

CLIMATIC PERSPECTIVES

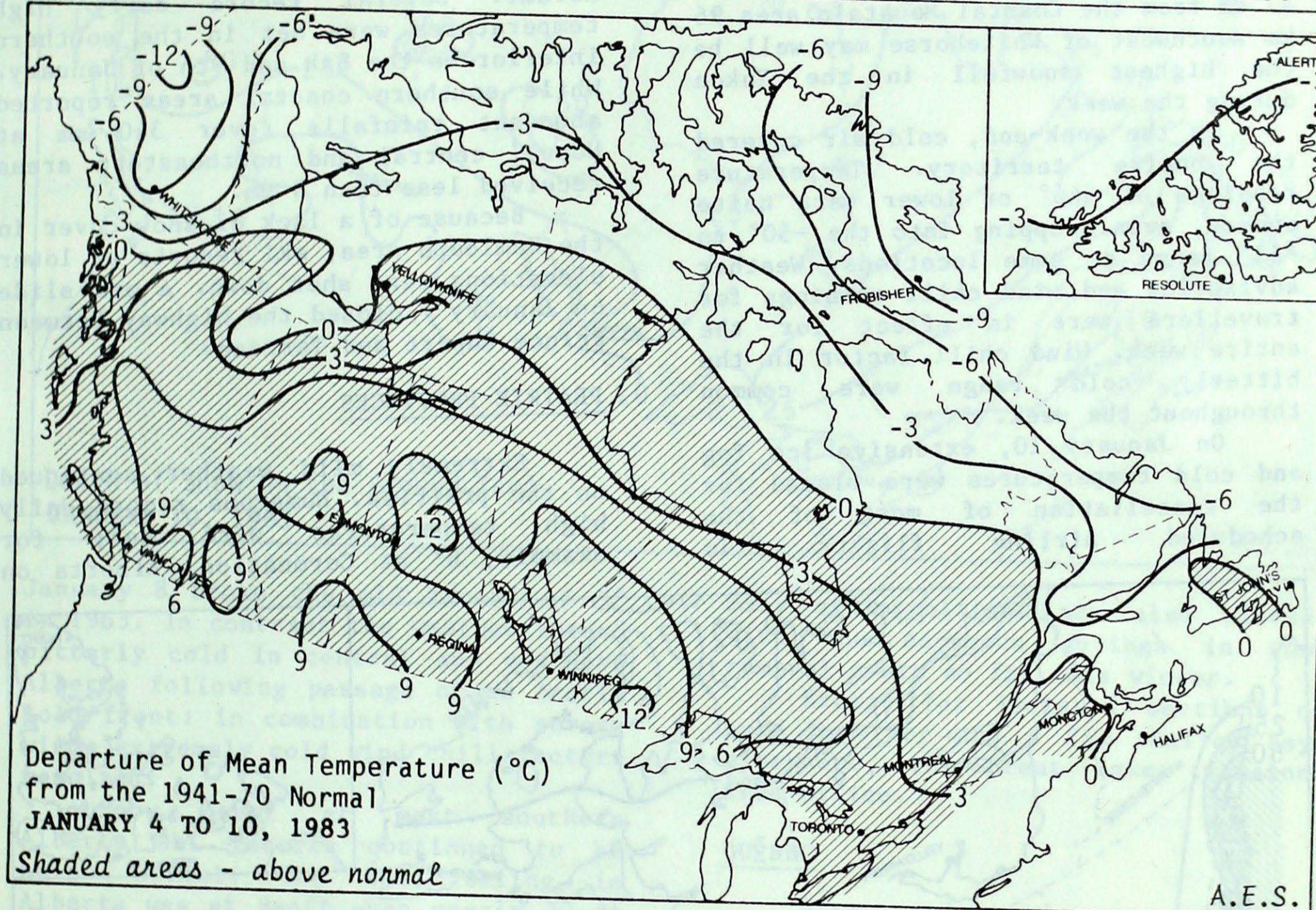
Canada

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

JANUARY 14, 1983

(Aussi disponible en français)

VOL. 5 NO. 2



WEATHER HIGHLIGHTS FOR THE PERIOD - JANUARY 4 - 10, 1983

Bitterly cold weather in Northwestern Canada

With an influx of bitterly cold air in Northwestern Canada, temperatures plummeted to near the -50° mark, falling to -52.7° at Mayo, Y.T. Extensive ice fog and extremely cold air brought many Yukon communities to a standstill. The bone chilling weather later arrived in Alberta where wind chill equivalent temperatures of -50° were common.

In contrast, Southern Ontario continued to remain mild and snow-free; heating requirements were considerably reduced and many municipalities were pleased with the enormous savings in their snow removal costs so far this winter.

Temperatures ranged from 12.9° at Victoria, B.C. to -52.7° at Mayo, Y.T. Hope, B.C. received 340 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

This winter's coldest weather arrived in the Yukon as a bitterly cold air mass entrenched itself over the northern half. Temperatures plunged to -50° in far northern areas. The clash between this frigid air mass and the milder air farther south produced snowfalls of 15 to 20 cm mainly in the southern areas. An unofficial report of 47 cm from the Coastal Mountain area 96 km southwest of Whitehorse may well be the highest snowfall in the Yukon during the week.

By the week-end, cold air covered the entire territory. Temperature readings of -40° or lower were quite common, even dropping into the -50° to -53° range at some locations. Weather advisories and wind chill warnings for travellers were in effect for the entire week. Wind chill factor in the bitterly cold range were common throughout the week.

On January 10, extensive ice fog and cold temperatures were blamed for the cancellation of most of the scheduled airline flights. In

Whitehorse, extremely poor visibility also directly caused one person to be seriously injured in a car accident.

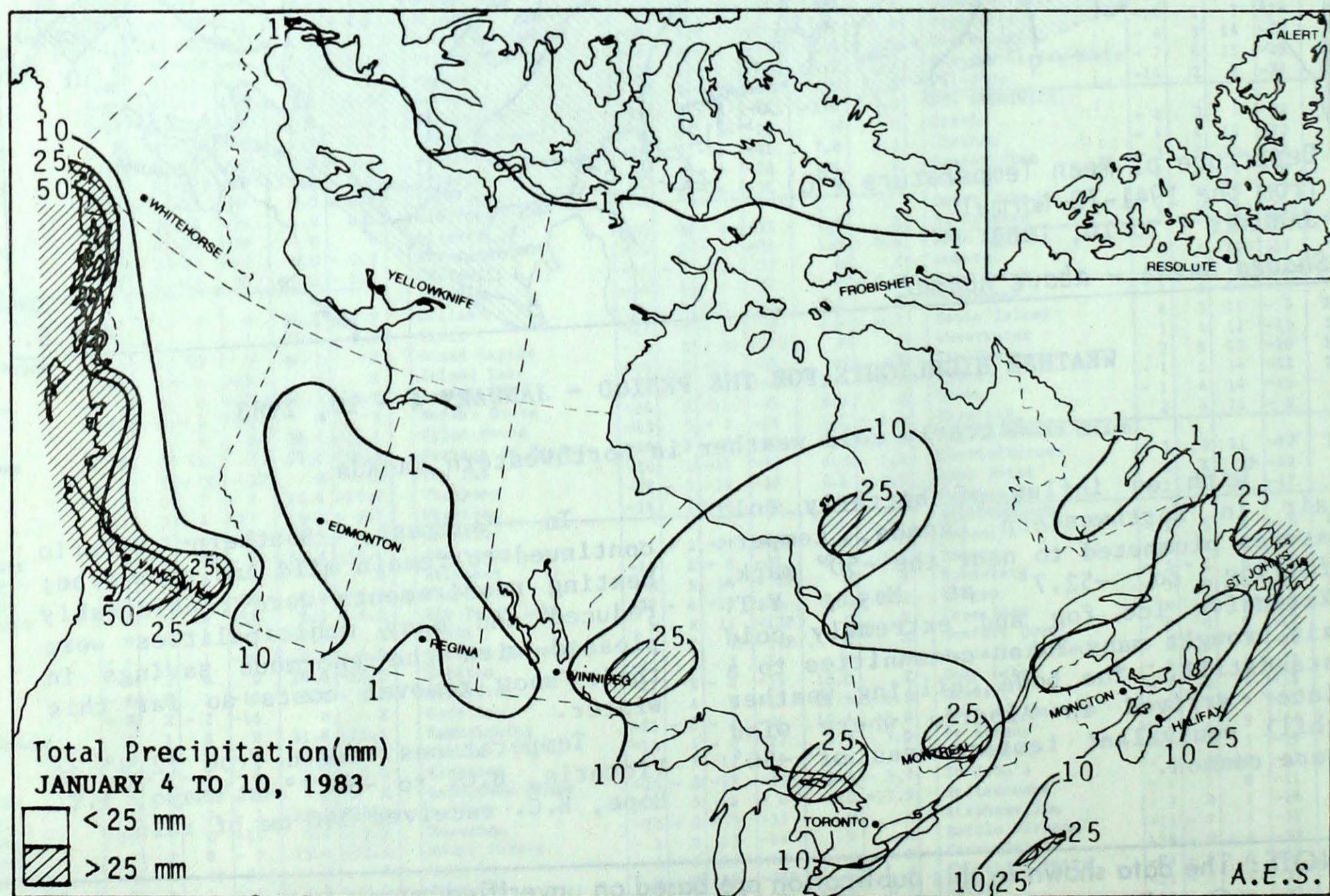
BRITISH COLUMBIA

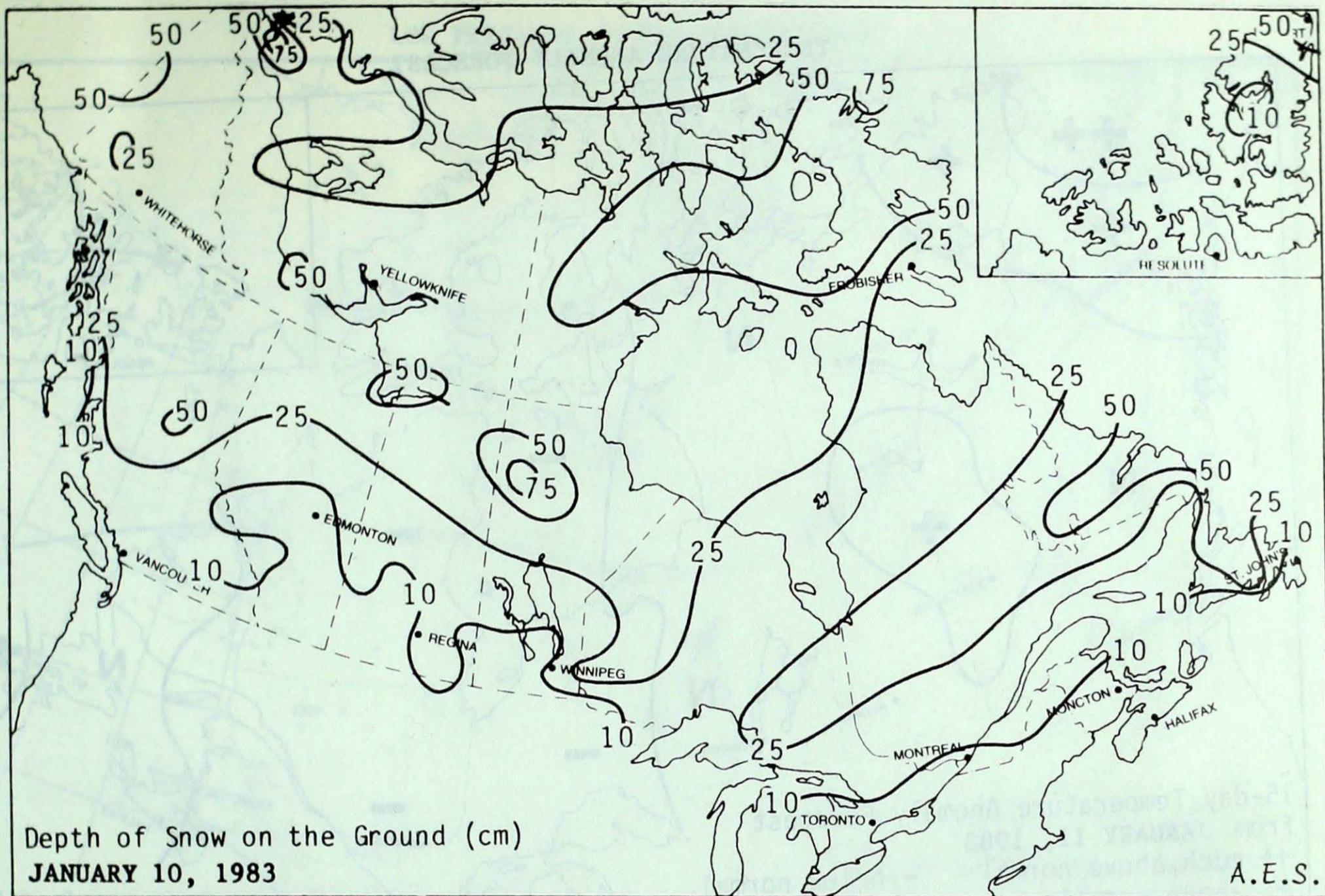
A southwesterly flow of mild Pacific air resulted in above normal temperatures throughout the province; Kamloop's weekly mean was 10.7° above normal. Several record daily high temperatures were set in the southern interior on the 8th and 9th of January. While southern coastal areas reported abundant rainfalls (over 340 mm at Hope), central and northeastern areas received less than 3 mm.

Because of a lack of snow cover in the Kamloops area; ski resorts at lower elevations were shut down. A mud slide on January 7 closed the highway between Prince Rupert and Terrace.

PRAIRIE PROVINCES

Extremely mild weather continued on the prairies. Numerous record daily high temperatures were set; for example, 8° at Coronation, Alberta on





January 8 broke the old record of 5° in 1963. In contrast the weather turned bitterly cold in central and northern Alberta following passage of an Arctic cold front: in combination with strong winds extremely cold wind chill factors resulted.

Snow cover at most southern Alberta ski resorts continued to be below normal. The best skiing in Alberta was at Banff when nearly 30 cm of snow remained on the ground.

ONTARIO

Although southern Ontario remained mild and relatively snow-free, central and northern areas experienced more seasonable weather. Several snowfalls in northern Ontario increased the snow cover to over 40 cm, but the snow cover extended to just north of Lake Simcoe. Southern ski resort in the snowbelt area are only faring better with the help of artificial snow.

While homeowners are benefiting from the mild weather and the reduced heating requirements (approximately 10% fewer heating degree-days than normal),

many municipalities are also pleased with the enormous savings in snow removal costs so far this winter.

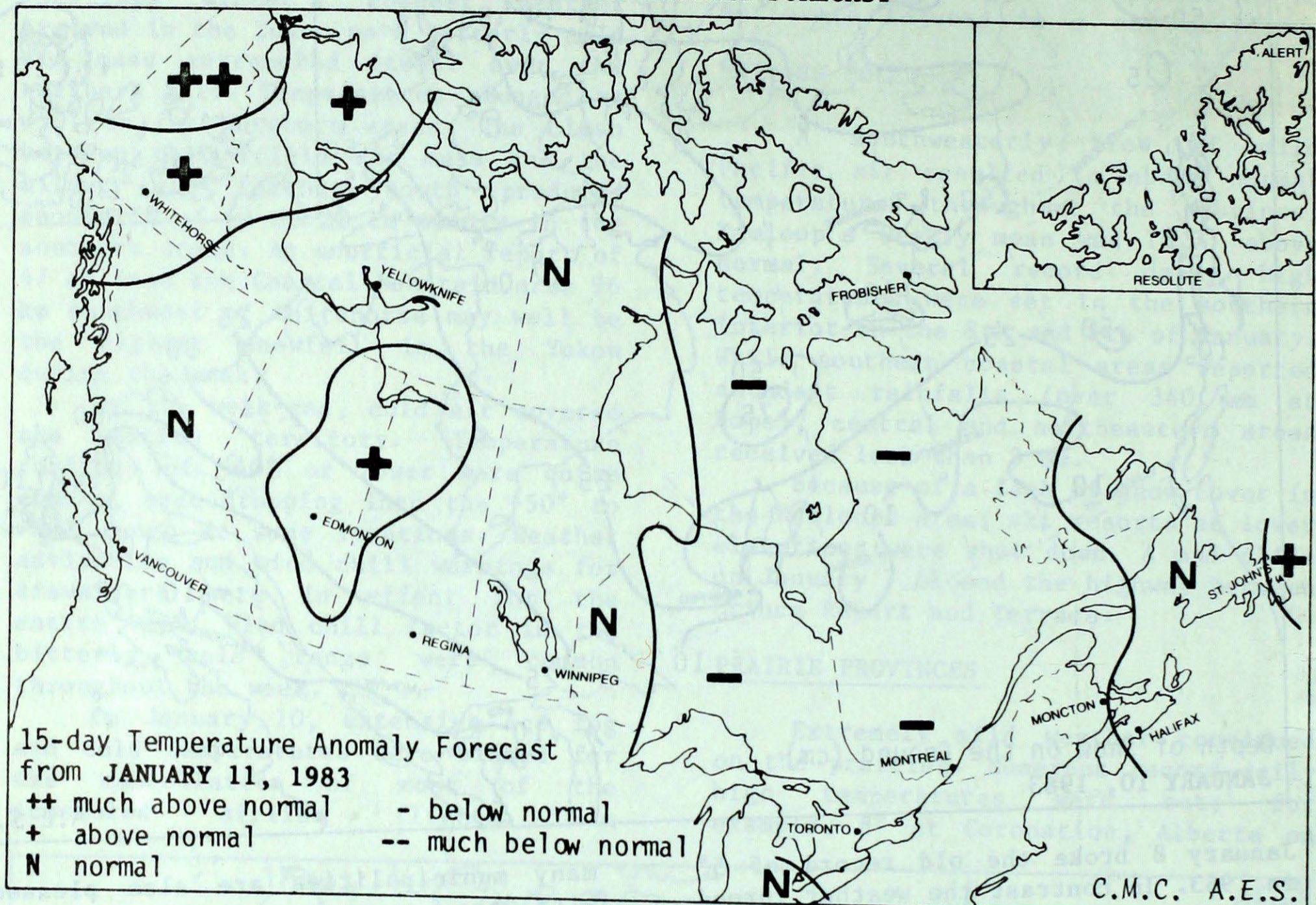
Except for isolated sections of Lake Superior and a few shallow bays elsewhere, the Great Lakes remained free of ice.

QUÉBEC

Cold temperatures moderated significantly during the week as a brisk southerly air flow became established over the province. Several record daily high temperatures were set; for example, 5.0° at Sherbrooke on January 10 upset the old record of 4.4° in 1972. Nearly 10 cm of new snow allowed limited skiing in the Laurentians. The Ottawa Valley received most of the precipitation; 36.4 mm at Ste-Agathe was the highest for the week. The Gulf of St. Lawrence remained free of ice.

(continued on page 6)

TEMPERATURE ANOMALY FORECAST



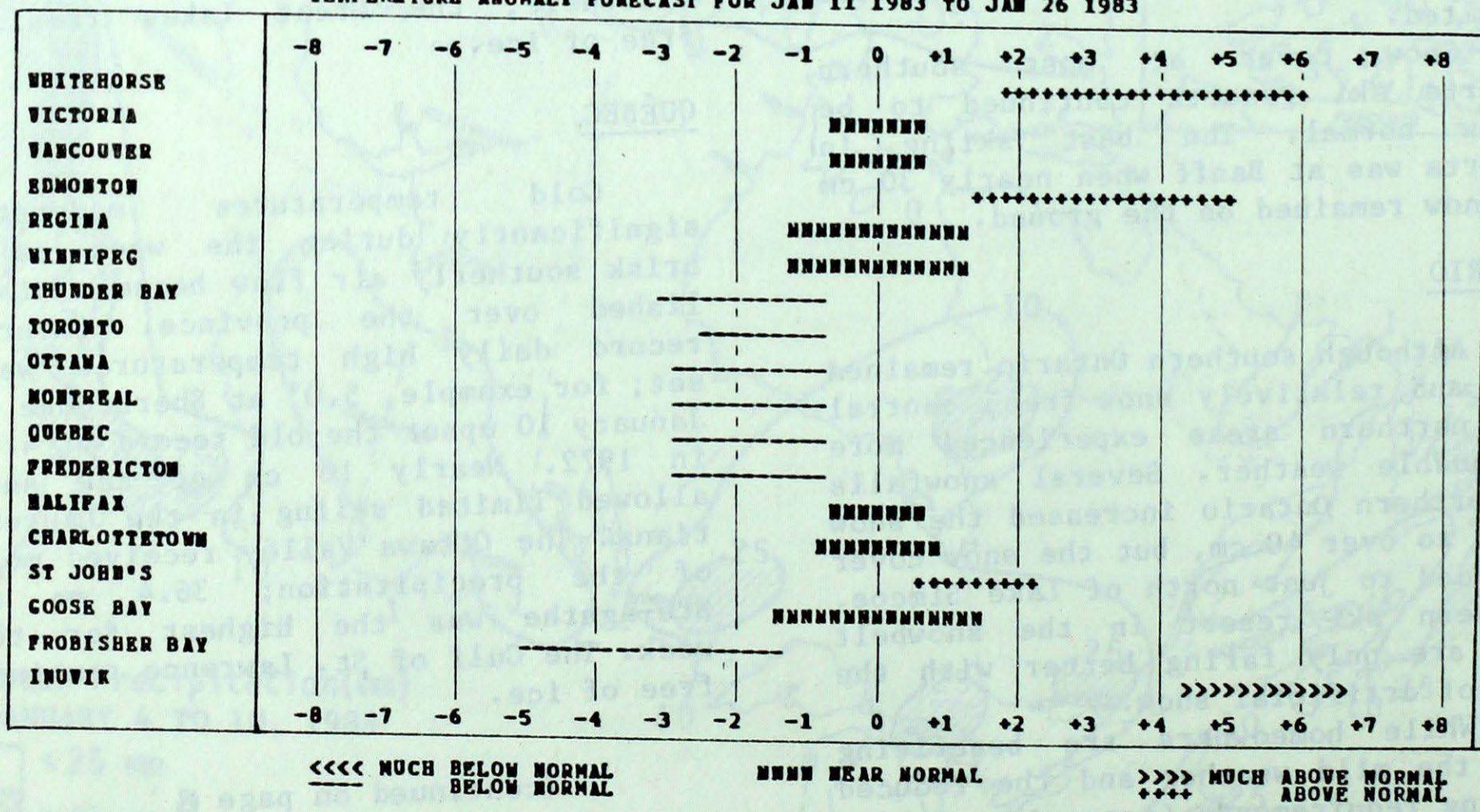
15-day Temperature Anomaly Forecast
from JANUARY 11, 1983

++ much above normal

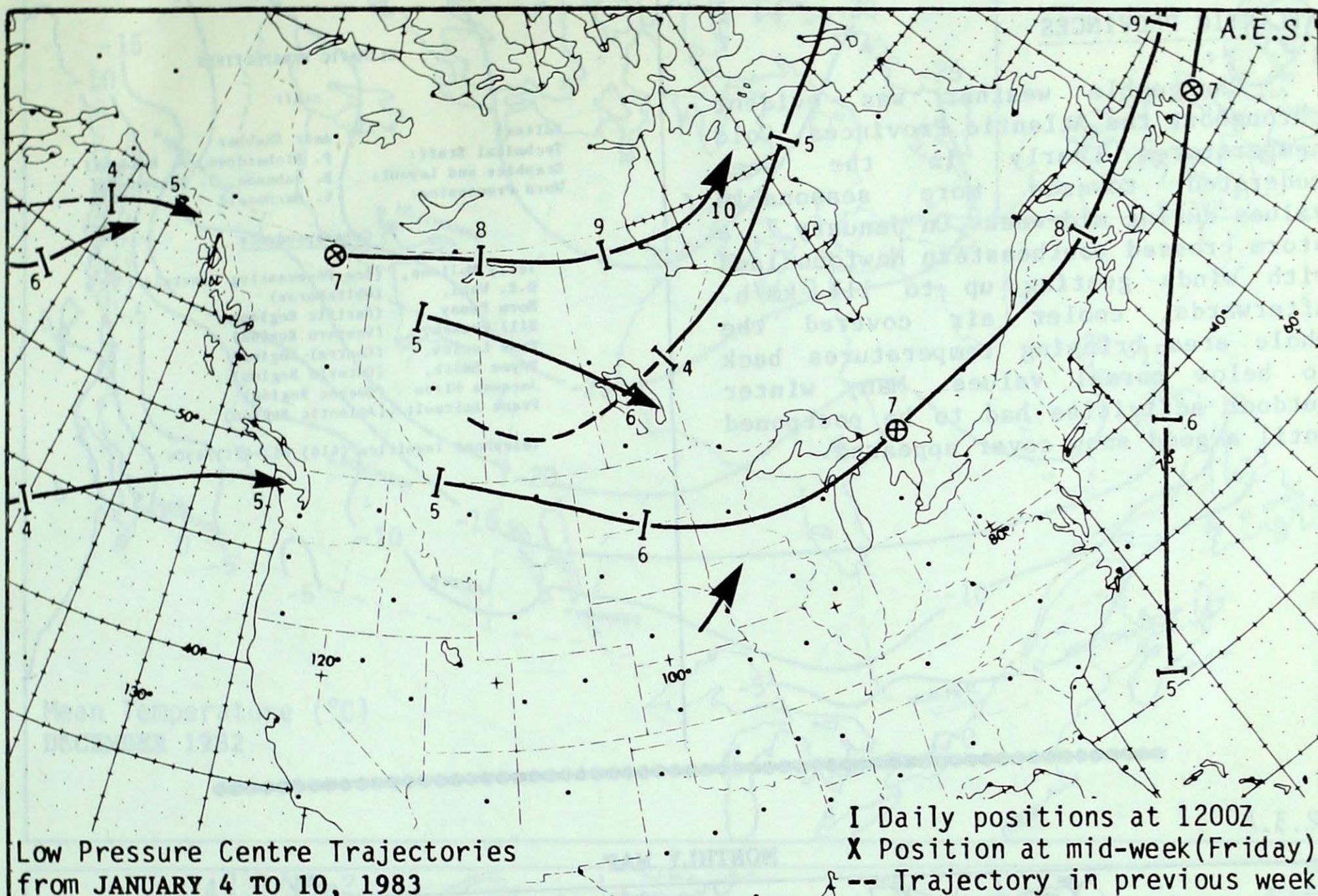
++ much above normal - below normal
+ above normal -- much below normal
N normal

C.M.C. A.E.S.

TEMPERATURE ANOMALY FORECAST FOR JAN 11 1983 TO JAN 26 1983



LOW PRESSURE CENTRE TRAJECTORIES



EXTREMES FOR THE WEEK

	MAXIMUM TEMPERATURE	LOCATION	MINIMUM TEMPERATURE	LOCATION	GREATEST PRECIPITATION	LOCATION
YUKON TERRITORY	-8	TESLIN	-52.7	MAYO	10.1	WATSON LAKE
NORTHWEST TERRITORIES	-9.8	FORT SMITH	-49.1	INUVIK	8.6	BAKER LAKE
BRITISH COLUMBIA	12.9	VICTORIA	-35.2	FORT NELSON	340.6	HOPE
ALBERTA	9.4	CALGARY	-40.0	HIGH LEVEL	8.6	ROCKY MOUNTAIN HOUSE
SASKATCHEWAN	4.5	SWIFT CURRENT	-35.8	CREE LAKE	12.0	COLLINS BAY
MANITOBA	3.6	DAUPHIN	-36.3	CHURCHILL	8.6	CHURCHILL
ONTARIO	7.2	GODERICH	-35.8	MOOSONEE	37.1	TRENTON
QUEBEC	5.0	SHERBROOKE	-39.8	NITCHEQUON	36.4	STE AGATHE DES MONT
NEW BRUNSWICK	5.8	SAINT JOHN	-24.4	CHARLO	10.7	CHARLC
NOVA SCOTIA	7.5	SABLE ISLAND	-21.8	TRURO	73.0	SABLE ISLAND
PRINCE EDWARD ISLAND	3.0	CHARLOTTETOWN	-19.8	CHARLOTTETOWN	8.6	CHARLOTTETOWN
NEWFOUNDLAND	7.0	ARGENTIA VTHS	-36.5	CHURCHILL FALLS	46.2	ST LAWRENCE

Shaded areas - above normal
2.3.A

(continued from page 3)

ATLANTIC PROVINCES

Changeable weather was evident throughout the Atlantic Provinces. Cold temperatures early in the week moderated towards more seasonable values during mid-week. On January 7, a storm crossed southeastern Newfoundland with winds gusting up to 111 km/h. Afterwards, cooler air covered the whole area bringing temperatures back to below normal values. Many winter outdoor activities had to be postponed until a good snow cover appeared.

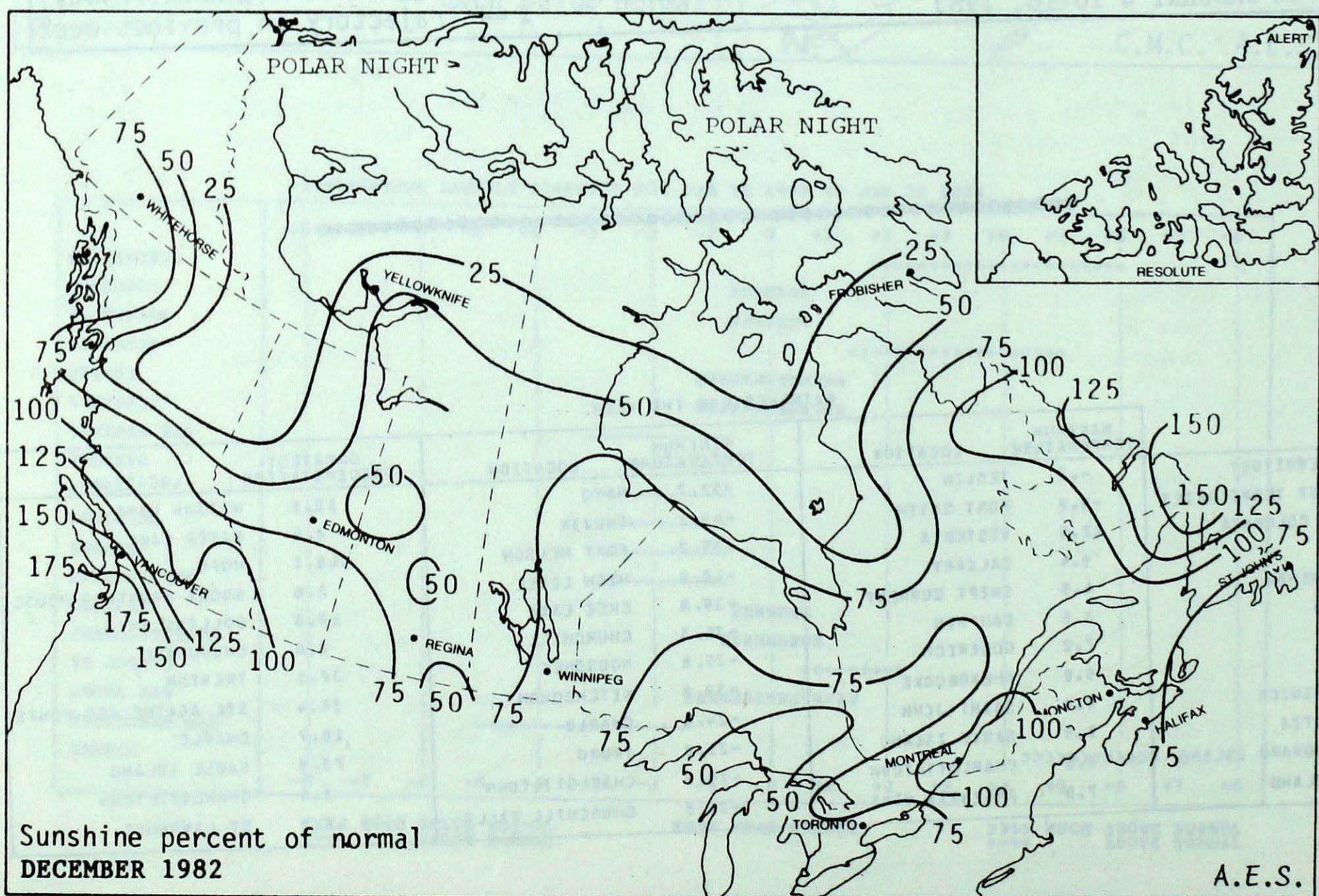
CLIMATIC PERSPECTIVESStaff

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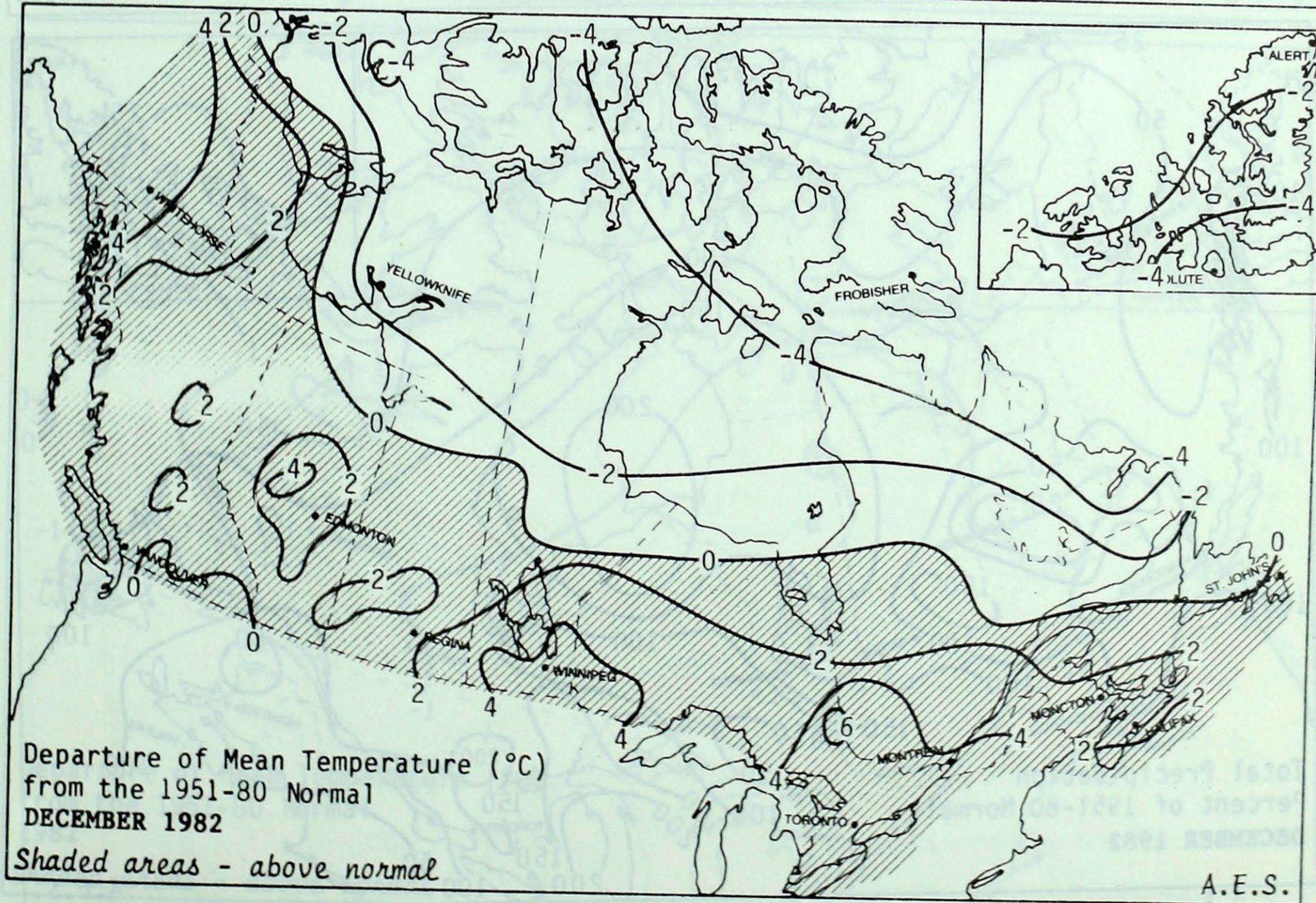
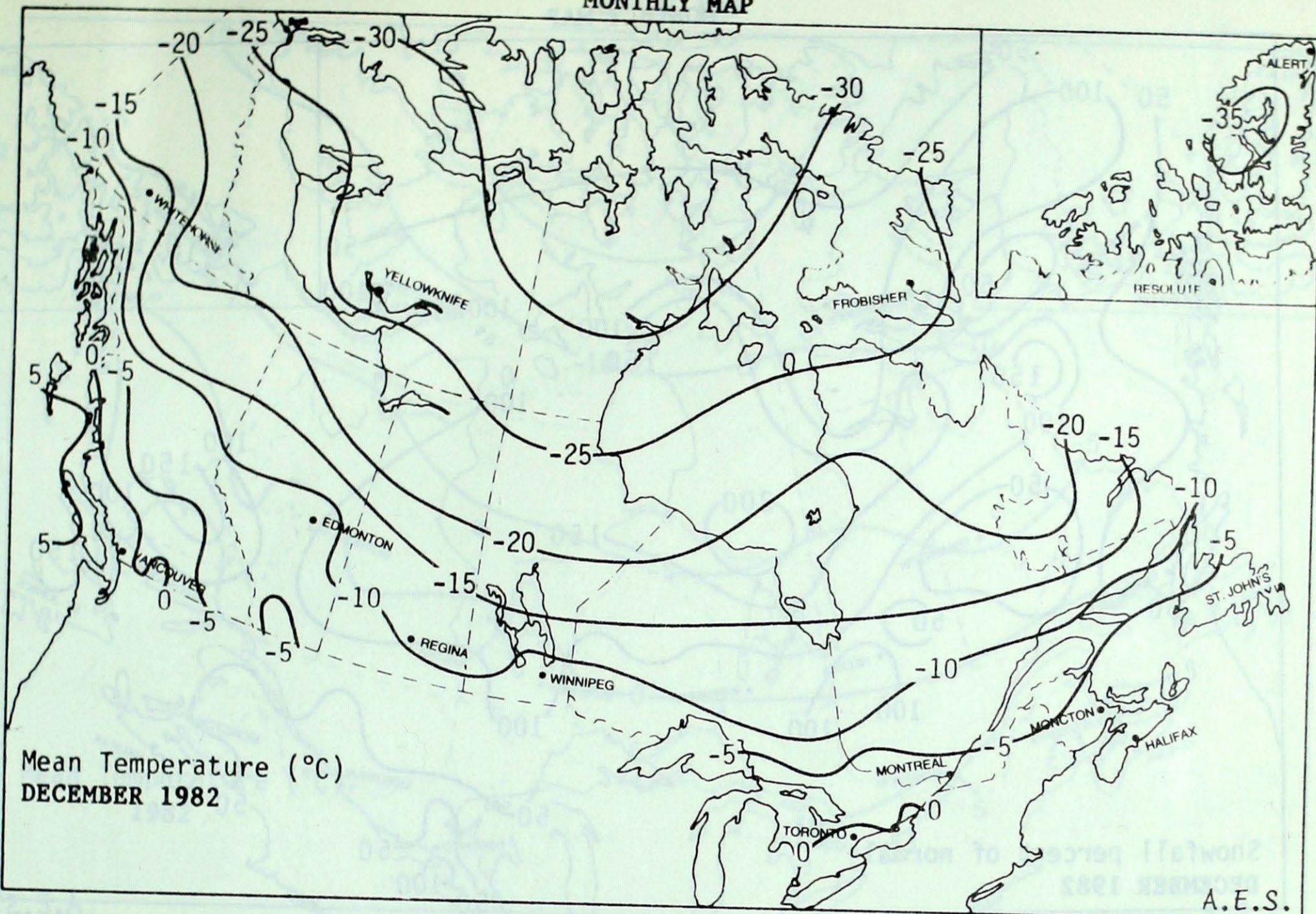
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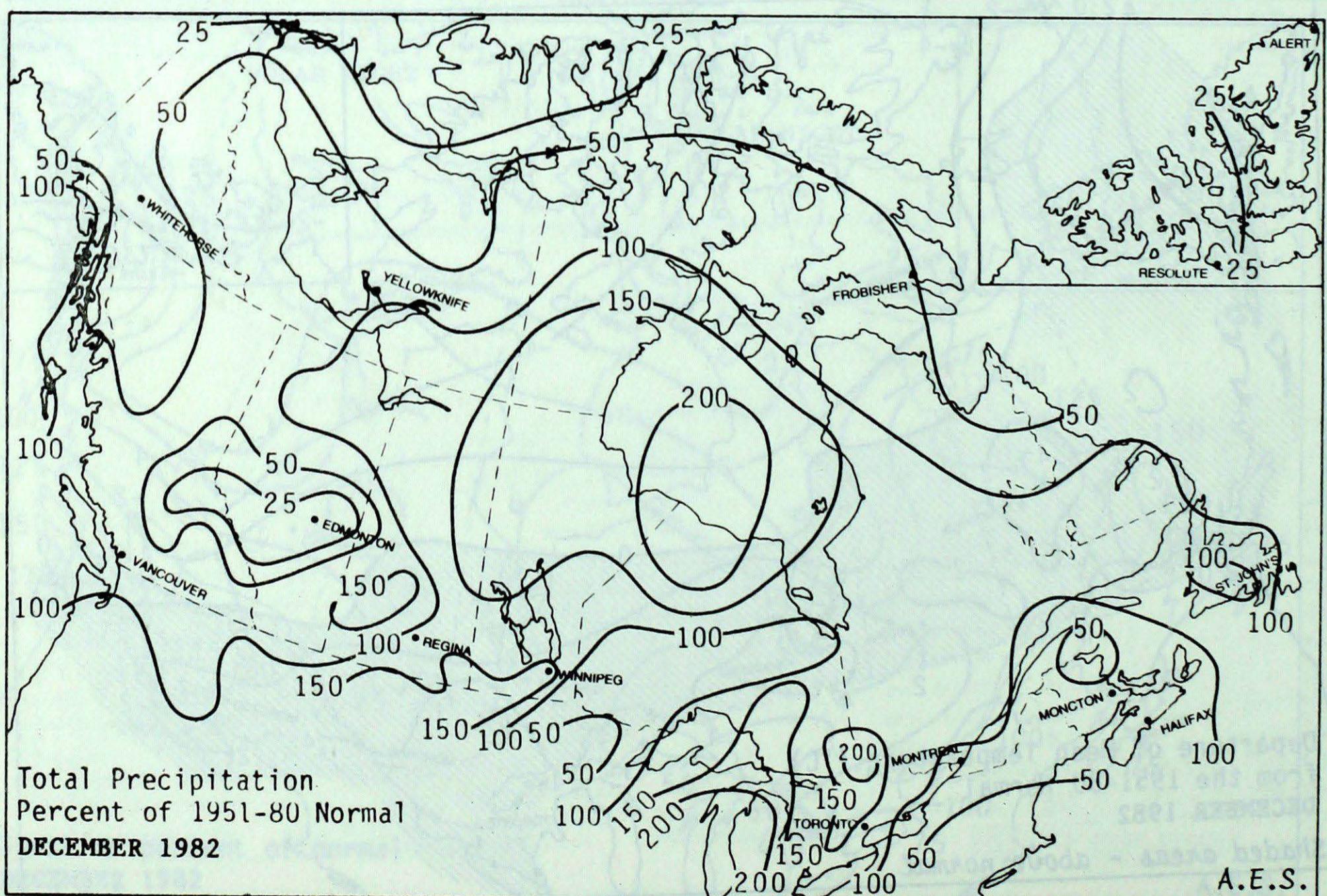
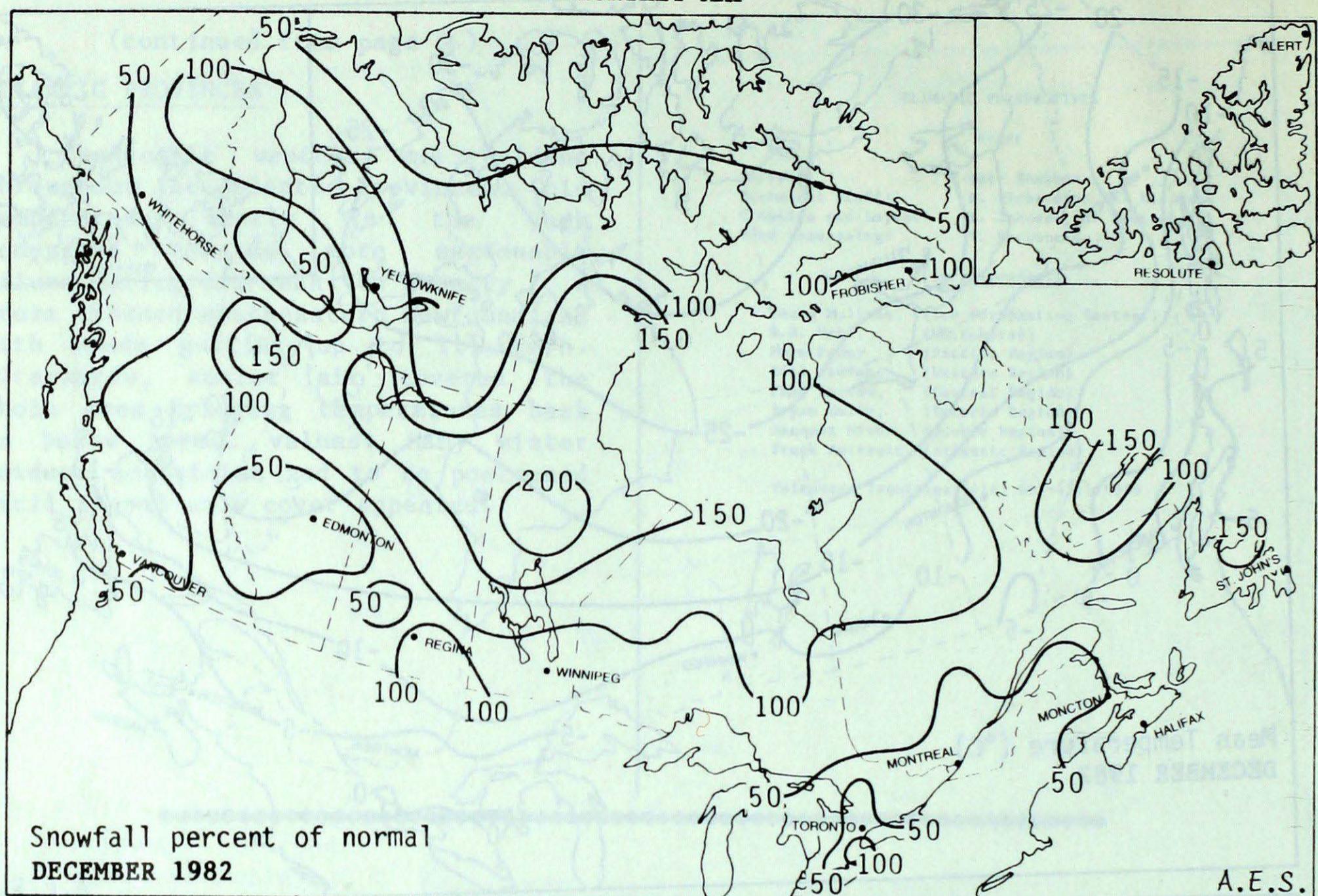
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MONTHLY MAP

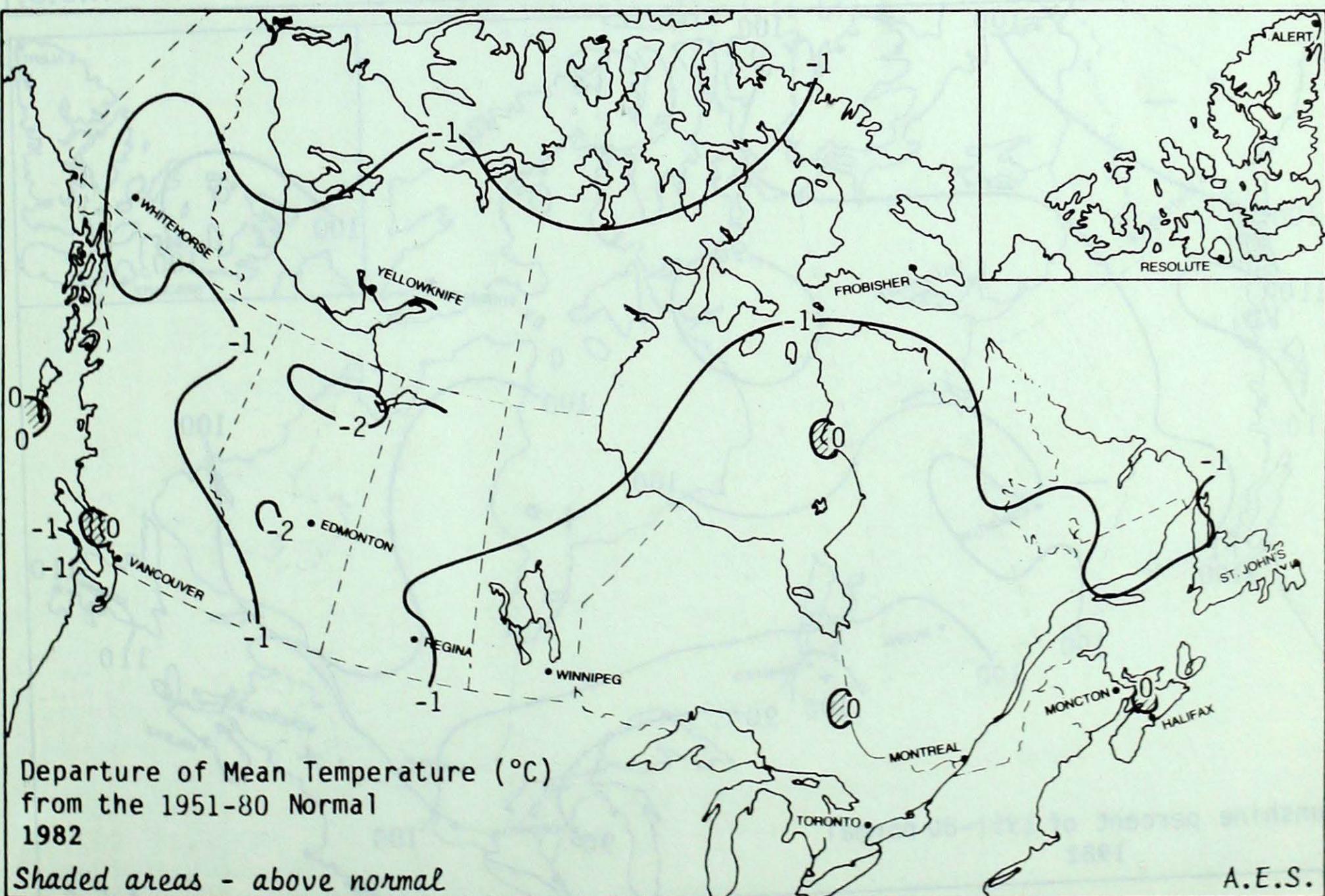
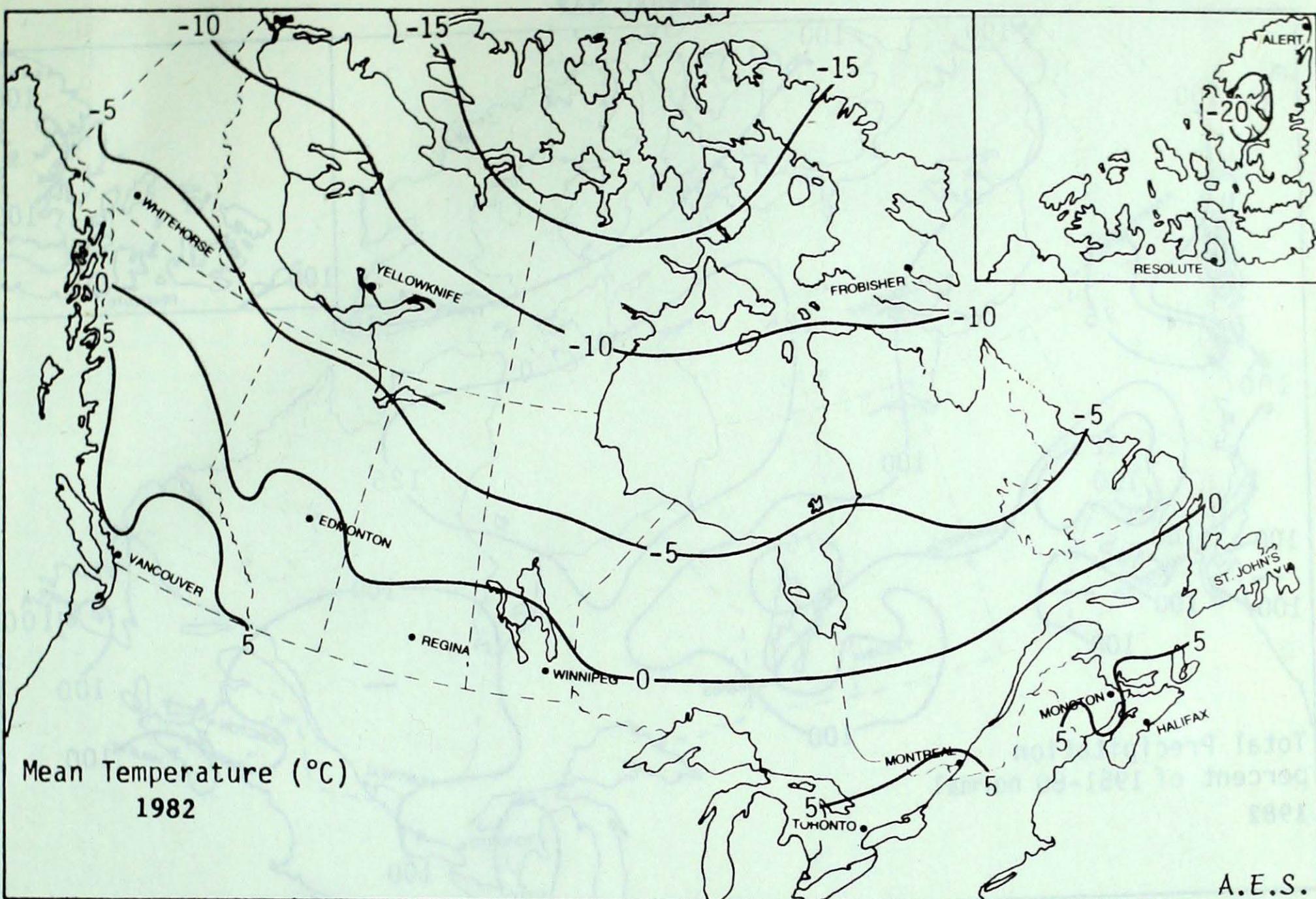
MONTHLY MAP



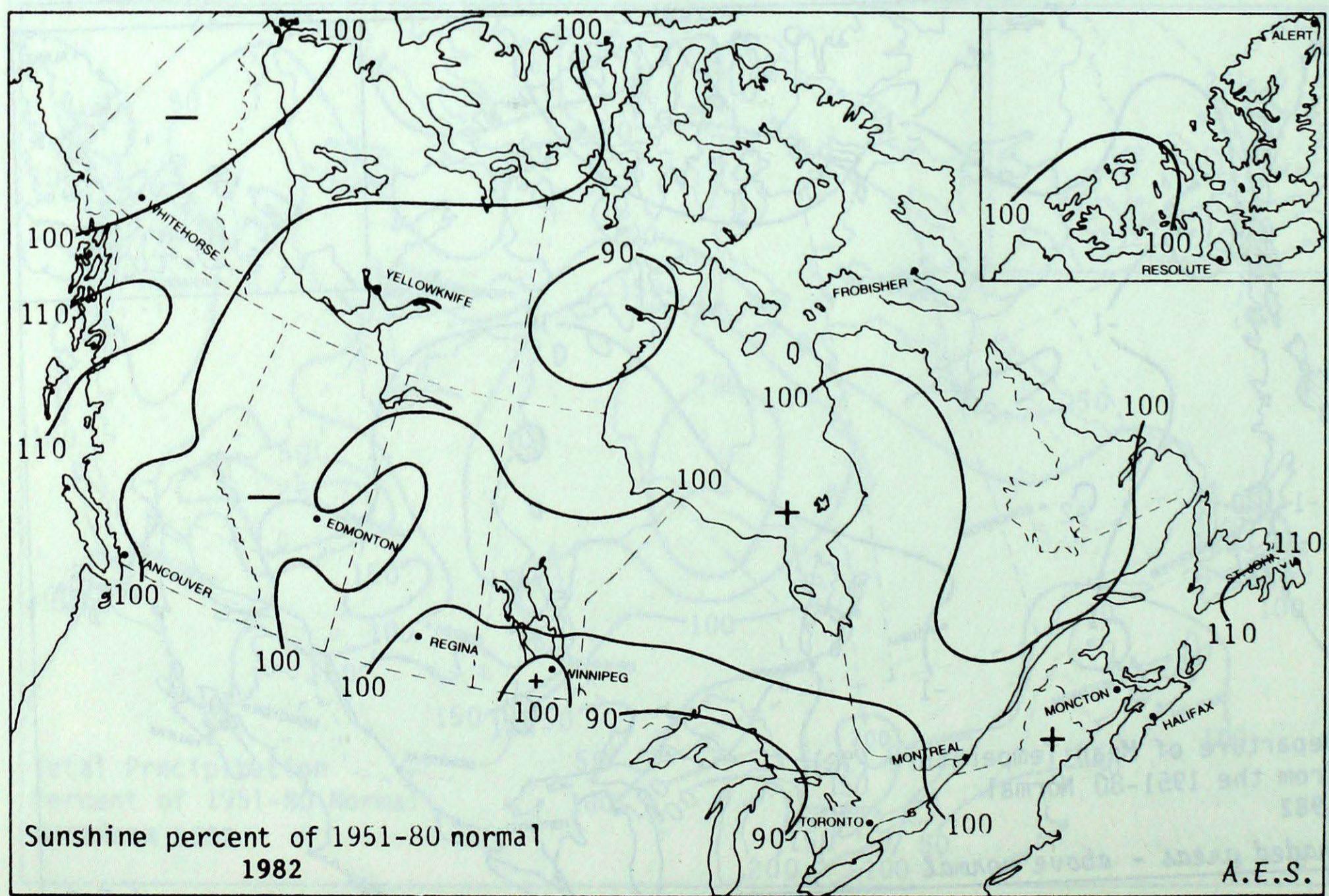
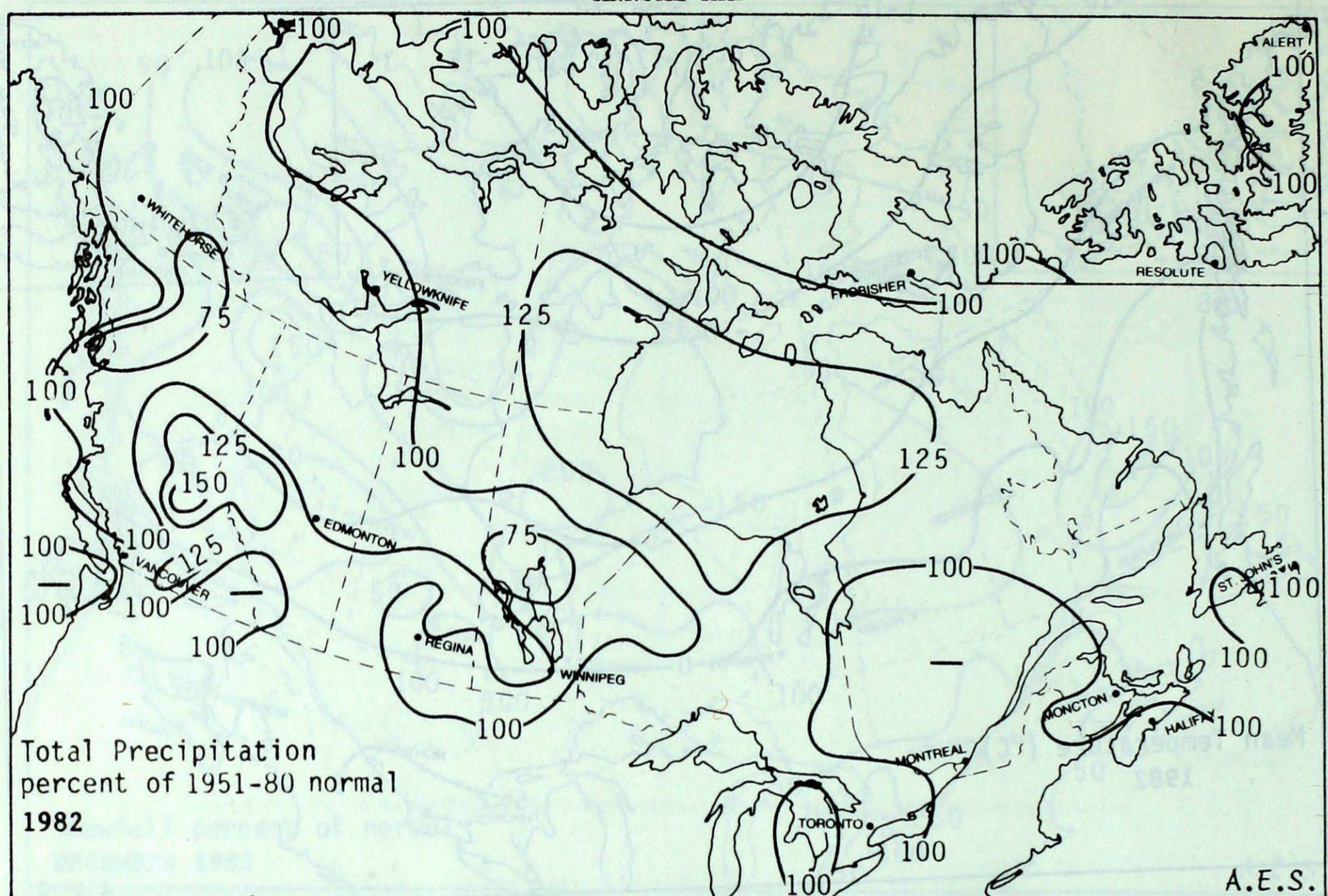
MONTHLY MAP



ANNUAL MAP



ANNUAL MAP



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TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. JANUARY 11, 1983

Station	Temperature (°C)				Precip. (mm)	
	Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal
YUKON						
Burwash	-33	-8	-18	-50	1.1	-3.9
Dawson	-40	-12	-22	-51	8.2	2.9
Faro	M	X	-6	-38P	M	X
Komakuk Beach	M	M	-23P	-41	0.0	-0.1
Mayo	-35	-9	-19	-53	8.6	2.1
Shingle Point	-33	-6	-24	-41	0.0	-3.0
Teslin	M	X	-1	-41P	M	X
Watson Lake	-21	3	-14	-41	10.1	2.0
Whitehorse	-27	-9	-10	-45	6.8	2.8
NORTHWEST TERRITORIES						
Cape Parry	-33	-31	-25	-40	M	M
Cape Young	-33	-4	-23	-42	0.4	-0.1
Clinton Point	-31	-3	-25	-38	2.0	1.3
Coppermine	-31	-2	-22	-43	1.0	-1.7
Fort Reliance	-26	3	-14	-38	6.5	2.1
Fort Simpson	-30	1	-22	-40	5.8	1.3
Fort Smith	-24	3	-10	-35	5.7	1.5
Hay River	-27	-1	-18	-35	4.9	-0.8
Inuvik	-36	-4	-25	-49	6.1	2.2
Lady Franklin Point	M	M	-25P	-40	2.0	2.0
Nicholson Peninsula	M	M	-28P	-43	0.0	-0.4
Norman Wells	-34	-5	-23	-44	4.4	-0.1
Port Radium	M	X	-23P	-34P	M	X
Robertson Lake	M	X	-21P	-41P	M	X
Tuktoyaktuk	M	M	-26P	-44	1.2	0.3
Yellowknife	-28	0	-16	-37	3.8	0.7
Baker Lake	-32	0	-20	-41	8.6	7.5
Coral Harbour	-30	-1	-18	-39	2.2	-0.1
Ennadai Lake	M	M	-16P	-36P	M	M
Jenny Lind Island	M	M	-22P	-41	M	M
Pelly Bay	-35	-5	-25	-43	0.0	-0.9
Rankin Inlet	-30	X	-17	-39	6.0	X
Shepherd Bay	M	M	-22P	-45	2.3	2.1
Broughton Island	M	M	-27P	-39P	M	M
Cape Dorset	-28	X	-20	-35	M	X
Cape Dyer	M	M	-29	-42P	M	M
Cape Hooper	M	M	-28	-35P	M	M
Clyde	-35	9	-28	-42	0.6	-2.1
Dewar Lakes	M	M	-39P	-40	0.0	-0.7
Probisher Bay	-34	-9	-24	-42	2.2	-2.8
Longstaff Bluff	M	M	-32P	-42	0.0	-0.6
Pond Inlet	-38	X	-29	-43	0.0	X
Alert	-35	-2	-26	-39	0.6	-1.3
Eureka	-39	3	-27	-47	0.0	-0.4
Gladman Point	M	M	-21P	-46	5.0	3.7
Hall Beach	-36	-6	-28	-42	0.0	-2.7
Mackar Inlet	M	M	-26P	-40	3.2	2.7
Resolute	-35	-3	-27	-40	0.0	-0.7
Byron Bay	M	M	-24P	-42	0.0	-0.1
Cambridge Bay	-36	-3	-24	-42	M	M
Mould Bay	-37	3	-32	-44	M	M
Sachs Harbour	M	M	-25P	-37	M	M
BRITISH COLUMBIA						
Abbotsford	6	4	12	2	168.0	119.8
Alert Bay	5	2	10	1	91.6	42.1
Amphitrite Point	8	X	11	4	208.9	X
Blue River	M	X	3P	-5P	M	X
Bull Harbour	6	2	11	2	114.8	54.6
Burns Lake	-6	X	4	-17	M	X
Cape Scott	6	3	10	2	94.3	32.4
Cape St James	6	2	9	1	68.6	32.0
Clinton	M	X	2P	-8P	M	X
Comox	7	4	11	3	36.0	-15.1
Cranbrook	-1	11	6	-9	4.4	-6.5
Dease Lake	-13	6	2	-35	7.8	0.7
Estevan Point	M	M	10P	3	M	M
Ethelda Bay	4	X	9	0	M	X
Fort Nelson	-24	0	-16	-35	1.8	-3.8
Port St John	-12	4	6	-32	3.4	-4.2
Hope	6	X	12	0	340.6	X
Kamloops	0	5	7	-7	13.9	4.2
Langara	4	1	9	0	67.5	29.6
Lytton	4	11	12	-2	22.8	10.2
Mackenzie	-5	X	2	-17	M	X
McInnes Island	6	4	10	3	M	M
Nanaimo	M	X	M	M	M	X
Penticton	2	4	9	-4	30.9	22.8
Port Alberni	6	X	12P	2	0.0	X
Port Hardy	6	3	11	2	116.0	54.9
Prince George	-2	8	5	-9	8.9	-5.9
Prince Rupert	4	6	10	-1	96.9	46.2
Puntzi Mountain	M	X	OP	-19P	M	X
Quesnel	-2	8	6	-7	10.0	-3.8
Revelstoke	-0	10	3	-4	68.9	43.7
Sandspit	4	2	10	-1	48.4	11.2
Smithers	-4	6	4	-10	M	M

Station	Temperature (°C)				Precip. (mm)	
	Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal
Stewart	1	X	4	-3	M	X
Terrace	0	6	5	-5	53.9	19.9
Vancouver	7	4	12	2	79.3	46.6
Victoria	8	4	13	4	91.6	61.6
Williams Lake	-2	8	4	-8	8.6	-4.9
ALBERTA						
Banff	-3	7	4	-11	M	M
Calgary	-3	7	9	-19	6.0	2.3
Cold Lake	-11	7	3	-30	1.6	-5.1
Coronation	-8	7	8	-22	M	M
Edmonton Intl	-7	11	5	-23	0.2	-4.9
Edmonton Namao	-6	10	4	-24	0.0	-4.9
Edson	-8	9	6	-22	3.2	-5.8
Fort Chipewyan	-21	6	-5	-35	5.6	0.5
Fort McMurray	-15	6	-2	-33	4.0	-0.7
Grande Prairie	-9	7	6	-28	6.2	-1.6
High Level	-23	8	-13	-40	2.1	-2.8
Jasper	-3	8	5	-15	5.5	-3.3
Lethbridge	0	8	9	-16	6.7	2.4
Lloydminster	-10	X	3	-29	0.0	X
Medicine Hat	-2	9	6	-14	8.5	4.5
Peace River	-14	7	4	-34	0.5	-3.9
Red Deer	-8	7	6	-21	7.2	3.2
Rocky Mountain House	-7	5	8	-21	8.6	4.0
Slave Lake	-11	9	6	-27	0.0	-7.6
Whitecourt	-8	8	4	-24	0.6	-5.9
SASKATCHEWAN						
Broadview	-8	X	4	-18	0.4	X
Buffalo Narrows	-15	10	-1	-30	0.6	-5.0
Collins Bay	-21	X	-6	-34	12.0	X
Cree Lake	-18	X	-4	-36	3.5	X
Eastend	M	X	1P	-15	M	X
Elbow	-9	X	3	-25	M	X
Estevan	-7	7	4	-19	7.6	4.9
Hudson Bay	-9	11	0	-17	M	M
Kindersley	-9	8	3	-24	0.0	-3.9
La Ronge	-13	13	1	-32	0.9	-3.1
Meadow Lake	-13	X	3	-34	0.6	X
Moose Jaw	-6	8	4	-21	5.0	1.5
Nipawin	-10	X	0	-29	1.2	X
North Battleford	-12	5	-1	-29	0.0	-4.1
Prince Albert	-10	10	1	-29	0.6	-3.7
Regina	-9	7	3	-23	2.2	-0.8
Rockglen	M	X	4P	-10P	M	X
Saskatoon	-10	8	-1	-27	M	M
Swift Current	-5	8	5	-22	5.6	