

CLIMATIC PERSPECTIVES

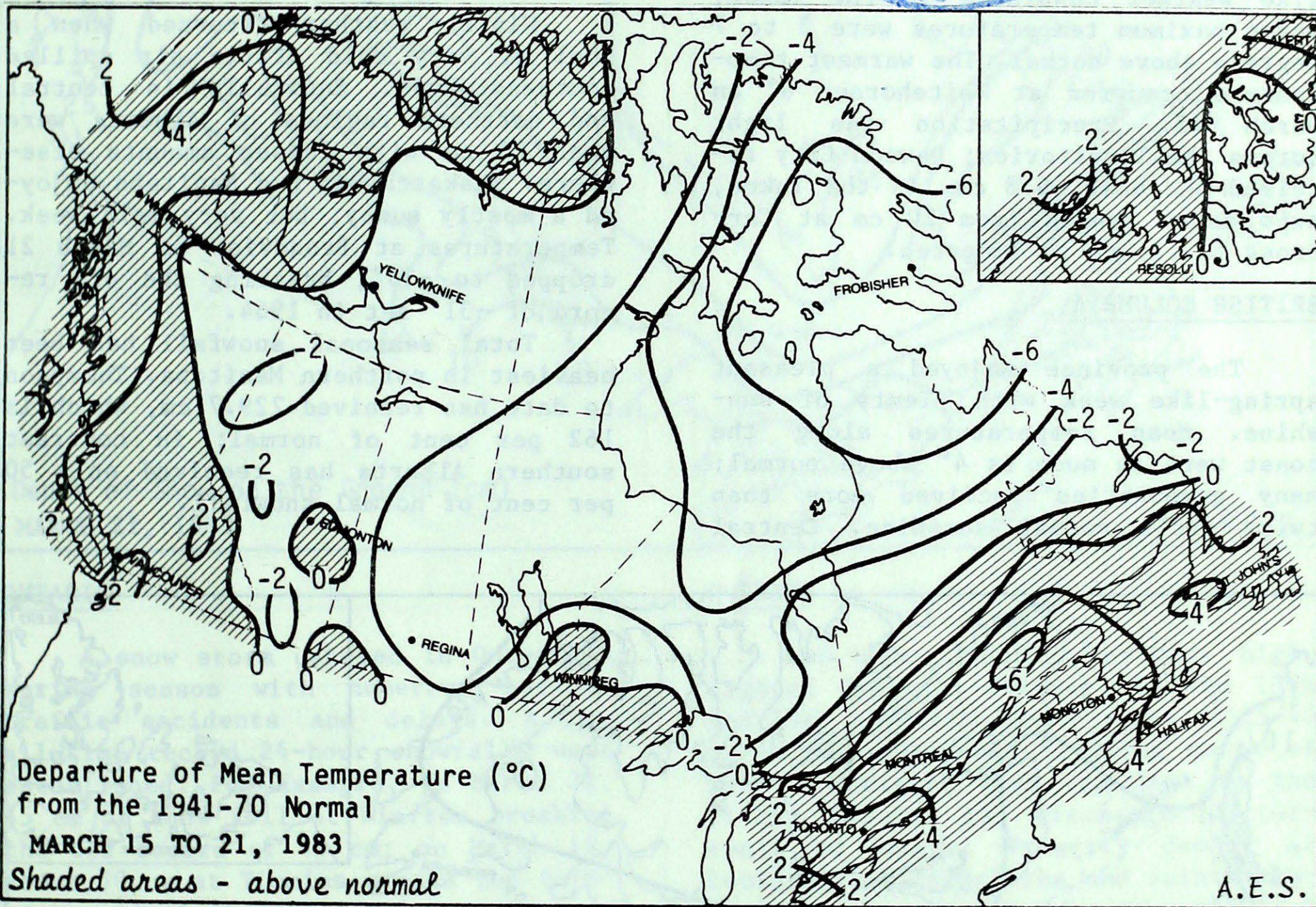
Canada

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

MARCH 25, 1983

(Aussi disponible en français)

VOL. 5 NO. 12



WEATHER HIGHLIGHTS FOR THE PERIOD - MARCH 15-21, 1983

	Page
* Major snow storms strike Ontario - much needed snow cover at resorts provides good March break skiing ...	3
* Torrential rain causes disastrous flooding in southern Québec ...	3
* Early spring thaw stops logging in central British Columbia ...	2
* Extensive ice cover off eastern Newfoundland delays the start of the seal hunting season ...	7
* Above normal temperatures are forecast for western Canada during the next two weeks ...	5

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

Frigid Arctic air returned to the Franklin District of the Northwest Territories; temperatures averaged 4 to 7 degrees below normal. On March 20, Frobisher Bay established a record low for the date when temperatures plummeted to -40° breaking the old record of -37° set in 1961. In contrast, spring-like weather continued in the Yukon, where maximum temperatures were 3 to 7 degrees above normal. The warmest temperature occurred at Whitehorse; 6° on March 15. Precipitation was light across the Territories; Dawson City received the most, 6.8 cm. In the Yukon, snow depth ranged from 20 cm at Carcross to 111 cm at Tungsten.

BRITISH COLUMBIA

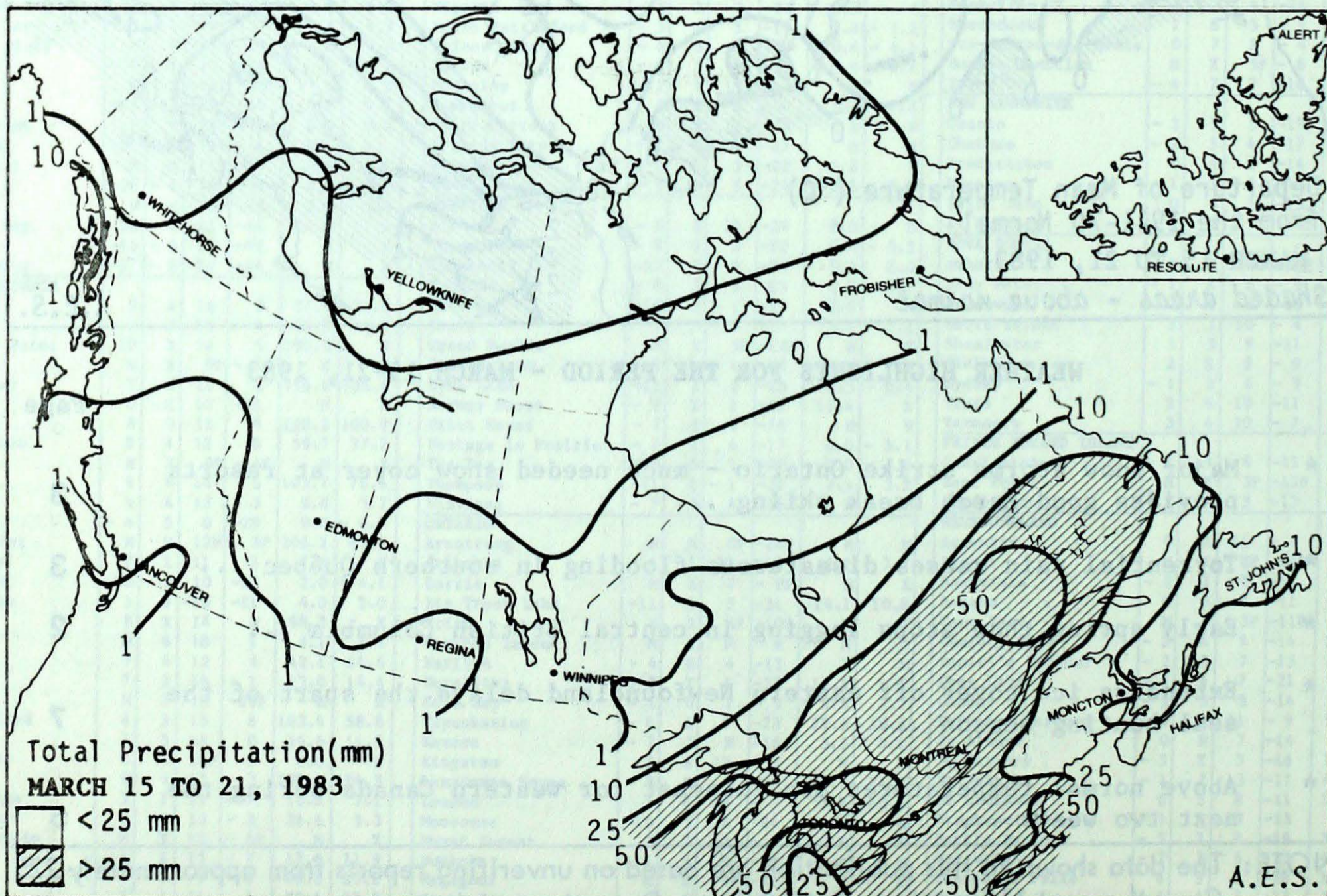
The province enjoyed a pleasant spring-like week with plenty of sunshine. Mean temperatures along the coast were as much as 4° above normal; many communities received more than twice their normal sunshine. Central

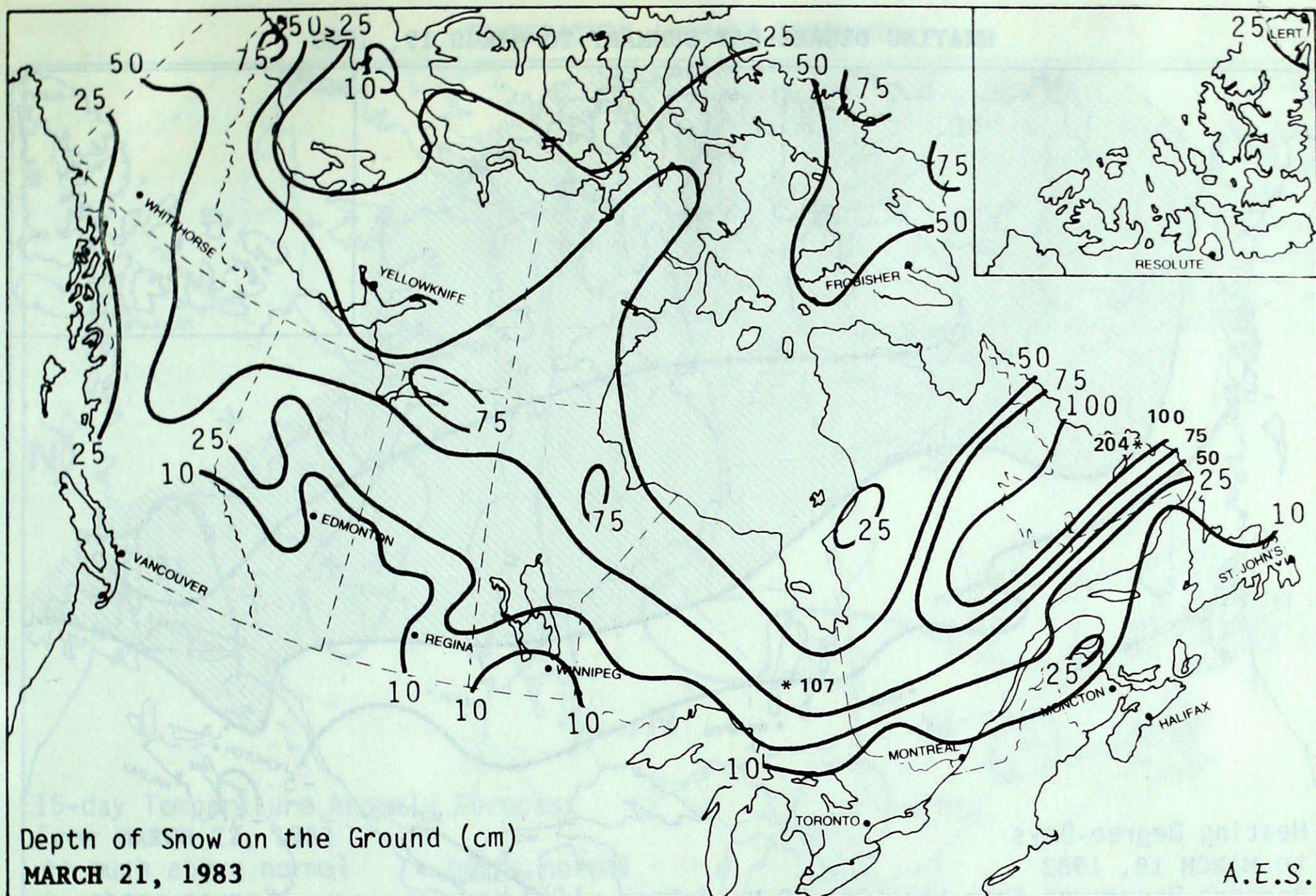
interior logging operations have ceased because of the spring thaw. Ice is breaking up on many large lakes - 2 to 4 weeks earlier than normal. Good spring skiing is still being enjoyed in the south even though maximum daytime temperatures have climbed to near-record values.

PRAIRIE PROVINCES

Winter weather returned when a pool of very cold Arctic air spilled southeastwards. Snowfalls in central and northern regions of Alberta were near 10 cm with lesser amounts elsewhere. Saskatchewan and Manitoba enjoyed a mostly sunny, but very cold week. Temperatures at Broadview on March 21 dropped to -33° , breaking the old record of -31° set in 1964.

Total seasonal snowfall has been heaviest in northern Manitoba. Thompson to date has received 229.7 cm, which is 162 per cent of normal; in contrast southern Alberta has received only 50 per cent of normal snowfall.





ONTARIO

A snow storm ushered in Ontario's spring season with numerous serious traffic accidents and delays. A few all-time record 24-hour snowfalls were established. For example, on March 21, 45 cm of snow fell at Warton breaking the old record of 41 cm; on March 19, about 50 cm at Timmins erased the former record of 44 cm.

Across the province, snow ploughs struggled to keep the roads clear of fallen and drifting snow, which was accompanied at times by freezing rain. However, heavy snowfall formed only part of the week's foul weather; earlier, heavy rains of 25-35 mm in southern Ontario caused stream to swell. Residents were warned to keep away from the torrent water courses.

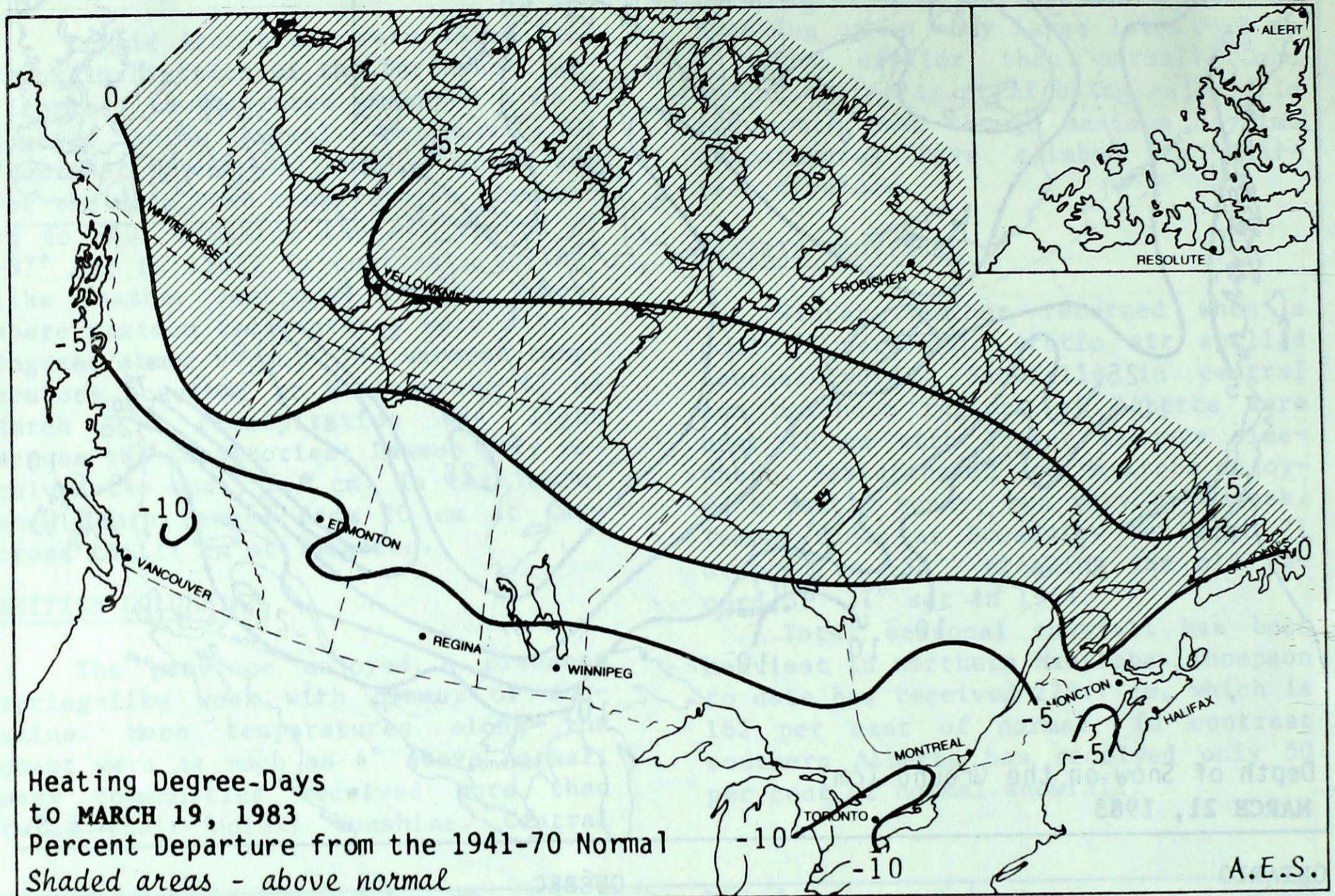
Ironically, after the mildest season in 30 years, winter arrived in southern Ontario on the first day of spring creating the greatest snow cover of the season at many locations; for example, 107 cm at Timmins. Ski resort operators welcomed the much-needed snow, which arrived just in time for the March school break.

QUÉBEC

Two major weather systems highlighted Québec's weather. On the 18th and 19th of March, heavy rains of 25-40 mm caused extensive flooding north of Lake St. Pierre when ice jams in the rivers impeded the discharge of torrents of water. Property damage at Louiseville, Yamachiche and Saint-Roch-de-l'Achigan was estimated at \$1.5 million; at Louiseville alone 300 homes were flooded. Nearly 25 mm of rain at Montréal produced treacherous roads and eight lives were lost in traffic accidents. A 24-hour record rainfall for March was broken at Québec City when 36 mm fell on March 19; old record, 16.5 mm in 1948. Heavy rain also helped produce a mud slide at Cap Blanc. Another storm on March 21 produced a mixture of rain, freezing rain and snow in southern areas. After 35 consecutive days of above normal readings, temperatures dropped below normal in southern Québec.

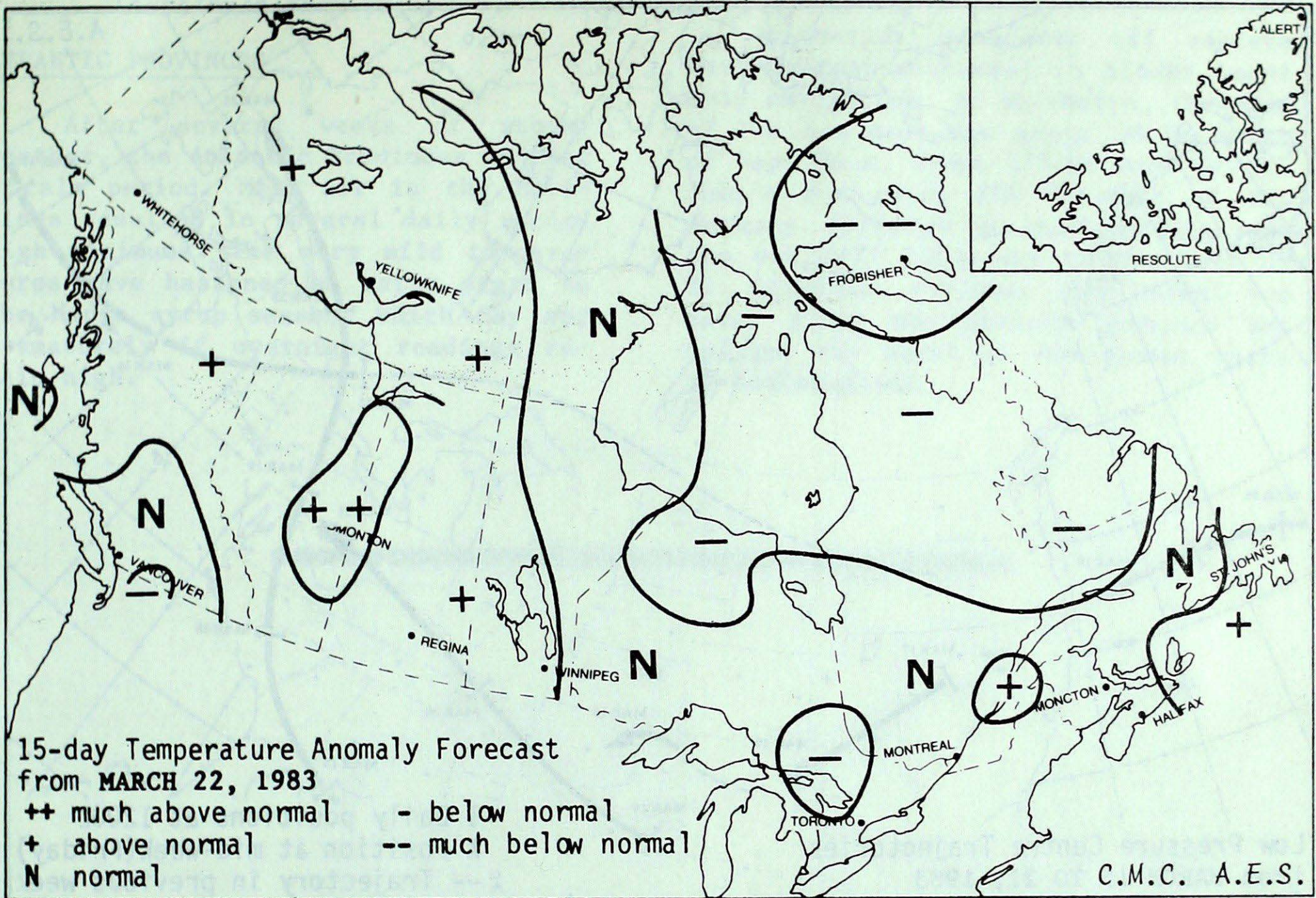
(continued on page 7)

HEATING DEGREE-DAY SUMMARY TO MARCH 19, 1983

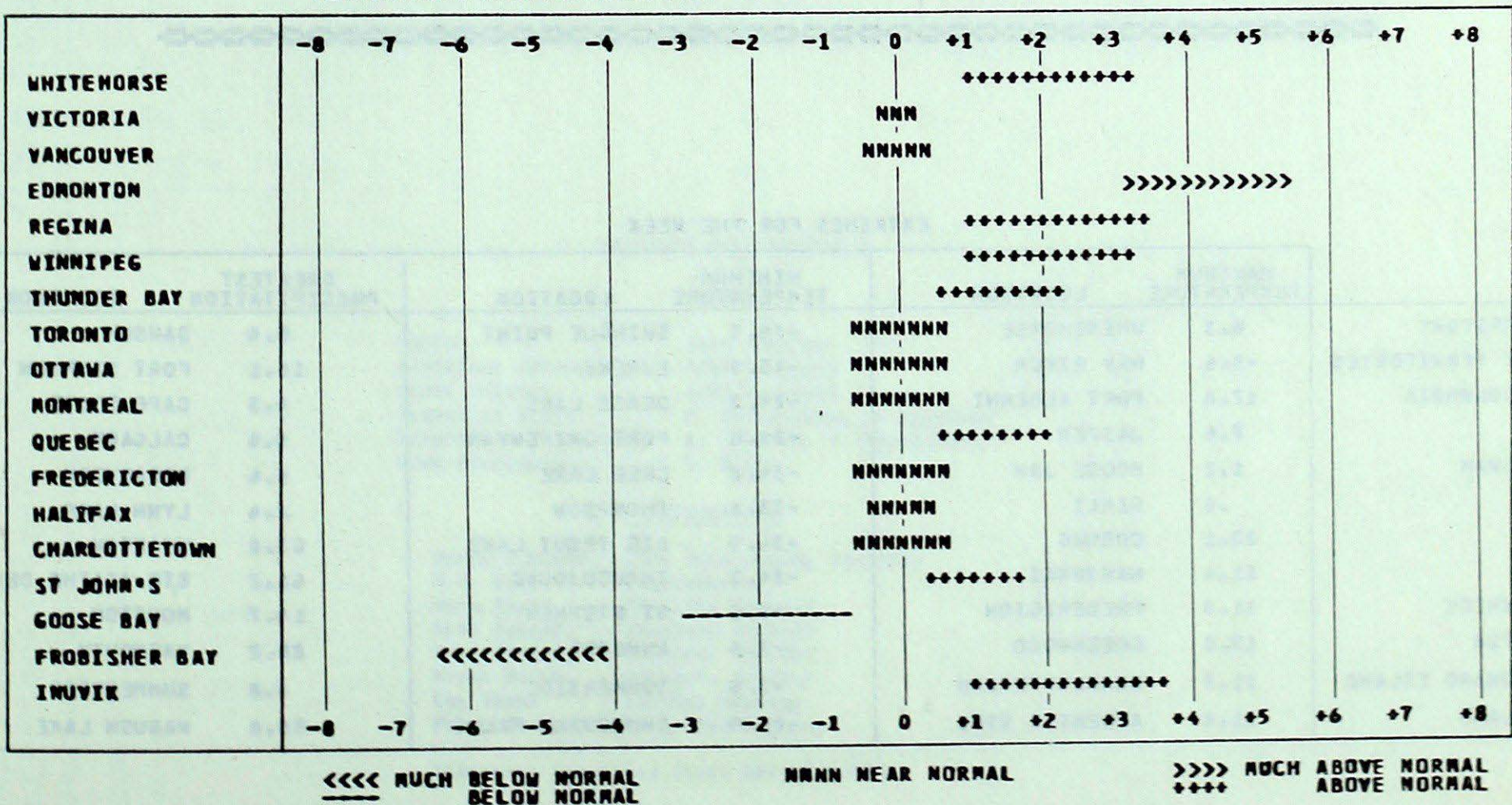


STATION	MONTHLY CUMULATIVE TOTAL	MONTHLY DIFF. FROM 1941-70 NORMAL	SEASONAL TOTAL	SEASONAL DIFF. FROM 1941-70 NORMAL	SEASONAL PERCENT OF NORMAL
Resolute	990.0	37.0	9798.5	437.5	105
Inuvik	853.5	16.5	8234.5	284.5	104
Whitehorse	481.5	-33.5	5489.5	-10.0	100
Vancouver	188.5	-51.5	2157.5	-141.5	94
Edmonton Mun	403.0	-78.0	4144.5	-347.0	92
Calgary	398.0	-47.0	3795.5	-352.5	92
Regina	453.5	-91.5	4453.5	-352.0	93
Winnipeg	432.5	-108.5	4385.5	-384.5	92
Thunder Bay	396.5	-96.5	4211.5	-307.0	93
Windsor	223.5	-119.5	2503.0	-382.5	87
Toronto	270.5	-117.5	2920.5	-325.5	90
Ottawa	308.0	-127.0	3420.5	-394.5	90
Montreal	304.5	-107.5	3329.0	-309.0	92
Quebec	358.5	-93.5	3783.5	-292.0	93
Saint John, N.B.	345.0	-73.0	3420.0	-237.0	94
Halifax	337.5	-36.5	2938.0	-123.5	96
Charlottetown	373.5	-47.5	3351.0	-140.5	96
St. John's, Nfld.	402.5	5.5	3087.0	-6.0	100

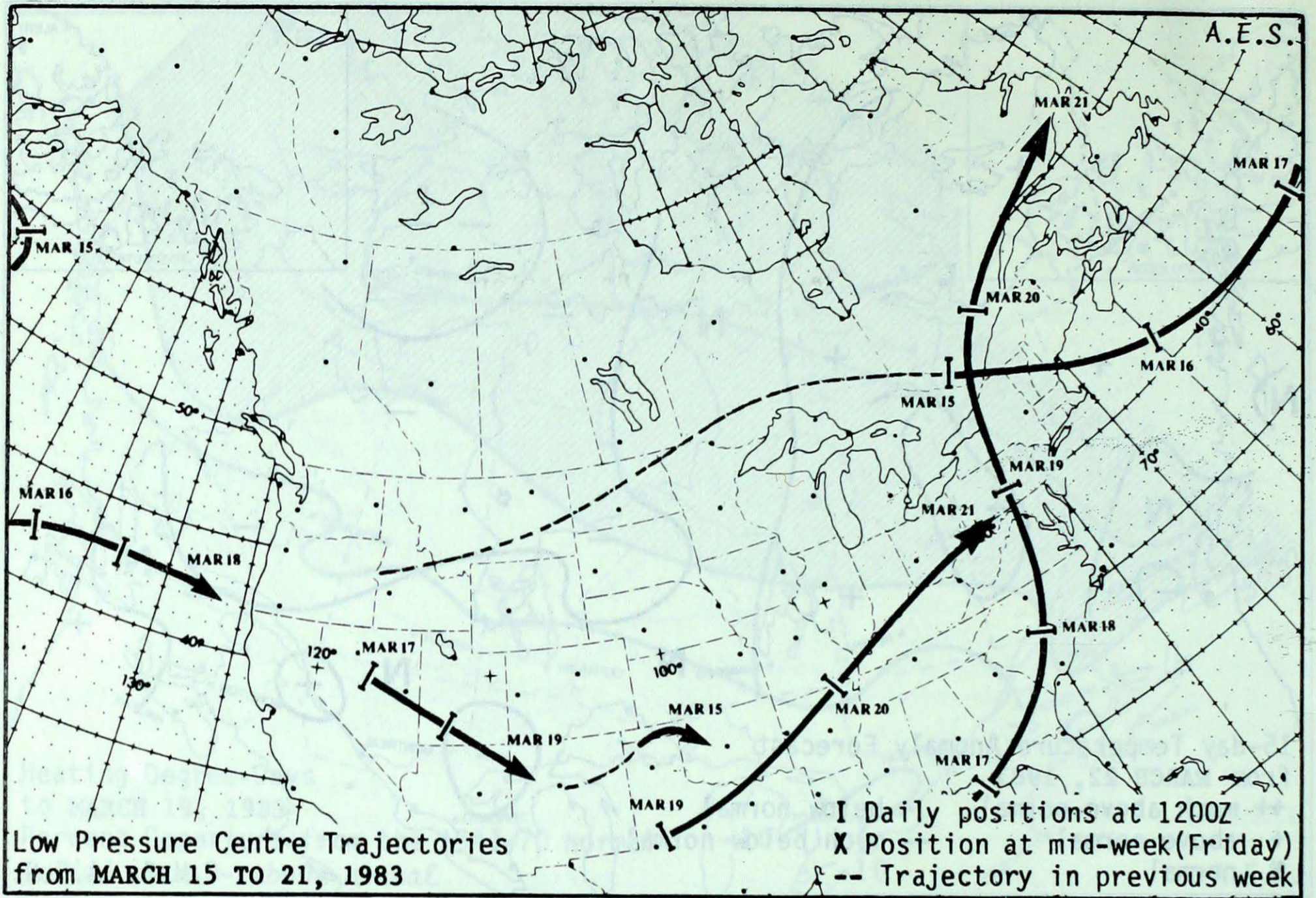
TEMPERATURE ANOMALY FORECAST



TEMPERATURE ANOMALY FORECAST FOR MAR 22 1983 TO APR 5 1983



LOW PRESSURE CENTRE TRAJECTORIES



EXTREMES FOR THE WEEK

	MAXIMUM TEMPERATURE	LOCATION	MINIMUM TEMPERATURE	LOCATION	GREATEST PRECIPITATION	LOCATION
YUKON TERRITORY	6.3	WHITEHORSE	-39.5	SHINGLE POINT	6.8	DAWSON
NORTHWEST TERRITORIES	-3.6	HAY RIVER	-45.9	EUREKA	10.1	FORT SIMPSON
BRITISH COLUMBIA	17.8	PORT ALBERNI	-24.3	DEASE LAKE	4.3	CAPE SCOTT
ALBERTA	7.6	JASPER	-28.0	FORT CHIPEWYAN	9.6	CALGARY
SASKATCHEWAN	1.2	MOOSE JAW	-34.8	CREE LAKE	5.4	BROADVIEW
MANITOBA	.6	GIHLI	-33.0	THOMPSON	2.4	LYNN LAKE
ONTARIO	23.1	COBURG	-34.9	BIG TROUT LAKE	63.0	WIARTON
QUEBEC	11.4	HANUWAKI	-34.3	INOUCOJOUAC	61.2	STE AGATHE DES MONTS
NEW BRUNSWICK	11.3	FREDERICTON	-5.0	ST STEPHEN	19.7	HONGTON
NOVA SCOTIA	13.8	GREENWOOD	-3.5	AMHERST	28.2	YARMOUTH
PRINCE EDWARD ISLAND	11.5	CHARLOTTETOWN	-3.6	SUMMERSIDE	8.8	SUMMERSIDE
NEWFOUNDLAND	11.8	ARGENTIA VTMS	-26.9	CHURCHILL FALLS	50.0	WABUSH LAKE

(continued from page 3)

ATLANTIC PROVINCES

After several weeks of stormy weather, the Atlantic Provinces enjoyed a calm period. Mild air in the Maritimes resulted in several daily record high minimums. The very mild temperatures have hastened an early start to the Maple syrup season, which may end prematurely if overnight readings remain high.

Extensive ice cover off eastern Newfoundland continued to hinder local ship navigation. At mid-March, the edge of the ice pack was about 50 km south of Cape Race, about 175 km east of St. John's and about 250 km east of St. Anthony. Although the seal hunting season was well under way in the Gulf of St. Lawrence, the more than normal ice cover along the Eastern Seaboard has delayed the start of the season north of Newfoundland.



CLIMATIC PERSPECTIVES

Staff

Editor:	Amir Shabbar
Assistant Editor:	Réal Sarrazin
Staff Writer:	Andy Radomski
Technical Staff:	F. Richardson, A. Radomski
Graphics and Layout:	B. Johnson, J. Rautenberg
Word Processing:	U. Ellis

Correspondents

Terry Mullane,	(Ice Forecasting Central)
H.E. Wahl,	(Whitehorse)
Norm Penny	(Pacific Region)
Bill Prusyk,	(Western Region)
Fred Luciw,	(Central Region)
Bryan Smith,	(Ontario Region)
Guy Borne	(Quebec Region)
Frank Amirault	(Atlantic Region)

Telephone Inquiries (416) 667-4711/4906

TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. MARCH 22, 1983

Station	Temperature (°C)				Precip. (mm)	
	Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal
YUKON						
Burwash	-10	2	2	-27	0.0	-4.0
Dawson	-12	2	0	-28	6.8	4.2
Faro	M	X	3P	-25P	M	X
Komakuk Beach	-27	-1	-22	-37	0.0	-0.4
Mayo	-8	4	0	-22	0.3	-2.0
Shingle Point	-26	-1	-12	-40	0.0	-0.3
Teslin	M	X	4P	-21P	M	X
Watson Lake	-10	0	1	-30	1.6	-4.7
Whitehorse	-5	3	6	-20	0.0	-4.1
NORTHWEST TERRITORIES						
Cape Parry	-26	1	-22	-32	0.0	-0.6
Cape Young	-28	1	-23	-34	0.0	-0.2
Clinton Point	-23	3	-15	-30	0.0	-0.2
Coppermine	-28	-2	-22	-34	0.2	-2.3
Fort Reliance	-24	-1	-10	-37	0.0	-2.0
Fort Simpson	-15	2	-9	-30	10.1	5.8
Fort Smith	-14	0	-4	-31	0.6	-2.9
Hay River	-18	-1	-4	-28	0.2	-3.8
Inuvik	-22	2	-14	-38	0.0	-3.6
Lady Franklin Point	-29	1	-22	-34	0.0	-0.5
Nicholson Peninsula	-25	2	-22	-32	0.0	-0.6
Norman Wells	-16	2	-8	-27	1.9	-0.8
Port Radium	M	X	-16P	-25P	M	X
Robertson Lake	M	X	-25P	-33P	M	X
Tuktoyaktuk	-26	1	-19	-35	0.0	-1.0
Yellowknife	-19	0	-7	-30	0.4	-2.7
Baker Lake	-28	-2	-14	-35	M	M
Coral Harbour	-31	-7	-19	-38	4.7	2.4
Ennadai Lake	M	M	-25P	-32P	M	M
Jenny Lind Island	-29	2	-22	-36	0.0	-0.6
Pelly Bay	-32	-1	-26	-37	M	M
Rankin Inlet	-29	X	-14	-36	1.2	X
Shepherd Bay	-35	-2	-28	-44	0.0	-0.3
Broughton Island	-29	-4	-20	-34	5.2	4.3
Cape Dorset	-28	X	-19	-35	1.8	X
Cape Dyer	-28	-5	-24	-37	3.0	-4.6
Cape Hooper	-30	-4	-25	-33	0.0	-0.3
Clyde	-31	-4	-22	-36	1.2	0.4
Dewar Lakes	-35	-7	-28	-42	M	M
Frobisher Bay	-29	-6	-16	-40	2.2	-0.9
Longstaff Bluff	M	M	-26P	-40	M	M
Pond Inlet	M	X	-27P	-40P	M	X
Alert	-30	3	-24	-40	5.4	3.3
Eureka	-36	-1	-25	-46	0.8	0.4
Gladman Point	-32	1	-24	-38	0.0	0.0
Hall Beach	-34	-4	-25	-42	M	M
Mackay Inlet	M	M	-27P	-38P	M	M
Resolute	-31	0	-23	-40	0.7	-0.1
Byron Bay	-28	3	-20	-35	0.0	-0.4
Cambridge Bay	-29	0	-20	-36	0.0	-1.6
Mould Bay	-30	2	-26	-34	0.0	-0.5
Sachs Harbour	-26	2	-17	-36	0.0	-1.3
BRITISH COLUMBIA						
Abbotsford	9	3	17	1	0.0	-33.9
Alert Bay	7	2	15	0	0.0	-27.6
Amphitrite Point	9	X	17	2	2.7	X
Blue River	M	X	8P	9P	M	X
Bull Harbour	7	1	15	0	0.0	-38.3
Burns Lake	-1	X	9	-11	M	X
Cape Scott	8	3	15	3	4.3	-68.9
Cape St James	10	5	16	4	0.2	-32.1
Clinton	M	X	8P	-5P	M	X
Comox	6	1	14	-1	0.0	-29.0
Cranbrook	1	-1	10	-10	0.0	-1.7
Dease Lake	-4	3	7	-24	1.6	-3.4
Estevan Point	M	M	16	OP	1.0	-83.1
Ethelda Bay	6	X	13	-2	M	X
Fort Nelson	-10	-1	2	-23	2.4	-4.4
Fort St John	-9	-3	-2	-20	0.9	-7.0
Hope	9	X	18	0	3.8	X
Kamloops	5	1	14	-5	0.0	-1.4
Langara	7	3	11	4	1.0	-33.8
Lytton	7	1	16	-2	0.0	-8.3
Mackenzie	-3	X	7	-18	M	X
McInnes Island	9	4	15	4	0.6	-55.5
Penticton	6	1	14	-4	0.0	-3.7
Port Alberni	M	X	18	-3P	M	X
Port Hardy	6	1	14	-2	0.4	-32.3
Prince George	1	2	9	-10	0.0	-11.3
Prince Rupert	5	2	16	-3	4.0	-34.7
Puntzi Mountain	M	X	11P	-10P	M	X
Quesnel	2	1	11	-7	0.4	-7.1
Revelstoke	4	2	11	-5	1.0	-16.9
Sandspit	7	2	11	1	0.4	-23.6
Smithers	1	2	9	-6	0.4	-6.8

Station	Temperature (°C)				Precip. (mm)	
	Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal
Stewart	5	X	14	-5	M	X
Terrace	6	3	14	-2	1.2	-19.3
Vancouver	8	1	17	1	0.0	-22.4
Victoria	7	1	16	0	0.2	-16.8
Williams Lake	1	1	9	-8	0.0	-5.8
ALBERTA						
Banff	-3	-1	5	-15	M	M
Calgary	-6	-4	5	-17	9.6	6.2
Cold Lake	-8	-2	1	-20	1.1	-4.3
Coronation	-5	1	2	-16	2.2	-4.0
Edmonton Intl	-5	1	2	-13	7.7	2.8
Edmonton Namao	-7	-2	1	-15	6.5	0.9
Edson	-6	-3	4	-19	6.6	1.8
Fort Chipewyan	-14	-1	-3	-28	M	M
Fort McMurray	-10	-1	-2	-20	7.4	1.2
Grande Prairie	-8	-2	2	-25	M	M
High Level	-12	-3	-4	-20	7.9	1.7
Jasper	-1	0	8	-11	3.2	-0.5
Lethbridge	-4	-3	7	-16	4.8	-0.3
Lloydminster	-9	-2	0	-21	1.6	-4.4
Medicine Hat	-2	0	6	-12	1.2	-1.7
Peace River	-9	0	1	-21	1.9	-3.0
Red Deer	-5	1	3	-16	5.9	2.9
Rocky Mountain House	-5	-2	4	-14	8.0	3.9
Slave Lake	-7	-2	0	-14	1.0	-3.5
Whitecourt	-6	-1	2	-17	7.7	1.2
SASKATCHEWAN						
Broadview	-14	X	-2	-33	5.4	X
Buffalo Narrows	-12	-3	-2	-26	M	M
Collins Bay	-15	X	-4	-32	2.0	X
Cree Lake	-17	X	-3	-35	3.8	X
Eastend	M	X	-2P	-10P	M	X
Elbow	-8	X	1	-17	M	X
Estevan	-9	-4	0	-20	3.0	-0.7
Hudson Bay	-14	-5	-2	-30	M	M
Kindersley	-7	-1	0	-16	0.2	-1.5
La Ronge	-15	-6	-3	-29	1.6	-0.5
Meadow Lake	-12	X	-1	-29	M	X
Moose Jaw	-9	-4	1	-19	1.9	-0.2
Nipawin	-14	X	-4	-27	0.6	X
North Battleford	-11	-3	-1	-21	0.6	-4.5
Prince Albert	-14	-4	-3	-27	0.4	-5.3
Regina	-10	-2	1	-21	1.3	-3.1
Rockglen	M	X	OP	-14P	M	X
Saskatoon	-11	-4	-2	-21	0.2	-4.2
Swift Current	-8	-3	0	-17	M	M
Uranium City	-17	-1	-3	-30	1.9	-5.8
Wynyard	-12	X	-3	-21	1.4	X
Yorkton	-14	-5	-2	-28	1.2	-3.4
MANITOBA						
Bissett	-7	X	-1	-18	0.4	X
Brandon	-10	-1	-2	-18	0.0	-3.0
Churchill	-23	-4	-9	-32	1.0	-2.0
Dauphin	-12	-3	0	-23	0.6	-5.1
Gillam	-20	X	-8	-31	0.4	X
Gimli	-7	1	1	-14	0.4	-3.0
Grand Rapids	M	X	-2P	-33P	M	X
Island Lake	-16	X	-4	-30	M	X
Lynn Lake	-16	-2	-2	-31	2.4	-1.1
Norway House	-15	X	-3	-31	1.2	X
Pilot Mound	-8	0	-2	-15	0.4	-2.3
Portage la Prairie	-8	-1	0	-14	1.6	-2.9
The Pas	-14	-3	-3	-27	0.6	-5.0
Thompson	-17	-4	-2	-33	1.0	-2.7
Winnipeg	-7	1	-1	-12	M	M
ONTARIO						
Armstrong	M	M	-1P	-27P	M	M
Atikokan	-6	0	1	-17	2.2	-4.7
Barrie	M	X	12P	-11P	M	X
Big Trout Lake	-17	-4	-2	-35	1.4	-2.3
Britt	M	X	13	-7P	M	X
Caribou Island	M	X	M	M	M	X
Earlton	-5	2	3	-22	M	M
Geraldton	-9	X	1	-25	2.2	X
Gore Bay	-2	2	7	-14	41.9	28.8
Kapuskasung	-11	-3	0	-25	29.2	17.2
Kenora	-7	0	-1	-17	1.2	-6.1
Kingston	3	4	13	-8	M	M
Lansdowne House	-16	-4	-3	-33	0.2	-6.7
London	2	3	13	-6	32.3	13.7
Moosonee	-12	-1	-3	-27	4.5	-5.4
Mount Forest	1	4	12	-8	M	M
Muskoka	2	6	14	-10	39.8	20.8
Nagagam	M	X	-1P	-26P	M	X
North Bay	-2	2	11	-19	49.0	32.5
Ottawa	2	5	11	-9	40.7	27.5

Station	Temperature (°C)				Precip. (mm)	
	Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal
Petawawa	1	X	10	-13	44.8	
Pickle Lake	-12	-2	-4	-29	1.0	
Red Lake	-9	0	-2	-24	0.9	
Simcoe	M	M	13P	-5P	M	
Sioux Lookout	-8	0	0	-21	0.2	
Sudbury	-4	1	5	-20	46.3	
Thunder Bay	-5	0	1	-17	1.8	
Timmins	-9	-2	2	-25	M	
Toronto	2	3	11	-8	45.1	
Trenton	3	3	11	-9	37.7	
Upsala	M	X	OP	-21P	M	
Wawa	-7	X	0	-20	22.0	
Warton	1	4	12	-9	63.0	
Windsor	3	1	12	-9	24.3	
QUEBEC						
Bagotville	0	6	7	-11	21.4	
Bele-Comeau	0	6	3	-5	53.0	
Blanc-Sablon	-4	3	8	-15	8.4	
Border	M	M	-16P	M	M	
Chevery	M	X	3P	-13P	M	
Chibougamau	-4	X	5	-21	42.8	
Gaspé	0	X	9	-6	21.6	
Inukjuak	-26	-6	-13	-34	0.0	