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A WEEKLY REVIEW OF CANADIAN CLIMATE

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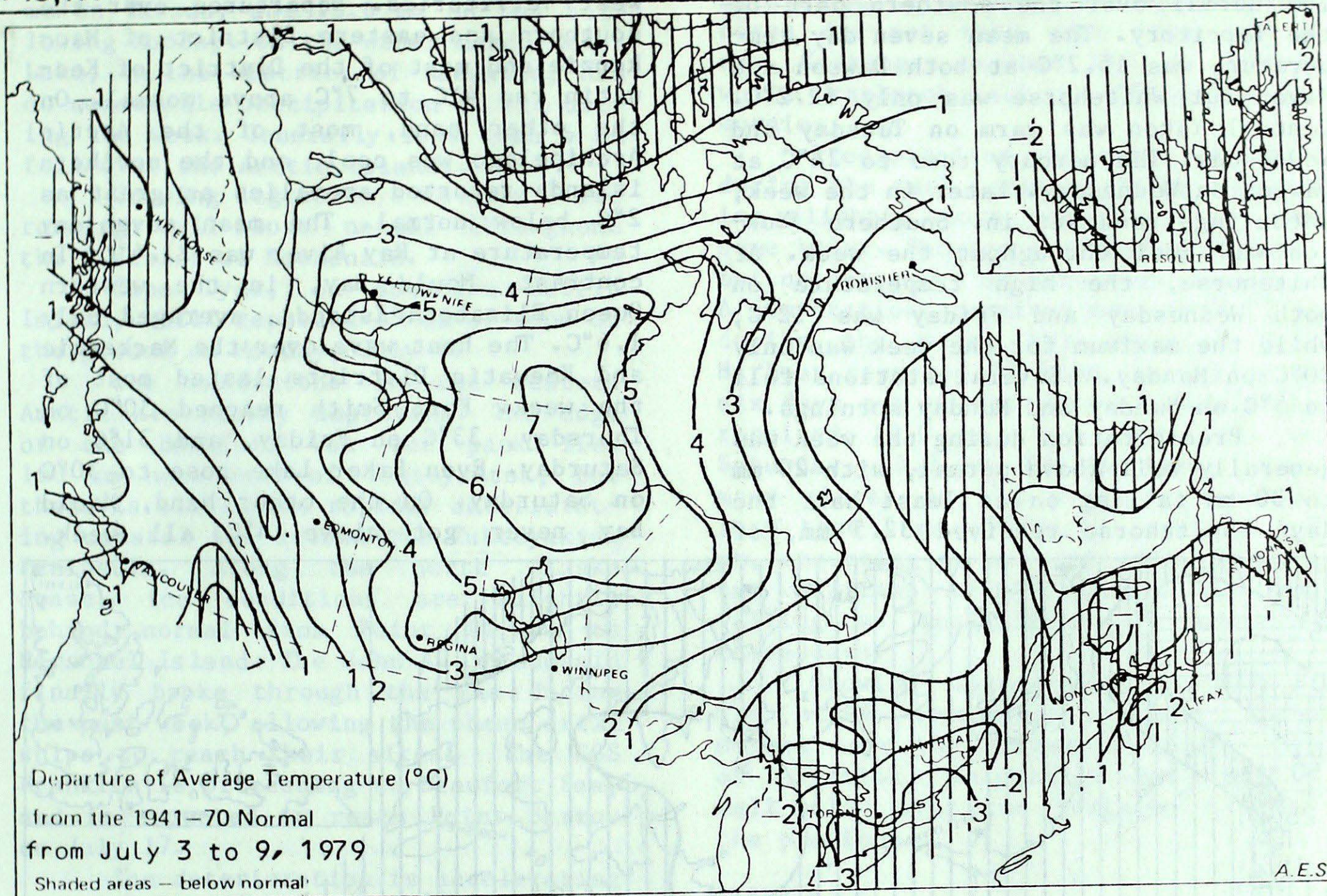
CLIMATE IN CIRCULATING PERSPECTIVES

THE CANADIAN CLIMATE CENTRE,
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JULY 13, 1979

(Aussi disponible en français)

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WEATHER HIGHLIGHTS FOR THE WEEK - JULY 3 - 9, 1979

Warm and dry over the Prairies, but cool and dry over
much of Eastern Canada

Mean temperatures averaged well-above normal over the Prairies and Continental Northwest Territories. Over southern Ontario, southern and eastern Quebec, most of the Atlantic Provinces, and the high Arctic islands, temperatures averaged below normal.

Most of Canada was relatively dry during the week. The major wet areas were southern Yukon, extreme southwestern Ontario, northern and eastern Quebec, Labrador, and parts of the eastern Maritimes.

Agricultural conditions were generally very good across Canada, but a few areas were suffering from lack of rain and low ground moisture. Parts of extreme southern Alberta, in particular, were suffering from a serious drought. Other areas of Alberta were plagued with a rash of fire blight and infectious disease affecting ornamental trees. Some frost damage to Indian corn was reported in the Eastern Townships of Quebec.

The dry weather of the past week

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

or two has caused an outbreak of forest fires in many scattered areas of the country. Hardest hit regions are northern Alberta, northern Manitoba, northwestern Ontario and eastern Newfoundland.

YUKON

Temperatures averaged near normal over central Yukon, but 1°C to 2°C below normal over the southern part of the Territory. The mean seven day temperature was 15.2°C at both Dawson and Mayo, but Whitehorse was only 12.2°C. Central Yukon was warm on Tuesday and Wednesday. The mercury rose to 28°C at Dawson on Wednesday. Later in the week, a cooling trend set in. Southern Yukon was cool throughout the week. At Whitehorse, the high temperature on both Wednesday and Friday was 12°C, while the maximum for the week was only 20°C on Monday. Several stations fell to 5°C on Sunday and Monday mornings.

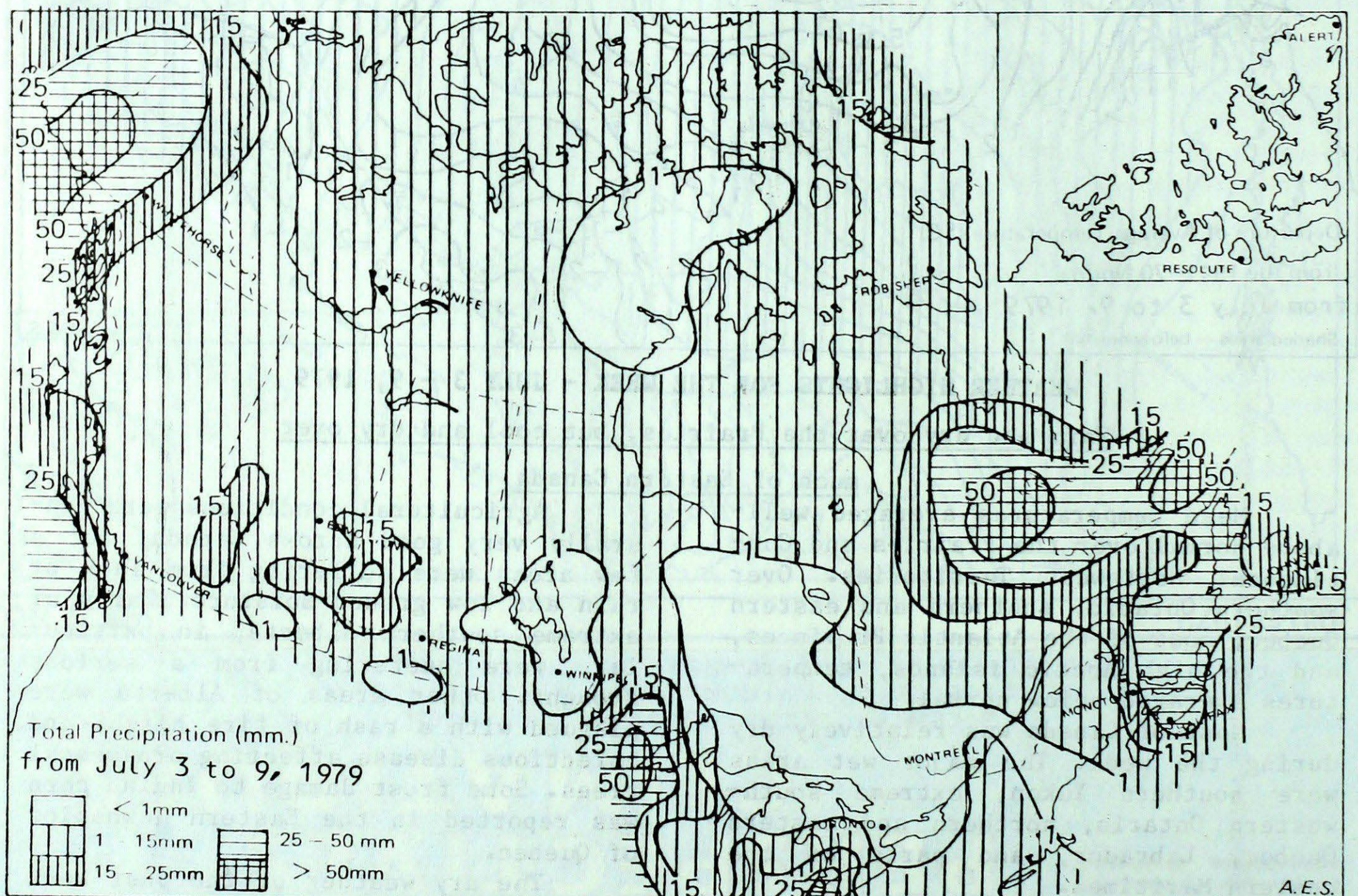
Precipitation during the week was generally well above normal, with 20 mm to 30 mm falling on at least half the days. Whitehorse received 32.5 mm, of

which 17.4 mm fell on Wednesday.

Growing degree-days to July 7 are still averaging near normal over central Yukon, but are well below normal over the extreme southern part of the Territory.

NORTHWEST TERRITORIES

Temperatures averaged well above normal over all of continental Northwest Territories. Departures over the southern and eastern District of Mackenzie and most of the District of Keewatin ran 4°C to 7°C above normal. On the other hand, most of the Arctic Archipelago was cool, and the northern islands reported anomalies as great as 2°C below normal. The mean seven day temperature at Hay River was 21.4°C. In contrast, Mould Bay, in the western Queen Elizabeth Islands, averaged only 1.6°C. The heat wave over the Mackenzie and Keewatin Districts lasted most of the week. Fort Smith reached 30°C on Thursday, 33°C on Friday, and 31°C on Saturday. Even Baker Lake rose to 30°C on Saturday. On the other hand, Mould Bay never got above 4°C all week.



Nighttime temperatures were still generally at or below the freezing point over most of the northern islands. Cape Dyer reported -6°C on Saturday morning.

Precipitation was quite variable across the Territories. In the District of Mackenzie heavy showers fell on Tuesday at most stations. Fort Smith received 31.4 mm during the week, 17.8 mm on Tuesday and 13.6 mm on the following Monday. On the other hand, Baker Lake, in the District of Keewatin, had no measurable precipitation at all during the week. Generally less than 5 mm fell over the Arctic islands.

Growing degree-days to July 7 are running well above normal throughout the District of Mackenzie.

Cape Dyer, on southern Baffin Island, still reported 59 cm of snow on the ground on Monday, July 9.

Ice conditions in the western Arctic are slowly improving. The edge of the Beaufort Sea ice pack lies 160 km northwest of Tuktoyaktuk, but there is still some rapidly deteriorating coastal ice around the Tuktoyaktuk Peninsula. Along the north Alaska coast, ice conditions are slightly behind normal from Point Barrow to Herschel Island. The John A. Macdonald finally broke through the ice during the past week, allowing the three drill ships to reach their sites. The CGS Franklin is proceeding to Beaufort Sea, and is expected to reach Point Barrow on July 17.

Ice deterioration is accelerating on Hudson Bay, where less than 50% is ice-covered. The ice mostly confined to central and southern regions. James Bay is ice free, and there is easy access for shipping to Churchill.

The Pierre Radisson is in Ungava Bay assisting shipping to Fort Chimo, P.Q., while the Norman McLeod Rogers is proceeding along the Labrador Coast, where drill sites are open to 60°N . Open leads have appeared along the Greenland coast of Baffin Bay up to the latitude of Lancaster Sound. This condition is slightly ahead of schedule for this time of year. Lancaster Sound and Barrow Strait are still solid ice, but deterioration is expected in the near future.

BRITISH COLUMBIA

Temperatures generally averaged within 1°C of normal over the province, but some stations in northern B.C. and also in the Lower Fraser Valley were 1°C to 2°C above normal. The extreme southeastern interior was about 1°C below normal. The mean seven day temperature at Kamloops was 21.0°C , while Estevan Point was only 13.3°C . Temperatures did not vary much from day to day. Castlegar reached 33°C on Friday, while Cranbrook fell to 1°C on Tuesday morning.

Precipitation was quite variable during the week, some stations receiving slightly above normal amounts and some below. Showers occurred most days, but no excessive amounts were recorded. A few stations received more than 20 mm during the week. For example, Bull Harbour reported 23.5 mm, occurring on six days out of the seven. Revelstoke received 18.0 mm, but most fell on Saturday, 16.2 mm. On the other hand, many places in the province received less than 5 mm. Victoria received 4.7 mm, occurring on one day only, Monday, but Williams Lake reported 1.8 mm, falling as insignificant showers on three days.

Growing degree-days to July 7 are still averaging slightly above normal over the extreme southern part of British Columbia, but mostly well below over the northern half of the province.

ALBERTA

Temperatures were on the warm side of normal over practically all of Alberta during the week. Means were near normal in some foothills and southern Alberta regions, but most of the central and northern parts of the province were running 2°C to 4°C above normal for the week. The mean seven day temperature at Medicine Hat was 20.9°C , but even Fort Chipewyan and Fort McMurray in the far north reported means of 20.7°C . Edson, in contrast, was only 15.2°C . Friday was generally the warmest day, with even stations in northern Alberta reporting temperatures in the thirties. Fort Chipewyan reached 34°C on that day. In contrast, there

were cool nights in the foothills. Edson fell to the freezing point Tuesday morning.

Precipitation was generally very light during the week. Peace River and Lethbridge each reported no measurable rain. Some stations reported 10 mm to 20 mm in heavy showers on Friday or Saturday, but Fort Chipewyan reported 18.8 mm on Tuesday and 7.8 mm on Thursday, and Fort McMurray received 30.0 mm on Sunday.

Growing degree-days to July 7 are running well above normal over extreme northern Alberta, but mostly normal to slightly below normal over the remainder of the province.

Alberta Agriculture reports that an extremely serious, short term drought situation threatens dry land crops in the area bounded by Calgary-Lethbridge-Brooks. The occasional light shower in the area did little to quench the thirst of the parched land. In northern and central regions, crops are in excellent condition considering the late seeding in many areas due to the wet, cool spring.

The warm weather has sparked a rash of fire blight and infectious disease, which threatens ornamental trees. This scourge of the Prairie garden is characterized by blackened blossoms, leaves, new shoots and young fruit. The disease is highly contagious, and is caused by bacteria, activated by warm, humid conditions. Fire blight can destroy apple, crab apple, mountain ash, hawthorne, plum, choke-cherry, saskatoon, cotoneaster and spirea.

A combination of tinder dry forests, lightning with no rain, and brisk winds has created some of the most volatile fire conditions to threaten Alberta's woodlands in at least 10 years. The fire hazard, rated high to extreme throughout the province, compares to conditions experienced during the million acre holocaust in 1968. Twenty-six forest fires were burning in the province on Thursday, 15 under control, three under partial control, and eight out of control. The toll this year is a staggering 174000 hectares compared to 5600 hectares burned by the same date in 1978. The Athabasca Forest

in the extreme northeast corner of the province is experiencing the worst fire problems. The most persistent fire has consumed over 15000 hectares of pine stands, black spruce and muskeg. Four hundred and fifty men were battling the inferno last week. Valuable timber was being consumed in the Lac la Biche Forest, where a 12000 hectare fire raged. About 300 fire fighters had the fire under partial control.

The explosive forest fire conditions have caused the Alberta forestry service to impose a ban on all open camp fires in the Bow-Crow and Rocky-Clearwater Forests. The ban went into effect at midnight July 6th and will continue until further notice.

SASKATCHEWAN

Temperatures averaged 3°C to 4°C above normal over southern Saskatchewan during the week, but over the northern part of the province, they averaged 5°C to 6°C above normal. Mean temperatures were very uniform over the province. The mean seven day temperature at Regina was 23.0°C, while Buffalo Narrows was 20.7°C. The weekend was generally the warmest period. The mercury rose to 34°C on Sunday at Broadview, Estevan, Regina and Yorkton. Nights were also warm, but Kindersley reported 8°C on Tuesday morning and Cree Lake the same temperature on Wednesday morning.

It was generally dry during the week, most stations receiving less than 10 mm over the seven day period, occurring as light showers on one or two days. Estevan, for example, reported 0.6 mm in a light shower on Tuesday, with no measurable precipitation the remainder of the week. On the other hand, Kindersley recorded 26.7 mm on three days, with 18.6 mm falling on Wednesday, while North Battleford received 18.4 mm on four days, with 16.4 mm falling also on Wednesday.

Growing degree-days to July 7 are running well above normal over northern Saskatchewan, but normal to slightly above over the remainder of the province.

While many areas of Saskatchewan have reported well above rainfall for the three month period, April to June, there have been some exceptions. The

Yorkton-Broadview area has had below normal precipitation, particularly in June. Fortunately, soil moisture levels are not seriously low, due to heavy precipitation and large snowpack last winter. The Macklin area, however, received light winter precipitation, and soil moisture levels are correspondingly low.

MANITOBA

Temperatures averaged 2°C to 3°C above normal over southern Manitoba during the week, but the northern half of the province was 5°C to 7°C above normal. Seven day mean temperatures averaged about 22°C over southern Manitoba, but The Pas was 23.5°C, and even Churchill, with winds blowing mostly off land, averaged 18.9°C. The weekend was generally the warmest period. On Sunday, temperatures rose into the thirties at most stations, and record-high maximum temperatures for the day were reported at Island Lake, The Pas, Thompson, Lynn Lake, Churchill and Gillam. Dauphin reached 36°C and Brandon 35°C. Even Churchill reported 34°C on Saturday, but by Monday cooler air had returned, and the high temperature that day at Churchill was only 13°C. Night-time temperatures were mostly in the teens, but Churchill was 3°C on Tuesday morning.

It was very dry over southern Manitoba. No measurable precipitation was reported during the week at Bissett, Gimli, and Winnipeg. However, Sprague reported 10.9 mm. Some shower activity gave about 10 mm or less precipitation on the weekend to northern Manitoba. Thompson, for instance, reported 10.0 mm, 1.4 mm on Friday and 8.6 mm on Sunday.

Growing degree-days to July 7 are running well below normal over southern Manitoba, but well above over the northern half of the Province.

The three month rainfall, April to June, has been well below normal over southwestern Manitoba. Consequently, soil moisture is diminishing rapidly in this area.

Lightning started several forest fires in northern Manitoba on Monday. There are now two large fires burning out of control, one in the Wrong Lake

area and the other in the Girouard area. Each covers about 4000 hectares.

ONTARIO

Temperatures averaged 1°C to 3°C below normal over southern and eastern Ontario, but over northwestern regions of the province, they were 2°C to 5°C above normal. The mean seven day temperature was 21.3°C at Kenora and 21.1°C at Trout Lake. Windsor, often the warmest place on the province, was 18.8°C. Winds blowing off cold Lake Superior kept Wawa at a chilly 12.4°C. The week began relatively cool over the province. Nighttime temperatures fell to 1°C at Moosonee on Tuesday and Wednesday mornings, Armstrong on Wednesday morning, and Geraldton on Wednesday and Thursday mornings. Much warmer weather reached northern Ontario from the Prairies by the weekend, when most stations reported maxima in the upper twenties or low thirties. Moosonee, for example, reported high temperatures in the teens on Tuesday, Wednesday and Thursday, but the mercury reached 33°C on Saturday, 32°C on Sunday, and 31°C on Monday. Red Lake rose to 34°C on Monday. The warm air was slow to reach southern Ontario. Toronto City finally barely reached normal on Sunday after three consecutive weeks of below normal temperatures. Earlier in the week, record low daily minimum temperatures were set at a number of stations in southern Ontario, including Warton, Hamilton, Kingston and Toronto International Airport.

The week was very dry across Ontario. A large number of stations reported no measurable precipitation or only negligible amounts during the week. There were two main exceptions, however. Showers fell over northwestern regions of the province on Monday. Atikokan received 35.0 mm that day and Pickle Lake 14.2 mm. Another area of rain or showers occurred over Kent and Essex Counties of southwestern Ontario. Windsor reported 6.0 mm on Wednesday, but received 61.2 mm on Monday. This area of heavy precipitation was very local as most of southwestern Ontario remained very dry.

Growing degree-days to July 7

are running below normal over most of southern Ontario and also over north-western Ontario. However, over north-eastern and eastern regions, most stations are reporting above normal values for the time of year.

The recent sunny, cool weather over southern Ontario has been excellent for haying operations. According to a spokesman for the Ontario Federation of Agriculture, growing conditions are adequate. Corn is reported to be near "thigh-high" in the Essex-Kent regions, but diminishes in height to 30 cm to 40 cm east of London. Soybeans are also more advanced in extreme southwestern Ontario.

The Ontario Ministry of Natural Resources report for Monday, July 9, is as follows:

NUMBER OF FIRES AND AREA BURNED
Week of June 25 - July 8

REGION	NUMBER	HECTARES
Northwestern	77	3340
North-central	29	300
PROVINCIAL TOTAL	124	3650

Total season to date

REGION	NUMBER	HECTARES
Northwestern	238	23090
North central	150	11340
Northern	39	160
Northeastern	63	70
Algonquin	96	80
Eastern	44	120
PROVINCIAL TOTAL	637	34860

As of July 9 there were 36 active fires in the province. Although the present situation is normal for the time of year, fuel conditions and forest fire weather indicate that new fire activity is possible in the north-western and north-central regions during the next week.

Possibly the most important environmental problem to surface recently in Ontario is the concern over "acid rain". An all-party committee of the Ontario Provincial Legislature has concluded that acid rain pollution is definitely killing our lakes and should be declared a "national emergency".

After weeks of hearings, evidence

was produced showing that the acid rain has already "killed" 140 Ontario lakes, and threatens 48000 others.

The problem is also threatening Ontario's tourist industry as well as untold amounts of corrosive damage, as the diluted sulphuric and nitric acids fall on roads and buildings. Blame has been placed on both United States industrial pollution and on major Canadian sources, such as smelting operations at Sudbury and thermal-electric generating stations. However, regardless of the initial sources, the drastic effects are documented, and a remedy must be sought immediately.

QUEBEC

Most of southern and central Quebec reported temperatures 1°C to 3°C below normal for the week, but over the remainder of the province, temperatures averaged close to normal for the time of year. The mean seven day temperature at Montreal was 17.3°C, but Inoucdjouac, on the east shore of Hudson Bay, was only 8.6°C. Temperatures were especially chilly during the first part of the week. Record low minimum temperatures were reported Wednesday at Bagotville, 4°C, Quebec City, 5°C, and Montreal, 7°C, and record low maximum temperatures the same day at Val d'Or, when the mercury never rose above 10°C, and Quebec, at 17°C. On Thursday morning, more record low temperatures for the day occurred, when Bagotville touched 1°C, Quebec City, 5°C, and Montreal, 7°C. The same day the mercury at Bagotville only struggled up to 13°C, another record low maximum temperature for the date. During this period, light frost was reported at Lac-Etchemin, Saint-Georges de Beauce, and Theftford Mines. Fort Chimo reported a low of 0°C on Tuesday morning. Temperatures recovered rapidly by the weekend. Roberval reported 30°C on Sunday and 31°C on Monday.

A large part of Quebec reported only light showers during the week. In fact, Quebec City reported no measurable precipitation at all. There were some major exceptions, however. Eastern and northern Quebec reported 10 mm to 30 mm on Tuesday and Wednesday, but

Schefferville reported 25.8 mm on the former day and 17.2 on the later day. This station also recorded rain later in the week, with the seven day total reported at 54.2 mm. Grindstone Island reported 41.8 mm of rain on Thursday as a rare summer Atlantic storm crossed into Newfoundland. Nitchequon was also very wet, 51.8 mm falling during the week.

Growing degree-days to July 7 are running well above normal over most of Quebec. However, the Eastern Townships report below normal values.

The recent dry period has helped haying in the southern and western regions of the province. The recent cool weather has delayed the development of the corn crops. In the Sawyerville-St-Malo area of the Eastern Townships, there was some damage to Indian corn.

MARITIME PROVINCES

Mean temperatures averaged near normal to about 1°C below normal over most of the Maritimes during the week, but in the Annapolis Valley of Nova Scotia, temperatures averaged more than 2°C below normal. The mean seven day temperature at Fredericton was 18.2°C, while Yarmouth was only 14.3°C. Temperatures remained on the chilly side until the weekend. Charlo, N.B., reported a minimum of 4°C on Thursday morning and Greenwood, N.S., the same temperature on Saturday morning. On Thursday, the mercury only reached 12°C at Chatham and Saint John, N.B., and Greenwood and Truro, N.S. By Monday, temperatures had recovered to normal values for the time of year, and most places reported maxima in the upper twenties or low thirties. Fredericton, N.B., reached 30°C on Sunday and 33°C on Monday.

Precipitation was generally light over most of the Maritimes during the week. A few, light showers fell on Tuesday, but on Thursday, a rapidly intensifying disturbance which developed to the south of Nova Scotia brought 20 mm to 40 mm of rain in less than 24 hours to most of Nova Scotia, Prince Edward Island, and eastern New Brunswick. Summerside, P.E.I., received 46.6 mm during the week, of which 42.6

mm fell on Thursday. In contrast, Chatham, N.B., not too far distant, received 0.6 mm of rain on Tuesday and only 0.2 mm on Thursday, for a weekly total of 0.8 mm.

An intense disturbance, very unusual for July, developed south of Nova Scotia on Thursday. It moved northward, crossing Newfoundland, and caused gale force winds over the Gulf of St. Lawrence. Winds were clocked as high as 152 km/h at Grindstone Island in the Magdalen Islands, and some yachts were driven aground at Savage Harbour, P.E.I.

Growing degree-days to July are running well above normal over all of the Maritimes. Agricultural conditions are generally excellent, with a second hay crop likely in Nova Scotia and good corn development. Thursday's heavy rain was welcomed by farmers.

NEWFOUNDLAND AND LABRADOR

Mean temperatures averaged near normal to about 1°C below normal for the week, but over eastern Labrador, temperatures averaged more than 1°C above normal. The mean seven day temperature at Gander was 16.0°C, while at Hopedale, on the Labrador Coast it was only 9.5°C. Over Labrador, temperatures remained generally cool until the weekend. Minimum temperatures on Friday morning reached 1°C at Hopedale and the same value Saturday morning at Cartwright. These same stations earlier in the week reported maximum temperatures as low as 5°C. Goose Bay, which reported a high temperature of only 10°C on Wednesday, rose to 31°C on Sunday, but on Monday the mercury only struggled up to 17°C. Less violent swings of temperature occurred over the Island of Newfoundland. The mercury fell to 3°C at Deer Lake on Thursday morning, while Gander rose to 26°C on Monday afternoon.

The Island of Newfoundland was generally very dry. Gander reported light showers on three days, giving only 8.0 mm over the week. Labrador was very wet, in contrast, with most stations receiving at least 30 mm as showers or rain on frequent days during the week. Cartwright, for example, report-

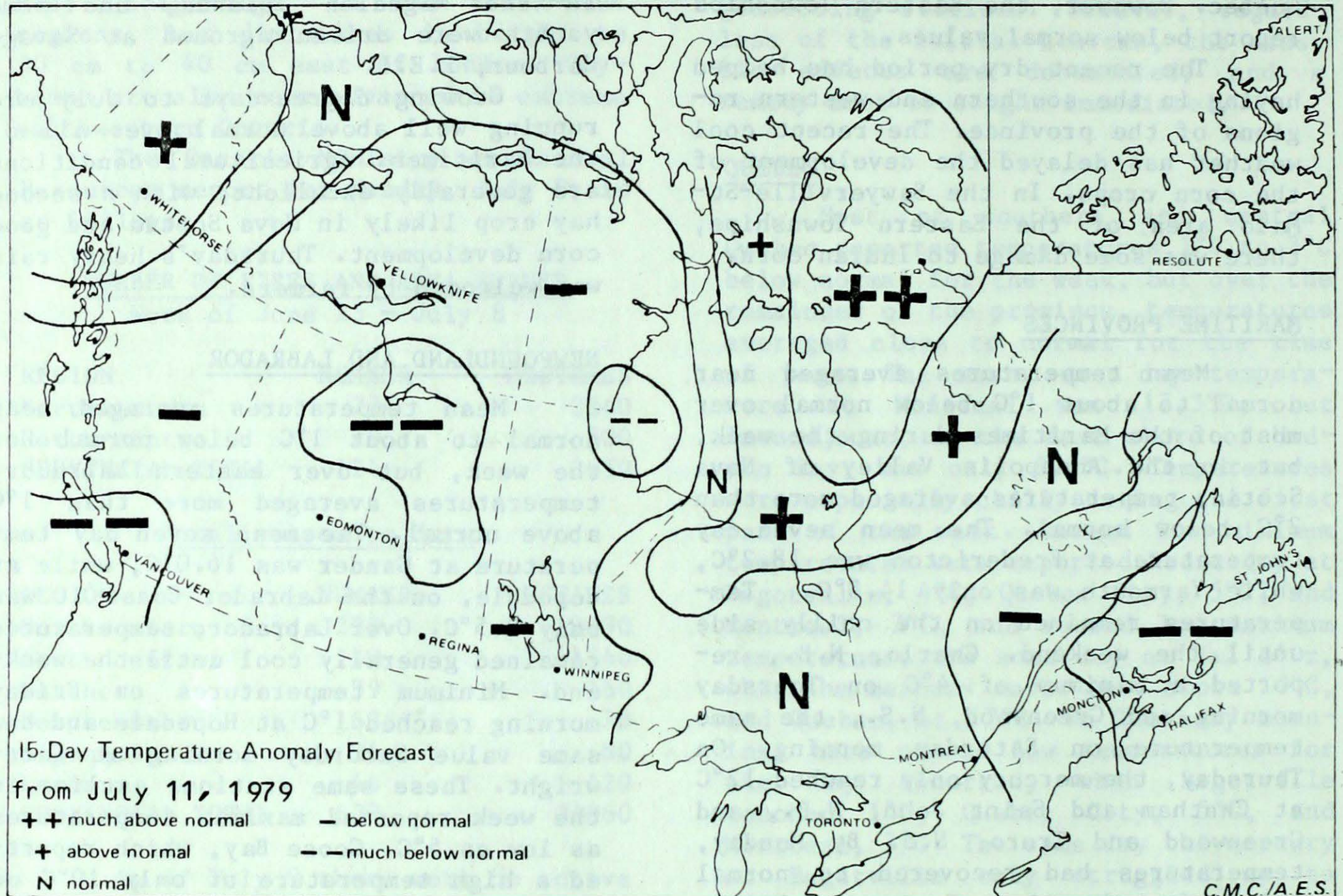
ed precipitation on six days out of seven. Out of the total of 63.7 mm, 28.1 mm fell on Wednesday.

Growing degree-days to July 7 are running well above normal over all of the Island of Newfoundland.

A large forest fire over eastern Newfoundland was out of control at the

end of the week. It was centred about 35 km east of Gander and had destroyed about 16000 hectares of forest. The Trans-Canada Highway was closed several times due to thick smoke, and several cottages and cabins and a sawmill have burned.

15 DAY TEMPERATURE ANOMALY FORECAST



Forecast Method

Analogue technique based on point prediction at 70 Canadian stations.

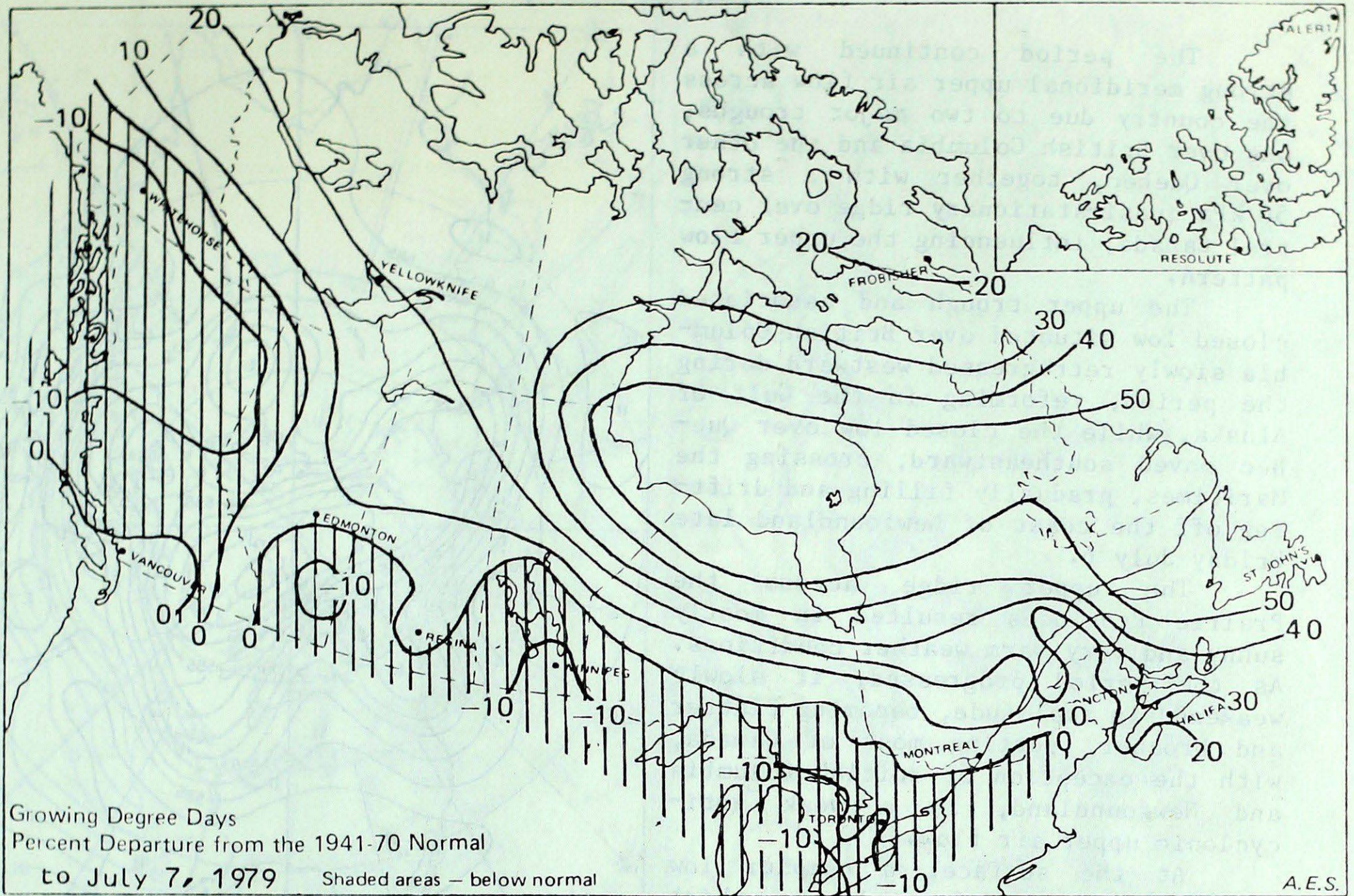
Temperature Scale

Each temperature class is designed to contain 20% of the historically observed 15 day means pertinent to specific location and time of year:

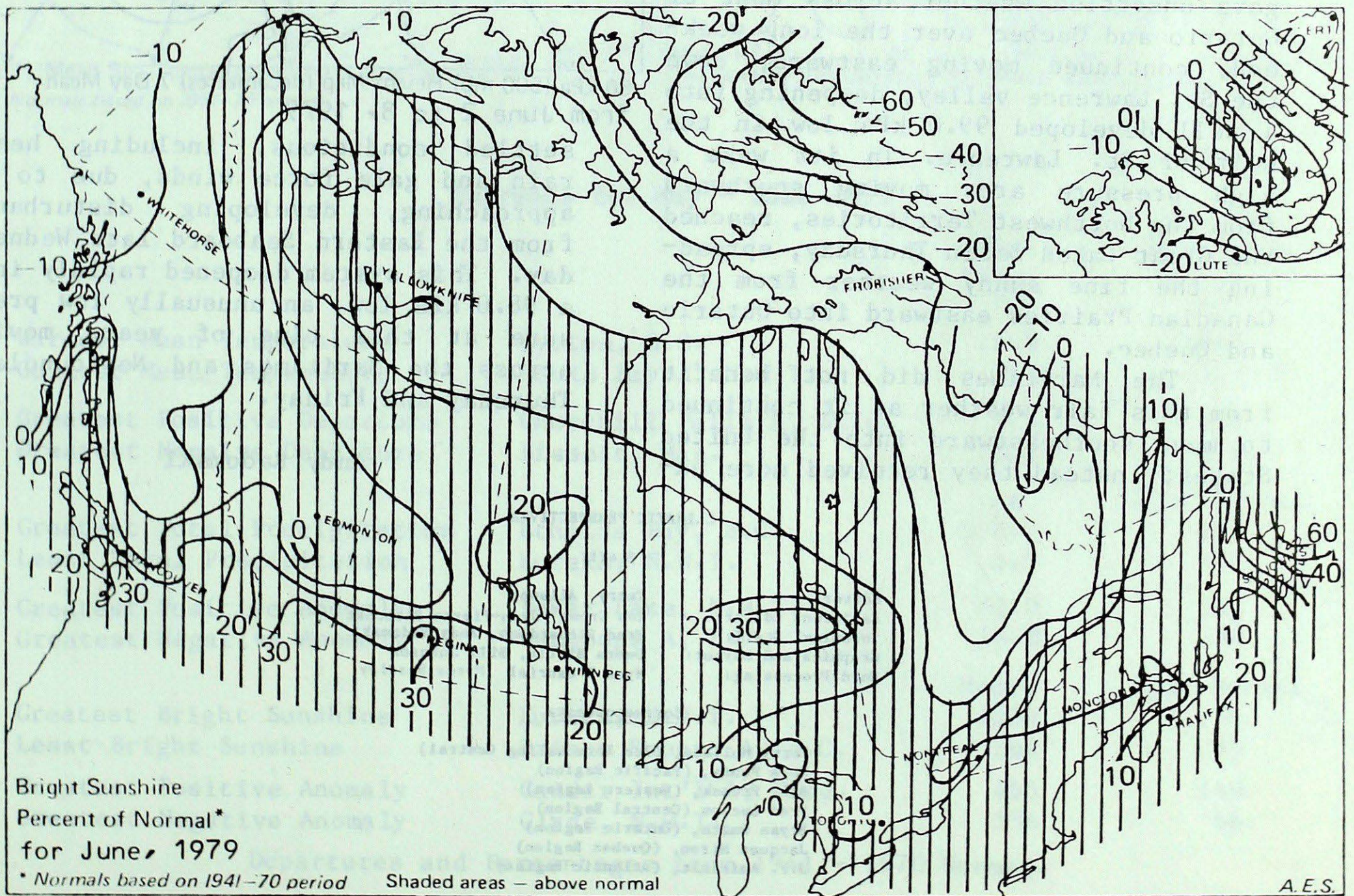
<u>Station</u>	<u>Current Temperature Anomaly (ΔT) Forecast</u>
Dawson	Above Normal ($+0.4^{\circ}\text{C} < \Delta T < +1.3^{\circ}\text{C}$)
Frobisher	Much Above Normal ($\Delta T > +1.2^{\circ}\text{C}$)
Trenton	Normal ($-0.5^{\circ}\text{C} < \Delta T < +0.5^{\circ}\text{C}$)
Vancouver	Much Below Normal ($\Delta T < -1.0^{\circ}\text{C}$)

Note: Anomaly denotes departure from the 1949-73 mean.

GROWING DEGREE-DAYS



Bright Sunshine



10
Synoptic History

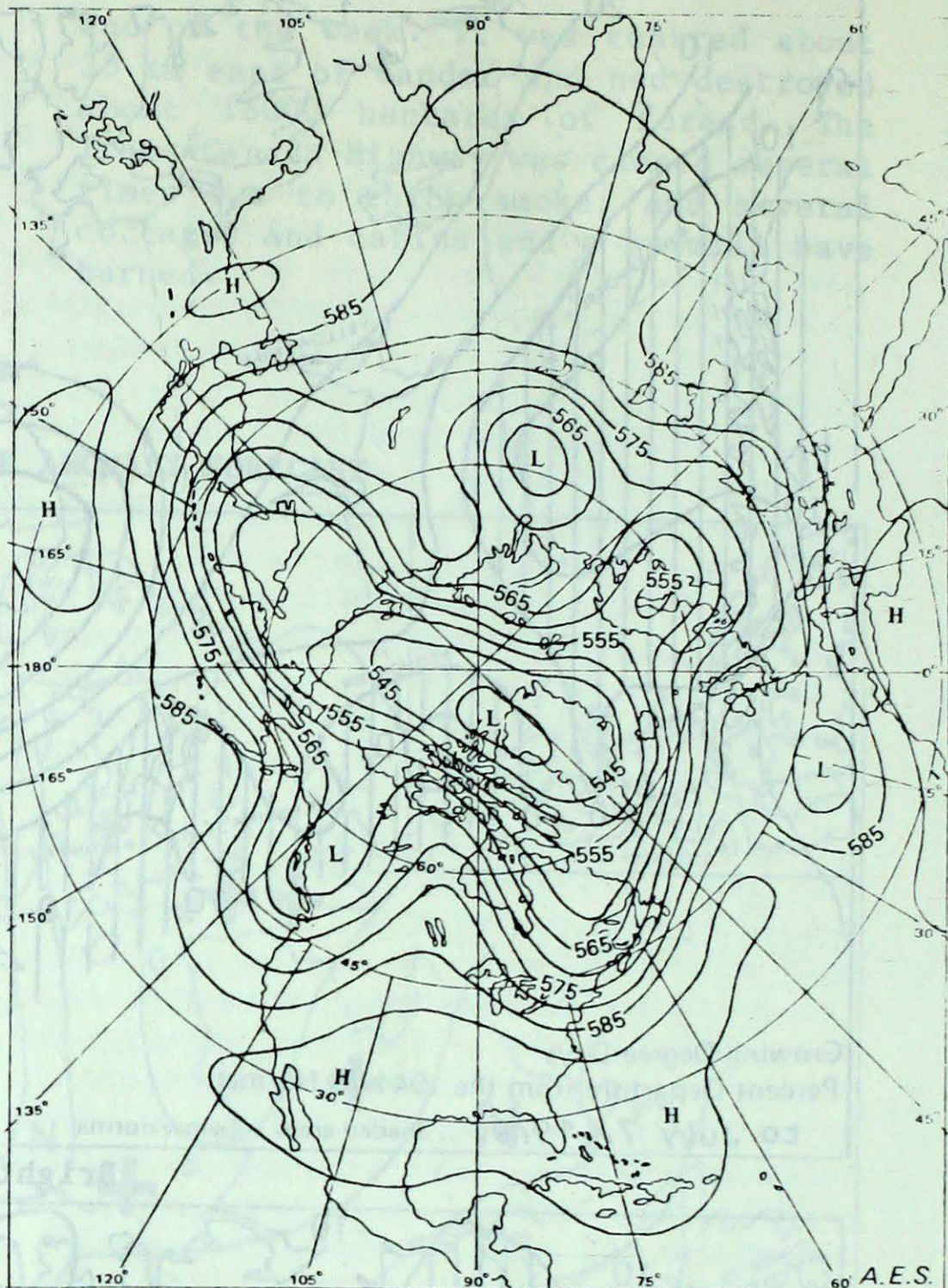
The period continued with a strong meridional upper air flow across the country due to two major troughs, one over British Columbia and the other over Quebec, together with a strong 50 kPa quasi-stationary ridge over central Canada, influencing the upper flow pattern.

The upper trough and associated closed low situated over British Columbia slowly retrogressed westward during the period, reforming in the Gulf of Alaska, while the closed low over Quebec moved southeastward, crossing the Maritimes, gradually filling and drifting off the coast of Newfoundland late Friday July 6.

The upper ridge across the Prairie Provinces resulted in mostly sunny and very warm weather conditions. As the period progressed, it slowly weakened in amplitude, becoming flatter and broader, putting most of Canada, with the exception of British Columbia and Newfoundland, in a weak anti-cyclonic upper air flow.

At the surface, a complex low pressure system and frontal zone, which gave unsettled weather across most of Ontario and Quebec over the long weekend, continued moving eastward, down the St. Lawrence valley, deepening into a well developed 99.0 kPa low in the Gulf of St. Lawrence. In its wake a high pressure area moving southward from the Northwest Territories, reached the Great Lakes Basin Thursday, spreading the fine sunny weather from the Canadian Prairies eastward into Ontario and Quebec.

The Maritimes did not benefit from this fair weather as it continued to move southeastward into the United States; instead they received more un-



50 kPa (500 mb) Height Map (decametres) 7 Day Mean from June 2 to 8, 1979

settled conditions, including heavy rain and gale force winds, due to an approaching, developing disturbance from the Eastern Seaboard late Wednesday. This system deepened rapidly into a 98.0 kPa low, an unusually low pressure at this time of year, moving across the Maritimes and Newfoundland Thursday and Friday.

Andy Radomski

CLIMATIC PERSPECTIVES

Staff

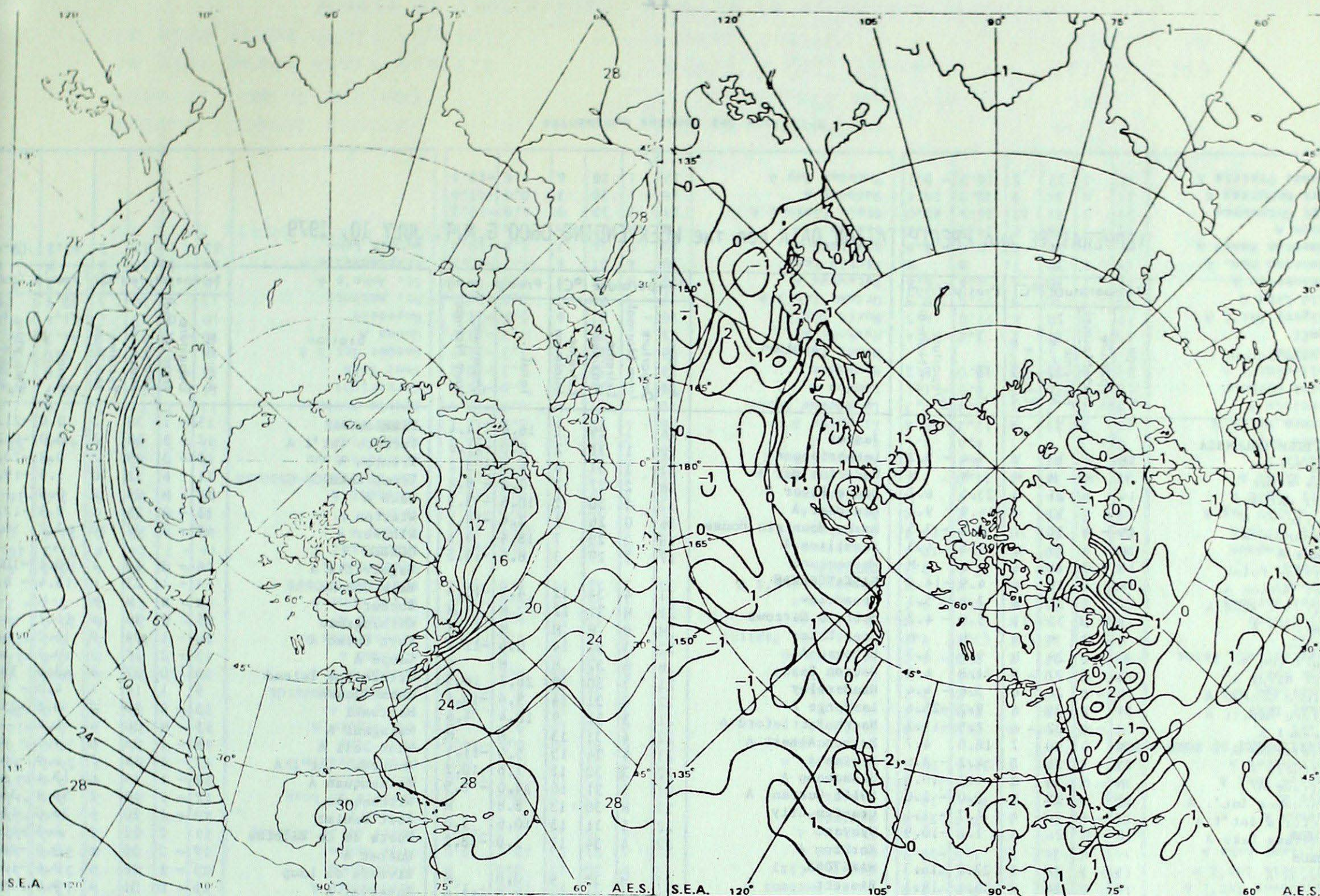
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Sea Temperature



Monthly Mean Sea Temperature for June, 1979

Sea Surface Temperature Anomalies For June, 1979

Note: Normals based on 1951-70 period

Extremes for May - June 1979

		Actual Value °C	Dep. from Normal °C
Warmest Mean Temperature	Lytton, B.C.	16.9	-0.1
Coldest Mean Temperature	Mould Bay A, N.W.T.	- 7.5	-1.9
Greatest Positive Departure	Churchill Falls A, Nfld.	9.5	4.3
Greatest Negative Departure	Bissett, Man.	10.3	-2.7
		mm	% of Normal
Greatest Total Precipitation	Ethelda Bay, B.C.	535.7	197
Least Total Precipitation	Eureka, N.W.T.	6.9	105
Greatest Positive Anomaly	Baker Lake, N.W.T.	92.0	362
Greatest Negative Anomaly	Kamloops A, B.C.	16.8	30
		Hours	% of Normal
Greatest Bright Sunshine	Eureka, N.W.T.	1009	110
Least Bright Sunshine	Prince Rupert A, B.C.	264	95
Greatest Positive Anomaly	Gander Int'l A, Nfld.	455	140
Greatest Negative Anomaly	Clyde, N.W.T.	356	66

Departures and Percentages from 1941 - 1970 Normal.

TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. JULY 10, 1979

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
BRITISH COLUMBIA							BRITISH COLUMBIA							QUEBEC						
Abbotsford	18	2	30	9	4.4	-5.2	Jasper	16	1	29	1	16.0	4.4	Timmins A	15	-1	30	2	0.0	-21.4
Blue River	M	M	M	M	M	M	Lethbridge A	19	1	31	2	0.0	-11.6	Toronto Int'l A	17	-3	28	7	0.0	-11.1
Bull Harbour	14	1	21	8	23.5	6.7	Medicine Hat A	21	1	31	6	4.2	-3.2	Trenton A	17	-3	29	7	0.0	-20.1
Castlegar A	20	-1	33	4	14.9	9.4	Peace River A	18	2	27	7	0.0	-9.8	Trout Lake	21	6	32	10	1.3	-19.7
Cranbrook A	19	-1	31	1	2.8	-3.5	Red Deer A	17	1	30	2	10.6	-3.9	Wawa A	12	M	24	2	0.0	M
Comox A	16	-1	24	6	13.5	4.3	Rocky Mountain House	16	0	26	1	2.4	-19.2	Warton A	15	-3	25	5	0.3	-12.0
Estevan Point	13	0	16	8	M	M	Vermilion A	19	2	29	7	18.4	5.1	Windsor A	19	-3	27	10	67.2	50.1
Fort Nelson A	18	1	29	8	4.9	-14.4	Whitecourt	17	2	29	3	6.6	-15.5	QUEBEC						
Fort St. John A	17	1	26	8	7.8	-5.1	SASKATCHEWAN						Bagotville A	14	-3	29	1	10.1	-10.8	
Kamloops A	21	1	32	11	5.0	-4.2	Broadview	21	4	34	12	4.3	-11.4	Baie Comeau	14	-1	23	6	13.4	-8.7
Lytton	M	M	M	9	M	M	Buffalo Narrows	21	M	31	12	M	M	Border	M	M	M	M	M	M
Pentlton A	20	1	29	6	9.7	3.7	Cree Lake	M	M	M	M	M	M	Chibougamau	15	M	30	4	11.7	M
Port Hardy A	15	2	21	9	21.8	6.9	Estevan A	22	3	34	14	0.6	-17.2	Fort Chimo A	10	-1	24	0	15.2	4.0
Prince George A	16	1	26	6	7.8	-4.4	Hudson Bay	M	M	32	M	M	M	Gaspé A	15	-2	27	3	19.3	-1.1
Prince Rupert A	14	2	25	6	9.2	-25.6	Kindersley	21	3	30	8	26.7	18.5	Grindstone Island	15	0	22	8	43.6	31.7
Quesnel A	18	1	27	8	2.5	-11.2	La Ronge A	22	6	31	14	9.4	-10.1	Inoucdjouac	9	1	16	4	4.0	-9.3
Revelstoke A	19	0	30	7	18.0	4.7	North Battleford A	21	3	31	9	18.4	4.6	Maniwaki	15	-2	29	2	0.6	-25.4
Smithers A	15	1	26	7	4.2	-8.6	Prince Albert A	22	4	31	13	M	M	Matagami A	15	-1	30	4	6.4	M
Terrace A	M	M	24	M	4.2	-10.5	Regina A	23	4	34	15	5.0	-11.1	Mont Joli A	16	-1	28	6	9.4	-8.6
Vancouver Int'l A	18	1	25	8	7.0	-2.0	Saskatoon A	22	3	32	12	1.6	-10.2	Montréal Int'l A	17	-3	29	7	1.9	-26.8
Victoria Int'l A	17	1	26	6	4.7	-1.1	Swift Current A	21	3	31	10	14.0	-1.5	Natashquan A	13	-1	18	6	17.4	-1.6
Williams Lake A	16	0	26	5	1.8	-10.9	Uranium City	21	M	30	13	8.8	M	Nitchequon	12	-2	20	2	51.8	31.6
YUKON							Wynyard	22	5	31	13	10.6	5.0	Port Menier	13	-1	20	6	24.0	11.2
Dawson A	15	-1	28	5	27.7	16.3	Yorkton A	22	4	34	11	1.0	-18.2	Poste de la Baleine	11	-2	22	2	4.3	-15.1
Mayo A	15	0	24	7	30.1	19.3	MANITOBA						Québec A	17	-2	30	5	0.0	-28.8	
Watson Lake A	14	-1	24	5	M	M	Bissett	21	M	33	9	0.0	M	Rivière du Loup	15	-1	26	5	2.4	-11.1
Whitehorse A	12	-2	20	5	32.5	22.9	Brandon A	21	2	35	11	3.2	-12.0	Roberval A	16	0	31	4	9.8	-19.8
NORTHWEST TERRITORIES							Churchill A	19	7	34	3	9.0	0.5	Schefferville A	12	0	24	2	54.2	35.4
Alert	2	-2	10	-3	0.8	-2.3	Dauphin A	23	4	36	10	0.4	-14.8	Sept-Iles A	15	1	25	7	19.0	-8.8
Baker Lake	16	6	30	7	0.0	-6.3	Gillam A	22	M	32	10	9.4	M	Sherbrooke A	15	-1	28	2	0.6	-16.9
Cambridge Bay A	7	-1	17	1	5.7	2.7	Gimli	22	3	31	12	0.0	-16.1	Val d'Or A	15	-1	28	4	2.2	-24.8
Cape Dyer	2	M	10	-6	1.8	M	Lynn Lake	23	7	34	14	4.3	-5.5	NEW BRUNSWICK						
Chesterfield Inlet	12	5	27	2	0.0	-8.2	Norway House	22	M	29	10	0.6	M	Charlo A	16	-1	28	4	14.7	1.5
Clyde	4	0	12	-2	15.8	9.9	Pilot Mound	M	M	M	M	M	M	Chatham A	17	-1	31	6	0.8	-17.2
Coppermine	M	M	M	M	M	M	Portage la Prairie	22	2	32	12	1.6	-16.1	Fredericton A	18	0	33	5	5.1	-10.7
Coral Harbour	11	3	23	4	4.9	-5.7	The Pas A	24	6	33	15	6.0	-13.3	Moncton A	16	-1	29	6	25.0	8.8
Ennadai	M	M	M	M	M	M	Thompson A	21	7	34	8	10.0	-9.4	Saint John A	15	-1	25	6	9.2	-7.9
Eureka	4	-2	10	0	7.6	5.3	Winnipeg Int'l A	22	3	33	14	0.0	-18.1	NOVA SCOTIA						
Fort Simpson	19	2	29	10	3.6	-10.7	ONTARIO						Greenwood A	16	-2	29	4	23.2	4.9	
Fort Smith A	21	5	33	10	31.4	18.8	Armstrong A	M	M	M	1	0.0	-18.6	Shearwater A	16	-1	24	8	31.2	10.4
Frobisher Bay A	8	1	16	1	M	M	Atikokan	18	1	30	5	35.4	12.0	Sydney A	16	-1	28	5	21.6	1.8
Hall Beach A	6	M	14	1	1.0	M	Earlton A	16	-1	30	4	0.6	-16.6	Truro	M	M	M	7	M	M
Hay River A	21	6	31	12	11.0	-2.2	Geraldton	16	1	27	1	0.2	-28.2	Yarmouth A	14	-1	20	9	2.3	-16.7
Inuvik A	15	1	27	6	8.1	1.1	Gore Bay A	16	-2	25	7	0.0	-11.2	PRINCE EDWARD ISLAND						
Mould Bay	2	-3	4	-1	4.4	2.1	Kapuskasing A	16	0	30	2	0.0	-20.3	Charlottetown	16	-1	27	7	M	M
Norman Wells A	18	2	29	9	12.2	-0.8	Kenora A	21	3	32	15	1.0	-24.8	Summerside	17	-1	26	9	46.6	33.3
Resolute A	2	-2	7	-1	5.2	-0.3	Kingston A	16	-4	24	6	0.0	-10.2	NEWFOUNDLAND						
Sachs Harbour	6	1	18	-1	2.0	-1.1	Lansdowne House	20	3	31	8	0.0	-18.6	Battle Harbour	11	2	21	5	M	M
Yellowknife A	21	4	28	13	13.0	6.2	London A	16	-3	26	7	1.8	-16.9	Cartwright	11	-1	27	1	63.7	47.5
ALBERTA							Moosonee	16	1	33	1	0.2	-22.2	Deer Lake	15	-1	25	3	M	M
Banff	15	1	27	2	5.0	-5.4	Mount Forest	15	-2	26	5	3.3	-11.7	Gander Int'l A	16	0	26	6	8.0	-7.7
Calgary Int'l A	17	1	28	6	17.8	4.5	Muskoka A	15	-3	27	4	0.0	-22.7	Goose A	13	-2	31	2	41.7	24.7
Cold Lake A	20	2	30	9	11.4	0.5	North Bay A	16	-2	27	6	0.0	-22.4	Hopedale	10	0	23	1	11.4	-7.0
Coronation A	19	2	30	4	4.4	-6.6	Ottawa Int'l A	17	-3	29	7	0.2	-24.1	St. Anthony	13	M	24	5	32.2	M
Edmonton Mun. A	19	2	30	7	M	M	Petawawa A	16	M	28	5	0.0	M	St. John's A	15	1	23	6	12.2	-7.6
Edmonton Namao A	19	1	29	8	9.6	-2.8	Pickle Lake	20	4	31	6	14.2	-11.8	Stephenville A	14	-1	21	6	M	M
Edson A	15	-1	28	0	24.8	-6.2	Red Lake A	20	2	34	7	1.8	-10.9	Wabush Lake	12	1	23	3	43.2	19.4
Fort Chipewyan	21	3	31	12	26.6	22.0	Simcoe	M	M	27	M	M	M							
Fort McMurray A	21	4	34	9	30.0	14.1	Sioux Lookout A	21	3	33	9	4.9	-13.2							
Grande Prairie A	17	1	27	5	10.2	-5.1	Sudbury A	16	-1	28	7	0.0	-17.4							
							Thunder Bay A	17	1	28	6	1.4	-13.5							

M- Denotes missing data