



Environment Canada / Environnement Canada

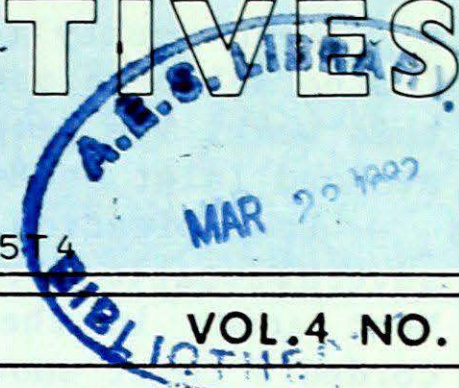
Atmospheric Environment / Environnement atmosphérique

A WEEKLY REVIEW OF CANADIAN CLIMATE

CLIMATIC PERSPECTIVES

Canada

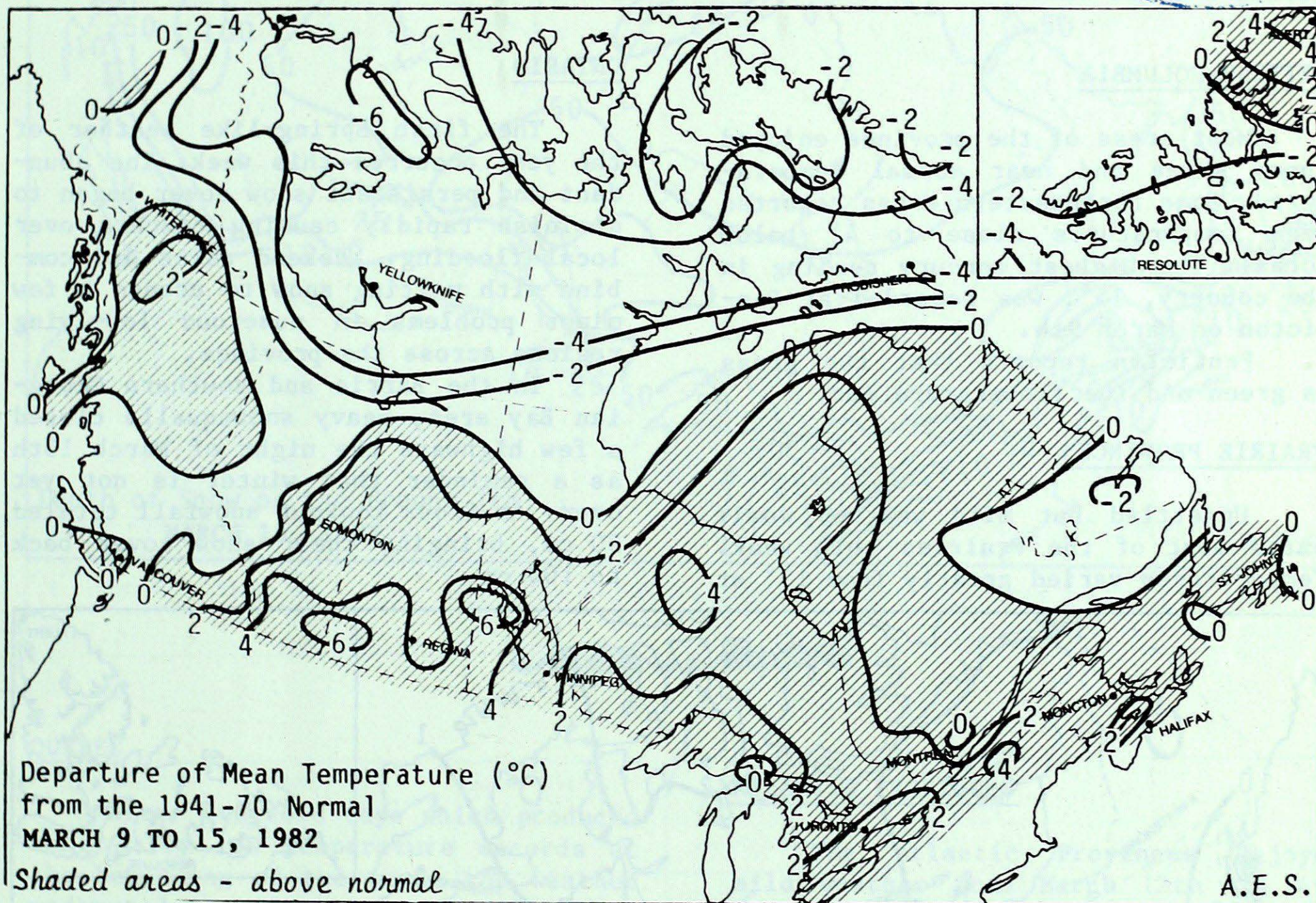
THE CANADIAN CLIMATE CENTRE,
ATMOSPHERIC ENVIRONMENT SERVICE,
4905 DUFFERIN ST., DOWNSVIEW, ONTARIO M3H 5T4



MARCH 19, 1982

(Aussi disponible en français)

VOL. 4 NO. 10



WEATHER HIGHLIGHTS FOR THE PERIOD - MARCH 9 TO 15, 1982

First signs of Spring appear

The first Spring-like weather appeared in many areas of the country this week. Snow cover began to diminish rapidly in the Prairies and Ontario. Maple Syrup production has started in Nova Scotia (but not in Québec). Reports from Penticton, British Columbia indicate that the grass is green and the flowers are out.

Heavy snowfalls struck the Edmonton to Whitecourt area in Alberta. Numerous power outages were reported and several major highways closed.

Temperatures varied from 15° at Penticton, B.C. to -49° at Pond Inlet, N.W.T. The greatest weekly precipitation total, 95.7 mm, was recorded at Hope, B.C.

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 NORTHWEST TERRITORIES

Mean weekly temperatures were below normal over most of the Territories this week. The temperature fell to -49° at Pond Inlet on March 10th.

Precipitation remained light and several stations recorded none at all. Most areas in the southern Yukon recorded 3 cm of snow.

BRITISH COLUMBIA

Most areas of the province enjoyed sunny skies and near normal temperatures. Some northeastern areas reported mean temperatures close to 4° below normal. The highest mercury reading in the country, 15° , was recorded at Penticton on March 9th.

Penticton reports that the grass is green and the flowers are out.

PRAIRIE PROVINCES

Unsettled but mild weather dominated most of the Prairies this week. Temperatures varied greatly from 13° at

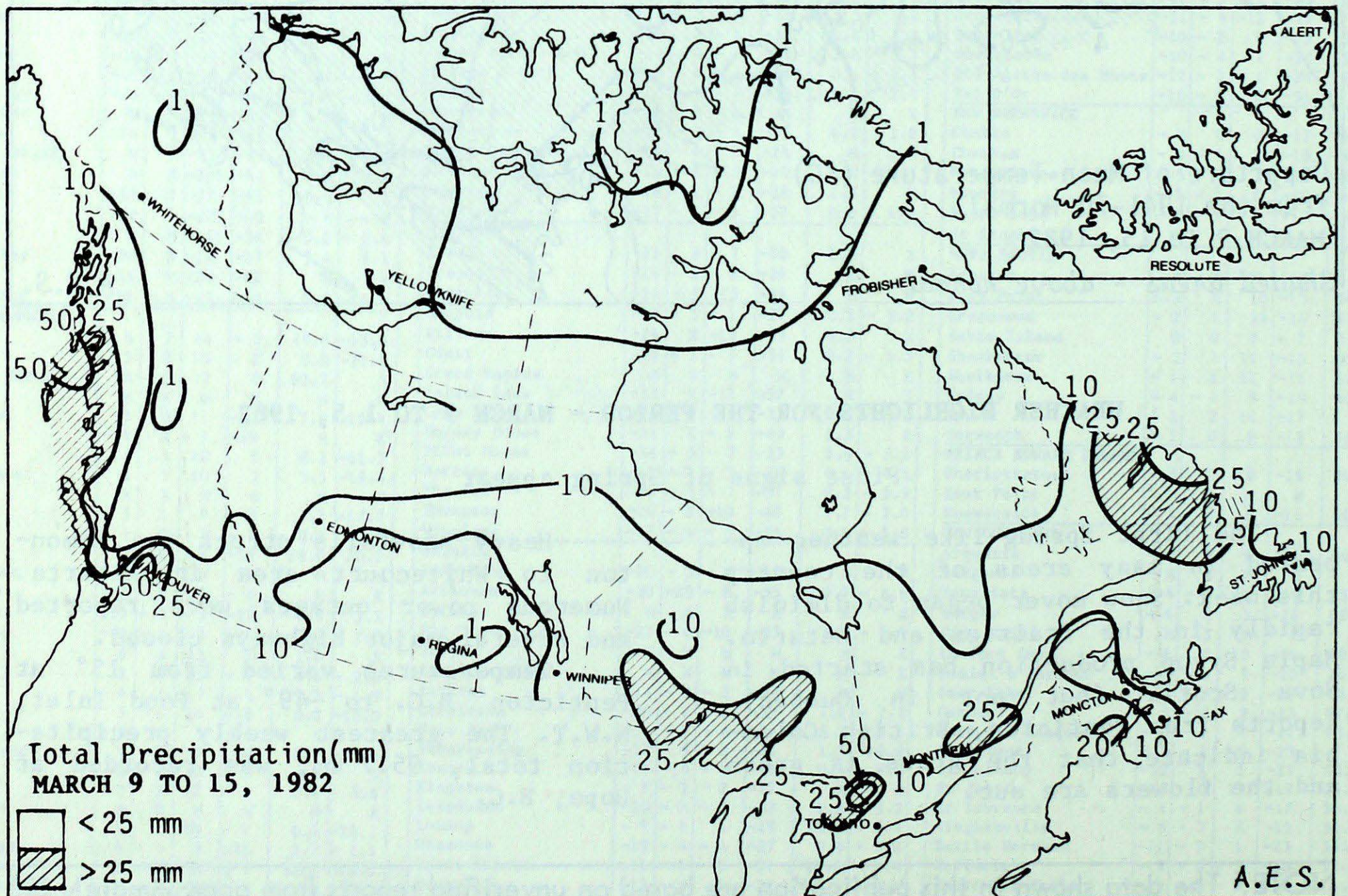
Medicine Hat on the 11th to -35° at Churchill on the 9th.

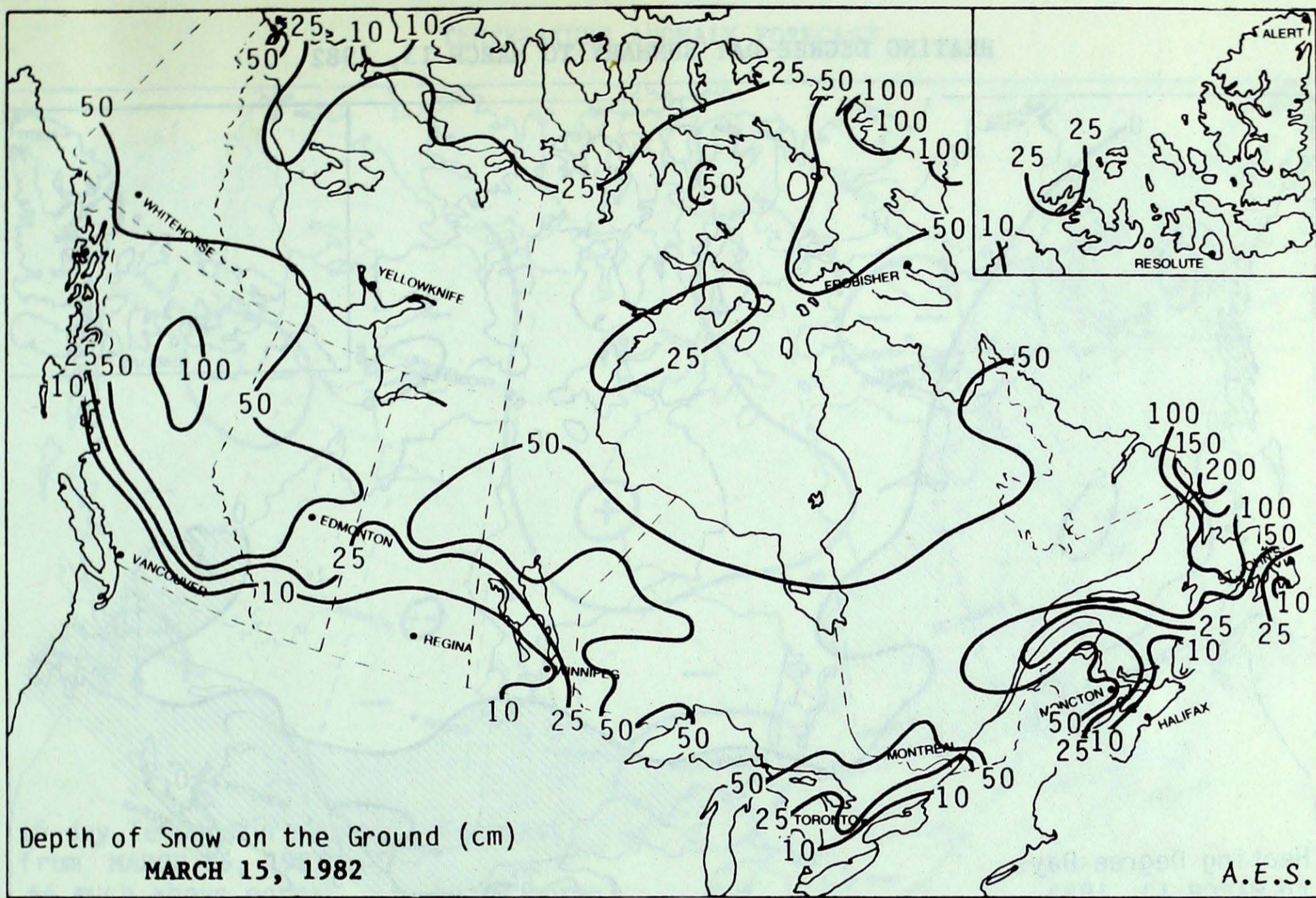
On March 11th a narrow band of heavy snow struck the Edmonton to Whitecourt area. Snowfall amounts ranged from 3 cm at Red Deer to 23 cm at Edmonton. Numerous power outages were reported and the main highways, including the Trans-Canada, were closed.

ONTARIO

The first Spring-like weather of the year occurred this week. The abundant and persistent snow cover began to diminish rapidly causing concern over local flooding. Weekend rains did combine with melting snow to create a few minor problems in numerous low-lying regions across the province.

In the Barrie and southern Georgian Bay area, heavy snowsqualls closed a few highways the night of March 13th as a reminder that winter is not yet over. At Sioux Lookout snowfall totaled 50 cm, bringing their snow cover back to 100 cm.





QUEBEC

After two cold days which produced some daily low temperature records at the beginning of the week, the weather moderated considerably and weekly mean temperatures were above normal. The mean temperature at Sherbrooke exceeded normal by 4.6° and some high temperature records were set at the end of the week.

With the exception of some southern stations precipitation was below normal. The wind reached 74 km/h at Sherbrooke on the 14th.

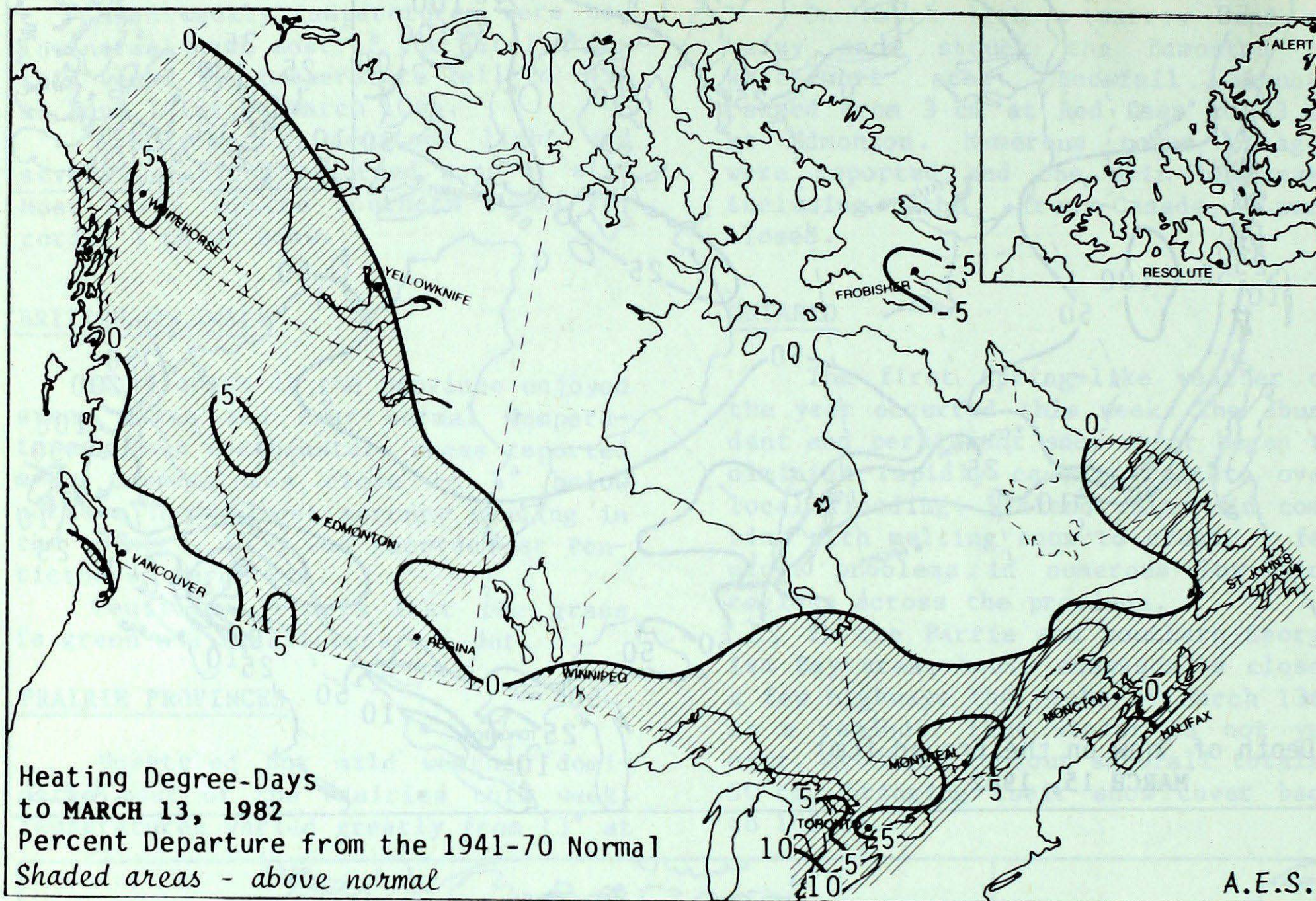
ATLANTIC PROVINCES

The Atlantic Provinces enjoyed mild weather from March 12th to 14th but cool temperatures dominated the rest of the week. Some low temperature records were tied.

Maple Syrup production started in Nova Scotia during the mild spell and full scale operations will continue when the freeze-thaw cycle resumes.

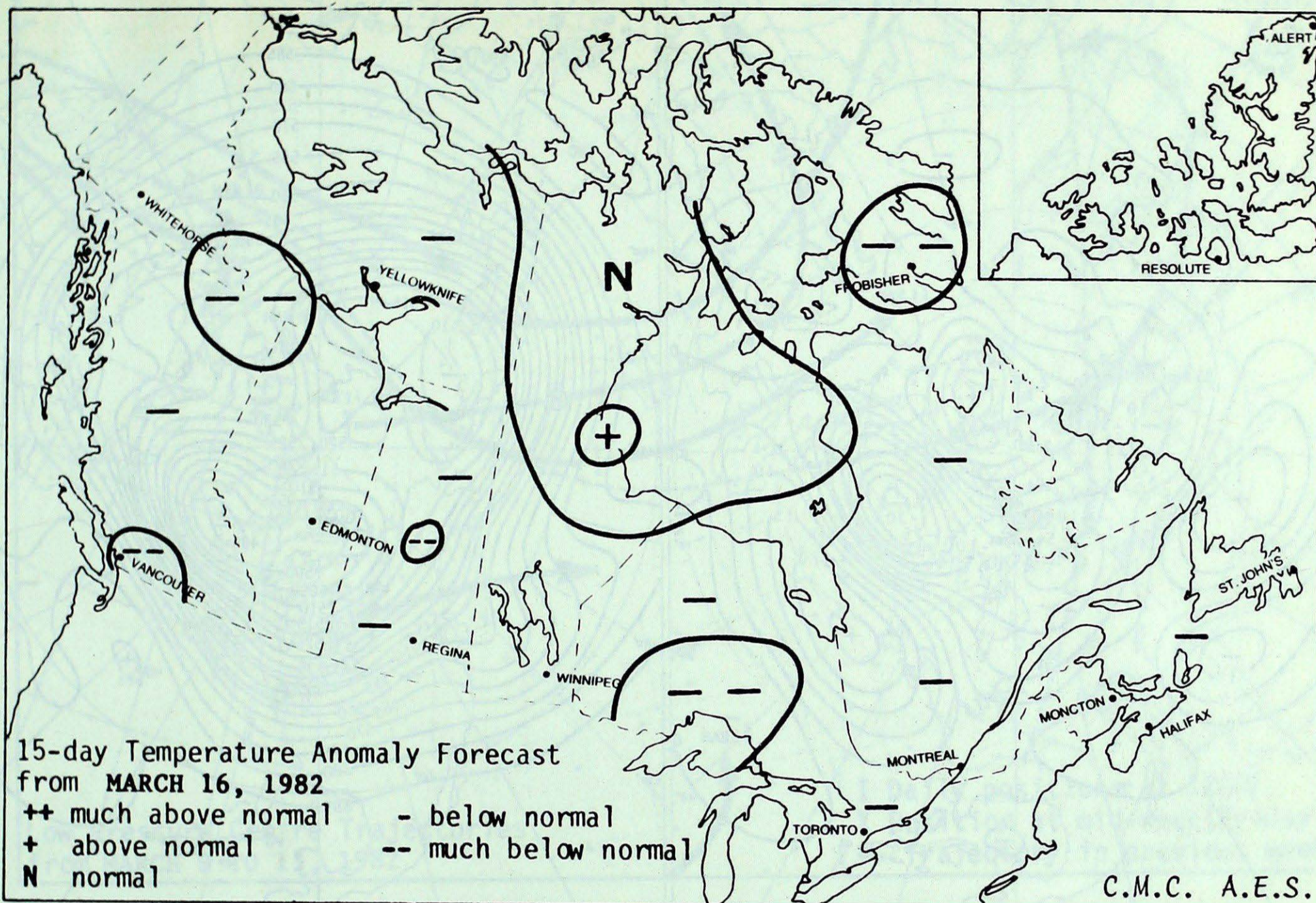


HEATING DEGREE-DAY SUMMARY TO MARCH 13, 1982

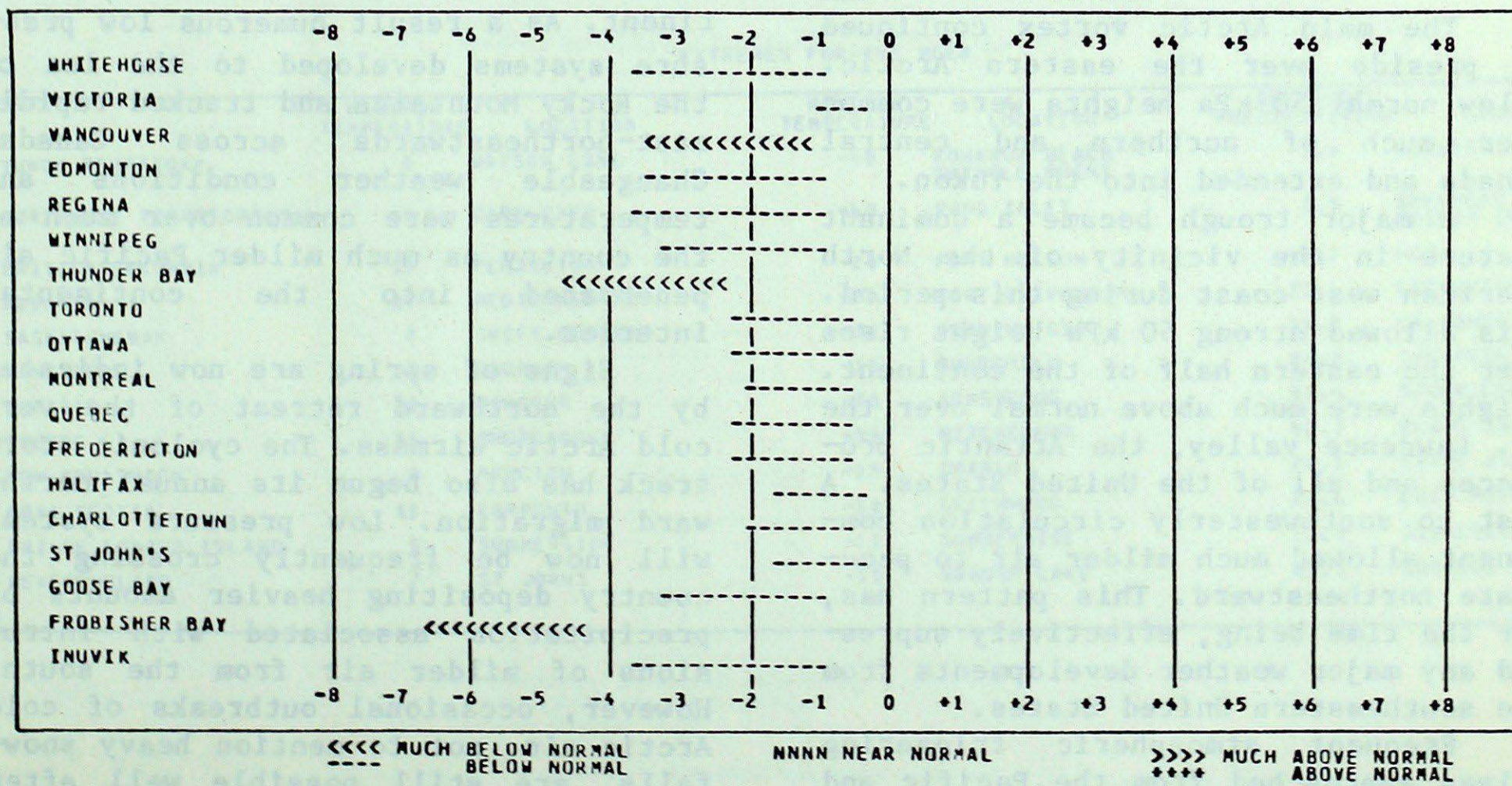


STATION	MONTHLY CUMULATIVE TOTAL	MONTHLY DIFF. FROM 1941-70 NORMAL	SEASONAL TOTAL	SEASONAL DIFF. FROM 1941-70 NORMAL	SEASONAL PERCENT OF NORMAL
Resolute	673.5	14.5	8656.5	-354.5	96
Inuvik	574.5	-6.5	7423.0	-218.0	97
Whitehorse	409.0	48.0	5806.5	416.5	108
Vancouver	167.5	-0.5	2219.0	-48.0	98
Edmonton Mun	354.5	15.5	4437.0	-12.0	100
Calgary	335.0	25.0	4279.5	173.5	104
Regina	417.0	31.0	4853.0	136.0	103
Winnipeg	407.0	23.0	4718.5	8.5	100
Thunder Bay	382.5	33.5	4606.5	161.5	104
Windsor	270.5	26.5	3149.5	300.5	111
Toronto	308.5	35.5	3490.5	305.5	110
Ottawa	333.5	24.5	3896.5	164.5	104
Montreal	315.5	25.5	3830.5	280.5	108
Quebec	341.5	20.5	4160.5	200.5	105
Saint John, N.B.	294.5	0.5	3658.0	101.0	103
Halifax	257.5	-3.5	3046.0	74.0	102
Charlottetown	295.0	-1.0	3413.5	39.5	101
St. John's, Nfld.	294.0	21.0	3352.5	32.5	101

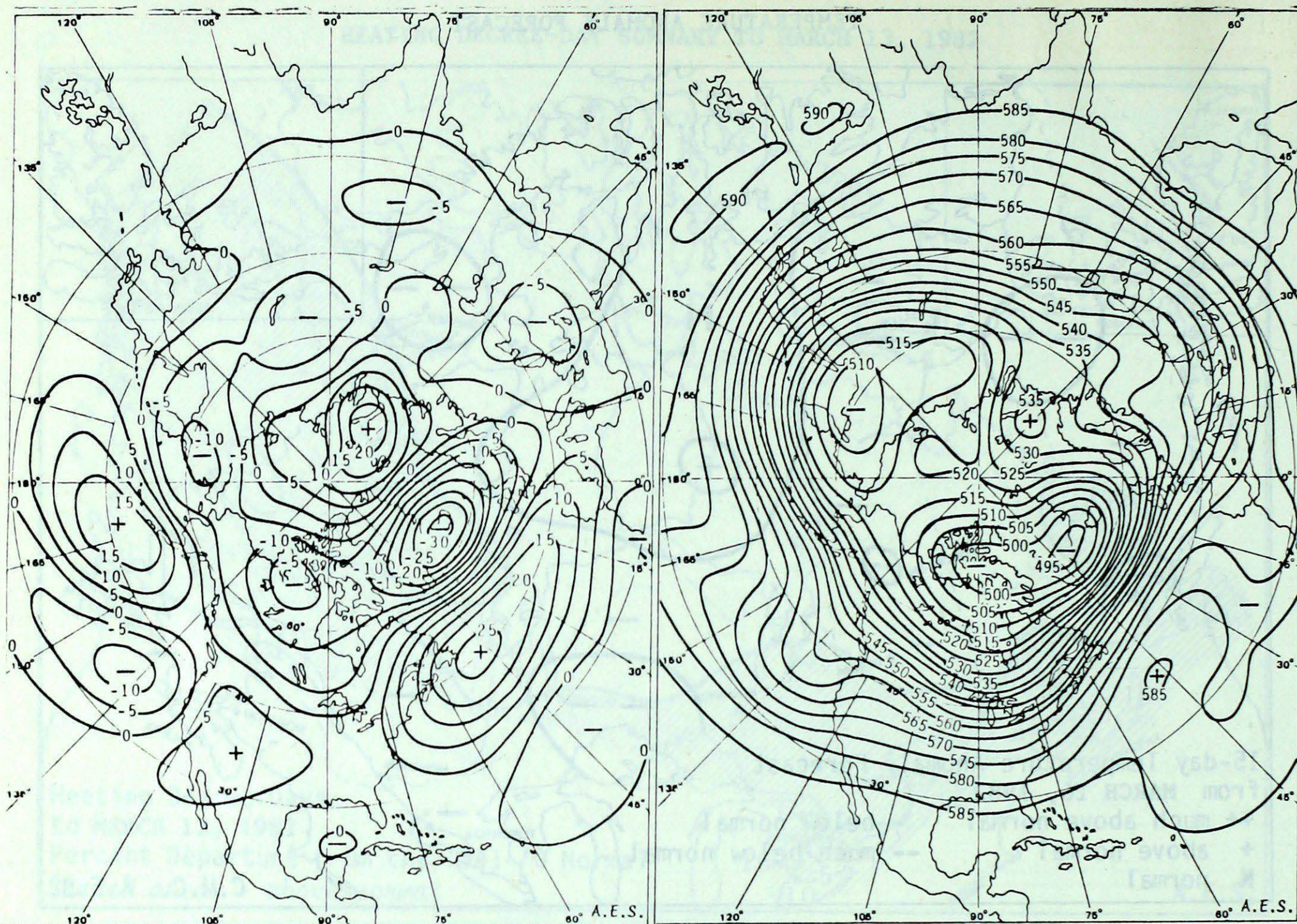
TEMPERATURE ANOMALY FORECAST



TEMPERATURE ANOMALY FORECAST FOR MAR 16 1982 TO MAR 30 1982



Atmospheric Circulation



7-day Mean 50 kPa Height Anomaly
(5 dam intervals)

MARCH 9 TO 15, 1982

7-day Mean 50 kPa Height (dam)

MARCH 9 TO 15, 1982

The main Arctic vortex continued to preside over the eastern Arctic. Below normal 50 kPa heights were common over much of northern and central Canada and extended into the Yukon.

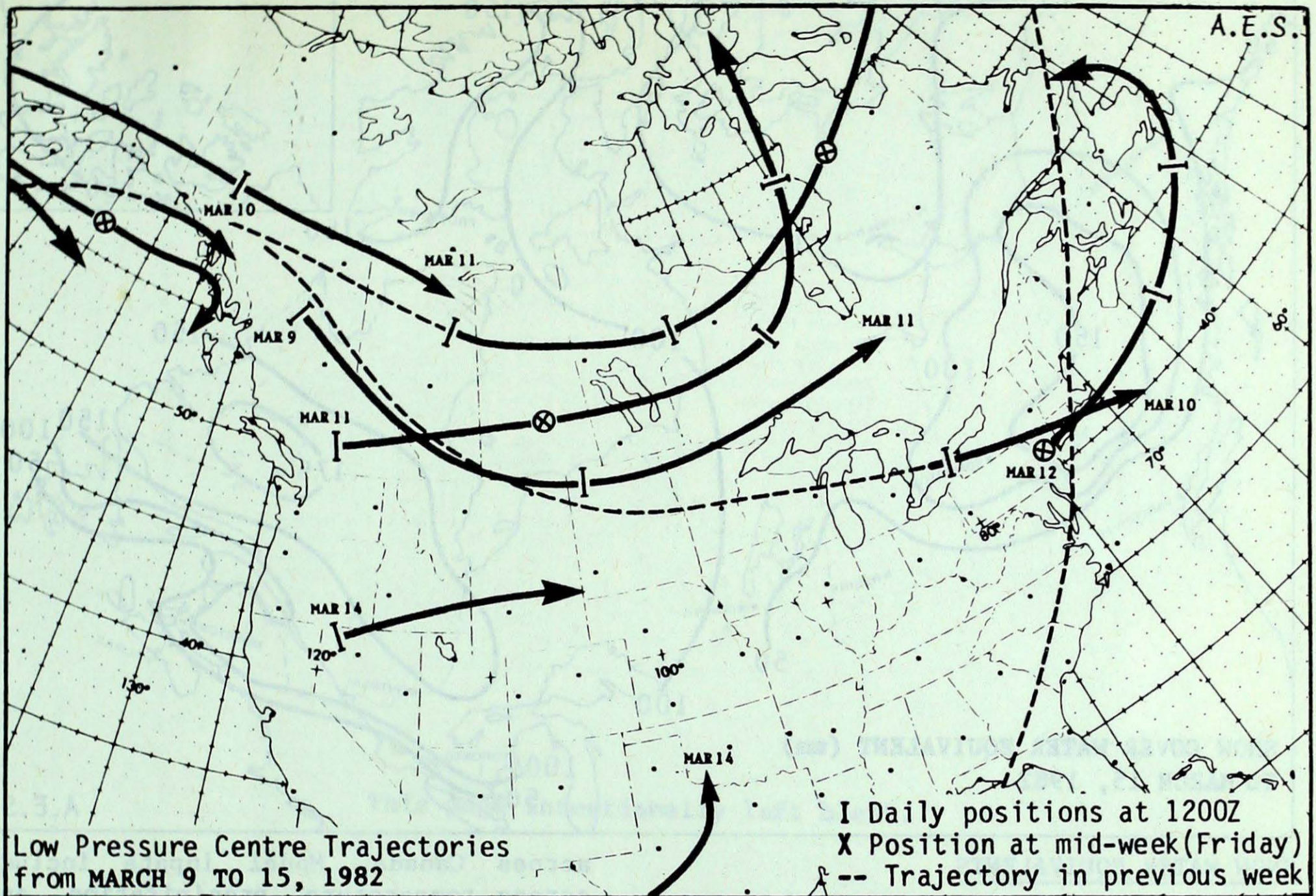
A major trough became a dominant feature in the vicinity of the North American west coast during this period. This allowed strong 50 kPa height rises over the eastern half of the continent. Heights were much above normal over the St. Lawrence valley, the Atlantic provinces and all of the United States. A west to southwesterly circulation component allowed much milder air to penetrate northeastward. This pattern has, for the time being, effectively suppressed any major weather developments from the southeastern United States.

Frequent atmospheric triggering pulses approached from the Pacific and moved rapidly eastwards across the con-

tinent. As a result numerous low pressure systems developed to the lea of the Rocky Mountains and tracked rapidly east-northeastwards across Canada. Changeable weather conditions and temperatures were common over much of the country as much milder Pacific air penetrated into the continental interior.

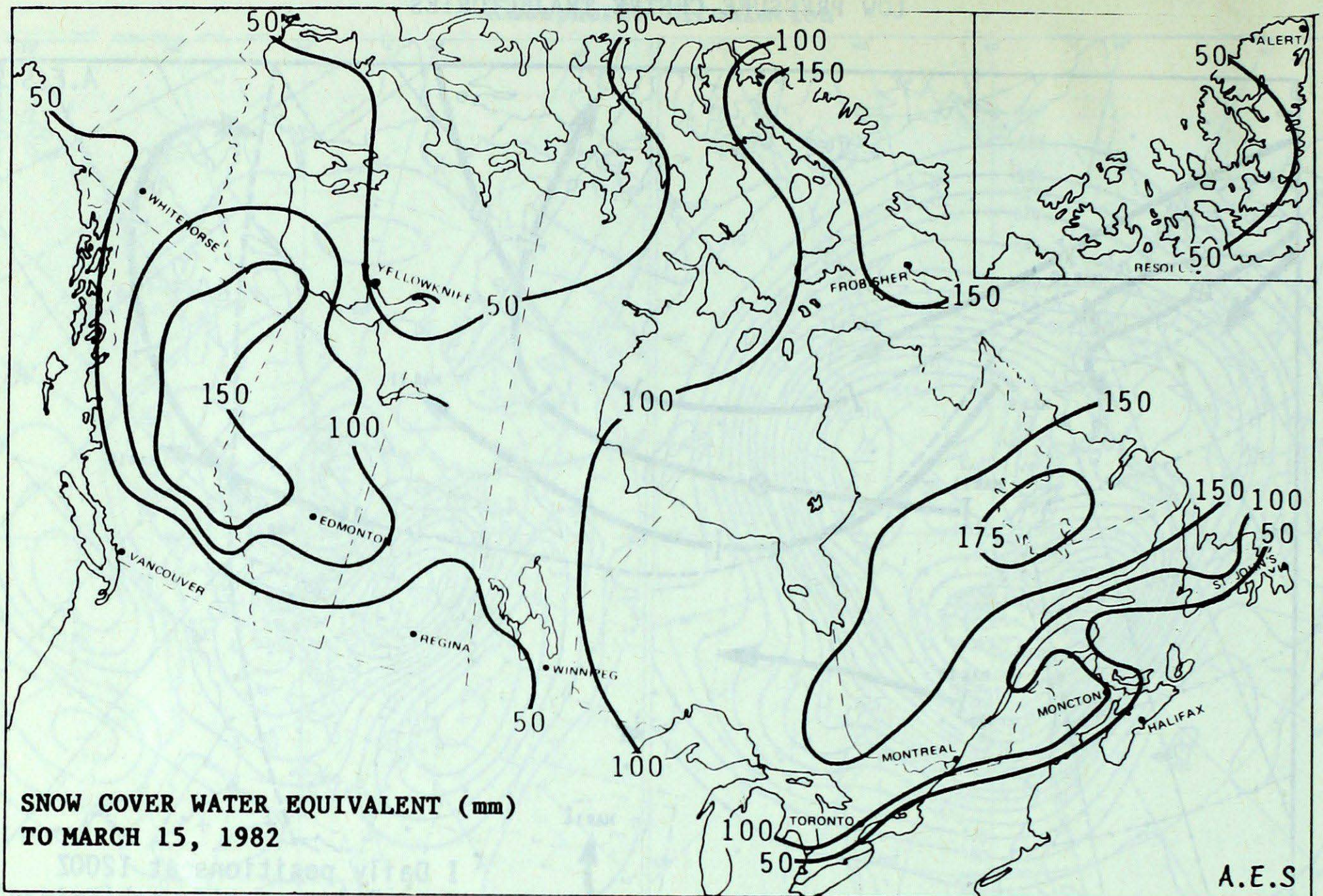
Signs of spring are now indicated by the northward retreat of the very cold Arctic airmass. The cyclonic storm track has also begun its annual northward migration. Low pressure systems will now be frequently crossing the country depositing heavier amounts of precipitation associated with intrusions of milder air from the south. However, occasional outbreaks of cold Arctic air, not to mention heavy snowfalls, are still possible well after the beginning of Spring.

LOW PRESSURE CENTRE TRAJECTORIES



EXTREMES FOR THE WEEK

	MAXIMUM TEMPERATURE	LOCATION	MINIMUM TEMPERATURE	LOCATION	GREATEST PRECIPITATION	LOCATION
YUKON TERRITORY	0	WATSON LAKE	-40	KOHAKUK BEACH SHINGLE POINT	7.4	BURWASH
NORTHWEST TERRITORIES	-4	CAPE CYR	-49	POND INLET	2.9	SHEPHERD BAY MACKAR INLET
BRITISH COLUMBIA	15	PENTICTON	-20	FORT NELSON	95.7	HOPE
ALBERTA	12	MEDICINE HAT	-28	FORT CHIPEWYAN	22.4	LETHBRIDGE
SASKATCHEWAN	7	SWIFT CURRENT	-31	URANIUM CITY	18.3	LA RONGE
MANITOBA	5	DAUPHIN	-35	CHURCHILL	24.2	THOMPSON
ONTARIO	10	WINDSOR	-38	ARMSTRONG	39.4	SIoux LOOKOUT
QUEBEC	11	SHERBROOKE	-34	NITCHEQUON	42.7	BLANC SABLON
NEW BRUNSWICK	6	MONCTON	-19	CHARLO	28.5	SAINT JOHN
NOVA SCOTIA	11	YARMOUTH	-10	GREENWOOD	23.6	EDDY POINT
PRINCE EDWARD ISLAND	5	SUMMERSIDE	-11	SUMMERSIDE	18.9	SUMMERSIDE
NEWFOUNDLAND	7	ST JOHN'S	-35	WABUSH LAKE	47.8	DANIELS HARBOUR



SNOW WATER EQUIVALENTS

The snow water equivalents are one of the outputs of a weekly water budget model applied to 170 synoptic stations

across Canada. Model inputs include screen temperature, precipitation, and station latitude. The map shows the distribution of the water storage in the snow pack on a large spatial scale.



CLIMATIC PERSPECTIVES

Staff

Editor:	Yves Durocher
Assistant Editor:	Bob Paterson
Technical Staff:	Fred Richardson, Andy Radowski
Graphics and Layout:	J. Rautenberg, Lubna Malik
Word Processing:	Naseem Khaja, Una Ellis

Correspondents

Terry Mullane,	(Ice Forecasting Central)
H.E. Wahl,	(Whitehorse)
Bill Prusak,	(Western Region)
Fred Luclow,	(Central Region)
Bryan Smith,	(Ontario Region)
Jacques Miron,	(Quebec Region)
Frank Amirault	(Atlantic Region)
Staff of Prince	George, Kamloops, Castlegar, Fort
	Nelson, Penticton and Kelowna
	weather office (Pacific Region)

Telephone Inquiries (416) 667-4711/4906

This page intentionally left blank.

TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. 16, MARCH 1982

Station	Temperature (°C)				Precip. (mm)		Station	Temperature (°C)				Precip. (mm)		Station	Temperature (°C)				Precip. (mm)	
	Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal		Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal		Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal
YUKON							Smithers	-1	1	5	-10	0.5	-4.1	Petawawa	-4	X	8	-26	5.8	X
Burwash	-15	-2	-2	-37	7.4	2.0	Stewart	2	X	6	-1	M	X	Pickle Lake	-9	3	5	-32	8.5	0.2
Dawson	-17	0	-4	-34	1.4	-1.9	Terrace	1	0	7	-4	10.2	-8.0	Red Lake	-9	3	5	-31	11.6	8.4
Faro	M	X	M	M	M	X	Vancouver	5	0	11	1	15.0	-6.2	Simcoe	M	M	6P	-14P	16.0	4.1
Komakuk Beach	-31	-5	-24	-40	0.0	-1.7	Victoria	5	0	13	-1	9.4	-5.6	Sioux Lookout	-7	2	6	-33	39.4	32.2
Mayo A	-18	-4	-4	-37	0.8	-1.4	Williams Lake	-3	-2	5	-16	4.6	1.3	Sudbury	-4	4	5	-21	18.8	12.0
Shingle Point	-30	-5	-20	-40	1.0	-1.3	ALBERTA							Thunder Bay	-6	2	4	-27	27.5	18.8
Teslin	M	X	-1P	-22P	M	X	Banff	-2	4	5	-9	M	M	Timmins	-7	4	6	-20	14.8	4.8
Watson Lake	-10	2	0	-22	2.9	-2.4	Calgary	-1	5	8	-9	2.7	-1.6	Toronto	-1	1	7	-16	17.0	2.8
Whitehorse	-11	-2	-2	-28	3.0	-0.2	Cold Lake	-7	2	4	-20	14.5	11.0	Trenton	-1	1	6	-14	14.2	0.9
NORTHWEST TERRITORIES							Coronation	-6	3	2	-15	5.8	0.4	Upsala	M	X	M	M	M	X
Cape Parry	-34	-6	-26	-41	M	M	Edmonton Intl	-7	2	3	-19	12.7	8.8	Wawa	-7	X	4	-20	32.1	X
Cape Young	-33	-5	-26	-40	0.0	-0.9	Edmonton Nanao	-5	3	3	-15	14.9	10.8	Warton	-2	2	8	-16	29.5	17.3
Clinton Point	-31	-5	-21	-37	0.0	-0.7	Edson	-6	-2	5	-20	8.4	3.7	Windsor	2	2	11	-9	11.4	-0.7
Contwoyto Lake	M	M	M	M	M	M	Fort Chipewyan	-16	-3	-7	-29	M	M	QUÉBEC						
Coppermine	-33	-6	-25	-40	2.8	0.1	Fort McMurray	-9	2	2	-25	1.8	-1.5	Bagotville	-7	2	6	-28	10.0	-3.0
Fort Reliance	-28	-5	-16	-38	1.0	-1.2	Grande Prairie	-6	4	4	-18	1.0	-3.5	Baie Comeau	-7	1	4	-26	11.6	1.7
Fort Simpson	-21	-5	-9	-36	2.3	-2.6	High Level	-16	X	-6	-27	1.0	-4.1	Blanc Sablon	-9	0	2	-20	42.7	18.7
Fort Smith	-20	-4	-7	-33	2.1	-1.6	Jasper	-5	-1	4	-19	12.6	9.6	Border	M	M	M	M	M	M
Hay River	-22	-5	-5	-34	2.4	-2.5	Lac La Biche	M	X	M	M	M	X	Chevery	M	X	M	M	M	X
Inuvik	-32	-5	-16	-47	M	M	Lethbridge	1	6	11	-9	22.4	16.4	Chibougamau	-12	X	3	-34	15.9	X
Lady Franklin Point	-32	-4	-25	-38	0.0	-1.2	Medicine Hat	2	7	13	-10	9.5	3.7	Gaspé	-6	X	6	-18	10.0	X
Nicholson Peninsula	M	M	-27P	-40P	0.0	-0.6	Peace River	-10	0	1	-23	1.1	-3.1	Grindstone Island	-3	2	4	-11	11.2	-4.6
Norman Wells	-25	-4	-14	-37	M	M	Red Deer	-6	3	4	-17	10.9	6.0	Inoucdjouac	-18	4	0	-31	M	M
Port Radium	M	X	M	M	M	X	Rocky Mountain House	-6	0	4	-19	7.0	1.0	Kuujuuaq	-17	2	4	-33	3.8	-2.2
Robertson Lake	M	X	M	M	M	X	Slave Lake	-8	-2	5	-20	3.8	-2.0	Lac Eon	M	X	M	M	M	X
Tukttoyaktuk	-32	-5	-25	-40	1.0	0.1	Vermilion	-8	2	1	-18	3.6	-0.2	Grande Riviere	-14	X	2	-28	13.9	X
Yellowknife	-25	-5	-14	-36	1.8	-1.7	Whitecourt	-5	3	4	-16	3.4	-2.8	Maniwaki	-5	2	8	-29	20.8	11.2
Baker Lake	-34	-6	-26	-40	0.2	-1.2	SASKATCHEWAN							Matagami	-11	X	4	-33	M	X
Coral Harbour	-30	-4	-20	-40	0.8	-0.8	Broadview	-6	X	3	-21	1.0	X	Mont-Joli	-6	0	7	-19	4.5	-15.3
Ennadai Lake	M	M	M	M	M	M	Buffalo Narrows	-9	0	5	-24	M	M	Montréal	-2	2	8	-18	16.8	-0.2
Jenny Lind Island	M	M	-28P	-38	0.6	0.4	Collins Bay	-14	X	1	-25	M	X	Natashquan	-8	0	0	-18	12.4	-3.7
Pelly Bay	-31	0	-22	-38	1.0	0.4	Cree Lake	-14	X	1	-30	2.1	X	Nitchequon	-17	-1	-1	-35	8.8	2.9
Rankin Inlet	-30	X	-22	-38	1.0	X	Eastend Cypress	M	X	M	M	M	X	Parent	M	X	M	M	M	X
Shepherd Bay	M	M	-27P	-45	2.9	2.0	Estevan	-4	4	4	-15	1.2	-2.6	Port Menier	M	M	M	M	M	X
Alert	-28	6	-13	-40	M	M	Hudson Bay	-8	4	3	-21	M	M	Poste-de-la-Baleine	-15	3	3	-29	3.8	-1.2
Broughton Island	-27	-1	-10	-33	2.0	1.2	Kindersley	-4	5	6	-15	2.6	-2.6	Québec	-4	2	5	-24	25.2	9.2
Cape Dorset	-25	X	-8	-33	M	X	La Ronge	-9	2	5	-23	18.3	14.2	Rivière du Loup	M	M	M	M	M	M
Cape Dyer	-27	-2	-5	-37	M	M	Meadow Lake	-10	X	1	-23	11.0	X	Roberval	-8	1	6	-29	2.0	-13.0
Cape Hooper	-27	-2	-13	-35	0.0	-0.5	Moose Jaw	-4	5	5	-14	5.2	1.7	Schefferville	-16	0	0	-32	6.6	-1.9
Clyde	-30	-3	-21	-37	M	M	Nipawin	-9	X	1	-21	7.8	X	Sept-Iles	-9	-1	2	-21	18.2	-1.0
Dewar Lakes	-30	-1	-16	-36	0.0	0.0	North Battleford	-7	3	2	-18	2.0	-1.9	Sherbrooke	-2	5	11	-26	14.8	1.6
Eureka	-37	0	-29	-44	M	M	Prince Albert	-9	4	2	-22	5.8	1.2	Ste Agathe des Monts	-6	0	3	-27	32.4	18.1
Frobisher Bay	-28	-4	-9	-39	M	M	Regina	-6	4	2	-18	6.9	1.7	Val D'Or	-9	1	4	-28	14.0	3.4
Gladman Point	M	M	-29P	-42	0.0	0.0	Rockglen	M	X	M	M	M	X	NEW BRUNSWICK						
Hall Beach	-35	-4	-16	-43	M	M	Saskatoon	-6	5	3	-16	1.8	-2.2	Charlo	-6	2	6	-19	3.9	-13.0
Longstaff Bluff	-31	-2	-13	-39	0.0	0.0	Swift Current	-1	7	8	-14	M	M	Chatham	-4	1	6	-15	8.5	-15.1
Mackar Inlet	-31	-1	-21	-38	2.9	2.6	Uranium City	-19	-3	-10	-32	2.2	-0.6	Fredericton	-2	2	6	-13	14.6	-4.4
Pond Inlet	-34	X	-18	-49	1.0	X	Wynyard	-6	X	6	-19	7.4	X	Moncton	-3	2	6	-14	6.4	-17.4
Resolute	-35	-4	-23	-40	M	M	Yorkton	-5	6	4	-20	2.2	-4.0	Saint John	-2	2	6	-12	28.5	2.5
Byron Bay	M	M	-28P	-39	0.0	-0.6	MANITOBA							St Stephen	M	X	M	M	M	X
Cambridge Bay	-33	-3	-28	-38	0.4	-0.4	Bissett	-9	X	3	-30	15.9	X	NOVA SCOTIA						
Mould Bay	-35	-2	-29	-39	0.4	-0.1	Brandon	-5	6	5	-20	1.4	-3.7	Amherst	M	X	M	M	M	X
Sachs Harbour	-34	-5	-24	-40	M	M	Churchill	-23	-2	-14	-35	M	M	Eddy Point	-1	X	7	-9	23.6	X
BRITISH COLUMBIA							Dauphin	-5	7	6	-20	0.6	-4.6	Greenwood	0	2	10	-10	11.7	-10.1
Abbotsford	5	0	12	0	40.4	9.5	Gillam	-15	X	-5	-30	10.5	X	Sable Island	1	1	10	-5	18.4	-8.4
Alert Bay	3	-2	9	-2	18.9	-3.4	Gimli	-8	3	3	-23	17.6	13.0	Shearwater	0	2	9	-8	8.9	-20.2
Amphitrite Point	5	X	10	0	34.7	X	Grand Rapids	M	X	M	M	M	X	Shelburne	1	X	10	-9	17.2	X
Blue River	M	X	M	M	M	X	Island Lake	-11	X	1	-26	M	X	Sydney	-2	1	7	-9	19.0	-12.3
Bull Harbour	3	-1	10	-2	41.2	10.4	Lynn Lake	-14	-1	4	-30	M	M	Truro	0	4	8	-9	M	M
Burns Lake	-4	X	5	-19	0.0	X	Norway House	-12	X	0	-28	13.3	X	Yarmouth	1	2	11	-7	11.0	-15.1
Cape Scott	4	-1	9	0	34.2	-31.3	Pilot Mound	-6	3	2	-22	M	M	PRINCE EDWARD ISLAND						
Cape St James	5	0	12	1	24.6	1.5	Portage	-5	4	4	-20	2.8	-3.2	Charlottetown	-3	2	5	-11	15.0	-8.3
Clinton	M	X	M	M	M	X	The Pas	-10	4	0	-23	15.0	10.7	East Point	M	X	M	M	M	X
Comox	4	0	10	-2	1.2	-25.9	Thompson	-15	-1	-4	-32	24.2	20.5	Summerside	-3	1	6	-12	18.9	-0.5
Cranbrook	2	2	10	-4	13.2	8.5	Winnipeg	-6	4	4	-21	16.2	10.6	NEWFOUNDLAND						
Dease Lake	-5	4	0	-15	9.1	5.6	ONTARIO							Argentia	-2	X	5	-9	17.0	X
Estevan Point	M	M	M	M	M	M	Armstrong	-9	3	3	-38	M	M	Badger	M	X	M	M	M	X
Ethelda Bay	M	X	7P	-1P	M	X	Atikokan	-7	1	7	-35	27.0	16.2	Bonavista	-3	1	4	-11	4.6	-25.4
Fort Nelson	-11	0	1	-21	2.2	-2.6	Barrle	M	X	M	M	M	X	Burgeo	-3	2	4	-12	17.0	-7.0
Fort St John	-8	1	3	-18	8.3	2.1	Big Trout Lake	-12	4	2	-32	17.1	12.7	Cape Race	M	X	M	M	M	X
Hope	5	X	13	0	95.7	X	Britt	M	X	M	M	M	X	Comfort Cove	-4	2	5	-15	7.0	-17.6
Kamloops	3	1	11	-6	2.5	0.2	Caribou Island	M	X	M	M	M	X	Daniel's Harbour	-5	0	5	-17	47.8	33.4
Langara	3	0	6	1	71.8	43.8	Earlton	-5	4	5	-24	M	M	Deer Lake	-6	2	4			