



Environment Canada / Environnement Canada

A WEEKLY REVIEW OF CANADIAN CLIMATE

Atmospheric Environment / Environnement atmosphérique

CLIMATIC PERSPECTIVES

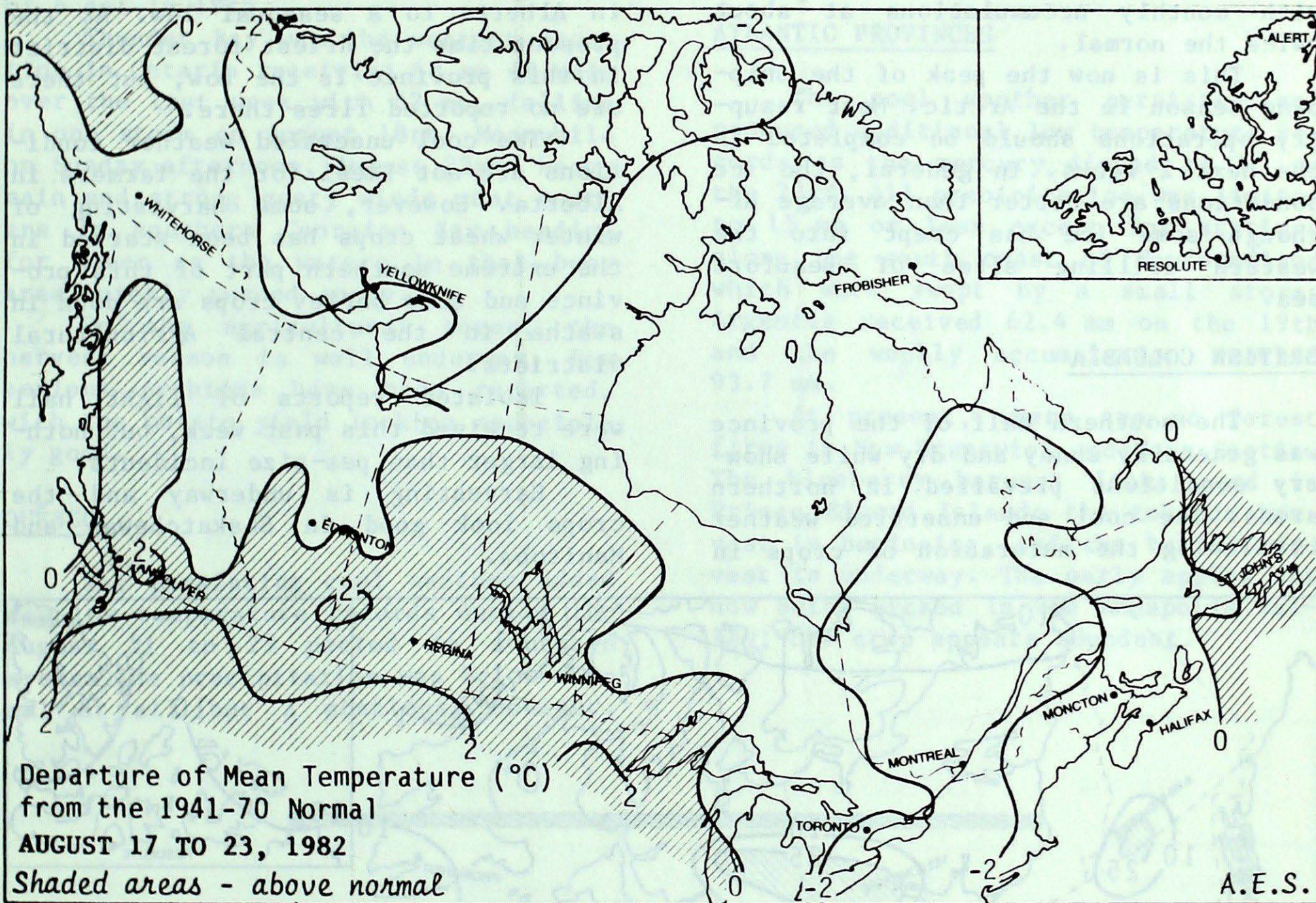


THE CANADIAN CLIMATE CENTRE,
ATMOSPHERIC ENVIRONMENT SERVICE,
4905 DUFFERIN ST., DOWNSVIEW, ONTARIO M3H 5T4

AUGUST 27, 1982

(Aussi disponible en français)

VOL.4 NO.33



WEATHER HIGHLIGHTS FOR THE PERIOD - AUGUST 17-23, 1982

Cool weather persists

With the exception of Saskatchewan and Manitoba, the cool weather dominated the week in all areas of the country, adding a few daily low temperature records.

A torando (unconfirmed yet) near Val d'Or (Québec) pushed a mobile home more than 15 metres away from its foundation.

Showers and thunderstorms have reduced the fire index in most districts. In contrast, the cool weather and the showers have delayed harvesting in several areas.

The temperature reached 33.4° at Medicine Hat (Alta.) and fell to -7.5° at Mould Bay (N.W.T.). Precipitation totaled 93.7 mm at Argentea (Nfld.).

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

Cool weather dominated the week in all areas. The weekly temperatures fell to more than 3° below normal at several stations. Some daily maximums fell close to the freezing point.

The forest fire situation has become a mopping-up case as further rain fell particularly over the Liard basin. The rain totaled 41.4 mm at Watson Lake with monthly accumulations at about twice the normal.

This is now the peak of the shipping season in the Arctic. Most resupply operations should be completed in the next 2 weeks. In general, the ice conditions are better than average although some ice has crept into the western drilling sites of Beaufort sea.

BRITISH COLUMBIA

The southern half of the province was generally sunny and dry while showery conditions prevailed in northern areas. The cool and unsettled weather is slowing the maturation of crops in

the Fort St. John area. In contrast, sunny skies provided good haying conditions in the Kamloops area and the apple and pear crops are improving in the Okanagan Valley.

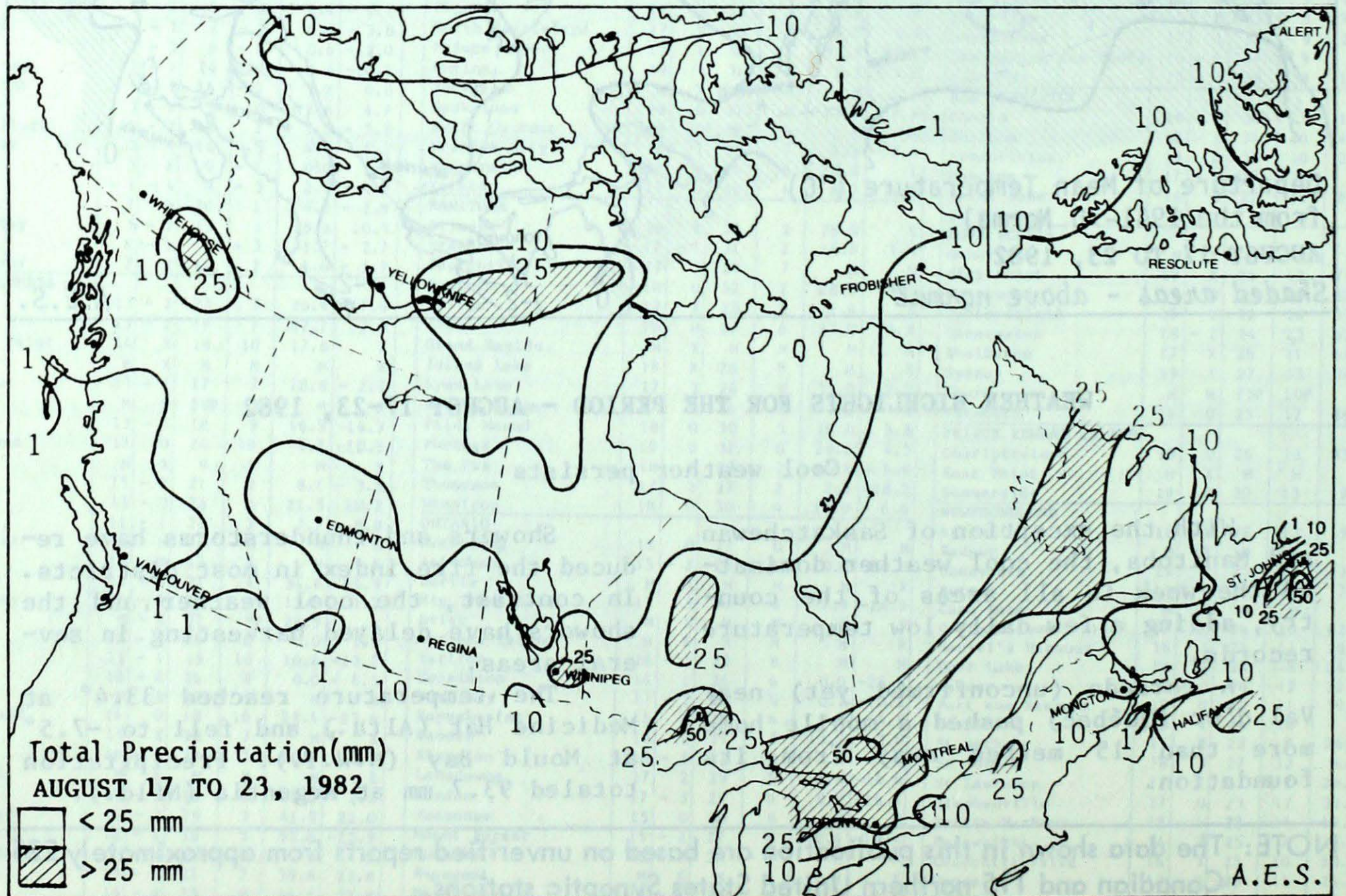
PRAIRIE PROVINCES

Cool temperatures, spotty showers, and high humidities were most favourable in bringing forest fire activity in Alberta to a seasonal low. At the present time the driest forest district in this province is the Bow, but there are no reported fires there.

The cool unsettled weather conditions are not ideal for the farmers in Alberta. However, some harvesting of winter wheat crops has been started in the extreme southern part of this province and some barley crops are down in swaths in the central Agricultural districts.

Isolated reports of light hail were received this past week, but nothing larger than pea-size incidents.

Harvesting is underway and the crops look good in Saskatchewan and Manitoba.



ONTARIO

August's weather continued cool with plenty of rain falling towards the end of the week. Temperatures fell near freezing point on August 22nd as Peta-wawa recorded a minimum of 1°C. Further south, Trenton fell to 5°C, establishing a record low for any August 22nd there, breaking the old mark of 7 set in 1973. London tied their record low of 6 set in 1925.

Thunder Bay was the wettest location in Ontario receiving 68 mm of rain over the last week with 52 mm, falling in one storm on August 18th. Meanwhile on Sunday afternoon, August 22nd, heavy rain and strong gusty winds sent boaters in southern Georgian Bay heading for cover as the waters in that busy area quickly turned angry.

On the agricultural scene, the harvest season is well underway. Few serious problems have been reported, with the potato yield looking especially good.

QUÉBEC

The persisting cool weather added new low temperature records during the August 21 to 23 period in southern areas. The precipitation was below normal at all but 2 stations; however,

thunderstorms poured large quantities of rain locally. Rainfalls were estimated at 50 mm in downtown Val d'Or (only 30 mm fell at the airport) and as yet unconfirmed tornado moved a mobile home some 15 metres from its foundations.

The weather delayed the second cut of hay and the grain harvest. Some scattered frost was reported on the morning of the 21st in the Laurentians.

ATLANTIC PROVINCES

The cool weather persisted and produced additional low temperature records as the mercury dipped to 5° on the 23rd. All precipitation was limited to 15 mm or less except for stations along the south coast of Newfoundland which were swept by a small storm; Argentia received 62.4 mm on the 19th and the weekly accumulation reached 93.7 mm.

At present, there are no forest fires in New Brunswick and Nova Scotia. The blueberry harvest looks good in Prince Edward Island; the tobacco harvest is beginning, and the barley harvest is underway. The early apples are now being picked in the Annapolis Valley; the crop appears abundant.

CLIMATIC PERSPECTIVES

Staff

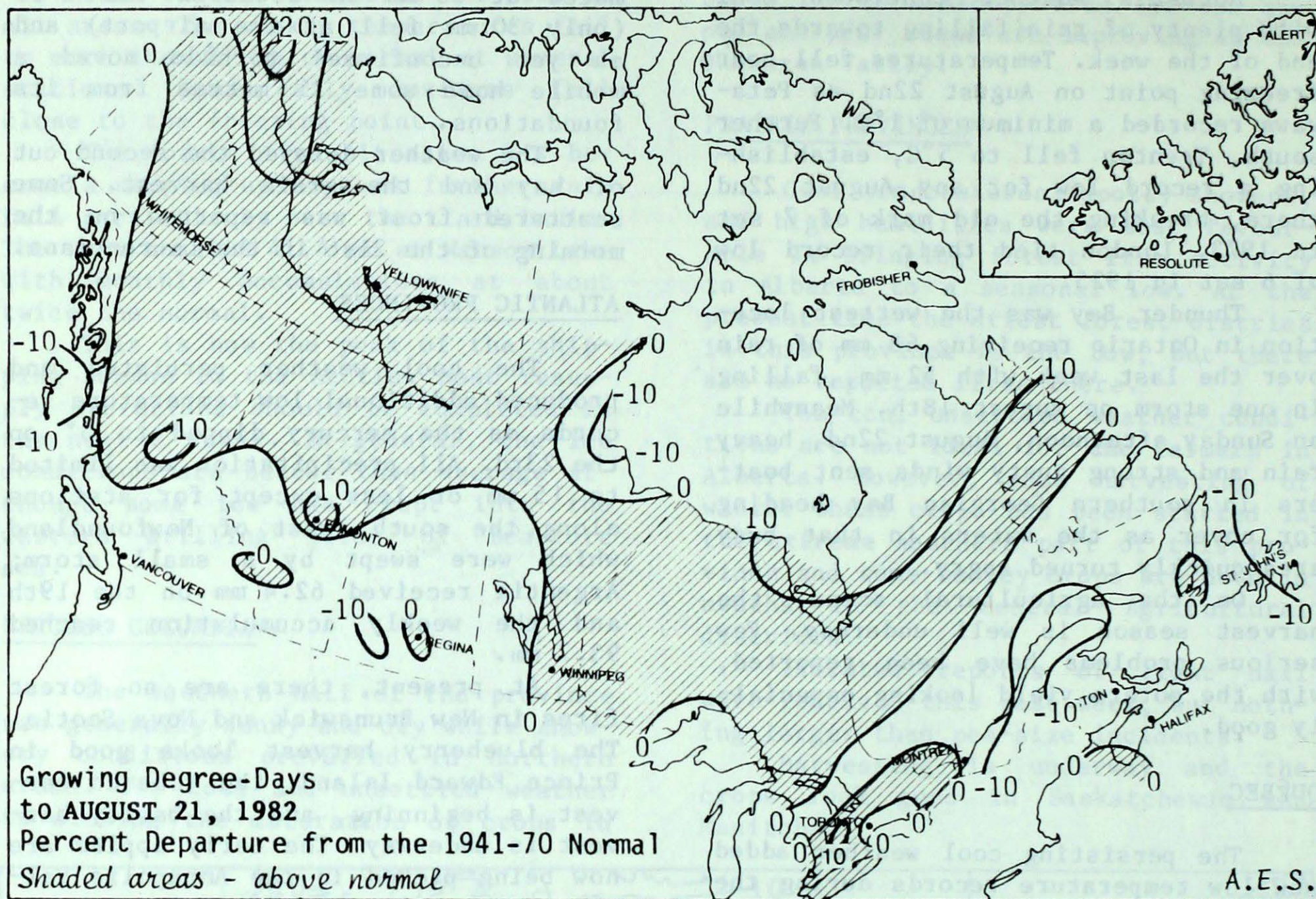
Editor: Yves Durocher
 Assistant Editor: Amir Shabbar
 Technical Staff: Fred Richardson, Andy Radowski
 Graphics and Layout: Bruce Bradshaw, B. Johnson, J. Eutenberg
 Word Processing: Naseem Elajja, Ina Ellis

Correspondents

Terry Mullane, (Ice Forecasting Central)
 H.E. Wahl, (Westchester)
 Bill Prusak, (Western Region)
 Fred Lucifow, (Central Region)
 Bryan Smith, (Ontario Region)
 Guy Borne, (Quebec Region)
 Frank Amrault, (Atlantic Region)
 Earl Coatta, (Pacific Region)

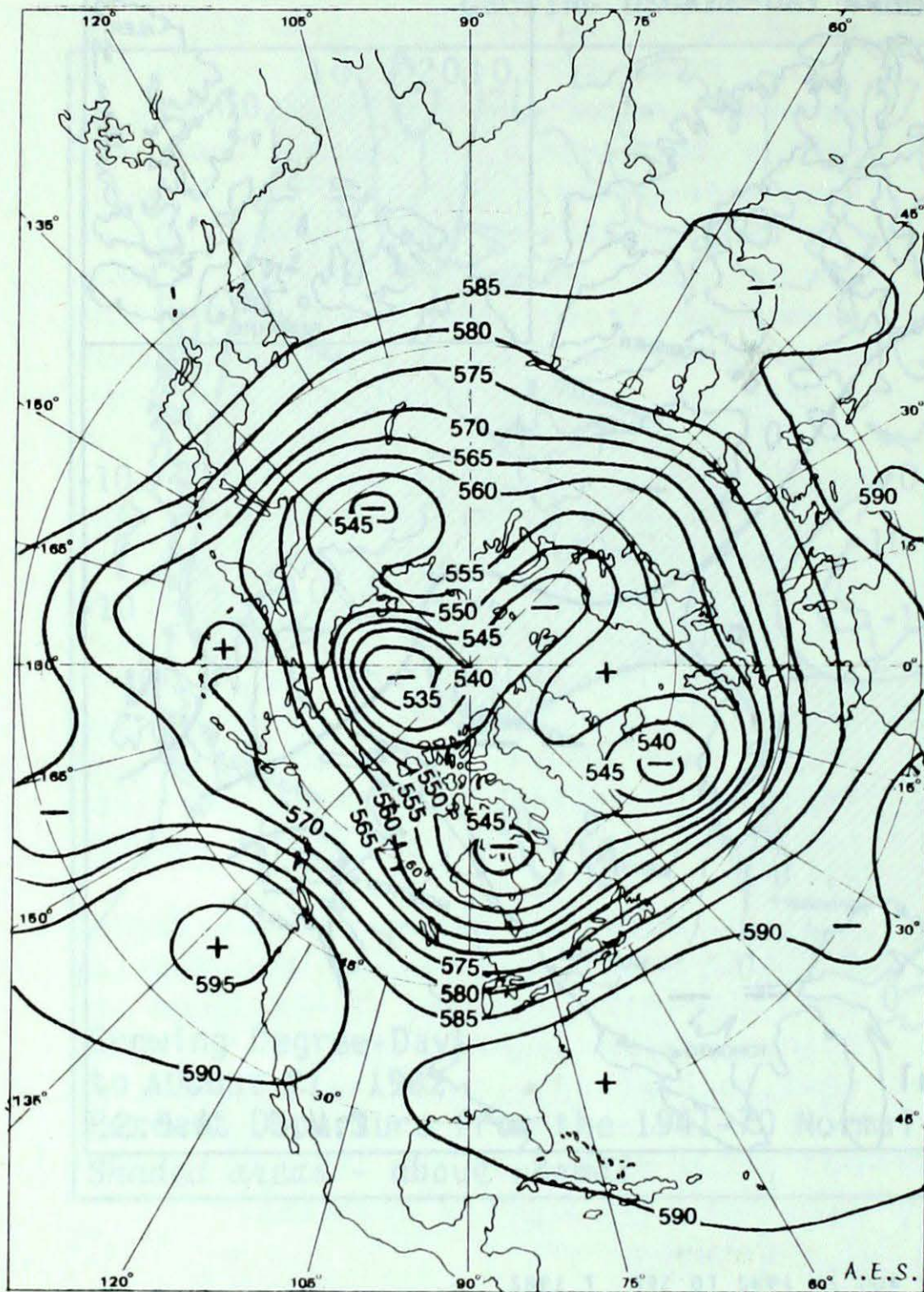
Telephone Inquiries (416) 667-4711/4906

GROWING DEGREE-DAY SUMMARY TO AUGUST 21, 1982

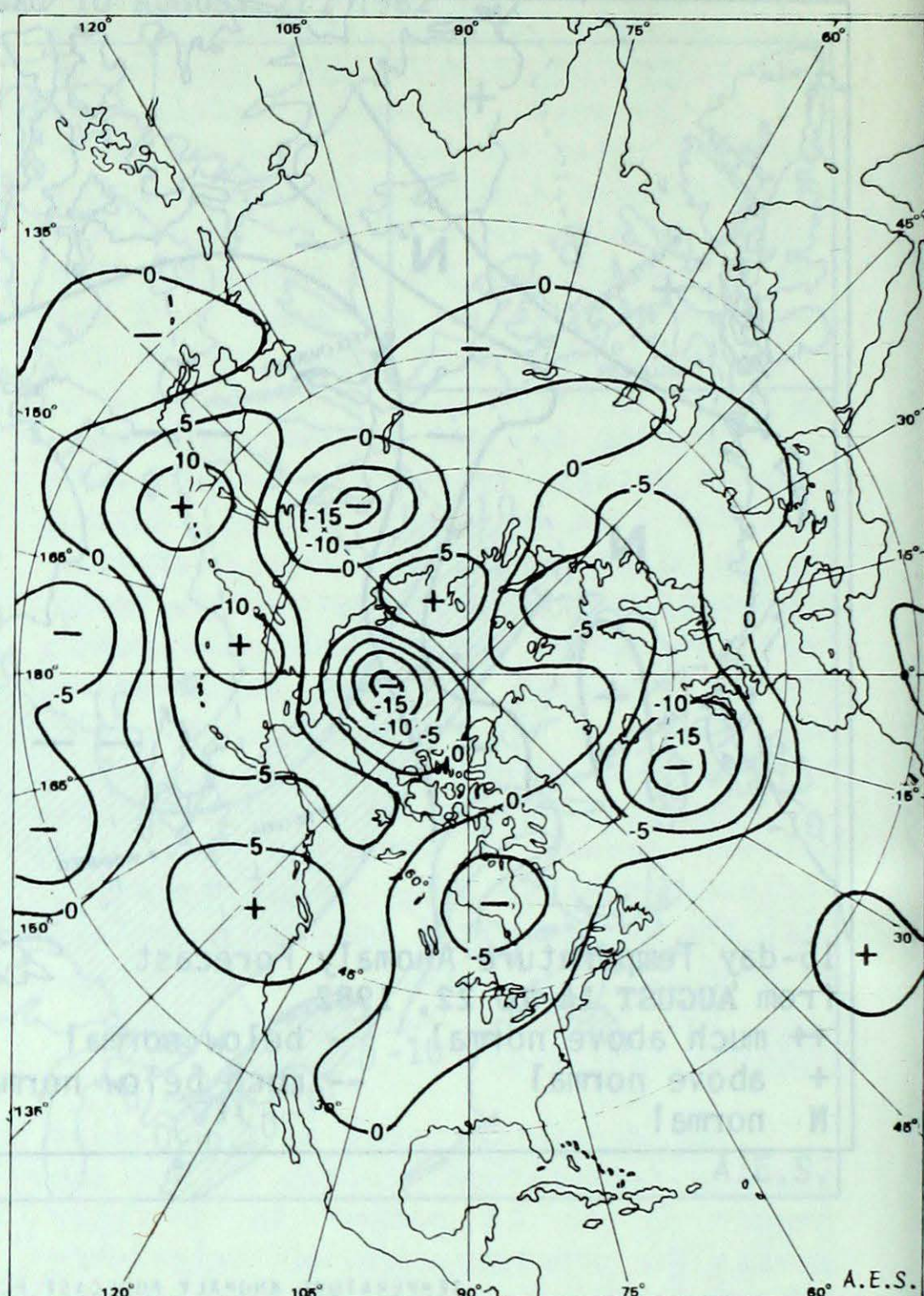


STATION	MONTHLY CUMULATIVE TOTAL	MONTHLY DIFF. FROM 1941-70 NORMAL	SEASONAL TOTAL	SEASONAL DIFF. FROM 1941-70 NORMAL	SEASONAL PERCENT OF NORMAL
Whitehorse	143.0	-22.0	731.0	0.0	100
Penticton	288.5	-20.5	1471.5	-64.5	96
Vancouver	238.5	-21.5	1280.0	-63.0	95
Edmonton	238.0	3.0	1176.5	138.5	113
Calgary	232.0	3.0	1002.0	16.0	102
Regina	256.0	5.0	1052.5	-34.5	97
Saskatoon	282.5	10.5	1156.0	-51.0	96
Winnipeg	299.5	0.5	1347.0	47.0	104
Thunder Bay	220.5	-26.5	1009.5	-10.5	99
Windsor	338.0	-7.0	1773.5	47.5	103
Toronto	280.0	-42.0	1428.0	-70.0	95
Ottawa	280.0	-27.0	1509.0	48.0	103
Montréal	281.5	-39.5	1502.0	-3.0	100
Québec	246.5	-27.5	1219.5	-21.5	98
Fredericton	256.5	-27.5	1230.5	-14.5	99
Halifax	257.0	-20.0	995.0	-98.0	91
Charlottetown	260.0	-19.0	1022.5	-43.5	96
St. John's	235.0	4.0	654.5	-88.5	88

ATMOSPHERIC CIRCULATION



7-day Mean 50 kPa Height (dam)
AUGUST 16 TO 22, 1982



7-day Mean 50 kPa Height Anomaly
(5 dam intervals)
AUGUST 16 TO 22, 1982

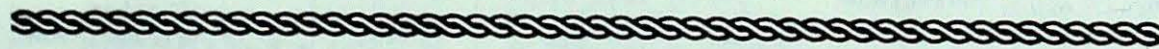
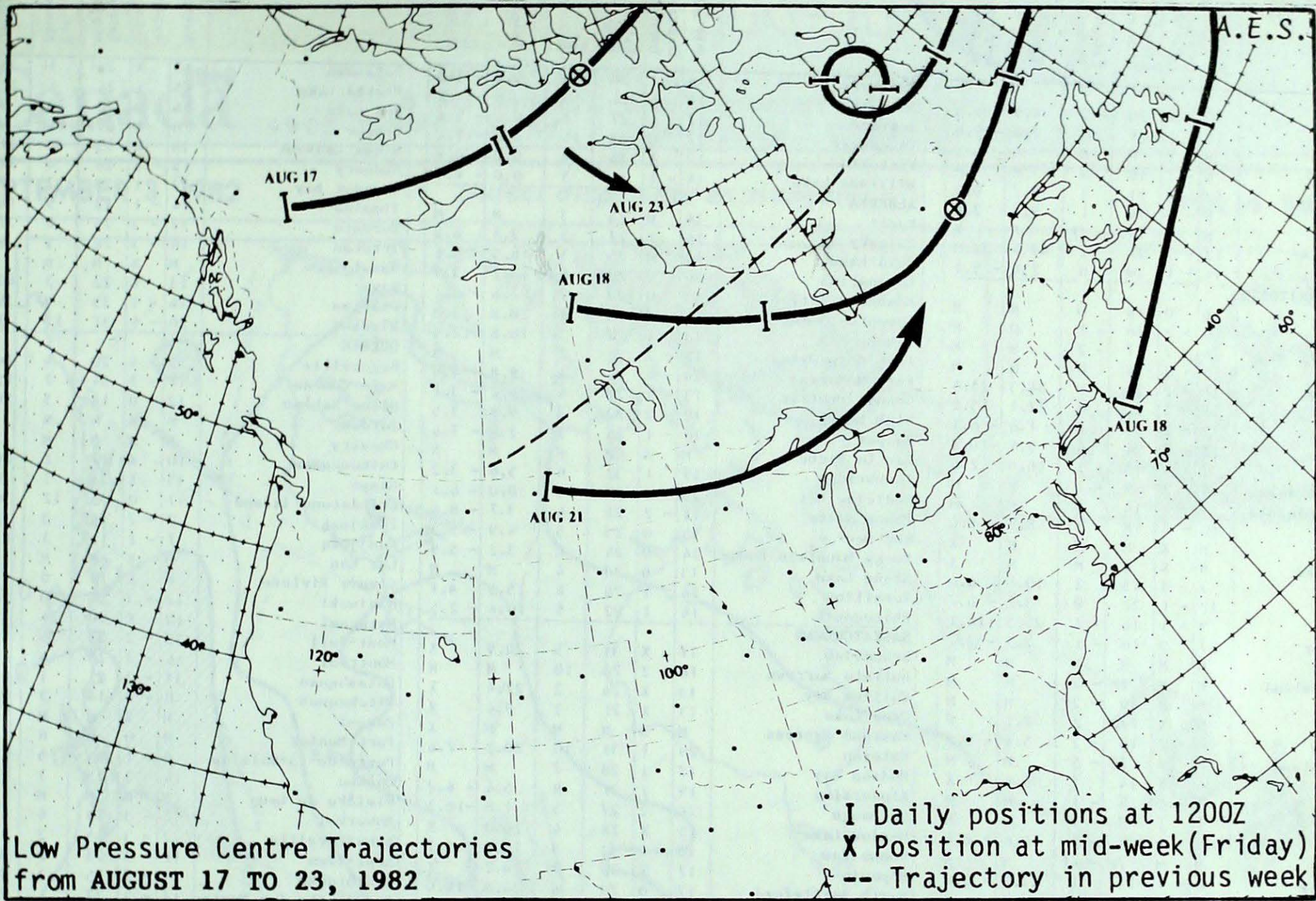
The atmosphere is now in a period of seasonal transition. The Arctic vortex has begun to deepen and is once again becoming a prominent circulation feature over the Northern Hemisphere.

This strengthening cold vortex gradually approached from the Siberian Arctic. Towards the end of the period this pool of very cold air was situated precariously over the Northwest Territories sporting a strong north westerly circulation around its center. A nearly stationary atmospheric ridge remained

well entrenched over the west-central United States. The ridge extended northward along the Pacific coast. It produced relatively dry weather across most of western Canada this week.

Tropospheric waves drifted slowly eastward across the country. Surface weather disturbances associated with these upper features resulted in changeable unsettled weather conditions. The eastern half of the country received the bulk of inclement weather.

LOW PRESSURE CENTRE TRAJECTORIES



EXTREMES FOR THE WEEK

	MAXIMUM TEMPERATURE	LOCATION	MINIMUM TEMPERATURE	LOCATION	GREATEST PRECIPITATION	LOCATION
YUKON TERRITORY	21.1	DAWSON	-1.7	BURHASH	41.4	WATSON LAKE
NORTHWEST TERRITORIES	25.5	FORT SMITH	-7.5	HOLLID BAY	34.3	FORT RELIANCE
BRITISH COLUMBIA	33.2	LYTTON	.3	DEATH LAKE	22.1	TRIFF IDLAND
ALBERTA	33.4	MEDICINE HAT	2.0	FORT CHIPERYAN	20.3	EDMONTON NAMAO
SASKATCHEWAN	32.4	MOORE JAW	1.9	COLLINS BAY	24.8	NORTH BATTLEFORD
MANITOBA	30.4	PILOT MOUND	0.0	THOMPSON	28.4	WINNIPEG
ONTARIO	30.5	WINDSOR	-1.7	ARMSTRONG	67.6	THUNDER BAY
QUEBEC	25.2	GASPE	-1.3	MANIWAKI	33.3	SHERBROCKE
NEW BRUNSWICK	29.2	CHATHAM	3.6	MONCTON	11.2	CHARLO
NOVA SCOTIA	29.1	GREENWOOD	2.7	SHELPERNE	30.2	SABLE ISLAND
PRINCE EDWARD ISLAND	27.2	CHARLOTTETOWN	7.2	SUMMERSIDE	9.8	SUMMERSIDE
NEWFOUNDLAND	29.2	DEER LAKE	2.8	CHURCHILL FALLS	93.7	ARGENTIA VMS

TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. AUGUST 24, 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	14	1	26	1	0.6	-5.3	Petawawa	13	X	26	1	28.2	
Eurwash	10	0	20	-2	4.9	-5.3	Stewart	14	X	21	5	M	X	Pickle Lake	15	1	24	6	27.0	
Dawson	11	-1	21	0	2.4	-9.8	Terrace	17	1	27	8	0.0	-9.6	Red Lake	16	0	25	8	9.8	
Faro	M	X	M	M	M	X	Vancouver	17	0	23	11	0.0	-11.4	Simcoe	M	M	27P	10P	M	
Komakuk Beach	4	-1	10	0	M	M	Victoria	17	1	26	8	0.0	-6.9	Stouffville	16	0	25	8	21.8	
Mayo A	12	0	21	1	9.7	0.5	Williams Lake	14	-1	24	5	0.0	-4.4	Stouffville Lookout	16	0	25	8	31.4	
Shingle Point	6	-3	14	1	9.6	2.6	ALBERTA							Sudbury	15	-2	26	4	67.6	
Teslin	M	X	14P	2P	M	X	Banff	14	0	25	3	M	M	Thunder Bay	17	-1	28	7	16.2	
Watson Lake	12	-1	21	2	41.4	31.0	Calgary	16	1	27	5	2.8	-6.6	Timmins	14	-1	23	5	27.9	
Whitehorse	11	-1	20	0	2.6	-5.1	Cold Lake	15	0	25	5	18.5	5.6	Trenton	16	-3	26	5	9.7	
NORTHWEST TERRITORIES							Coronation	16	0	28	6	13.2	3.9	Upsala	M	X	M	M	M	
Cape Parry	6	0	16	0	M	M	Edmonton Intl	15	0	23	7	2.6	-6.1	Wawa	13	X	22	3	43.2	
Cape Young	6	-2	16	-1	M	M	Edmonton Namoo	15	0	23	8	20.8	13.8	Warton	16	-1	25	9	39.5	
Clinton Point	6	-2	17	-2	M	M	Edson	13	-1	22	3	10.8	-12.4	Windsor	20	-1	31	11	3.2	
Coppermine	6	-3	14	0	M	M	Fort Chipewyan	12	-2	22	2	M	M	QUÉBEC						
Fort Reliance	11	-2	24	0	34.3	23.5	Fort McMurray	14	-1	22	4	9.8	-4.6	Bagotville	12	-4	20	4	16.8	
Fort Simpson	11	-3	21	0	27.1	15.1	Grande Prairie	13	-1	21	4	6.2	-3.1	Bale Comeau	11	-3	24	2	19.1	
Fort Smith	12	-2	26	2	1.6	-6.1	High Level	12	-2	22	3	9.8	3.5	Blanc Sablon	12	0	18	5	16.8	
Hay River	12	-2	24	4	2.4	-10.3	Jasper	13	-1	25	3	2.6	-7.6	Border	M	M	M	M	M	
Inuvik	7	-4	15	-1	16.0	2.6	Lac La Biche	M	X	M	M	M	X	Chevery	M	X	M	M	M	
Lady Franklin Point	4	-3	9	-1	M	M	Lethbridge	19	1	32	8	5.6	-3.2	Chibougamau	10	X	17	1	26.2	
Nicholson Peninsula	5	-2	14	0	M	M	Medicine Hat	20	1	31	10	0.0	-6.1	Gaspé	13	X	25	1	4.4	
Norman Wells	10	-3	18	2	8.9	-5.6	Peace River	12	-2	21	4	3.7	-8.4	Grindstone Island	17	0	25	12	6.8	
Port Radium	M	X	M	M	M	X	Red Deer	15	0	25	5	4.9	-5.3	Inukjuak	7	-2	14	3	2.8	
Robertson Lake	M	X	M	M	M	X	Rocky Mountain House	14	0	24	6	3.2	-5.9	Kuujuuaq	7	-2	15	3	15.0	
Tuktoyaktuk	7	-3	15	1	10.6	6.0	Slave Lake	13	0	23	4	M	M	Lac Eon	M	X	M	M	M	
Yellowknife	12	-1	22	0	3.2	-6.7	Vermilion	16	1	26	6	15.5	4.1	Grande Riviere	8	X	19	0	M	
Baker Lake	9	-1	16	-1	25.5	16.1	Whitecourt	14	1	22	5	10.6	-2.5	Maniwaki	12	-3	24	0	18.3	
Coral Harbour	7	0	16	-1	2.5	-7.7	SASKATCHEWAN							Matigant	10	X	20	1	M	
Ennadai Lake	M	M	M	M	M	M	Broadview	17	X	31	5	20.9	X	Mont-Joli	13	-2	23	6	14.9	
Jenny Lind Island	M	M	7P	-3	M	M	Buffalo Narrows	16	2	24	10	M	M	Montréal	16	-3	25	4	10.0	
Pelly Bay	M	M	10	-2P	M	M	Collins Bay	13	X	24	2	22.4	X	Natashquan	11	-2	21	1	15.0	
Rankin Inlet	M	X	17P	2	7.1	X	Cree Lake	13	X	21	3	9.4	X	Nitchequon	8	-3	14	3	21.8	
Shepherd Bay	4	-2	10	-2	5.4	-5.2	Eastend Cypress	M	X	M	M	M	X	Parent	M	X	M	M	M	
Broughton Island	M	M	7P	-5	M	M	Estevan	20	1	31	10	20.2	7.6	Port Menier	M	M	M	M	M	
Cape Dorset	6	X	14	1	4.4	X	Hudson Bay	17	1	28	7	M	M	Poste-de-la-Baleine	8	-1	14	5	14.0	
Cape Dyer	3	-1	9	-1	M	M	Kindersley	19	2	31	8	5.4	-6.2	Québec	14	-3	25	3	19.8	
Cape Hooper	1	-1	8	-7	M	M	La Ronge	16	2	27	5	1.8	-10.2	Rivière du Loup	M	M	M	M	M	
Clyde	3	-1	9	-2	0.8	-6.4	Meadow Lake	15	X	28	4	20.0	X	Roberval	12	-3	19	4	12.2	
Dewar Lakes	M	M	7P	-4P	M	M	Moose Jaw	19	1	32	9	19.5	9.7	Schefferville	7	-3	15	2	11.8	
Frobisher Bay	6	-1	13	1	13.1	-0.8	Nipawin	17	X	30	7	14.2	X	Sept-Îles	11	-3	23	2	33.3	
Killinek	3	X	9	1	30.7	X	North Battleford	17	0	29	6	24.8	14.0	Sherbrooke	13	-2	25	3	33.8	
Longstaff Bluff	5	-2	13	1	M	M	Prince Albert	17	1	28	7	7.2	-4.8	Ste Agathe des Monts	12	-3	22	1	20.8	
Pond Inlet	4	X	7	-2	1.4	X	Regina	19	1	32	8	19.4	10.7	Val D'Or	12	-2	21	1	30.0	
Alert	1	1	12	-4	3.0	-2.0	Rockglen	M	X	M	M	M	X	NEW BRUNSWICK						
Eureka	2	0	6	0	9.4	6.6	Saskatoon	18	0	31	8	14.6	6.6	Charlo	14	-2	25	4	11.2	
Gladman Point	3	-3	11	-7	3.6	0.6	Swift Current	18	0	29	8	M	M	Chatham	16	-1	29	5	10.4	
Hall Beach	4	-1	11	0	M	M	Uranium City	13	-2	26	4	2.1	-8.7	Fredericton	16	-1	28	4	2.5	
Mackay Inlet	M	M	8P	-2P	M	M	Wynyard	17	X	30	9	18.7	X	Moncton	16	-2	27	4	11.1	
Resolute	0	-2	6	-3	11.7	6.4	Yorkton	17	0	31	8	20.0	9.2	Saint John	15	-1	24	6	8.0	
Byron Bay	M	M	15P	-2	M	M	MANITOBA							St Stephen	M	X	M	M	M	
Cambridge Bay	4	-3	10	-2	M	M	Bissett	16	X	27	5	22.2	X	NOVA SCOTIA						
Mould Bay	-1	-3	5	-8	4.0	-2.2	Brandon	18	0	28	6	15.2	5.1	Anherst	M	X	M	M	M	
Sachs Harbour	2	-3	11	-4	10.8	2.8	Churchill	10	-1	15	4	8.5	-4.3	Eddy Point	17	X	26	7	4.9	
BRITISH COLUMBIA							Dauphin	18	1	30	7	24.0	8.2	Greenwood	16	-2	29	4	0.0	
Abbotsford	18	1	29	7	0.0	-14.2	Gillam	14	X	24	3	6.0	X	Sable Island	18	0	23	8	30.2	
Alert Bay	12	-2	18	7	0.0	-13.7	Gimli	18	0	27	8	4.2	-8.5	Shearwater	16	-1	24	9	14.8	
Amphitrite Point	15	X	21	10	0.0	X	Grand Rapids	M	X	M	M	M	X	Shelburne	15	X	25	3	6.8	
Blue River	M	X	M	M	M	X	Island Lake	17	X	25	9	M	X	Sydney	17	-1	28	7	2.6	
Bull Harbour	13	-1	17	9	0.0	-16.8	Lynn Lake	14	1	26	4	7.0	-7.1	Truro	M	M	28P	4P	M	
Burns Lake	13	X	24	2	M	X	Norway House	17	X	27	6	4.8	X	Yarmouth	15	-1	23	9	3.4	
Cape Scott	12	-1	18	10	1.2	-34.1	Pilot Mound	19	1	30	7	6.6	-11.3	PRINCE EDWARD ISLAND						
Cape St James	14	0	19	10	1.4	-14.4	Portage	19	1	29	9	19.5	4.3	Charlottetown	17	-1	27	9	4.8	
Clinton	M	X	M	M	M	X	The Pas	18	2	28	6	6.2	-10.2	East Point	M	X	M	M	M	
Comox	17	0	26	9	0.0	-9.7	Thompson	14	1	27	0	10.0	-2.9	Summerside	17	-1	26	7	9.8	
Cranbrook	19	2	29	8	0.0	-6.8	Winnipeg	19	1	29	8	28.4	17.6	NEWFOUNDLAND						
Dease Lake	12	1	22	0	2.0	-6.2	ONTARIO							Argentia	15	X	19	12	93.7	
Estevan Point	M	M	M	M	M	M	Armstrong	15	1	25	-1	M	M	Badger	M	X	M	M	M	
Ethelda Bay	13	X	20	4	M	X	Atikokan	15	0	26	5	21.4	-6.5	Bonavista	16	2	25	11	0.8	
Fort Nelson	14	0	24	6	M	M	Barrie	M	X	M	M	M	X	Burgeo	14	0	20	6	7.7	
Fort St John	13	-1	20	5	5.6	-5.7	Big Trout Lake	14	0	21	8	43.8	28.1	Cape Rice	M	X	M	M	M	
Hope	19	X	31	10	0.3	X	Britt	M	X	M	M	M	X	Comfort Cove	16	1	29	7	2.4	
Kamloops	20	0	31	7	0.0	-4.3	Caribou Island	M	X	M	M	M	X	Daniel's Harbour	15	1	20	12	7.2	
Langara	13	-1	15	9	7.2	-16.9	Earlton	14	-1	26	4	M	M	Deer Lake	15	0	29	7	3.3	
Lytton	22	2	33	10	0.0	-2.5	Geraldton	15	1	25	3	16.6	0.6	Gander	16	1	28	7	3.0	
Mackenzie	M	X	24P	1P	M	X	Gore Bay	17	-1	25	9	37.5	21.2	Port aux Basques	15	0	23	8	0.5	
McInnes Island	14	0	18	11	0.0	-30.2	Kapuskaing	14	-1	23	4	17.6	-1.9	St Albans	16	1	23	6	M	
Nanaimo A																				