

WEATHER HIGHLIGHTS FOR THE WEEK - JUNE 17 - 23, 1980

Western Drought Continues - Eastern Cold Spell Ends

While increased amounts of precitemperatures of the previous week conpitation were recorded in parts of soutinued, resulting in the weekly averthern Saskatchewan, below normal condiages being below normal. Frost was retions prevailed throughout Manitoba. As corded at least once in both provinces. well, abnormally warm conditions conti-However, warm sunny conditions arrived nued in both provinces. Reports indicover the weekend and maximum temperaate that crop damage in the most strestures for the week peaked on Monday sed regions ranged from moderate to June 23. severe. Comparison with previous years The extreme highest and lowest indicates the present drought is one of temperatures for the week were 35°C at the most severe on record, and indeed Portage la Prairie on June 22 and -6°C is establishing new records at Winnipeg at Cape Dyer on June 23. The maximum and other locations. quantity of precipitation was recorded In Ontario and Quebec, the low at Whitecourt, Alberta, (79.8 mm). 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

Precipitation was below normal throughout much of the Arctic. Above normal rainfall was recorded at Mayo, Norman Wells and Fort Reliance. The maximum quantity of precipitation (28.4 mm) fell at Normal Wells, much of it occurring on the 19th (Thursday). Precipitation was also somewhat above average at Tuktoyaktuk, Nicholson and Shingle Point.

Temperatures were much above normal in the interior regions of the mainland, along the northern continental coastline, and north to the Queen Elizabeth Islands. Other areas were generally below average with the exception of Longstaff on the western coast of Baffin Island. The weekly maximum temperature was 29°C and occurred at Fort Simpson on Wednesday June 18th. The following Monday (23rd), the lowest temperature (-6°C) was recorded at Cape Dyer.

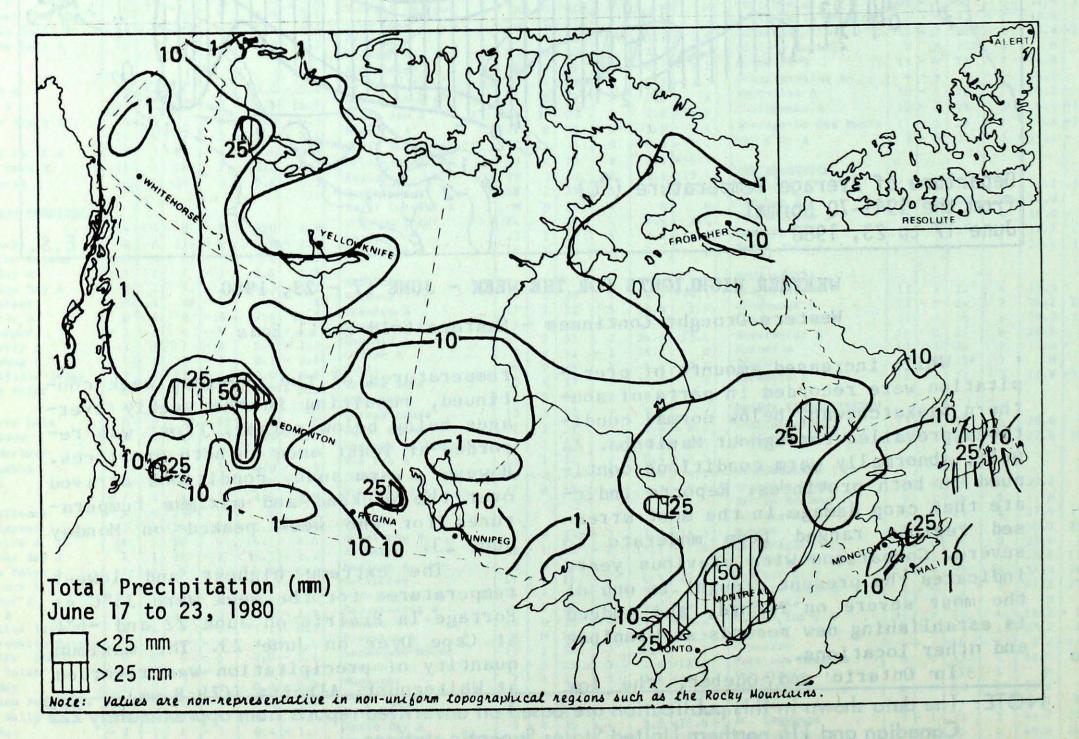
In spite of Mayo's above average precipitation, rainfall throughout the Yukon was inconsistent. Many southern regions continue to be below normal for the season with the result that forest fires have increased in number.

Along the Tuktoyaktuk Peninsula, fast ice persists for up to 30 miles off shore. However, it is rapidly deteriorating. Northwest of Cape Bathurst, there is open water. The drill ship Explorer 3 is now on site and the ice breaker Kigoriak is fully operational breaking up ice for other drill ships. The much above normal temperatures have greatly facilitated ice break-up in the Beaufort and it is now 1 to 2 weeks ahead of normal.

In Hudson Bay mostly open waters exist in the southeast shallows and are expanding rapidly in the northwest. Fox Basin is beginning to clear, its loose ice moving into Hudson Strait, the northern half of which is mostly open water.

BRITISH COLUMBIA

Coastal regions and the northern half of the province experienced below



normal precipitation during the past week. Both Terrace and Smithers recorded no rainfall. Precipitation was above normal in much of the southeastern quadrant. At Quesnel, 39.6 mm of rain fell, the highest in the province.

Temperatures in southwestern B.C. including the coastal regions were somewhat below normal. Most of the remaining regions of the province experienced warmer conditions than normal. Although temperatures at Kamloops were generally below normal, Kamloops also recorded the provincial high for the week; 30°C on June 19th. The lowest temperature (0.0°C) occurred at Dease Lake on the 18th.

In the Kamloops-Castlegar region, some ground frost occurred in low areas. Although conditions were too wet for haying, the harvesting of straw berries is well under way, and just beginning for cherries. Haying was also delayed at Prince George where severe hail damage from the previous week occurred to several vegetable farms. The warm, dry conditions near Fort Nelson did little to inhibit the many forest fires, 5 of which are out of control, and indeed have resulted in increasing grasshopper problems.

ALBERTA

While precipitation over much of Alberta was below average, it was considerably above in the southwest, in the region bounded by Calgary, Edmonton, Whitecourt and Jasper. At Whitecourt, 79.8 mm of rainfall were recorded, 65.9 mm above average. Much of this precipitation occurred on the 17th (Tuesday). eastern Alberta where less than sufficient quantities exist. Germination and therefore spraying operations have occurred unevenly due to the dry spell earlier in the season. Also, some limited hail damage has been reported in central Alberta.

SASKATCHEWAN AND MANITOBA

Northern Saskatchewan, plus areas in central and southern Saskatchewan and nearly all of Manitoba, continued to record below average precipitation. Both Uranium City and Island Lake remained completely dry during the week. Rainfall was somewhat above normal in parts of southern Saskatchewan, 21.6 mm being recorded at Wynyard - the maximum for the two provinces for the week.

During the nine-month period from September 1, 1979, to May 31, 1980, Winnipeg has recorded only 138.8 mm, or 46% of normal precipitation - the driest period on record. At Brandon it has been the 3rd driest period on record, 142.6 mm.

Temperatures continued to be above normal, especially in southern Saskatchewan but also throughout Manitoba. The warming trend begun during the weekend resulted in an extreme high maximum temperature of 34°C being recorded on Monday the 23rd at Estevan. In Manitoba, the maximum temperature on Sunday was 35°C at Portage la Prairie. Minimum tempertures of 0.0°C and -1°C were recorded at Churchill and Meadow Lake respectively.

Frost therefore did occur in a few locations early in the week. Thunderstorm activity occurred at Winnipeg on several occasions and on Friday hail was reported. Moderate to heavy crop damage persists in some areas of Saskatchewan, and

Temperatures were higher than normal throughout the entire province. The extreme high maximum temperature occurred at Medicine Hat on the 17th (30°). The lowest recorded temperature was 4°C at both Cold Lake and Vermilion on the 18th.

Soil moisture conditions are currently adequate for normal crop growth throughout the province, except in certain parts of east-central and southmany farmers have reseeded.

ONTARIO

Below normal precipitation quantities continued to fall throughout northern and southwestern Ontario. At Atikokan and Armstrong, only 0.4 mm of rain were recorded. In central and eastern Ontario, however, rainfall was considerably above normal. Total precipitation at North Bay for the week measured 61.8 mm, a departure of 46.5 mm from the normal.

In addition to the dry conditions, northern Ontario also experienced above normal temperatures. Most of central and southern Ontario were cooler than normal although a weekend warming trend did occur. On Tuesday June 17 the minimum temperature at Muskoka was -1°C. The highest temperature was recorded at Thunder Bay on the following Monday (33°C).

The cool temperatures experienced earlier in the week resulted in 5 to 10% of the tobacco crop sown along the north shore of Lake Erie being killed by frost.

On Friday June 20th, a maximum wind speed of 98 km/h from the northwest was recorded at Toronto International Airport.

QUÉBEC

Precipitation was relatively below normal throughout much of Quebec with a very obvious exception at Maniwaki. In that region, 43.6 mm of precipitation were recorded, 24.3 mm above the normal.

The low temperatures prevailing the previous week were continued so that much of the province experienced colder than normal conditions. The lowest recorded temperature occurred on June 20 at both Inoucd jouac and Postede-la-Baleine. Not until the weekend did higher temperatures finally arrive. Temperatures peaked at 29°C on Monday June 23 at both Matagami and Roberval. The low temperatures have hampered agricultural growth and the strawberry season, for example, has been delayed from one to two weeks. On a more positive note, the cool conditions are helping to control insect activity. Recreational enthusiasts have also delayed their activities due to cool

conditions. Registration at camp grounds remains low and participation in swimming and other water-based activities has also been hindered.

ATLANTIC PROVINCES

In Labrador and Newfoundland, precipitation were mixed. patterns Western, inland regions of Labrador and certain areas on the northwest, southeast and southern coast of the Island were relatively dry, while eastern Labrador and the remainder of the Island recorded above average rainfall. Precipitation was also above normal on Prince Edward Island but below in New Brunswick and most of Nova Scotia. The least amount of rainfall was recorded at Bonavista (1.6 mm) while the most (38.7 mm) fell at Burgeo, on the opposite side of Newfoundland.

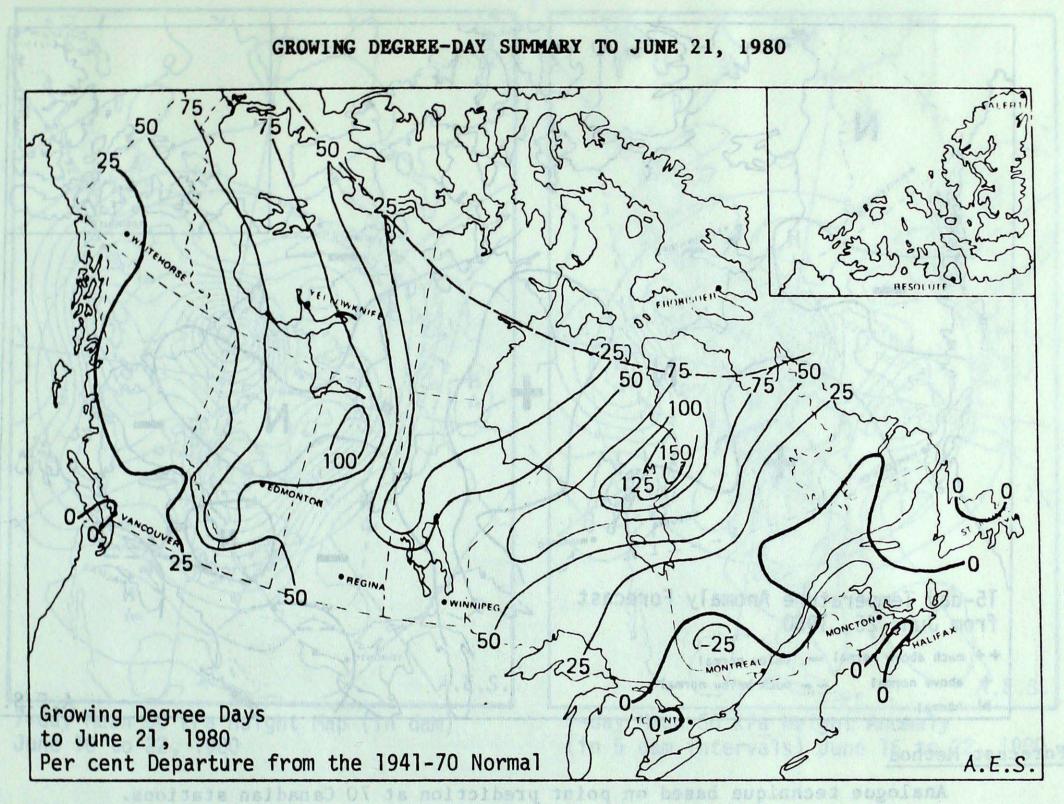
Above average temperatures were recorded throughout Labrador, P.E.I., eastern New Brunswick and most of Newfoundland, (Bonavista and St. John's excepted). Cool conditions prevailed in the rest of New Brunswick and all of Nova Scotia. Deer Lake recorded the lowest temperature; -3°C on June 17th. The highest occurred at both Chatham and Fredericton on the 23rd (30°C).

Although the cool temperatures have not significantly damaged tobacco crops in Nova Scotia, strawberries have been severely affected. The threat of frosts has forced farmers to irrigate their strawberry crops for many nights in succession in order to minimize damage. Such cool conditions have resulted in strawberry growth being 2 weeks behind schedule. Delays in apple blossom development have also occurred, prim-

arily due to the adverse effects of the cool weather on insects. Forage crops continue to do well.

throughout the grovince, eacepril a der-



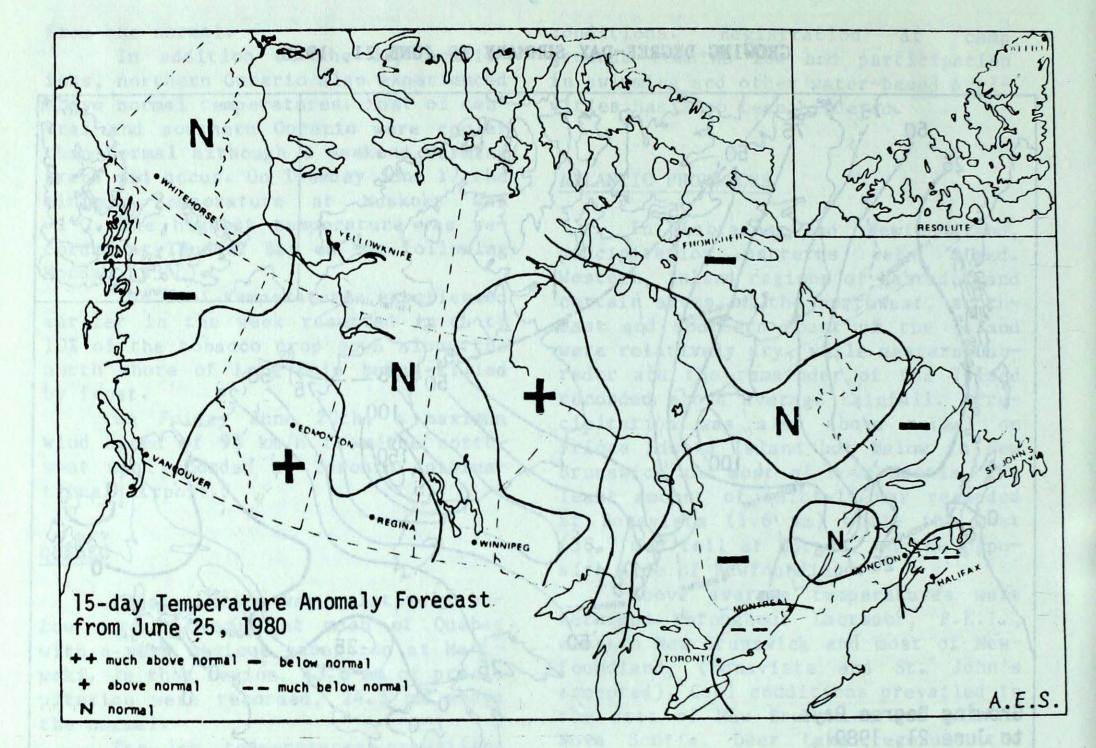


CITY	MONTHLY CUMULATIVE TOTAL	MONTHLY DIFF. FROM 1941-70 NORMAL	SEASONAL TOTAL	SEASONAL DIFF. FROM 1941-70 NORMAL	SEASONAL PERCENT OF NORMAL
Whitehorse	171.0	21.0	254.0	41.0	roll19 modestrill
Penticton	246.5	-4.5	764.0	121.0	reality a brode in
Vancouver	193.0	-12.0	589.0	1001-5.0 Cont	100 99 serdebas
Edmonton	239.0	46.0	652.5	285.5	178
Calgary	183.5	14.5	508.5	185.5	157
Regina	243.5	33.5	697.0	290.0	171
Saskatoon	236.5	27.5	702.0	295.0	172
Winnipeg	228.0	-3.0	691.5	262.5	161
Thunder Bay	157.0	-20.0	413.5	116.5	139
Windsor	234.0	-55.0	630.5	-56.5	92
Toronto	175.5	-82.5	491.5	-58.5	89
Ottawa	195.0	-70.0	532.5	-6.5	99
Montréal	199.0	-69.0	531.5	-12.5	98
Québec	179.5	-36.5	411.0	7.0	102
Fredericton	184.0	-28.0	402.5	1.5 Out	100
Halifax	142.5	-43.5	291.0	-26.0	92
Charlottetown	152.0	-25.0	239.5	-33.5	88
St John's	117.0	17.0	140.5	13.5	111 Altenat

15 DAY TIME RANGE 'ANDRACK' FORECAST

Anomaly denotes departure from the 1949-75 wean.

15 DAY TEMPERATURE ANOMALY FORECAST



Forecast Method

Analogue technique based on point prediction at 70 Canadian stations.

Temperature Scale

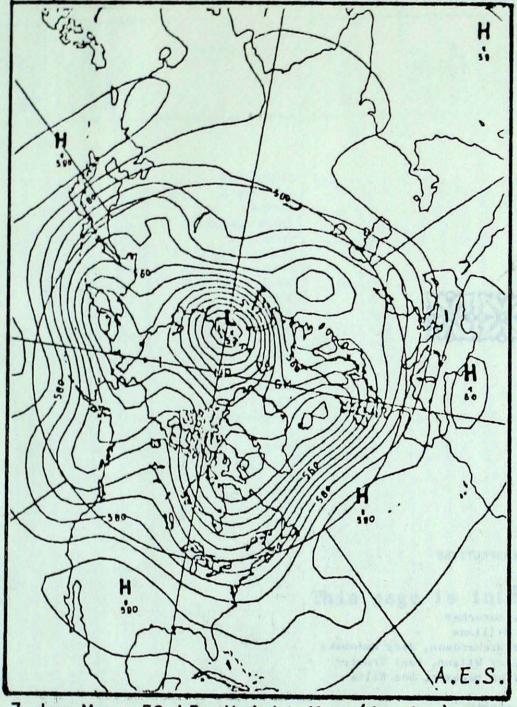
Each temperature class is designed to contain 20% of the historically observed 15 day means pertinent to specific location and time of year:

Station	Current	Temperature Anomaly Forecast
Whitehorse	Near Normal	Within 0.5° of Normal
Victoria	Near Normal	Within 0.3° of Normal
Vancouver	Near Normal	Within 0.3° of Normal
Edmonton	Above Normal	From 0.4° to 1.5° above Normal
Regina	Above Normal	From 0.4° to 1.5° above Normal
Winnipeg	Near Normal	Within 0.5° of Normal

Thunder Bay Toronto Ottawa Montreal Quebec Fredericton Halifax Charlottetown St. John's Goose Bay Frobisher Bay Inuvik Above Normal Much Below Normal Much Below Normal Below Normal Below Normal Below Normal Much Below Normal Below Normal Below Normal Below Normal Below Normal Near Normal From 0.4° to 1.2° above Normal More than 1.5° below Normal More than 1.4° below Normal From 0.4° to 1.3° below Normal From 0.4° to 1.3° below Normal From 0.4° to 1.3° below Normal More than 1.0° below Normal More than 1.3° below Normal From 0.5° to 1.7° below Normal From 0.5° to 1.6° below Normal From 0.4° to 1.3° below Normal

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

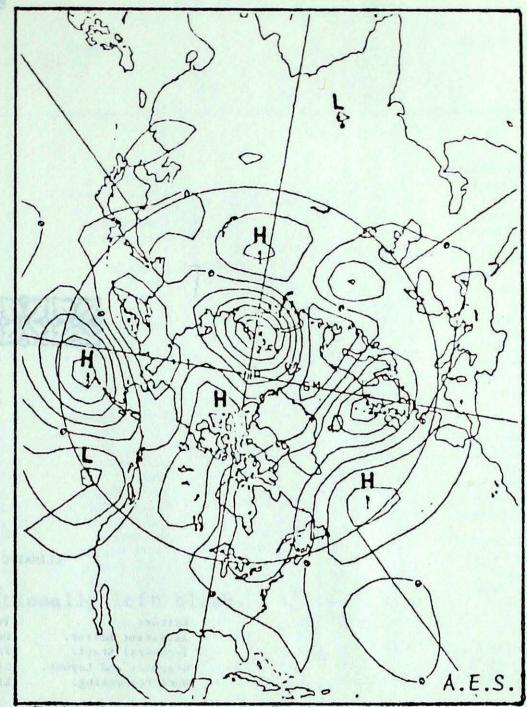
Atmospheric Circulation



7-day Mean 50 kPa Height Map (in dam) June 16 to 22, 1980

The atmospheric flow through the first half of the period remained essentially unchanged. A major upper ridge and trough remained positioned over the western and eastern halves of the country respectively.

Cold Arctic air continued surging southeastwards across eastern Canada keeping temperatures below normal. Disturbances moving across the area resulted in unsettled weather with occasional shower activity. Ground frost was once again reported in many agricultural areas causing further crop damage. A well established atmospheric trough previously located west of the Pacific coast began drifting slowly eastwards. This resulted in a shift of major wave positions over North America. By the end of the period a complete reversal had taken place in the upper flow pattern. A broad major trough has



7-day Mean 50 kPa Height Anomaly (in 5 dam intervals) June 16 to 22, 1980

now established itself across western North America, while an atmospheric ridge has positioned itself in the vicinity of the Great Lakes Basin.

the surface, weak cyclonic At disturbances were common across most of western Canada but precipitation amounts on the whole, continued to be relatively light. By the latter part of the period, increasingly unsettled weather was occurring due to the shift in the upper flow pattern. This resulted in more frequent shower and thunderstorm activity across the parched prairies. On the other hand, higher surface pressures and a strong southwesterly air flow both at the surface and aloft let the very warm, long-awaited tropical air finally reach Ontario, Quebec and the Maritimes, resulting in daytime temperatures nudging the 30° mark by Monday.

Andy Radomski



8

CLIMATIC PERSPECTIVES

Stati

Editor: Assistant Editor: Technical Staff: Graphics and Layout: Word Processing:

Yves Durocher Dan Williams Fred Richardson, Andy Radomski Gregory Wilson, Paul Truster Lillian Methven, Una Ellis

Correspondents

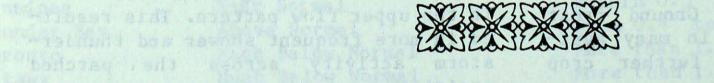
Terry Mullane, H.E. Wahl,

> Fred Luciow, Bryan Smith, Jacques Miron,

(Ice Forecasting Central) (Whitehorse) (Western Region) (Central Region) (Untario Region) (Quebec Region) J.F. Amirault, (Atlantic Region) Staff of Prince George, Kamloops, Castlegar, Fort Nelson, Peuticton and Kelowna weather office (Pacific Region)

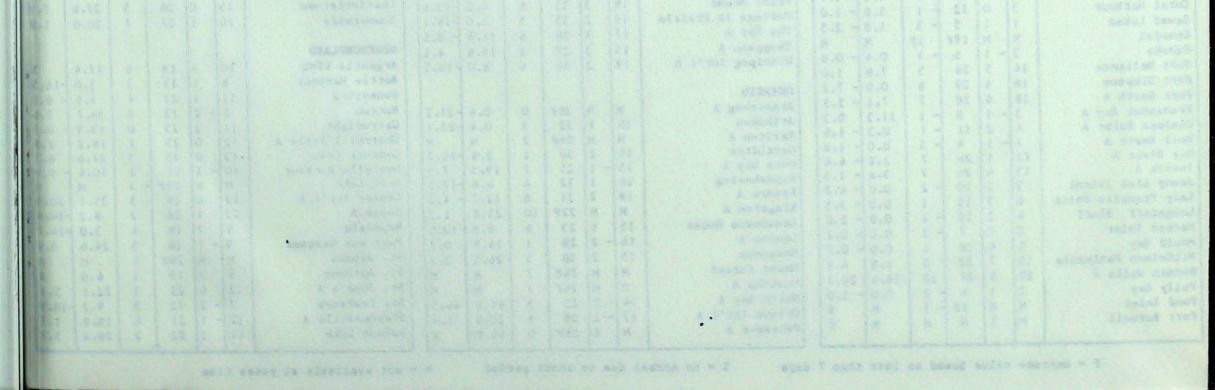
strangedate hendeldates lies a

Telephone Inquiries (416) 667-4711/4956



695013 TEREBRATURE AND RIGCIPITATION DATA FOR THE NEEK ENDING DEOD 6.N.T. ANE 29, 1980

																and the second second second second
1 anna (124)																
11111111													1 Jan			
												and the second				
		and the second second														
									A sensitive							and the construction and the second sec
									A wait brockers							
																and the second second
	the last is.															
A TANKS		A TURNE DIMAN		C.R.												
	1 12 1 - 13			0.05												
				- 0.0	1											
			for a land						Contender, plan A. References in the Res A.							
										1 1 1.6	- 1.5					
				1. 1. 1.						1 Law	- Daves					
								R.								
								Jai								
		A AMITAD TIM		1.1.83												
																ALLER GRADIER A.
		1 Jackson (and a second sec		182												
			1 1 L L L	- 6-15	a la se				Joseph and Street Contra							
		1 Abertan													1 AND	
			This	pas	ze 1	s 1	nt	ent	ionally left							
									MAINERSTANDAS		-					
	1 01 10 11															
	19 12 14 - 19															
		a hardwood and a set														
na Habit																
										The second se						
				a la					A AMERICAN A							
the strengt of the																
1211213							2 1		A Company A Company							
									A REAL PROPERTY AND A REAL PROPERTY.							
1 - V - V - V - V - V - V - V - V - V -		al in an and a sup														
I LIT LIEL													1			
bet of outs 1 1																
man of Ears 1 1																
		CALLER CALLERS TOP							and the second sec				1 -			
														and the Mar		



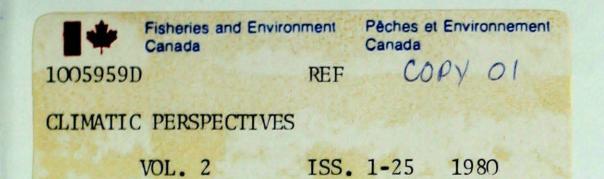
695013 TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. JUNE 24, 1980

692013		•			Precip			Temperature (°C) Precip. (mm)							Te	Preci				
	Temperature (°C)			- Tecip				line						Temperatur						
Station	Averoge	Departure from Normal	Extreme Maximum	Extreme Minimum	Total	Departure from Normal	Station	Average	Departure from Normal	Extreme Moximum	Extreme Minimum	Total	Departure from Normal	Station	Average	Departure from Normal	Extreme Maximum	Extreme Minimum	Total .	Denarture
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 Lytron Mackenzie A McInnes Island Penticton A Port Hardy A Prince George A Prince Rupert A Quesnel A Revelstoke A Sandspit A Smithers A Spring Island Stewart A Terrace A Tofino A Vancouver Int'l A Williams Lake A	15 13 12 13 13 19 15 17 M 15 18 11 18 13 15 17 13 15 12 16 17 13 15 12 16 17 13 15 12 16 17 13 15 12 15 12 15 17 15 17 18 11 18 11 19 15 17 18 11 18 11 19 15 17 18 11 19 15 17 18 11 19 15 17 18 11 19 15 17 18 11 18 11 19 15 17 18 11 15 11 15 11 15 11 15 15 11 15 115 1	00x0x12011MMM1112X10112MX2M1012	23 20 24P 17 22P 16 18 29 24 28 20P 15P 26 24 30 16 29 23P 18 29 23P 18 29 18 29 23P 18 29 23P 18 29 23P 18 29 23P 18 29 24 23P 18 29 24 23P 24 22P 24 23P 24 22P 24 23P 24 22P 24 23P 24 22P 24 22P 24 23P 24 22P 22P	7 6 6 4 9 8 9 9 8 9 9 8 9 9 8 9 9 8 9 9 8 9 9 8 9 9 8 3 9 9 8 3 9 9 8 3 9 9 8 3 9 9 8 5 10 M 9 8 9 9 9 8 9 9 9 8 9 9 9 8 3 9 9 9 8 9 9 9 8 3 9 9 9 8 3 9 9 8 3 9 9 9 8 9 9 8 3 9 9 9 8 3 9 9 9 8 9 9 8 3 9 9 9 8 8 3 9 9 9 8 8 3 9 9 8 9 9 8 9 9 9 8 9 9 8 9 9 8 8 9 9 8 8 9 9 9 8 9 9 8 9 9 9 9 8 8 9 9 9 8 8 9 9 9 8 9 9 9 8 9 9 8 9 9 9 8 9 9 9 8 9 9 9 9 8 9 9 9 9 8 9 9 9 8 9 9 9 9 8 9 9 9 9 9 9 8 9 9 9 9 9 8 9 9 9 9 9 8 9 9 9 9 9 8 9	M 3.8 M 1.0 11.6 10.5 1.6 8.5 1.4 M 11.3 7.8 6.6 14.0 15.0 M 0.4 14.4 6.3 21.2 1.8 39.6 18.2 3.6 0.0 M 0.0 M 0.0 M	21.0 - 2.7 x -13.7 x -18.4 - 1.9 - 2.5 - 5.8 - 6.7 - 9.1 M - 3.3 - 3.5 1.6 - 8.2 11.2 x - 25.2 8.8 - 6.9 7.8 - 6.4 - 8.2 11.2 x - 25.2 8.8 - 6.9 7.8 - 6.4 - 8.2 1.8 - 8.2 1.2 x - 25.2 8.8 - 6.9 7.8 - 6.4 - 8.2 30.1 8.8 - 6.4 - 8.2 - 8.8 - 6.9 - 7.8 - 6.4 - 8.2 - 8.2 - 8.2 - 8.2 - 8.8 - 6.9 - 7.8 - 6.4 - 8.2 - 8.2 - 8.2 - 8.8 - 6.4 - 8.2 - 8.2 - 8.2 - 8.2 - 8.8 - 6.4 - 8.2 - 8.2 - 8.2 - 8.2 - 8.2 - 8.2 - 8.8 - 6.4 - 8.2 - 8.2 - 8.2 - 8.2 - 8.8 - 6.4 - 8.2 - 8.2 - 8.2 - 8.8 - 6.4 - 8.2 - 8.2 - 8.2 - 8.2 - 8.2 - 8.2 - 8.8 - 6.4 - 8.2 - 8.9 - 8.2 - 8.9 - 9.5 - 2.9 - 23.7 - 7 - 7 - 7 - 7 - 7 - 8 - 7 - 7 - 7 - 7 - 7 - 8 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7	Resolute A Sachs Harbour Shepherd Bay A Tuktoyaktuk Yellowknife A ALBERTA Banff Brooks Calgary Int'l A Cold Lake A Coronation A Edmonton Int'l. A Edmonton Namao A Booton Namao A Booton Namao A Edmonton Namao A Booton Namao A Booto	2 7 3 11 17 15 M 16 17 16 17 16 17 16 17 16 17 16 17 16 17 16 17 16 17 16 15 16 15 16 15 16 15 16 15 16 15 16 17 17 16 17 16 17 17 16 17 17 16 17 17 16 17 17 16 17 17 16 17 17 16 17 17 16 17 17 16 17 17 16 17 17 16 17 17 16 17 17 16 17 17 16 17 17 16 15 17 16 17 17 16 15 16 15 16 16 16 15 16 16 16 15 16 16 15 16 16 15 16 16 15 16 16 15 16 16 15 16 16 15 16 16 15 16 16 16 15 16 16 16 15 16 16 15 16 16 15 16 16 15 16 16 17 17 16 16 17 17 17 16 17 17 17 16 17 17 17 17 17 16 17 16 17 17 17 17 17 16 15 16 16 15 17 17 17 17 16 17 17 17 17 17 16 17 17 17 17 17 16 17 17 17 17 17 16 17 17 17 17 16 16 15 16 16 15 16 16 15 16 16 15 16 16 15 16 16 15 16 16 15 16 16 16 16 16 15 16 16 16 16 16 15 16 16 16 16 16 15 16 16 16 16 16 16 16 16 16 16 17 16 16 16 17 16 17 17 16 17 17 16 17 17 16 17 17 16 17 17 16 17 17 17 17 17 17 17 17 17 17 17 17 17	14155 3M3231211 M324134322122 4MX4	5 19 10 25 26 25 27 25 26 25 24 25 27 25 26 25 24 25 27 25 28 30 26 27 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 26 25 27 25 26 25 27 25 26 25 24 30 26 27 25 26 27 25 26 27 25 26 27 25 26 27 25 26 27 25 26 27 25 26 27 25 26 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 24 27 25 24 24 27 25 24 27 25 24 24 27 25 24 24 27 25 24 24 27 25 24 24 27 25 24 24 27 25 24 24 27 25 24 24 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 27 25 27 25 24 27 25 24 27 25 24 27 25 27 25 24 27 25 24 25 27 25 24 25 27 25 27 25 27 25 24 25 27 25 27 25 27 25 27 25 27 25 27 25 27 25 27 25 27 25 27 25 27 25 27 25 27 25 27 25 27 25 27 25 27 25 24 25 27 25 27 25 24 27 25 24 27 25 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 24 25 27 25 24 27 25 24 27 25 24 25 24 27 25 24 27 25 24 25 24 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 27 25 24 2 24 2	- 2 - 1 - 2 9 5 M 7 4 7 7 10 9 6 P 5 7 5 5 10 10 6 9 8 6 4 5 7 8 P 4 5 7 8 P 4 5	0.0 7.0 40.6 21.5 2.8	- 2.8 - 2.1 - 0.8 0.1 - 4.6 - 8.3 M 17.2 -11.4 - 6.3 14.4 16.3 24.8 58.0 M - 15.0 - 1.8 - 7.6 13.9 - 17.4 - 10.9 - 3.3 22.3 - 4.9 - 16.1 - 10.8 65.9 3.0 M X - 3.9	Pickle Lake Red Lake A 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 Inoucd jouac Koartak La Grande Rivière A Maniwaki Matagami A Mont-Joli A Montréal (A int.) Natashquan A Nitchequon Port Menier Poste-du-la-Baleine Québec A	17 M M 17 155 15 14 16 15 14 16 15 14 15 18 15 M 8 M 13 7 14 12 4 9 15 14 15 17 11 M 13 4 16	$\begin{array}{c} M \\ M \\ 2 \\ - 1 \\ 1 \\ 0 \\ - 2 \\ - 4 \\ 2 \\ X \\ - 1 \\ - 2 \\ - 4 \\ 2 \\ X \\ - 1 \\ - 2 \\ - 1 \\ M \\ M \\ X \\ - 1 \\ - 3$	18 19P 27 16 27	5 6 3 2 6 4 8 8 2 7 2 2 1 3 7 2 2 1 3 7 2 2 1 3 7 2 2 1 3 7 2 1 2 6 4 8 8 7 7 2 1 2 6 4 8 8 7 7 1 2 1 2 1 3 7 1 2 1 3 7 1 2 1 3 7 1 2 1 3 7 1 3 7 1 2 1 3 7 1 2 1 3 7 1 3 7 1 2 1 3 7 1 2 1 3 7 1 3 7 1 2 1 3 7 1 2 1 3 7 1 2 1 3 7 1 2 1 3 7 1 2 1 3 7 1 2 1 2 1 3 7 1 3 7 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 3 7 8 0 3 3 - 2 8 0 3 3 - 2 8 8 1 3 7 8 0 3 3 - 2 8 8 1 3 7 8 0 3 3 - 2 8 8 8 8 1 3 7 8 1 3 7 8 8 1 3 7 8 1 3 7 8 1 3 7 8 1 3 7 8 1 3 7 8 1 3 7 8 1 3 7 8 1 3 7 8 1 7 8 1 3 7 8 1 8 1 3 7 8 1 3 7 8 1 8 1 7 8 1 7 8 1 8 1 7 8 1 8 1 7 8 1 8 8	2.2 M M 7.3 17.0 8.2 6.3 18.6 48.6 48.6 48.6 43.5 11.8 11.2 8.8 2.55 M 17.0 6.1 25.0 19.8 0.6 19.8 0.6 12.2 43.6 16.0 8.9 15.4 22.2 10.3 5.4 17.6 14.8 15.9 14.8 14.8 14.8 14.8 14.8 14.8 14.8 14.8 14.8 15.9 15.4 17.0 15.4 17.6 14.8 17.6 14.8 1	
YUKON Burwash A Dawson A Komakuk Beach A Mayo A Shingle Point A Watson Lake A Whitehorse A	9 12 8 12 12 12 12 11	- 2 - 3 - 2 5 - 2 - 2 - 2	19 22 19 21 22 22 20	- 3 1 1 1 3 0		-12.3 - 1.4 - 3.0 4.4 0.3 - 8.6 - 3.4	Hudson Bay Kindersley La Ronge A Meadow Lake A Moose Jaw A Nipawin A North Battleford A Prince Albert Regina A	M 19 17 17 20 18 18 18 18	M 3 4 X 4 X 2 3 M	28P 28 29 33 31 28 31 33P	0 8 3 - 1 8 3 6 2 7	M 10.8 12.0 6.0 10.2 8.8 19.1 8.3 4.8	M 3.6 - 5.4 X - 2.3 X 8.9 - 5.1 -12.5	Rivière du Loup Roberval A Schefferville A Sept-Iles Sherbrooke A Ste.Agathe des Monts Val d'Or A NEW BRUNSWICK Charlo A	1 1 1 1 1 1 1 1	M - 1 - 1 - 2 - 2	15P 29 21P 22 26 25 28 29	3	M 15.2 M 2.6 30.4 23.8 20.6	-1
NORTHWEST TERRITORIES Alert Baker Lake Broughton Island Byron Bay	07 M	- 1 2 M 2	8 17 3P 13	- 5 0 - 4	0.0	- 4.3 - 4.3 - 7.0 - 0.7	Saskatoon A Swift Current A Uranium City Wynyard Yorkton A	19 M 17 17 18	3 M 4 3 2	32 31P 27 33 32	3 7 5 1 2	13.6 M 0.0 21.6 37.7	3.0 M -10.3 12.8 25.1	Chatham A Fredericton A Moncton A Saint John A	17 16 16	0 - 1 0	30 30 28 27	3444	14.1 15.4 6.1 9.2	
Cambridge Bay A Cape Dorset Cape Dyer A Cape Hooper Cape Parry A Cape Young A Chesterfield Inlet Clinton Point Clyde	5 M O O 5 6 5 7 M	2 x - 1 0 3 1 3 1 3 M	11	1 - 1P - 6 - 4 0 1 0 0 - 4	0.0 M 0.4 0.0	- 3.3 x -12.6 - 6.5 - 5.4 - 2.5 - 9.0 0.1 M	MANITOBA Bissett Brandon A Churchill A Dauphin A Gillam A Gimli Island Lake Lynn Lake	17 18 6 17 13 17 M 16	1 3 - 1 2 X 1 X 3	32 33 19 30 24 32 25P 27	2 4 0 2 4 5 8 4	8.6	-13.0 - 5.5 8.8 -20.8 X - 5.1 X - 3.8	NOVA SCOTIA Eddy Point Greenwood A Sable Island Shearwater A Sydney A Truro Yarmouth A	M 15 10 12 12 12 M 13	X - 1 - 2 - 3 M - 1	18P 27 14 23 21 25P 22	4 1 6 5 2 1 3	21.3 25.0 6.9 10.3 11.6 M 14.2	-1:
Contwoyto Lake Coppermine Coral Harbour Dewar Lakes Ennadai Eureka	M 7 3 1 M 3	M 3 0 1 M	18P 21 12	0 - 1 - 3 1P	M 2.8 3.6 1.0 M 0.4	M - 1.7 - 2.0 - 2.5 M - 0.6	Norway House Pilot Mound Portage la Prairie The Pas A Thompson A	17 19 19 17 15 19	X 3 2 3 3 2	29 33 35 28 27 34	2 6 5 6 1	0.0 4.2 1.0 11.8 19.8	X -13.6 -19.1 - 0.5 4.1 -10.5	PRINCE EDWARD ISLAND Charlotterown Summerside NEWFOUNDLAND Argentia VTMS	15 16 10	0 1 X	26 27 18	57	27.6	7
Fort Reliance Fort Simpson Fort Smith A Frobisher Bay A Gladman Point A Hall Beach A Hay River A	14 18 18 3 4 1 17	-1 -5 -4 -1	0 24 29 28 8 11 4 26	- 1 5 8 7 - 1 - 1 - 3 7	7.8 0.0 7.1 11.3 0.3	$\begin{array}{c} 1.0 \\ - 7.2 \\ - 2.5 \\ 0.3 \\ - 1.6 \\ - 1.8 \\ - 4.4 \end{array}$	Winnipeg Int'l A ONTARIO Armstrong A Atikokan Earlton A Geraldton Gore Bay A	M 16 M 15 15	2 M 1 M 2 - 1	26P 32 26P 30 25	4 0 3 2 1 7	0.4 0.4 M	-21.2 -22.1 M -16.7 7.5	Battle Harbour Bonavista Burgeo Cartwright Churchill Falls A Comtort Cove Daniel's Harbour	8 11 8 11 12 13 10	1 - 2 1 0 - 1	15 21 13 25 23 25 21	3 4 3 0 1 3 3	3.0 1.6 38.7 19.9 18.2 27.0 10.4	-14 - 9 3 - 0 2 8 - 9
Inuvik A Jenny Lind Island Lady Franklin Point Longstaff Bluff Mackar Inlet Mould Bay Nicholson Peninsula	15 3 6 4 2 5 12	4 2 3 2 2 4 7	26 10 13 10 7 10 22	- 2 - 1 - 1 - 2 1 0	0.0 0.0 0.0	- 1.3 - 4.2 - 3.5 - 2.0 - 2.1 - 0.7 4.8	Kapuskasing Kenora A Kingston A Lansdowne House London A Moosonee Mount Forest	16 18 M 15 16 15 M	1 2 M 1 - 2 2 M	32 31 22P 25 28 30 24P	4 8 10 6 1 5 7	6.8 12.7 25.5	-17.5 - 4.2 1.2 -10.0 - 0.7 3.2	Deer Lake Gander Int'l A Goose A Hopedale Port aux Basques St. Albans St. Anthony	M 13 13 9 9 9 M 9	M 0 1 2 - 1 M X	21P 25 28 16 16 20P 19	- J 3 2 4 5 1 1	3.0 24.6 M 6.0	20 -10 -14 0
Norman Wells A Pelly Bay Pond Inlet Port Burwell	19 2 M M	5 1 X X	27 6	10 - 2 - 3 M	28.4	20.3 - 3.0 X X	Mount Forest Muskoka A North Bay A Ottawa Int'I A Petawawa A	M 14 17 M	M - 2 - 2 X	24P 24P 25 28 25P	- 1 5 6 0	M 61.8 20.0 46.9	M 46.5 1.4 X	St. John's A St. Lawrence Stephenville A Wabush Lake	12 7 12 11	0 - 2 - 1 1	23 12 21 22	3 3 4 2	22.1 9.2 18.9 28.4	5 -18 1 5

P - extreme value based on less than 7 days

X = no normal due to short period

H = not available at press time





NON-CIRCULATING

