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A WEEKLY REVIEW OF CANADIAN CLIMATE

CLIMATIC PERSPECTIVES

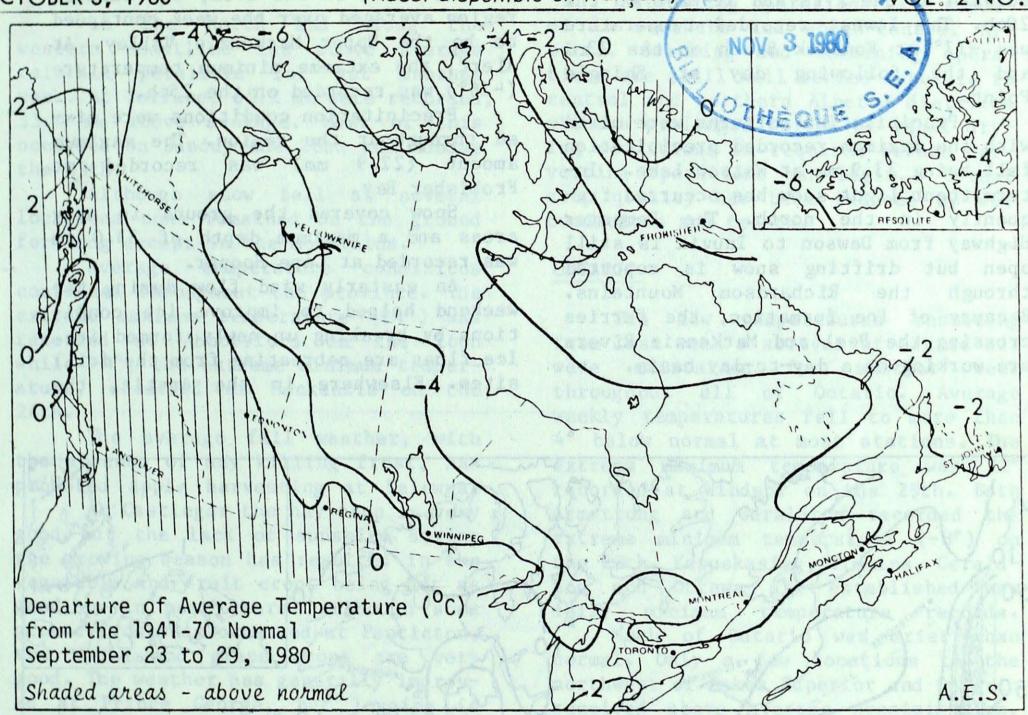
THE CANADIAN CLIMATE CENTRE,
ATMOSPHERIC ENVIRONMENT SERVICE,
4905 DUFFERIN ST., DOWNSVIEW, ONTARIO M3H 5T4

seek have continued.

OCTOBER 3, 1980

(Aussi disponible en français)

WQL. 2 NO. 39



WEATHER HIGHLIGHTS FOR THE WEEK - SEPTEMBER 23 - 29, 1980

Cold air persists throughout most of Canada

The cold air which spread down from the Arctic into southern Canada last week continued to set new minimum temperature records across the country. Below average conditions prevailed throughout all of Manitoba, Ontario, Québec and the Atlantic Provinces.

The first significant snow of the approaching winter season fell in most eastern provinces.

Golf ball-sized hail was associated with two Ontario tornadoes and a severe thunderstorm in New Brunswick interrupted electrical service. The

Temperatures ranged from 27° at Medicine Hat on the 29th and at Rock-glen, Saskatchewan, the 28th to -26° at Alert on the 25th. At Estevan point, more than 102 mm of precipitation were recorded.

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

YUKON

Continuing the trend begun last week, cool conditions persisted throughout the region. Only the southwest corner of the Yukon experienced above normal temperatures. The extreme high temperature (14°) was recorded at Burwash on the 27th and at Mayo on the 29th. The lowest recorded temperature was -17° at Komakuk Beach on the 23rd and the following day at Shingle Point.

Precipitation patterns were mixed with the maximum recorded precipitation fall being 33.9 mm at Watson Lake. Intermittent light snow has occurred frequently in the north. The Dempster Highway from Dawson to Inuvik is still open but drifting snow is reported through the Richardson Mountains. Because of ice formation, the ferries crossing the Peel and Mackenzie Rivers are working on a day-to-day basis.

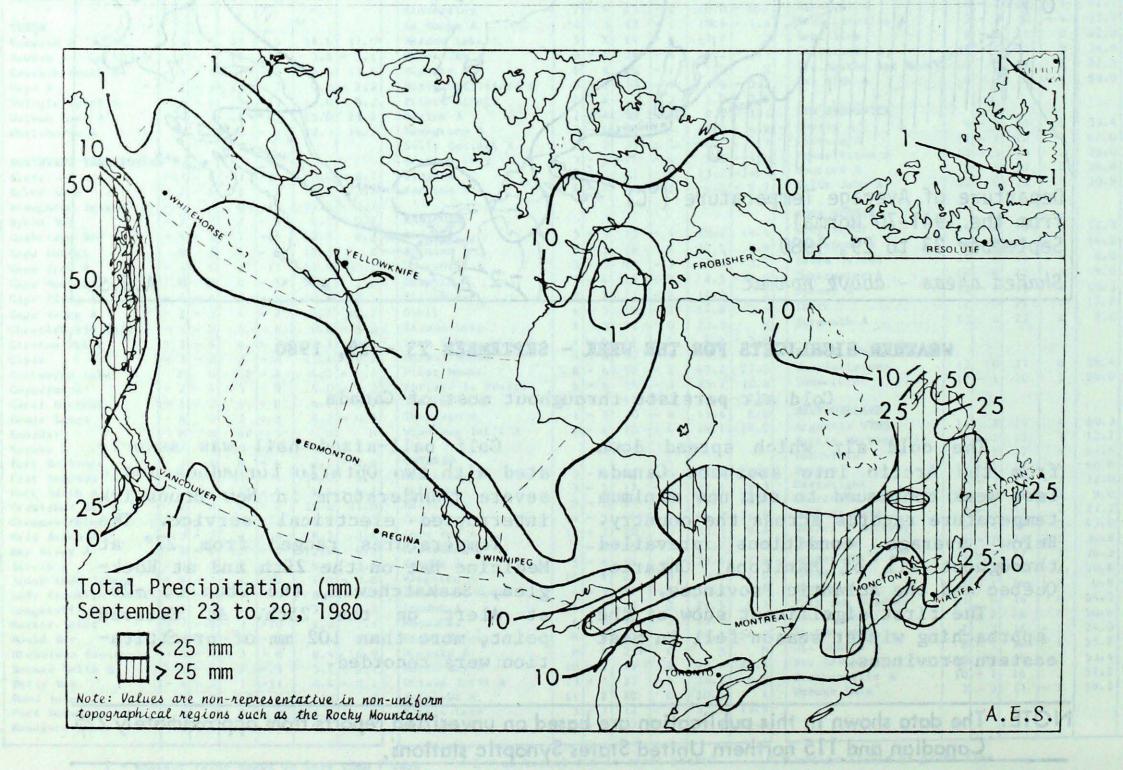
NORTHWEST TERRITORIES

The cold conditions prevalent last week have continued. Below normal temperatures persisted throughout most of the region with the exception of central Baffin Island. Although an extreme maximum temperature of 12° was recorded at Fort Smith on the 27th, the warmest region averaged over the week continued to be the Upper Mackenzie Valley. At Alert, the extreme minimum temperature (-26°) was recorded on the 25th.

Precipitation conditions were mixed throughout the region. The maximum amount (22.9 mm) was recorded at Frobisher Bay.

Snow covered the ground in many areas and a maximum depth of 33.0 cm was recorded at Cape Hooper.

An easterly wind flow during the weekend helped to improve ice conditions by breaking up newly formed ice. Ice floes are retreating from the drill sites. Elsewhere in the Arctic, the



freeze-up is well under way. New ice is forming along the coasts of Foxe Basin and northern Baffin Bay. Although shipping continues in the Perry Channel, only one more week remains in the shipping season.

BRITISH COLUMBIA

In the north and along the western coastline the above average rainfall persisted for yet another week. At Terrace, 65.2 mm were recorded, 33.4 mm above average. Most of this occurred on Sunday the 28th and Monday the 29th.

Although snow fell at several locations none remained on the ground for long except in the mountains.

Average temperature conditions continued throughout the province. The extreme maximum temperature (24°) was recorded at Abbotsford on the 26th while -4°, the extreme minimum temperature, occurred at Mackenzie on the 24th.

The average fall weather, with the absence of any killing frost, has promoted apple harvesting at Kelowna.

At Castlegar the hay crop is very good but the lack of sunshine during the growing season has resulted in the vegetable and fruit crops being not as good as in past years. Although some ground frost has occurred at Penticton, the apple and grape crops are very good. The weather has generally improved at Prince George, but logging is still being hindered by very wet forests. Farther north, at Fort Nelson, the wet conditions are also hindering road construction.

PRAIRIE PROVINCES

The cold air which invaded the Prairies last week remained in northern Alberta, most of Saskatchewan and throughout Manitoba. An extreme high temperature of 27° was recorded at Rockglen, Saskatchewan, on the 28th, and at Medicine Hat, Alta, on the 29th. The mercury dipped to -7° at several locations on the 24th, 25th, and 29th.

Although some locations recorded above normal precipitation, dry conditions were generally experienced throughout the three provinces. The maximum precipitation for the week (17.0 mm) was recorded at Norway House, Manitoba, much of it occurring on the 23rd. Snow fell at many locations including Churchill and Uranium City.

Harvesting operations have resumed in southern and south-central Alberta. Swathing and combining operations are still well behind schedule in central and northern Alberta districts where a prolonged period of ideal drying conditions is required before harvesting operations can begin. Cereal crop quality has been reduced by wet conditions and frosts.

ONTARIO

low temperatures resulting from last week's arrival of Arctic air maintained for another week throughout all of Ontario. Average weekly temperatures fell to more than 4° below normal at most stations. The extreme maximum temperature was recorded at Windsor on the 29th. Both Armstrong and Geraldton recorded the extreme minimum temperature (-8°) on the 28th. Kapuskasing, Timmins, Geraldton and Ottawa all established new temperature records. daily minimum

Much of Ontario was drier than normal. Only a few locations to the northwest of Lakes Superior and Ontario received above average precipitation. Wawa recorded 41.3 mm during the week, approximately half of which fell on the 25th (Thursday).

The first significant snow of the season fell in the Timmins area where 4 cm were measured on the ground on the morning of September 26. Snow fell as far south as Haliburton on that day. The first official frost at Toronto International Airport was recorded and the 27th (Saturday) when the temperature fell to -0.1°.

Corn yields appear to be average or slightly above average, but well below the record yields of 1977. Wet fields halted wheat seeding in many areas of the province.

Parks and and applicately the strong last

QUÉBEC

Temperatures continued to fall below those recorded last week, as all of Quebec was below normal. Temperatures ranged from 18° at Montreal, Quebec and Sherbrooke on the 23rd and also at the latter on the 25th, to -7° at Schefferville on the 27th and at Chibougamau and Sherbrooke on the 29th.

Although some locations in the north and the south did receive below average precipitation, most of the province was wetter than normal. Port Menier recorded the maximum precipitation, 52.4 mm, most of which fell on the 26th. Snow was recorded at several locations throughout the province.

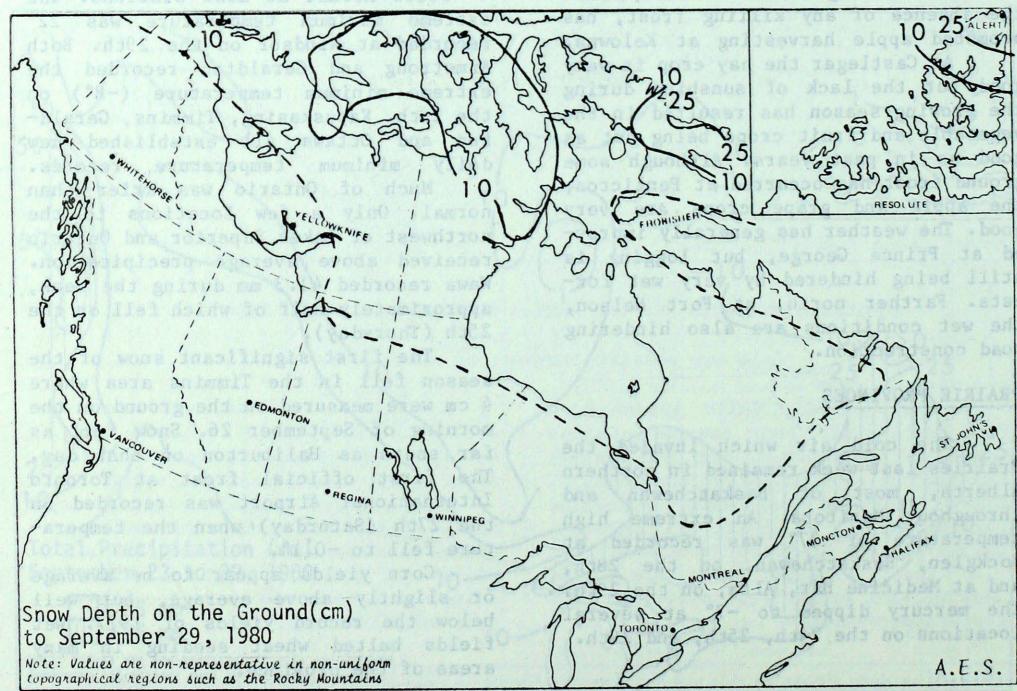
Several daily minimum temperature records were set during the last week. In addition, new monthly temperature records were set at Val d'Or $(-6^{\circ}$, previous record -5° set in 1963), and at Sherbrooke $(-7.4^{\circ}$ beating the 1978 record of -6.8°).

The percentage of possible sunshine ranged from 25% to 58%.

ATLANTIC PROVINCES

The entire region continued to be colder than normal. The extreme maximum temperature reached 23° at Fredericton, N.B., on the 23rd, while the extreme minimum temperature dipped to -6° at Wabush Lake, Labrador, six days later.

Although some locations in New Brunswick, Newfoundland and Nova Scotia were drier than normal, above average precipitation was reported throughout most of the above provinces and all of Prince Edward Island. The maximum recorded fall of precipitation was 54.7 mm at Eddy Point, N.S. Snow fell in Labrador.



Daily minimum temperature records again were set, especially on the 25th and 29th. The -2.3° temperature recorded at Yarmouth, N.S., on the 29th set a new record for the month of September.

In the Saint John, N.B. region, 100 homes went without electricity during a thunderstorm, and the airport's instrument landing system was shut down. Hardest hit areas included industrial zones in Lorneville, and residential areas of Glenfalls and South Bay. P.E.I. also experienced severe thunderstorms.

In Nova Scotia, frost on the 25th did not affect the corn crop but killed 10% of the tobacco crop yet to be harvested. In P.E.I. rain delayed the harvesting of cereals (already 90% complete) and of potatoes (just beginning) Corn growth was terminated by frost, so it must be harvested immediately. The Newfoundland blueberry crop was a complete disaster this year.

MORE TORNADOES

Monday September 22, 1980 was one of the most prolific days of this year's tornado season in Ontario. In addition to the two reported in Climatic Perspectives vol. 2 no 38 (at Stratford and near Woodbridge, both confirmed as type A), there were at least three more. One of these occurred near Lakefield, (type A), another near Mariposa (type B), and yet another in Primrose which is still under investigation. Wind damage was reported near Corunna and Lake Scugog which could also have been tornadic. No deaths or injuries resulted from these storms.

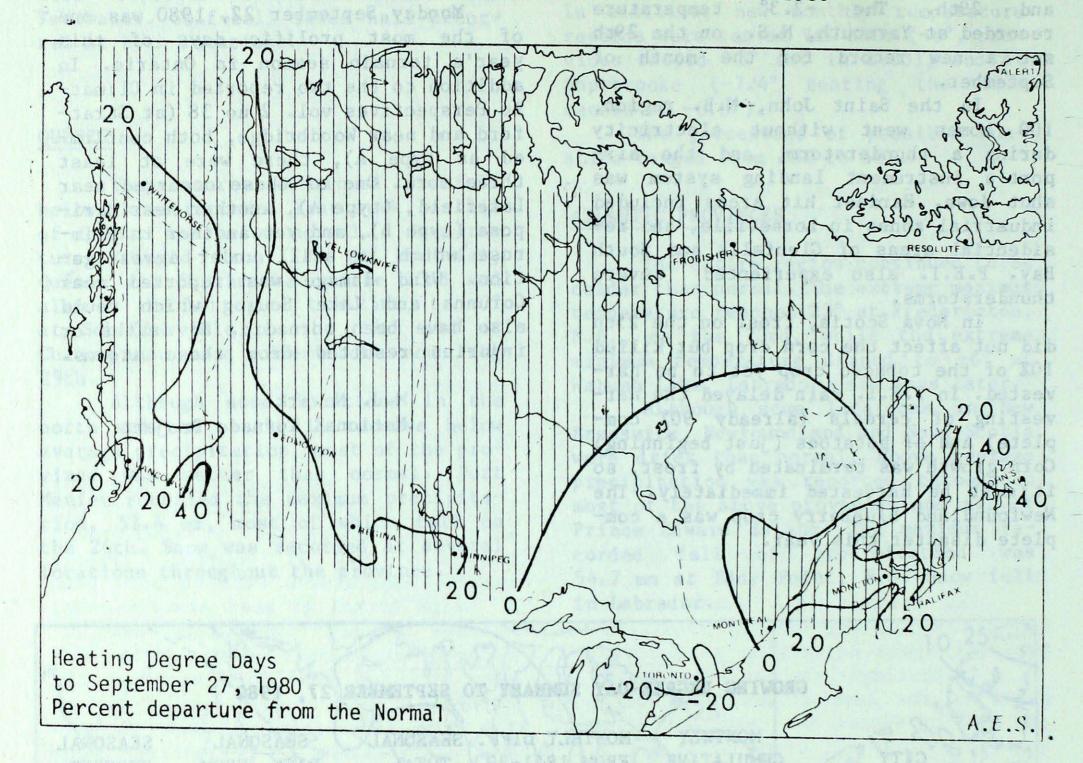
M.J. Newark National Tornado Project

GROWING DEGREE-DAY SUMMARY TO SEPTEMBER 27, 1980

			L GMOA	MI BONE GROOTSE	
Walter Street	MONTHLY	MONTHLY DIFF.	SEASONAL	SEASONAL	SEASONAL
CITY	CUMULATIVE	FROM 1941-70	TOTAL	DIFF. FROM	PERCENT
There is the thinking	TOTAL	NORMAL		1941-70 NORMAL	OF NORMAL
	WIND THE DAILY	CONTRACTOR IN NO		11060	
Whitehorse	* 7.5	-75.5	832.5	-44.5	95
• Penticton	260.5	-7.5	2001.0	64.0	103
Vancouver	241.5	-13.5	1630.5	-81.5	95
Edmonton	130.0	-19.0	1535.5	263.5	121
Calgary	147.5	-21.5	1313.5	70.5	106
Regina	* 168.0	-26.0	1748.0	216.0	114
Saskatoon	* 161.0	-25.0	1720.0	213.0	114
Winnipeg	* 156.0	-65.0	1830.5	185.5	111
Thunder Bay	* 150.5	-34.5	1455.5	140.5	111
Windsor	358.0	11.0	2249.0	14.0	101
Toronto	285.5	-15.5	1893.5	-48.5	98
Ottawa	239.0	-30.0	1873.5	6.5	100
Montréal	240.0	-48.0	1842.5	-91.5	95
Québec	188.0	-38.0	1568.0	-21.0	99
Fredericton	* 199.5	-33.5	1623.0	25.0	102
Halifax	250.5	-5.5	1410.5	-61.5	96
Charlottetown	226.5	-22.5	1377.0	-58.0	96
St John's	159.0	-35.0	898.5	-131.5	87

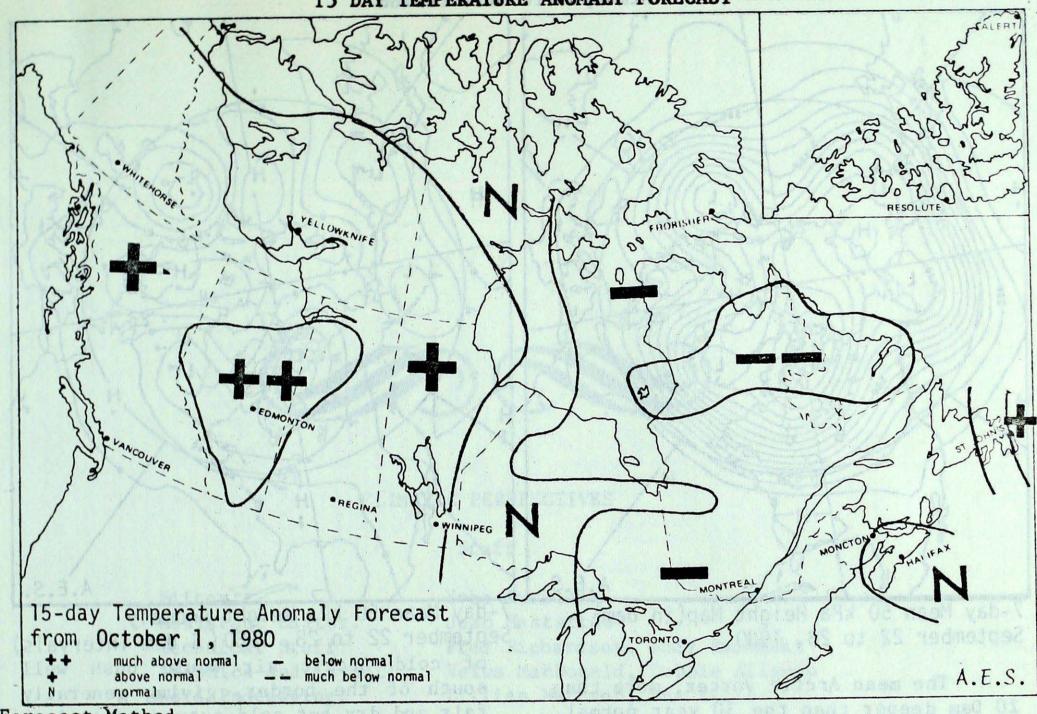
^{*} Denotes end of Growing Season

HEATING DEGREE-DAY SUMMARY TO SEPTEMBER 27 1980



CITY	MONTHLY CUMU LATIVE TOTAL	MONTHLY DIFF. FROM 1941-70 NORMAL	SEASONAL TOTAL	SEASONAL DIFF. FROM 1941-70 NORMAL	SEASONAL PERCENT OF NORMAL
Resolute	657.5	51.5	1566.5	61.5	104
Inuvik	499.0	100.0	934.0	157.0	120
Whitehorse	333.0	65.0	660.0	91.0	116
Vâncouver Int'l A	109.5	10.5 0.00-	213.5	39.5	123
Edmonton Mun. A	222.5	37.5	391.5	77.5	125
Calgary Int'l A	205.0	14.0	431.0	78.0	122
Regina	185.5	14.5	281.5	35.5	114
Winnipeg Int'l A	200.0	49.0	258.0	48.0	123
Thunder Bay	201.0	27.0	267.5	-24.5	92
Windsor	44.0	-9.0 0.02-	44.0	-20.0	69
Toronto Int'l A	86.5	3.5	91.5	-20.5	82
Ottawa Int'l A	124.5	19.5	128.5	-14.5	90
Montreal Int'l A	124.5	36.5	136.5	21.5	119
Quebec	167.0	36.0	204.5	6.5	103
Saint John, N.B.	147.0	6.0	232.5	-19.5	92
Halifax	108.0	21.0	196.5	42.5	128
Charlottetown	131.5	22.5	201.5	28.5	116
St. John's, Nfld.	193.0	33.0	497.0	148.5	143

15 DAY TEMPERATURE ANOMALY FORECAST



Forecast Method

Analogue technique based on point prediction at 70 Canadian stations.

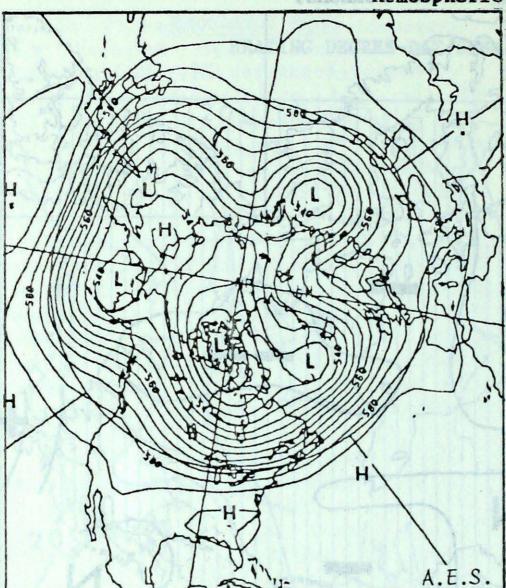
Temperature Scale

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

Station	Current Temper	cature Anomaly Forecast
Whitehorse	Above Normal	From 0.6 to 2.1° above Normal
Victoria	Above Normal	From 0.3° to 1.1° above Normal
Vancouver	Above Normal	From 0.3° to 1.1° above Normal
Edmonton	Much Above Normal	More than 2.5° above Normal
Regina	Above Normal	From 0.7° to 2.2° above Normal
Winnipeg	Above Normal	From 0.7 to 2.2 above Normal
Thunder Bay	Near Normal	Within 0.5° of Normal
Toronto	Below Normal	From 0.5° to 1.7° below Normal
Ottawa	Below Normal	From 0.5° to 1.7° below Normal
Montreal	Below Normal	From 0.5° to 1.6° below Normal
Quebec	Below Normal	From 0.5° to 1.6° below Normal
Fredericton	Below Normal	From 0.4° to 1.5° below Normal
Halifax	Near Normal	Within 0.4° of Normal
Charlottetown	Near Normal	Within 0.4° of Normal
St. John's	Above Normal	From 0.3° to 1.1° above Normal
Goose Bay	Much Below Normal	More than 1.6° below Normal
Frobisher Bay	Below Normal	From 0.6° to 1.9° below Normal
Inuvik	Near Normal	Within 0.8° of Normal

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

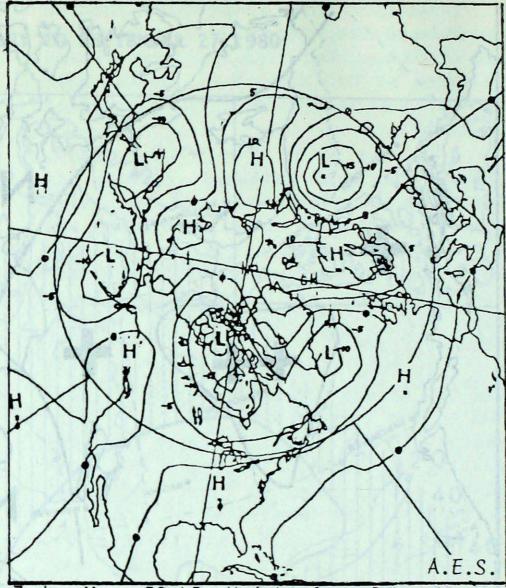
Atmospheric Circulation



7-day Mean 50 kPa Height Map(in dam) September 22 to 28, 1980

The mean Arctic vortex, more than 20 Dam deeper than the 30 year normal, remained nearly stationary over the Arctic Islands. A major trough encompassed most of central and eastern Canada resulting in a counter clockwise upper circulation from the western Arctic to the east coast. The atmospheric ridge previously over the Pacific, drifted gradually inland becoming the dominant feature across western Canada. Associated with higher surface pressures, relatively warm, dry, fair weather was experienced in the three western provinces, the exception being the British Columbia coast line. Here precipitation amounts were in excess of 50 mm, and were due to a deep cyclonic storm stationary on the Gulf of Alaska which pumped moisture-laden air inland.

Low pressure disturbances developing to the lee of the Rocky Mountains tracked southeastward across the Prairie Provinces toward eastern Canada, oscillating the Arctic frontal zone in a north-south direction. Brief periods of warmer but damp weather were common in the southerly air flow ahead of and to the south of each disturbance. Between each cyclonic system the leading edge



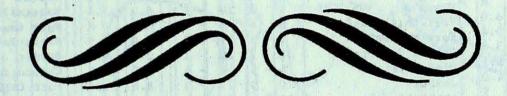
7-day Mean 50 kPa Height Anomaly
September 22 to 28, 1980 (5 dam intervals)
of cold Arctic air would push well
south of the border, giving generally
fair and dry but cold autumn conditions.

On Thursday afternoon a sharp cold front associated with a strengthening low pressure system crossing Lake Huron triggered showers and thunderstorms across southern Ontario, which in turn spawned two damaging tornadoes in the area south of Georgian Bay.

The Arctic air mass enforced its grip over all of central and eastern Canada this week. Widespread frost has now occurred across many rural communities of Ontario, Québec and the Maritimes resulting in crop damage, not to mention breaking numerous cold temperature records.

The Atlantic Provinces continued to receive above average rainfall amounts and below normal temperatures, due to numerous weather disturbances approaching from the west. Surges of cold Hudson Bay air are becoming increasingly more frequent, the leading edges of which have on occasion triggered heavy thunderstorm activity including high winds and heavy downpours. The island of Newfoundland was spared widespread frost up to now but Labrador received its first snowfall.

Andy Radomski



CLIMATIC PERSPECTIVES

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TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 06Q0 G.M.T. SEPTEMBER 30, 1980

	Temperature (°C) Precip. (mm)			Temperature (°C) Precip. (m					7.200	Temperature (°C) Precip.					0 /-					
AND DESCRIPTION OF THE PARTY OF	le				Temperatore (*C)						Temperature (°C)			Precip. (mm						
Station	Average	C	Extreme	Extreme	Total	Departure from Normal	Station	Average	Departure from Normo	Extreme	Extreme	Total	Deporture from Normal	Station	Average	Trom Norma	Extreme	Extreme	Total	Departure
BRITISH COLUMBIA Abbotsford A Alert Bay Blue River Bull Harbour Burns Lake Cape Scott Cape St. James Castlegar A Comox A Cranbrooke Dease Lake Estevan Point Fort Nelson A Fort St. John A Kamloops A Langara Lytton Mackenzie A McInnes Island	144 122 M 111 M 122 133 131 131 M M 5 M 144 122 15 M	1 X 0 X 0 1 0 0 1 M M - 2 M 1 0 0 X	24 21 18P 18 18P 16 18 23 18 22 13P 12 19P 22 15 22 15P 15P		32.5	- 7.0 X - 5.8	Sachs Harbour Shepherd Bay A Tuktoyaktuk Yellowknife A ALBERTA Banff Calgary Int'l A Cold Lake A Coronation A Edmonton Int'l. A Edmonton Mun. A Edmonton Namao A Edson A Fort Chipewyan Fort McMurray A Grande Prairie A High Level A Jasper Lethbridge A Medicine Hat A	9 11 7 9 10 9 10 9 M 5 10 4 10 12 12	- 6	- 1 6	-21 -16 - 9 - 5 - 2 - 1 - 2 - 3 - 1 2 - 1 - 5 - 2 1 - 5 - 2 - 1 - 2 - 3 - 1 - 2 - 1 - 2 - 1 - 2 - 1 - 2 - 2 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3	6.2 1.6 5.0 2.2 2.4 3.5	0.5 4.5 3.3 0.9 - 1.9 0.1 - 3.6 - 2.5 - 4.2 - 2.0 - 1.9 -12.4 M - 3.9 - 4.0 1.9 1.5 - 3.7 - 2.6	Simcoe Sioux Lookout A Sudbury A Thunder Bay A Timmins A Toronto Int'l A Trenton A Trout Lake Wawa A Wiarton A Windsor A QUEBEC Bagotville A Baie Comeau Blanc Sablon Border Chibougamau Fort Chimo A Gaspé A Grindstone Island	M 5 6 7 3 9 9 1 5 8 13 4 5 6 M 1 1 6 9	- 3 - 2 - 4 - 4 - 5 X - 2 - 5 - 4	15 16 20 18 18 19 6 16 19 22 16 15 10 M	2 - 2 - 3 - 6 0 - 1 - 5 - 3 - 2 4 - 4 - 7 - 6 - 3 3	18.7 7.0 33.6 5.5 2.0 13.4 41.3 18.1	16 -10 -12 - 2 - 8 27 16 7
Penticton A Port Hardy A Prince George A Prince Rupert A Quesnel A Revelstoke A Sandspit Smithers A Spring Island Stewart A Terrace A Vancouver Int'l A Williams Lake A YUKON Burwash A Dawson A	13 12 10 11 11 13 9 M M 11 13 13 10	0 1 2 0 2 0 2 1 M X	22 18 18 16 19 17 18 18 13P 18P 18 19 21 18	4 6 1 4 3 3 8 1 10 5P 7 6 6 1	1.0 37.6 3.2 43.2 3.8 17.4 36.7 12.1 M 65.2 17.4 5.7 8.6	- 3.4 3.0 -13.2 -35.5 - 8.0 11.5 11.8 - 2.3 M X 33.4 - 0.7 - 4.7	Medicine Hat A Peace River A Red Deer A Rocky Mountain House Slave Lake A Vermilion A Whitecourt SASKATCHEWAN Broadview Buffalo Narrows Cree Lake Estevan A Hudson Bay Kindersley La Ronge A Meadow Lake A Moose Jaw A Nipawin A	8 10 9 8 8 8 8 M 1 10 M 9 4 6 10 M	1 1 2 1 0 1 1 1 M X 0 M 0 0 - 3 X - 1 X	27 18 25 24 18 24 19 26 18P 26 12 22 26 16P	- 2 - 3 - 1 - 3 - 1 - 2 - 6 1 - 3 - 4 - 3 - 4 - 3	6.3 0.4 4.4 6.9 5.0 1.9 4.4 8.0 14.9 1.6 7.3 3.3	2.0 0.5 - 6.2 - 3.8 - 1.5 - 0.6 - 3.3 2.0 0.8 X - 4.6 - 1.3 - 5.6 - 1.6 X - 5.7	Inoucd jouac Koartak La Grande Rivière A Maniwaki Matagami A Mont-Joli A Montréal (A int.) Natashquan A Nitchequon Port Menier Poste-de-la-Baleine Québec A Rivière du Loup Roberval A Schefferville A Sept-Iles Sherbrooke A Ste-Agathe des Monts	1 M 0 0 5 M 6 8 6 0 0 5 2 6 M 5 5 - 2 5 M	- 3 X X - 5 X - 4 - 5 - 2 - 3 - 4 - 5 M - 5	5 6 4 15 13P 14 18 11 10 18 M 17 6 12 18P 15	- 3 - 3P - 6 - 5	19.3 20.4 45.5 28.8 M 47.6 19.8 40.8 15.3 52.4 18.7 39.3 M 39.9 18.9 18.2 22.6 38.8	3. 8. 29. 4. 21. - 4. 34. - 2. 20. 18. - 7. - 1. 15.
Komakuk Beach A Mayo A Shingle Point A Watson Lake A Whitehorse A NORTHWEST TERRITORIE Alert	-19	0 - 6 - 1 0		-17 - 8 -17 - 1 - 2		- 4.5 19.7 26.5 4.1	North Battleford A Prince Albert Regina A Rockglen Saskatoon A Swift Current A Uranium City Wynyard	8 5 9 M 8 M 0 8	- 1 - 2 0 X 0 M - 5	25 27P 21 26P 8 22	- 4 - 3 - 1 - 2 - 2 - 4 - 7	The state of the s	2.5 1.3 - 6.2 X 0.8 M - 2.4 - 3.6	Val d'Or A NEW BRUNSWICK Charlo A Chatham A Fredericton A Moncton A Saint John A	5 7 7 8 8	- 4 - 5 - 4 - 4	18 22	- 6 - 3 - 3 - 3 - 2		23 1 -11 -12
Baker Lake Broughton Island Byron Bay Cambridge Bay A Cape Dorset Cape Dyer A Cape Hooper Cape Parry A Cape Young A Chesterfield Inlet	- 6 - 5 - 9 -11 - 3 - 4 - 3 - 6 - 0 - 4	- 1 - 5 - 7 X 0 1 - 4	0 0 - 3 - 5 2 2 0 - 1 - 1	-12 -11 -15 -15 - 6 -15 - 8 -10 -10	17.3 1.0 1.2 21.1 8.0 17.8 1.3 17.9	- 2.4 - 2.1 X - 1.8 10.7 - 6.9 13.8 3.4	Yorkton A MANITOBA Bissett Brandon A Churchill A Dauphin A Gillam A Gimli Island Lake	6 8 - 1 7 - 1 7 M	0 - 2 - 1 - 4 - 2 X - 2 X	19 23 4 24 7 20 14P	- 3 - 1 - 5 - 3 - 7 - 1 - 2	5.4 9.8 8.6 4.6 5.0 2.2 5.7	- 4.2 - 8.8 2.6 - 5.0 - 3.6 X - 7.8 X	NOVA SCOTIA Eddy Point Greenwood A Sable Island Shearwater A Sydney A Truro Yarmouth A	10 9 13 10 9 M	- 4 - 2 - 4 - 4	-	3 - 2 1 - 1 - 1 - 1 - 2	3.9 41.1 43.4 M	-15 17 19
Clinton Point Clyde Contwoyto Lake Coppermine Coral Harbour Dewar Lakes Ennadai Eureka	- 7 M M - 7 - 5 M	M - 6	- 1P - 2 - 1 0P	-11 - 8 -12P -10 -13 -11 - 9 -25	1.8 6.0 M M 0.0 17.0 M	- 5.2 - 0.7 M M - 4.6 12.2 M - 1.8	Lynn Lake Norway House Pilot Mound Portage la Prairie The Pas A Thompson A Winnipeg Int'l A	1 2 8 8 4 0 7	- 4 X 0 - 2 - 3 - 4 - 2	10 13 22 23 14 12 21	- 6 - 7 - 1 - 2 - 2 - 6 - 2	17.0 4.8 1.8 15.1 0.9	-15.4 X - 5.7 - 8.5 3.9 -11.9 - 7.8	PRINCE EDWARD ISLAND Charlottetown Summerside NEWPOUNDLAND Argentia VTMS Battle Harbour Bonavista	9 8 11 M M	- 4 X M	18 19 18 10P 16P	1 0 5 18 5	52.8 34.4 25.6 M	31.
Fort Seliance Fort Simpson Fort Smith A	- 1 1 2 - 1	- 5 - 3 - 1 - 6 - 4 - 5 - 7 - 0 - 0	5 4 12 6 - 5 - 2 9 0 - 5 - 1 0 - 7 -11 - 1	- 6 - 5	2.3 18.8 12.1 22.9 1.0 5.2 25.4 8.9 0.6 1.4 6.6 15.8 2.4 2.5 0.0	10.6	ONTARIO Armstrong A Atikokan Earlton A Geraldton Core Bay A Kapuskasing Kenora A Kingston A Lansdowna Housu London A Moosonee Mount Forest Muskoka A North Bay A	M 6 M 3 8 3 7 M 1 10 2 M M 6 6	M - 4 - 3		- 8 - 5 - 8 - 1 - 6 - 1 1 - 4 2 - 5 M - 3 - 4	4.4 M 9.2 9.8 23.9 8.8 28.7 12.0 2.0 29.9 M M	- 8.9 -11.3 M - 8.0 -10.9 6.2 - 4.8 5.7 - 5.8 -16.2 11.3 M	Burgeo Cartwright Churchill Falls A Comfort Cove Daniel's Harbour Deer Lake Gander Int'l A Goose A Hopedale Port aux Basques St. Albans St. Anthony St. John's A St. Lawrence Stephenville A	8 4 1 8 7 7 8 4 3 8 M M 9 8 8	- 2 - 3 - 2 - 2 - 2	13 14 7 16 14 13 16 13 10 13 15P 9P 17 15	1 - 1 - 3 0 1 0 1 - 2 - 1 3 0 1 1 0 3	52.3 51 19.7 10.0 34.2 27.8 14.4 27.9 1.7 39.4 M	24. 30. -2. -16. 13. 1. -6. 8. -19. 8.

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