

WEATHER HIGHLIGHTS FOR THE PERIOD - MAY 12 TO 18, 1981

Most of Prairies in drought as Southern Alberta receives more rain

A drought continues in the area north-east of Edmonton, in southern Saskatchewan and in Manitoba. Spring precipitation in these areas is 20% to 40% of normal.

A storm brought more precipitation to southern Alberta. Amounts varied from 20 mm to 57 mm and more than 30 cm of snow fell in the mountains. The crop situation was much improved, especially for pasture and forage crops.

Cool weather in the Okanagan has caused an extended blossoming time for the fruit trees. This may result in a staggered ripening of the fruit and cause problems at harvest time.

The mercury reached its maximum of 27° at Sherbrooke, Québec and its minimum of -20° at Cape Dyer and Hall Beach, Northwest Territories. The highest precipitation total, 110.9 mm, was recorded at Sept-Iles, Québec.

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

Mean temperatures were above normal in all regions with the exception of the Baffin Island area where mean temperatures were 2° to 5° below normal. The mercury fell to -20° at Cape Dyer and Hall Beach on the 13th and 14th respectively. It rose to 26° at Fort Simpson on the 18th.

Precipitation was limited to Baffin Island and the surrounding area and to the Mackenzie Valley. In the Yukon precipitation exceeded normal only at Dawson with a total of 23.1 mm.

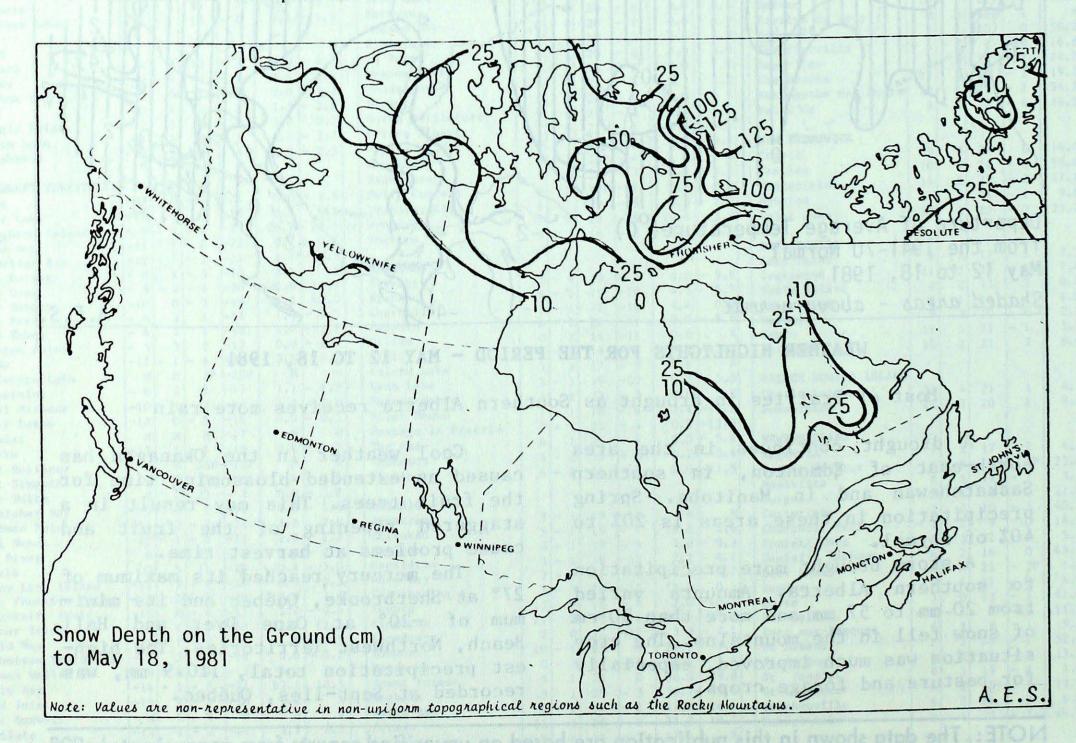
Ice conditions are more advanced than normal in the southern Arctic, particularly in Hudson Strait. Conditions in the Beaufort Sea remain favourable with some areas of open water evident.

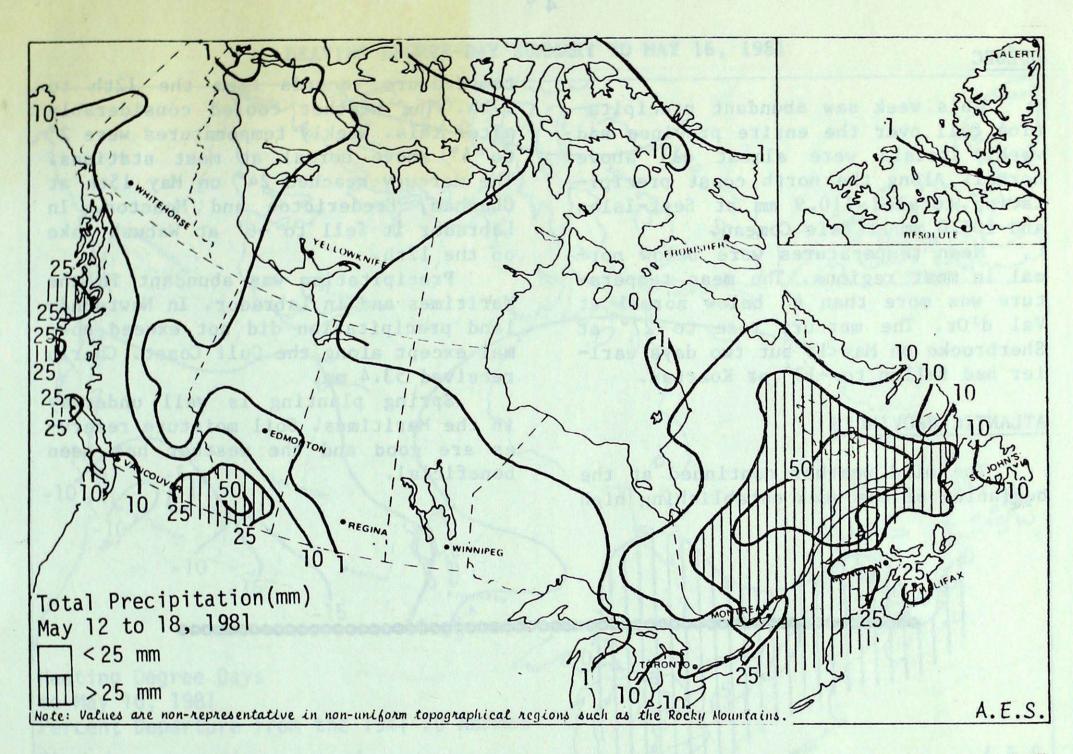
BRITISH COLUMBIA

Warmer weather was experienced in the interior of the province. Mean temperatures were close to normal in the peripheral areas and reached 2° to 3° above normal in the interior. After falling to -4° at Mackenzie on the 12th, the mercury rose to 25° on the same day at Lytton and at Kamloops and Revelstoke on the 18th.

Showers were numerous this week pushing weekly precipitation totals to above normal values at many stations. The showers were sporadic along the coast. Cape St. James recorded 46.8 mm of precipitation. It snowed in northern areas and in southern interior mountains; at Castlegar snow fell at the 1600 m altitude.

Fruit tree blossoms have remained out a long time this year in the Okanagan which could result in a staggered ripening of the fruit producing difficulties during the harvest. Moisture related fruit diseases have been reported in the Castlegar region. The first forest fire of the season in the Fort Nelson area was reported this week.





PRAIRIE PROVINCES

The drought continued across the Prairies with the exception of southern Alberta where a storm dropped more than 20 mm of precipitation in the agricultural regions and more than 30 cm of snow in the mountains; precipitation totaled 56.8 mm at Lethbridge. In Saskatchewan and Manitoba no rain fell this week at most stations and where rain did fall less than 5 mm was recorded.

Temperatures were above normal in most regions. The mercury reached 26° at Dauphin on the 18th and fell to -11° at Churchill and Gillam on the 14th and 15th respectively.

The precipitation from the storm of the 15th and 16th and from the storm of the previous week has resulted in a much improved crop situation in southern Alberta, especially for pasture and forage crops. The drought continues north-east of Edmonton, in southern Saskatchewan and in Manitoba. Spring precipitation is 20% of normal at

Portage and Winnipeg and less than 40% of normal at Estevan and Regina.

ONTARIO

Cooler weather arrived this week. Mean temperatures were close to 4° below normal at many stations. The mercury rose to 25° at Sioux Lake on May 18th and fell to -10° at Trout Lake two days later.

The beginning of the week saw precipitation fall in most areas, but weekly totals did not exceed normal at most stations. Ottawa recorded 35.4 mm.

Extremely dry conditions in extreme northwestern Ontario has forced fire crews to remain on alert status. The forests and their soils are reported as 'tinder dry'.

Cold, wet and windy weather has hampered farm field work and spraying in southern regions but a sunny weekend helped conditions. Frost was common across agricultural areas on the weekend causing some damage to unprotected plants.

QUÉBEC

This week saw abundant precipitation fall over the entire province and weekly totals were almost all above normal. Along the north coast precipitation totaled 110.9 mm at Sept-Isles and 106.0 mm at Baie Comeau.

Mean temperatures were below normal in most regions. The mean temperature was more than 4° below normal at Val d'Or. The mercury rose to 27° at Sherbrooke on May 15 but two days earlier had fallen to -13° at Koartak.

ATLANTIC PROVINCES

The mild weather continued at the beginning of the week establishing high

temperature records from the 12th to 17th. The weather cooled considerably after this. Weekly temperatures were 2° to 4° above normal at most stations. The mercury reached 24° on May 15th at Chatham, Fredericton and Moncton. In Labrador it fell to -6° at Wabush Lake on the 12th.

Precipitation was abundant in the Maritimes and in Labrador. In Newfound-land precipitation did not exceed normal except along the Gulf Coast. Charlo received 53.4 mm.

Spring planting is well underway in the Maritimes. Soil moisture reserves are good and the weather has been beneficial.

CLIMATIC PERSPECTIVES

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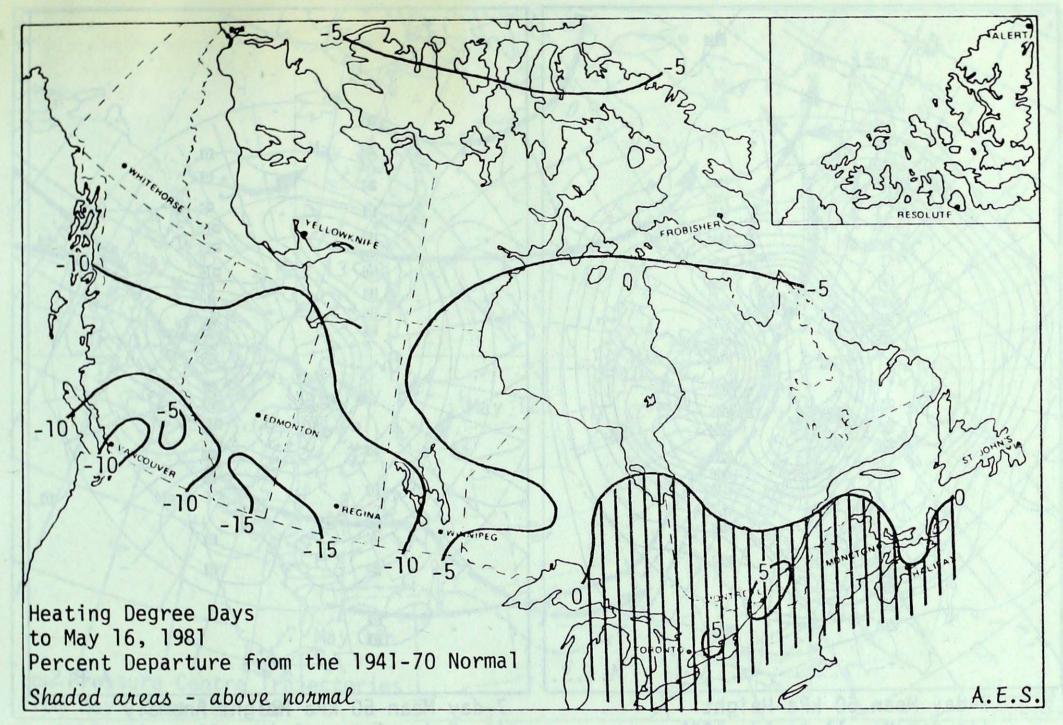
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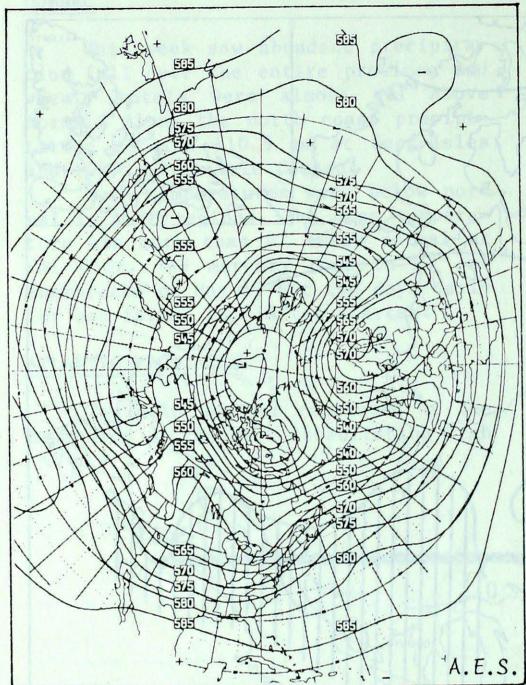
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HEATING DEGREE-DAY SUMMARY TO MAY 16, 1981

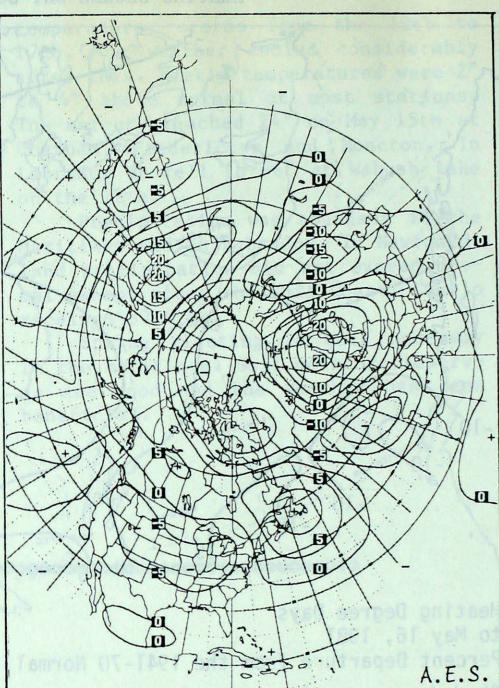


STATION	MONTHLY CUMULATIVE TOTAL	MONTHLY DIFF. FROM 1941-70 NORMAL	SEASONAL TOTAL	SEASONAL DIFF. FROM 1941-70 NORMAL	SEASONAL PERCENT OF NORMAL
Resolute	479.0	-17.0	11213.0	-394.0	97
Inuvik	277.5	-82.5	8899.0	-807.0	92
Whitehorse	170.5	-27.5	6094.0	-474.0	93
Vancouver	119.0	14.0	2652.5	-200.5	93
Edmonton Mun	126.0	-10.0	4572.0	-822.0	85
Calgary	177.5	19.5	4318.0	-766.0	85
Regina	133.5	-13.5	4945.0	-791.0	86
Winnipeg	154.5	9.5	5267.0	-455.0	92
Thunder Bay	178.5	10.5	5332.0	-150.0	97
Windsor	111.5	19.5	3618.5	106.5	103
Toronto	146.5	26.5	4145.0	178.0	104
Ottawa	114.5	-2.5	4663.0	98.0	102
Montreal	109.0	-2.0	4640.5	264.5	106
Quebec	136.0	-6.0	5147.0	233.0	105
Saint John, N.B.	129.0	-45.0	4605.5	81.5	102
Halifax	147.5	-20.5	4039.5	159.5	104
Charlottetown	115.0	-67.0	4389.5	2.5	100
St. John's, Nfld.	142.5	-74.5	4376.5	-28.5	99

Atmospheric Circulation



7-day Mean 50 kPa Height (in dam)May 11 to 17, 1981



7-day Mean 50 kPa Height Anomaly (in 5 dam intervals)May 11 to 17, 1981

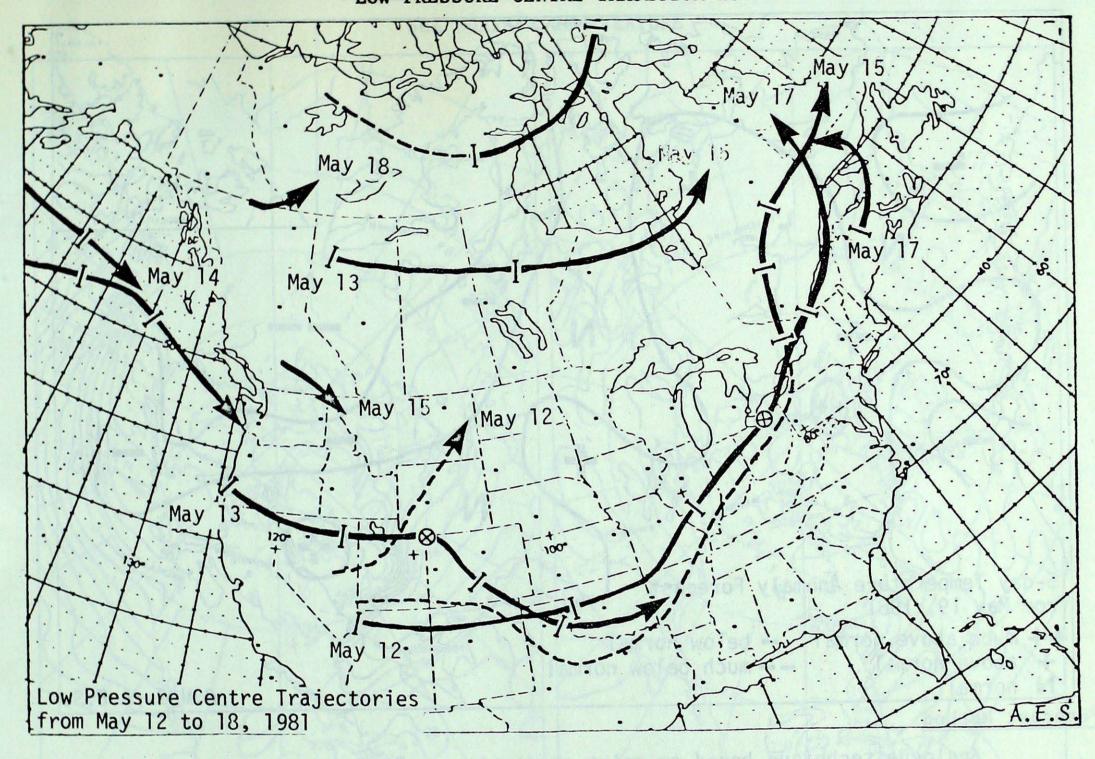
A major upper ridge rebuilt across central Canada and extended northwest-ward into the Yukon. Its strong influence once again produced dry, sunny, mild weather. On the other hand, southern British Columbia and Alberta remained under the influence of a 50 kPa upper trough and closed low. This resulted in unsettled showery conditions again this week.

A second cell of Arctic air and its associated area of strong high pressure drifted slowly southeastwards following the trajectory of the upper stream and became nearly stationary west of the Great Lakes basin. This forced the storm track, which previously crossed the Great Lakes, further to

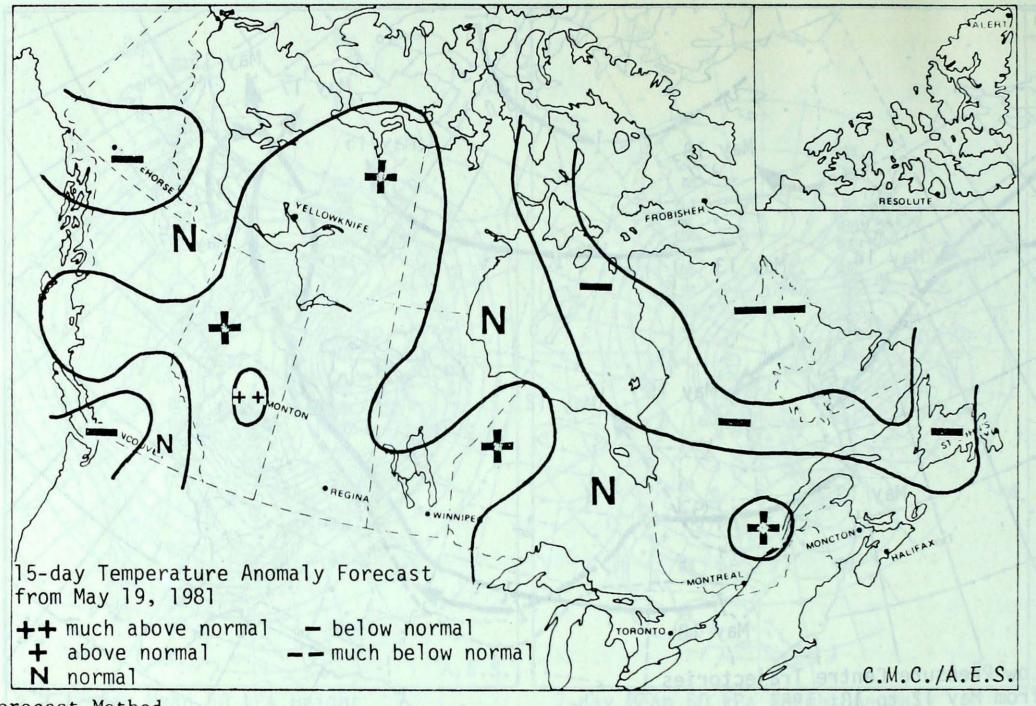
the south. Unsettled, wet conditions experienced earlier in the period were replaced by a northwesterly flow of cool Arctic air which dropped daily temperature readings to below normal values. Clear, cold nights across Ontario resulted in record low temperatures and frost.

The Atlantic Provinces and the southern portion of Québec continued to be wet as a series of low pressure systems approached from the southwest. Temperatures across the province of Québec were below normal. Only Labrador, the Maritimes and Newfoundland received above normal temperatures due to the northward push of mild air associated with each weather system.

LOW PRESSURE CENTRE TRAJECTORIES



15 DAY TEMPERATURE ANOMALY FORECAST



Forecast Method

Analogue technique based on point prediction at 70 Canadian stations.

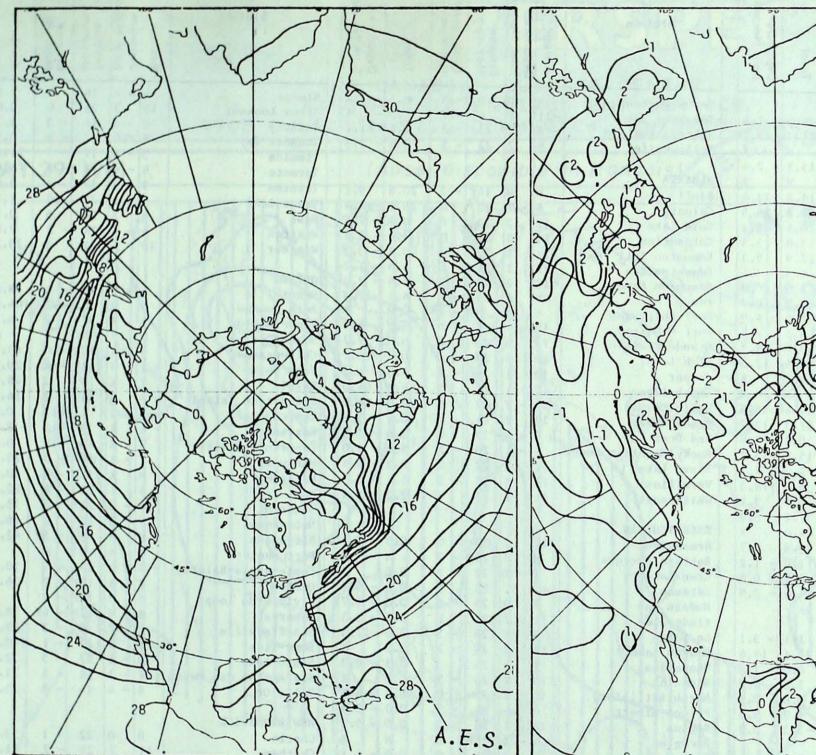
Temperature Scale

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 Tempera	ature Anomaly Forecast
Whitehorse	Below Normal	From 0.5° to 1.6° below Normal
Victoria	Below Normal	From 0.3° to 1.1° below Normal
Vancouver	Below Normal	From 0.3° to 1.1° below Normal
Edmonton	Much Above Normal	More than 1.7° above Normal
Regina	Above Normal	From 0.6° to 1.9° above Normal
Winnipeg	Above Normal	From 0.6° to 2.0° above Normal
Thunder Bay	Near Normal	Within 0.4° of Normal
Toronto	Near Normal	Within 0.5° of Normal
Ottawa	Near Normal	Within 0.5° of Normal
Montreal	Near Normal	Within 0.5° of Normal
Quebec	Above Normal	From 0.4° to 1.5° above Normal
Fredericton	Near Normal	Within 0.4° of Normal
Halifax	Near Normal	Within 0.3° of Normal
Charlottetown	Near Normal	Within 0.4° of Normal
St. John's	Near Normal	Within 0.5° of Normal
Goose Bay	Much Below Normal	More than 1.7° below Normal
Frobisher Bay	Much Below Normal	More than 2.0° below Normal
Inuvik	Near Normal	Within 0.7° of Normal

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

SEA SURFACE TEMPERATURE



Monthly Mean Sea Temperature for mid-April to mid-May, 1981

Sea Surface Temperature Anomalies for mid-April to mid-May, 1981

TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 06Q0 G.M.T. MAY 19, 1981

	Temperature (°C) Precip. (mm)						
	Temperature (٠٠١			i
Station	Average	Departure from Normo	Extreme	Extreme Minimum	Total	Departure from Normal	
BRITISH COLUMBIA		-	7				
Abbotsford	13	1	21	4	6.0	- 7.5 19.1	
Alert Bay Blue River	11 M	0 X	19 20P	2	31.3 M	X X	
Bull Harbour	10 M	1 X	15 19P	2 - 1P	15.5 M	- 2.6 X	
Burns Lake Cape Scott	10	1	14	- 6	14.8	-33.6	
Cape St James Castlegar	12	1 0	15	-62	46.8	28.9	
Comox	1.2	0	18	5	13.0	5.5	
Cranbrook Deane Lake	11 R	0	20	- 2	27.9	3.5	
Entevan Point Fort Nelson	11	11	1 3P	n	5.9	0.7	
Fort St John	1.2	- 7	12	1	2.0	4.9	
Pambaapu Langura	1.4	2	25 11	1,	62.11	24.7	
Lytton	15	l v	25 20	- 40	15.4	12.2 X	
McInnes Island	M	M	16P	8P	M	M	
Penticton Port Hardy	14	0	22 18	4 2	23.4	18.5	
Prince George	12	3	21	- 1	0.0	-11.8	
Prince Rupert Quesnel	11	2	16 22	- 1	15.9	-13.2 - 7.3	
Revelstoke	13	2	25 14	4 5	0.0	-14.3 3.1	
Sandspit Smithers	11	2	19	0	17.0	6.2	
Stewart	M 12		23	3P	14.0	4.7	
Vancouver	12	0	17	6	11.0	- 1.2	
Victoria Williams Lake	11	- 1	17 22	3	5.4	- 0.8 - 2.9	
	1	J.		100	NE T		
YUKON Burwash	7		17	- 5	1.1	- 3.1	
Dawson Komakuk Beach	10	-	20	- 3	23.1	19.6	
Mayo	11	3	18	0	2.2	- 1.2	
Shingle Point Watson Lake	- 2 8	1122	10	-11 - 1	0.0		
Whitehorse	9	2	18	- 1	3.3	0.9	
NORTHWEST TERRITORIE	s - 9	3	- 4	-17	0.0	- 2.7	-
Alert Baker Lake	- 6	1	3	-13	8.0	5.9	
Broughton Island Byron Bay	- 9	1	$-\frac{1}{1}$	-15 -18	0.2	- 5.9 - 0.6	
Cambridge Bay	-10	1	0	-18	0.0	- 1.4	
Cape Dorset Cape Dyer	-11	- 5	- 2P - 3	-11 -20	1.8	-12.7	
Cape Hooper Cape Parry	- 8 - 6	1020	- 2	-12	5.8	- 3.0 5.3	
Cape Young	- 7	1	1	-15	2.2	1.3	
Clinton Point Clyde	- 4	1	- 2	-12 -16	0.0		
Contwoyto Lake	- M	M	3P	-18	0.8	- 4.2 - 2.3	
Coppermine Coral Harbour	-10	- 4	- 3	-19	1.3	- 2.5	
Dewar Lakes Ennadai	-11 M	- 2 M	- 8 M	-15 -13P	11.1 M	8.4 M	
Eureka Under Bu	- 9	2	- 2	-13 -10	0.0	- 0.4	
Fort Reliance Fort Simpson	9		19 26	- 4	9.3	5.5	
Fort Smith Frobisher Bay	- 7	- 4	23	- 5 -13	0.0	- 4.5 - 2.1	
Gladman Point	-11	0	- 2	-19	0.0	- 3.1	
Hall Beach Hay River	-11 8	- 2	- 3 25	-20 - 5		- 2.6	
Inuvik Jenny Lind Island	2 -10	1991	18	-11	The second second	- 2.3	
Lady Franklin Point	- 7	1	3	-17	0.0	- 0.3	
Longstaff Bluff Mickar Inlet	-10 -12	- 2 - 2	- 5	-15 -15	6.5	2.9	
Mould Bay	-10 - 5	2 2	- 3 10	-15 -16	3.0	1.4	
Nicholson Peninsula Norman Wells	7	2	22	- 6	1.0	0.5	
Pelly Bay Pond Inlet	-13 -11	- 2 X	- 1	-19 -16	8.0	4.7 X	
Port Burwell Resolute	M -11	X	M - 4	M	М	X	
	-11		- 4	-16	7.5	5.5	
Pote; An		Ly	0.8		8 0	epar	

TON DATE FOR THE	Temperature (°C)				Precip. (mm)		
Station	Average	Departure from Normal	Extreme	Extreme Minimum	Total	Departure from Normal	
Sachs Harbour Shepherd Bay Tuktoyaktuk Yellowknife	- 9 -11 - 4 6	1	0 0 11 22	-15 -17 -13 - 5	0.2 0.5 1.4 0.6	- 1.7 - 0.4 1.1 - 2.8	
ALBERTA Banff Calgary Cold Lake Coronation Edmonton Intl Edmonton Mun Edmonton Namao Edmon Fort Chilpewyan Fort Helluray Grande Prairie High Level Jasper Lethbridge Medicine Hat Peace River Red Deer Rocky Mountain House Slave Lake Vermilion Whitecourt	M 8 12 10 11 12 12 9 M 12 11 10 10 10 11 12 9 8 12 12	- 1 2 0 2 2 2 2 1 M 1 1 1 - 1 - 1 - 1 - 1 2	22 24 23 27 H 24 21 19 21 22 24 21 20 22 22	- 2 0 0 0 - 1 2 2 - 1 - 2 - 2 - 3 0 1 0 - 2 0 - 1	20.8 26.1 0.0 1.2 0.8 4.8 4.4 4.4 4.0 0.0 56.8 37.0 0.0 3.0 5.8 0.0 1.4 2.2	44.0 28.0 - 5.8 - 5.6 - 4.0 - 8.4 - 5.5	
SASKATCHEWAN Broadview Buffalo Narrows Cree Lake Estevan Hudson Bay Kindersley La Ronge Meadow Lake Moose Jaw Nipawin North Battleford Prince Albert Regina Rockglen Saskatoon Swift Current Uranium City Wynyard Yorkton	111 M 7 12 9 111 9 12 12 10 12 10 12 10 12 11 7 7 11 10	X 1 0 2 1 X 1 X 2 1 1 X 1 1 2 1 1 2 1 1 1 1 1	22 23 25 22 24 24 25 25 25 24 23 18P 25 22 22 24	0 - 3 - 7 3 - 6 1 - 5 - 3 3 - 5 0 - 3 2 2 0 1 - 4 - 2 - 3	0.0	X - 9.7 - 6.7 - 5.3 -11.3 X - 6.3 X - 4.3 - 5.9 - 5.3 X - 5.1 - 3.6 - 1.3 - 5.3	
MANITOBA Bissett Brandon Churchill Dauphin Gillam Gimli Island Lake Lynn Lake Norway House Pilot Mound Portage la Prairie The Pas Thompson Winnipeg	10 M 1 9 3 8 M 6 7 12 12 8 M 12	M 3 - 1 X - 1 X 1 X 2 1 1	25P 15 26 20 20 21P 24 21 23 25 25	- 2 0 -11 - 5 -11 - 2 - 7 -10 - 7 2 - 1 - 6 -10 0	0.0	X -13.0 X -16.8 -13.1	
ONTARIO Armstrong Atikokan Earlton Geraldton Gore Bay Kapuskasing Kenora Kingston Lansdowne London Moosonee Mount Forest Muskoka North Bay Ottawa Petawawa Pickle Lake Red Lake	6 8 6 6 8 6 12 8 5 8 M 6 8 5 9 7 6 8	0 - 2 - 4 - 2 - 2 - 2 - 3 - 1 - 5 M - 5 - 3 - 5 - 3 X 0 1	20 21 17 19 17 20 22 17 21 17 15P 15 17 14 17 14 22 21	- 9 - 4 - 6 - 8 0 - 7 0 0 - 8 0 - 6 - 2 - 2 - 3 - 1 - 3 - 8 - 4	0.0 0.0 15.9 0.0 5.4 15.6 0.0 5.0 0.4 15.2 2.4 11.2 9.8 11.8 35.4 7.9 0.0	-14.5 -10.9 2.6 -12.0 - 7.5 - 2.2 -10.9 -12.6 - 9.6 - 5.2 -10.8 -14.7 -10.3 - 4.6 14.7 x -13.5 - 9.5	

	Temperature (°C)			Precip. (mm)			
			OF	761			lom
Station'	Average	Departure	from Norma	Extreme	Extreme	Total	Departure from Norma
Stucoe	9		4	18	1	М	М
Sloux Lookout Sudbury	11 6		3 4	25 16	0 - 3	6.3	-15.7 - 5.9
Thunder Bay	8		0	22	- 5 - 7	0.0	-15.8 7.9
Timmins Toronto	5 8	-	4	17	- 1	24.6	-15.1
Trenton Trout Lake	9	-	4	17	- 1 -10	3.6	-16.8 - 9.9
Wawa	M	1.0	X	20P	- 5	3.2	X
Wiarton Windsor	10		5	14 22	- 2	7.8	- 5.1 - 1.4
QUEBRC		1	7				
Bagotville	6		3	17 16	- 6 - 2	28.0	14.9 87.1
Bale Comeau Blanc Bablon	6	1	1	17	2	6.5	- 6.1
Border Clifbougaman	11	TO THE	II X	H	- 6	65.H	H X
Fort Chimo	- 1	10	0	12	- 4	20.8	15.1 X
Gaspé Grindstone Island	9		X 3	16	2	16.2	2.6
Inoucdjouac Koartak	- 4		2 X	2 0	-11 -13	0.0	- 5.3 X
La Grande Rivière	2	1	X	15	-11	8.6	4.3
Maniwaki Matagami	7 M		3 X	18P	- 9	20.9	X
Mont-Joli Montréal	10		1 3	22 22	- 1	82.4	69.9
Natashquan	6	1	2	12	0	66.6	48.2
Nitchecun Port Menier	M		M	9 M	- 8P M	42.4 M	32.0 M
Poste-de-la-Baleine	- 2		2	10	- 9 - 2	10.3	
Québec Rivière du Loup	M		M	19P	- 2	M	M
Roberval Schefferville	M 2	1	M 2	12P 8	- 6P - 3	38.9	29.2
Sept-Iles	10	Sign of the last o	0	A COLUMN	- 1 - 5	110.9	
Sherbrooke Ste Agathe des Monts	7	-	3	18	- 3	31.0	9.6
Val d'Or	4	-	4	14	- 8	25.8	8.2
NEW BRUNSWICK Charlo	8		0	22	- 1	53.4	36.3
Chatham	11	1	2	24	- 2	41.0	21.2
Fredericton Moncton	11		1 3	1 2 2 2 2 1	- 3 - 1	16.1	- 4.8
Saint John	10	b	2	21	- 1	45.0	21.2
NOVA SCOTIA				20	1	12 4	v
Eddy Point Greenwood	10		X 2	20	0	12.4	1.2
Sable Island Shearwater	9		3	13	5 2	1.3	-18.1 12.7
Sydney	11		4	22	2	24.4	1.5
Truro Yarmouth	M 11		M 2	16P 19	0	18.4	- 2.7
PRINCE EDWARD ISLAND							
Charlottetown	12		4	23	0	21.8	5.0
Summerside	13		4	22		21.0	3.0
NEWFOUNDLAND Argentia	8		X	18	3	6.4	x
Battle Harbour	3 7		1 3	7	0 2	4.9	- 4.8 - 9.0
Bonavista Burgeo	7		1	11	4	27.3	3.7
Cartwright Churchill Falls	6 M		4 M	22 10	- 3 OP	11.4	-1.3 36.5
Comfort Cove	10		3 4	22	2 2	5.6	-10.2 18.6
Daniel's Harbour Deer Lake	8		1	22	1	21.2	10.1
Gander Goose	10		3	20 18	- 3	3.2	7.1
Hopedale	2		1	10	- 4 2	7.3	- 3.3
Port aux Basques St Albans	11		3	20	2	9.4	- 7.2
St Anthony St John's	4 9		X 4	12 20	- 1 2	1000000	-21.0
St Lawrence Stephenville	7		2	16 20	3	11.4	0.6
Wabush Lake	3		1	9	- 6	46.4	38.8