigation.

(continued on page 7)

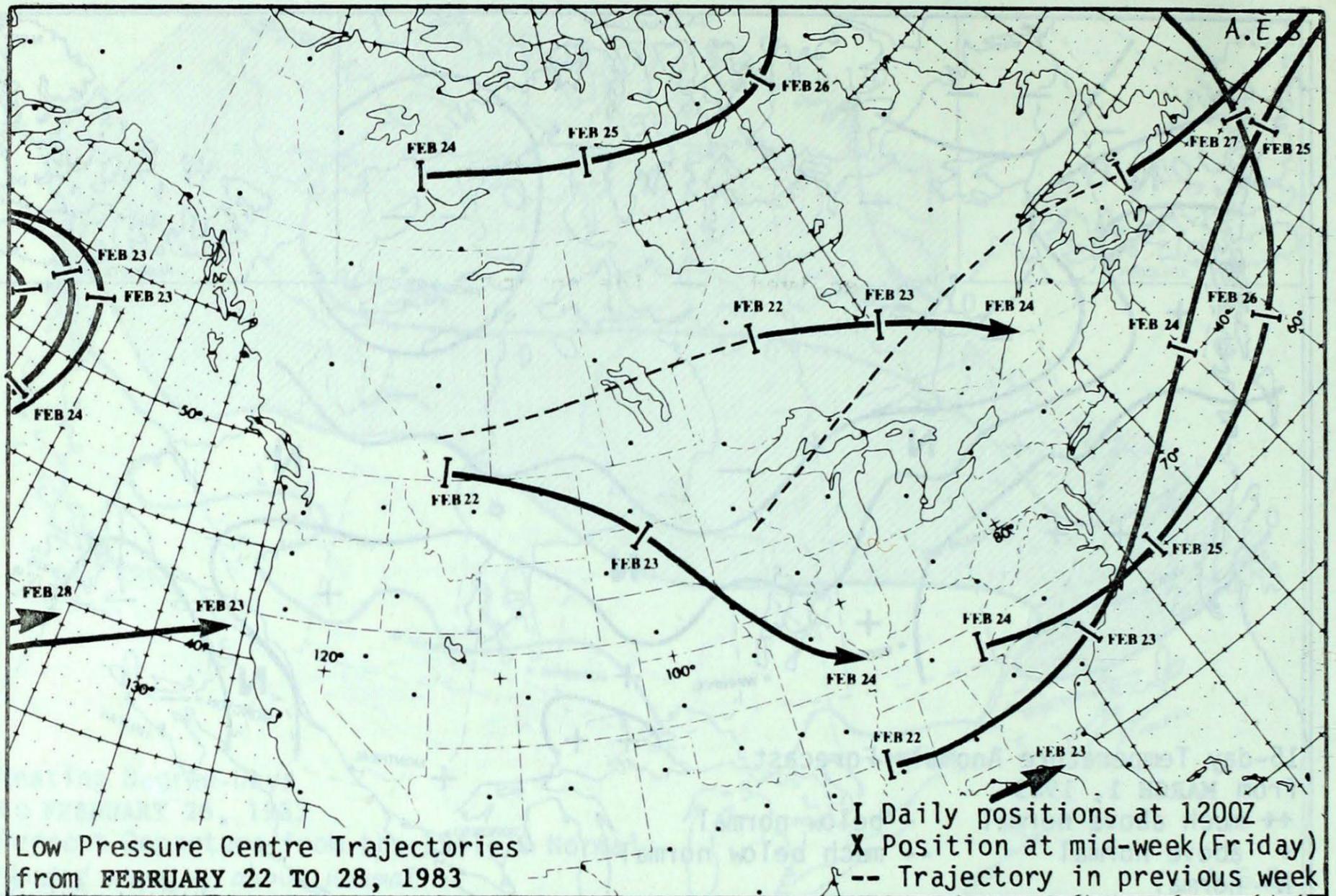
HEATING DEGREE-DAY SUMMARY TO FEBRUARY 26, 1983



STATION	MONTHLY CUMULATIVE TOTAL	MONTHLY DIFF. FROM 1941-70 NORMAL	SEASONAL TOTAL	SEASONAL DIFF. FROM 1941-70 NORMAL	SEASONAL PERCENT OF NORMAL
Resolute	1389.0	35.0	8700.0	394.0	105
Inuvik	1238.5	-8.5	7273.5	250.5	104
Whitehorse	781.0	-42.0	4957.0	30.5	101
Vancouver	297.5	-59.5	1943.0	-90.0	96
Edmonton Mun	633.5	-116.5	3689.5	-265.0	93
Calgary	510.0	-161.0	3356.0	-299.0	92
Regina	714.0	-138.0	3952.0	-246.5	94
Winnipeg	750.5	-138.5	3905.5	-259.5	94
Thunder Bay	678.5	-140.5	3772.5	-195.0	95
Windsor	502.0	-64.0	2248.5	-254.0	90
Toronto	554.5	-70.5	2617.0	-195.0	93
Ottawa	652.0	-72.0	3075.0	-251.0	92
Montreal	632.0	-77.0	2987.0	-191.0	94
Quebec	693.5	-63.5	3381.5	-189.0	95
Saint John, N.B.	643.0	-30.0	3036.0	-155.0	95
Halifax	577.5	-8.5	2562.5	-83.0	97
Charlottetown	637.0	-29.0	2932.5	-90.0	97
St. John's, Nfld.	572.0	-15.0	2633.0	-21.0	99



LOW PRESSURE CENTRE TRAJECTORIES



EXTREMES FOR THE WEEK

	MAXIMUM TEMPERATURE	LOCATION	MINIMUM TEMPERATURE	LOCATION	GREATEST PRECIPITATION	LOCATION
YUKON TERRITORY	4.8	WHITEHORSE	-45.7	SHINGLE POINT	9.4	MAYO
NORTHWEST TERRITORIES	3.0	FORT SMITH	-50.2	EUREKA	23.1	HAY RIVER
BRITISH COLUMBIA	14.7	VANCOUVER	-24.2	DEASE LAKE	139.3	AMPHITRITE POINT
ALBERTA	18.9	LETHBRIDGE	-25.0	FORT CHIPEWYAN	15.6	WHITCOURT
SASKATCHEWAN	12.7	SWIFT CURRENT	-30.7	COLLINS BAY	7.9	NORTH BATTLEFORD
MANITOBA	5.0	PILCT MOUND	-36.3	CHURCHILL	10.3	DAUPHIN
ONTARIO	11.2	WINDSOR	-35.0	WINISK	19.8	GERALDTON
QUEBEC	8.3		-40.1	POSTE DE LA BALEINE	16.2	MONTREAL/DORVAL
NEW BRUNSWICK	6.0	ST STEPHEN	-24.6	CHARLO	40.0	MONCTON
NOVA SCOTIA	7.9	WESTERN HEAD	-18.9	GREENWOOD	76.4	SYDNEY
PRINCE EDWARD ISLAND	2.3	SUMMERSIDE	-17.4	CHARLOTTETOWN	37.0	SUMMERSIDE
NEWFOUNDLAND	5.0	DANIELS HARBOUR	-40.0	CHURCHILL FALLS	79.8	GANDER

(continued from page 3)

### ATLANTIC PROVINCES

Heavy snow and strong gale force winds accompanied two major winter storms that struck the East Coast. On February 23, copious snow fell on Prince Edward Island, Nova Scotia and parts of New Brunswick; Truro received the most, 39 cm. Impassable roads and highways forced many schools to close. The second storm, which crossed Cape Breton and southern Newfoundland on February 27, was more vigorous. Snowfall amounted to 42 cm at Cape Sydney and winds gusted up to 100 km/h. Heavy blowing and drifting snow in Cape Breton Island, brought transportation to a standstill, caused businesses to close and produced numerous power outages.

Glace Bay felt the brunt of the storm; snow removal equipment was incapable of clearing snow drifts more

than 1-½ metres deep; some streets remained buried under snow for days. Some flights were diverted to alternate destinations. Sydney's February snowfall of 158.9 cm was the greatest for any February since 1872.

Heavy coastal ice and numerous icebergs seriously impeded ship navigation on the Eastern Seaboard. Solid ice covered an area extending from the Great Northern Peninsula to Cape Race. The leading edge of the ice sheet was nearly 200 km farther south than usual. In some places this sheet was nearly a metre deep. Heavy ice hampered fishing in the eastern Newfoundland waters; ferry services to many small islands were cut off. Many ships were stuck in the heavy ice, including three of four ice breakers labouring to free other ships. Extensive ice jams on the Exploits River resulted in serious flooding at Badger, Nfld; high explosives were detonated to release these jams.



### CLIMATIC PERSPECTIVES

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TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. MARCH 1, 1983

Station	Temperature (°C)				Precip. (mm)	
	Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal
<b>YUKON</b>						
Burwash	-12	3	1	-26	3.7	2.2
Dawson	-16	3	-5	-30	3.1	-1.0
Faro	M	X	OP	-14P	M	X
Komakuk Beach	M	M	-22P	-40	1.0	0.2
Mayo	-9	5	-1	-21	9.4	6.3
Shingle Point	M	M	-21P	-46	2.0	1.5
Tealin	-8	X	4	-17	M	X
Watson Lake	-15	-1	-7	-26	2.4	-3.5
Whitehorse	-7	1	5	-19	1.6	-2.0
<b>NORTHWEST TERRITORIES</b>						
Cape Parry	-32	-5	-22	-40	0.0	-2.5
Cape Young	-33	-5	-25	-42	5.7	4.4
Clinton Point	M	M	-22P	-41	0.0	-0.7
Coppermine	-32	-2	-19	-43	1.6	0.0
Fort Reliance	-23	2	-1	-47	6.7	3.0
Fort Simpson	-20	-5	-10	-33	2.0	-1.9
Fort Smith	-15	5	3	-27	2.4	-0.9
Hay River	-17	2	0	-30	23.1	18.8
Inuvik	-32	-7	-21	-47	M	M
Lady Franklin Point	M	M	-24P	-42	3.5	0.8
Nicholson Peninsula	M	M	-24P	-43	0.0	-0.4
Norman Wells	-28	-4	-14	-40	3.0	-2.0
Port Radium	M	X	-12	-39P	M	X
Robertson Lake	M	X	-20P	-41P	M	X
Tuktoyaktuk	M	M	-19P	-41	0.0	-2.1
Yellowknife	-19	4	-3	-37	1.7	-1.1
Baker Lake	-31	1	-7	-40	5.1	4.0
Coral Harbour	-30	-3	-11	-38	8.4	6.1
Ennadai Lake	M	M	-3P	-40P	M	M
Jenny Lind Island	M	M	-26P	-43	0.0	-1.1
Pelly Bay	-37	-6	-23	-45	3.4	3.4
Rankin Inlet	-27	X	-8	-40	0.9	X
Shepherd Bay	M	M	-22P	-48	0.8	-2.2
Broughton Island	-29	-6	-21	-38	1.0	-0.3
Cape Dorset	-27	X	-12	-37	5.2	X
Cape Dyer	-32	-11	-22	-47	3.0	-9.1
Cape Hooper	M	M	-23P	-42	M	M
Clyde	-32	-5	-24	-40	1.6	0.3
Dewar Lakes	M	M	-30P	-48	0.0	-1.1
Frobisher Bay	-30	-6	-12	-44	4.2	-3.1
Longstaff Bluff	-35	-8	-25	-47	0.0	-1.0
Pond Inlet	-36	X	-22	-46	M	X
Alert	-37	-4	-27	-44	0.4	-1.2
Eureka	-43	-6	-31	-50	1.0	0.5
Gladman Point	M	M	-23P	-47	1.0	0.0
Hall Beach	-36	-6	-25	-45	3.5	0.9
Mackay Inlet	M	M	-24P	-44	3.2	2.8
Resolute	-38	-5	-32	-44	M	M
Byron Bay	M	M	-30P	-43	5.0	4.0
Cambridge Bay	-37	-4	-31	-41	M	M
Mould Bay	-39	-4	-29	-47	M	M
Sachs Harbour	-35	-6	-28	-44	M	M
<b>BRITISH COLUMBIA</b>						
Abbotsford	8	3	13	1	55.0	23.7
Alert Bay	6	2	11	1	44.2	22.0
Amphitrite Point	9	X	13	3	139.3	X
Blue River	M	X	5P	-2P	M	X
Bull Harbour	6	2	12	0	35.6	2.3
Burns Lake	-1	X	8	-12	M	X
Cape Scott	7	1	11	3	86.2	34.5
Cape St James	7	2	10	4	42.5	17.9
Clinton	M	X	6P	-4P	M	X
Comox	7	3	12	0	36.7	11.5
Cranbrook	4	6	11	-2	7.2	1.6
Dease Lake	-9	0	4	-24	0.0	-4.3
Estevan Point	8	2	12	1	77.0	9.8
Ethelda Bay	7	X	10	0	M	X
Fort Nelson	-14	-1	-6	-22	1.7	-4.5
Fort St John	-7	1	7	-20	5.6	-0.4
Hope	8	X	14	2	35.5	X
Kamloops	5	6	11	-1	8.0	4.3
Langara	7	3	10	3	24.2	-0.3
Lytton	7	5	12	-1	9.6	-10.8
Mackenzie	M	X	6P	-17P	M	X
McInnes Island	7	3	10	2	42.6	-6.2
Penticton	5	5	10	-1	6.0	1.6
Port Alberni	M	X	10P	OP	M	X
Port Hardy	7	3	11	0	29.4	-1.8
Prince George	0	5	9	-7	7.2	-0.9
Prince Rupert	6	2	14	-3	17.1	-36.1
Puntzi Mountain	M	X	7	-9P	M	X
Quesnel	2	6	13	-5	5.8	0.5
Revelstoke	2	3	6	-1	34.1	13.8
Sandspit	6	3	9	2	70.3	51.8
Smithers	1	4	7	-6	8.7	3.8

Station	Temperature (°C)				Precip. (mm)	
	Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal
Stewart	3	X	10	-3	M	X
Terrace	4	4	9	-2	17.8	-3.3
Vancouver	8	4	15	2	29.2	4.0
Victoria	7	2	13	1	26.1	6.9
Williams Lake	2	5	10	-4	9.7	3.9
<b>ALBERTA</b>						
Banff	1	8	11	-6	M	M
Calgary	2	9	15	-7	4.2	-2.3
Cold Lake	-6	6	5	-16	2.4	-1.5
Coronation	-4	7	4	-14	4.2	-1.5
Edmonton Intl	-3	5	6	-10	14.6	9.9
Edmonton Namao	-4	5	5	-11	7.4	2.7
Edson	-3	5	9	-12	8.2	2.8
Fort Chipewyan	-13	2	4	-25	M	M
Fort McMurray	-7	7	6	-18	M	M
Grande Prairie	-7	2	5	-18	11.9	6.1
High Level	-13	-5	2	-24	3.2	2.3
Jasper	1	7	11	-6	2.1	-3.7
Lethbridge	3	9	19	-8	2.0	-5.8
Lloydminster	-6	X	3	-15	6.7	X
Medicine Hat	3	11	13	-4	2.5	-2.6
Peace River	-8	3	3	-19	0.5	-3.5
Red Deer	-2	8	10	-9	14.2	8.9
Rocky Mountain House	-2	4	12	-10	12.0	4.7
Slave Lake	-3	6	4	-13	M	M
Whitecourt	-4	5	6	-12	15.6	9.0
<b>SASKATCHEWAN</b>						
Broadview	-5	X	4	-15	4.0	X
Buffalo Narrows	-9	3	1	-19	M	M
Collins Bay	-16	X	1	-31	M	X
Cree Lake	-14	X	1	-26	1.0	X
Eastend	M	X	5P	M	M	X
Elbow	-3	X	4	-10	M	X
Estevan	-2	8	5	-9	6.4	-1.3
Hudson Bay	-7	7	3	-19	M	M
Kindersley	-3	8	6	-12	6.6	-0.2
La Ronge	-11	3	4	-21	1.2	-1.6
Meadow Lake	-8	X	3	-20	2.2	X
Moose Jaw	-1	9	11	-8	6.2	1.8
Nipawin	-10	X	2	-21	2.6	X
North Battleford	-6	6	5	-16	7.9	4.0
Prince Albert	-8	6	5	-19	2.6	-1.9
Regina	-4	8	3	-11	5.0	-1.2
Rockglen	M	X	9P	-3P	M	X
Saskatoon	-5	8	6	-14	3.6	-1.6
Swift Current	0	10	13	-5	0.0	-5.9
Uranium City	-14	6	-1	-29	3.2	0.4
Wynyard	-6	X	4	-17	4.0	X
Yorkton	-8	6	1	-18	4.0	-0.9
<b>MANITOBA</b>						
Bissett	-6	X	1	-22	M	X
Brandon	-6	7	2	-15	2.3	-5.6
Churchill	-22	3	-2	-36	6.4	3.5
Dauphin	-7	6	2	-17	10.3	5.8
Gillam	-17	X	1	-35	3.8	X
Gimli	-7	7	3	-20	4.7	-1.8
Grand Rapids	M	X	2P	-25P	M	X
Island Lake	-12	X	0	-24	M	X
Lynn Lake	-15	3	0	-31	1.8	-0.6
Norway House	-11	X	0	-25	1.1	X
Pilot Mound	-5	8	5	-14	M	M
Portage la Prairie	-5	7	4	-16	1.5	-4.8
The Pas	-8	7	3	-22	M	M
Thompson	-13	5	1	-26	0.0	-1.8
Winnipeg	-6	8	2	-18	2.5	-2.5
<b>ONTARIO</b>						
Armstrong	M	M	OP	-29	M	M
Atikokan	-6	6	2	-28	6.8	-0.9
Barrie	M	X	9P	-13P	M	X
Big Trout Lake	-15	4	-1	-30	6.5	2.4
Britt	M	X	6P	-10P	M	X
Caribou Island	M	X	1P	OP	M	X
Earlton	-6	5	8	-25	M	M
Geraldton	-10	X	0	-27	19.8	X
Gore Bay	-4	4	7	-18	8.4	-4.0
Kapuskasing	-10	4	3	-20	17.8	5.8
Kenora	-6	6	3	-15	0.8	-5.9
Kingston	-2	3	5	-11	M	M
Lansdowne House	-13	5	-2	-30	4.8	-1.9
London	-1	4	10	-9	13.9	-2.9
Moosonee	-13	4	2	-25	7.0	-3.5
Mount Forest	-3	5	8	-13	M	M
Muskoka	-4	3	7	-20	M	M
Nagagami	M	X	2P	-23	M	X
North Bay	-6	4	7	-18	7.4	-7.8
Ottawa	-3	4	7	-13	14.6	-0.3

Station	Temperature (°C)				Precip.	
	Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal
Petawawa	-7	X	8	-20	11.0	
Pickle Lake	-12	4	-3	-25	7.8	
Red Lake	-9	5	0	-21	6.1	
Simcoe	M	M	10P	-8	M	
Sioux Lookout	-9	5	1	-22	10.9	
Sudbury	-6	4	5	-21	9.2	
Thunder Bay	-6	5	4	-20	6.0	
Timmins	-9	4	2	-23	13.0	
Toronto	-1	3	9	-10	11.9	
Trenton	-1	3	6	-11	11.1	
Upsala	M	X	OP	-28	M	
Wawa	-6	X	2	-19	2.6	
Warton	-3	3	8	-15	10.5	
Windsor	1	3	11	-8	2.3	
<b>QUÉBEC</b>						
Bagotville	-8	3	1	-18	8.8	
Baie-Comeau	-10	1	0	-22	7.0	
Blanc-Sablon	-13	-2	-2	-21	4.4	
Border	M	M	-9P	-38P	M	
Chevery	M	X	-1P	-22	M	
Chibougamau	-11	X	-3	-29	7.1	
Gaspé	-9	X	2	-17	14.0	
Grindstone Island	M	M	-3P	-14P	M	
Inukjuak	-25	0	-5	-35	2.2	
Kuujuuaq	-25	-3	-7	-35	2.8	
Kuujuuarapik	-20	1	-5	-40	1.0	
Lac-Eon	M	X	-5P	-30P	M	
La Grande-Riviere	-16	X	-6	-32	M	
Maniwaki	-					