



CANADIAN Climate Summary

September 1996

Monthly review of Canadian climate and water

vol. 1

CLIMATIC HIGHLIGHTS

September 1996

Sept 26th - The country's coldest temperature this month, -25.9° , at Eureka.

The final week of the summer is near-disastrous for Prairie farmers. After a summer in which warmth and near-perfect moisture levels had produced the expectation of a near-record grain harvest, many areas receive more than 80 mm of rain, followed by several centimetres of snow and a killing frost. Although the moisture is at first welcomed by farmers who are about to plant winter wheat, it soon becomes apparent that a return to drier and warmer conditions will be needed at the beginning of October, to save the crops still to be harvested.

Sept 3rd - Once again, the highest temperature in the country is found in the Okanagan. This month it's in Summerland, where 32.2° is recorded.

Sept 5th - In the early morning hours thunderstorms produce straight-line winds that hit 120 km/h, destroying several buildings, and toppling 19 hydro-transmission towers just north of Winnipeg. Power from generating stations in northern Manitoba, accounting for 75% of the province's power, is cut off. As a result, Manitoba Hydro is forced to buy power from the USA. For two days residents and businesses are asked to cut back on hydro use.

Sept 9th - Much of the area around London misses the heavy rain from Fran, but makes up for it two days later. A mid-morning cloudburst drops 81 mm of rain on the city, flooding streets and basements. Afternoon showers bring the day's total to 92.5 mm, a new one-day record for the city. East of the city, the town of Ingersoll receives more than 140 mm. London's total for September is 314 mm, four times the normal, and the most the city has ever received in any month. Between the beginning of April and the end of September more than 830 mm of rain falls, making this London's wettest summer since records began in 1940.

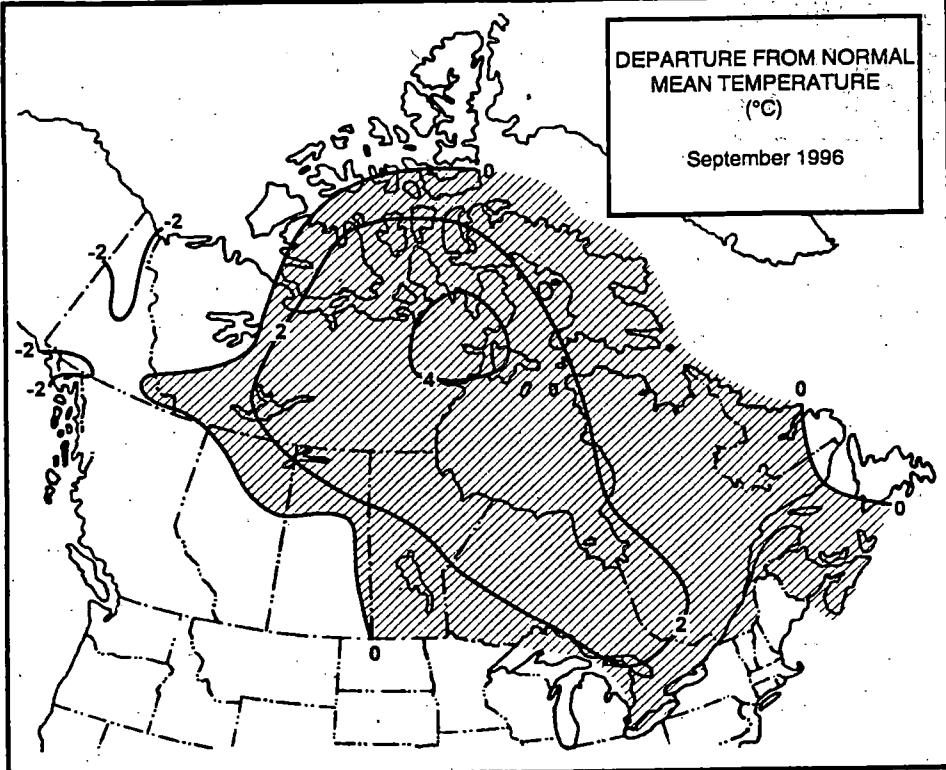
Sept 2nd & 3rd - The remains of Hurricane Edouard move by to the southeast of Nova Scotia. Rainfall amounts along the coast exceed 100 mm. At Yarmouth 122 mm are recorded, a record for September, and the second highest one-day precipitation total on record. Three people have to be rescued in the Bay of Fundy and near Peggy's Cove after strong winds produce a surf of 4 to 6 metres. Fortunately, there are no deaths or serious injuries.

Sept 14th & 15th - The third hurricane to affect Canada this month, Hortense moves across Nova Scotia, the first time that a storm still at hurricane strength has made a direct hit on the province since Hurricane Blanche in 1975. Rainfall amounts exceed 125 mm from Halifax to Cape Breton. Winds over the Cabot Strait exceed 160 km/h prompting the cancellation of most ferry crossings on the 14th and early on the 15th. Major power outages occur in Halifax and a few windows are blown out in office buildings in Halifax. In East Lawrencetown, huge waves destroy at least one house.

Sept 24th & 25th - Heavy rain again falls across the Atlantic provinces, this time the result of a storm system whose original incarnation had been as a Pacific hurricane. Across Newfoundland, rainfall totals of 50 to 75 mm are common, while along the island's south and east coasts, gusts of 100 to 125 km/h are recorded. Heavy rains also fall in Nova Scotia; taken together with the precipitation from Edouard and Hortense, much of the province has its wettest September ever. Both Halifax and Yarmouth finish up with more than 360 mm, breaking their old records for the month by well over 100 mm. With 186 mm, Gander also sets a new October record.

Sept 7th & 8th - The remains of Hurricane Fran hit the lower Great Lakes. Although it's been downgraded to a tropical depression, it still brings a lot of rain. More than 100 mm falls in areas bordering Lake St. Clair, while slightly less is recorded in several places along the north shores of Lakes Erie and Ontario. As much of the affected area has just come through a three-week dry spell, the two-day deluge is quickly soaked up and only minor flooding of some low-lying areas is reported.

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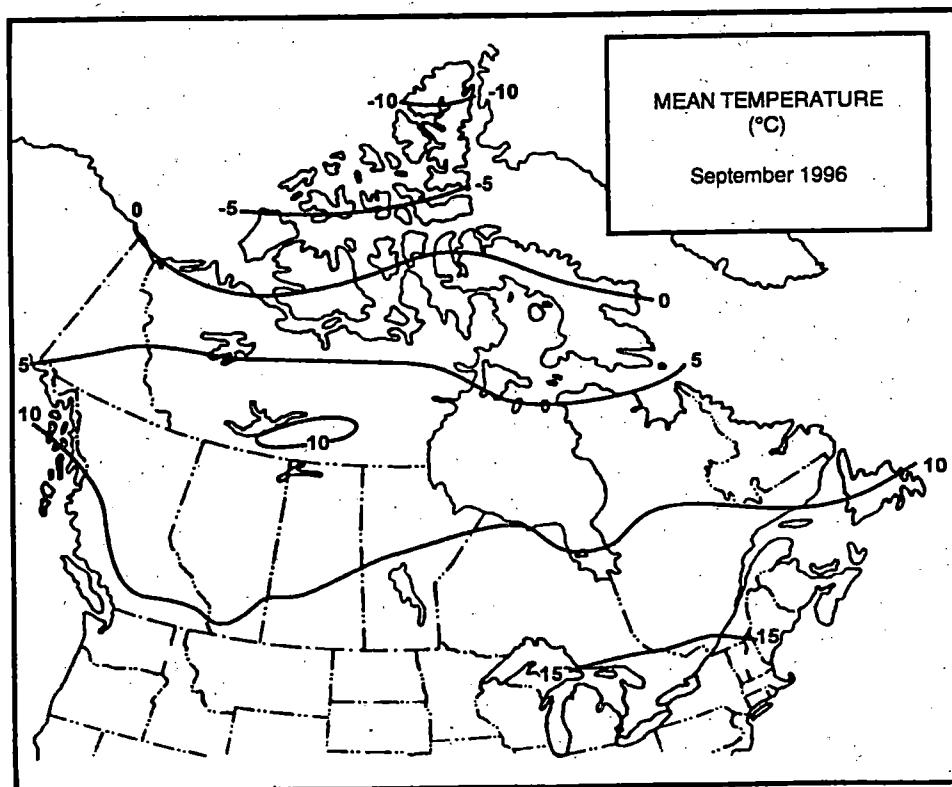
Climatic Summary is a monthly publication (disponible aussi en français) of the Canadian Meteorological Centre, Atmospheric Environment Service, 4905 Dufferin St., Downsview, Ontario, Canada M3H 5T4.

The data in this publication are based on unverified reports from approximately 225 Canadian synoptic weather stations. Articles do not necessarily reflect the views of the Department.

ISSN 1207-8514

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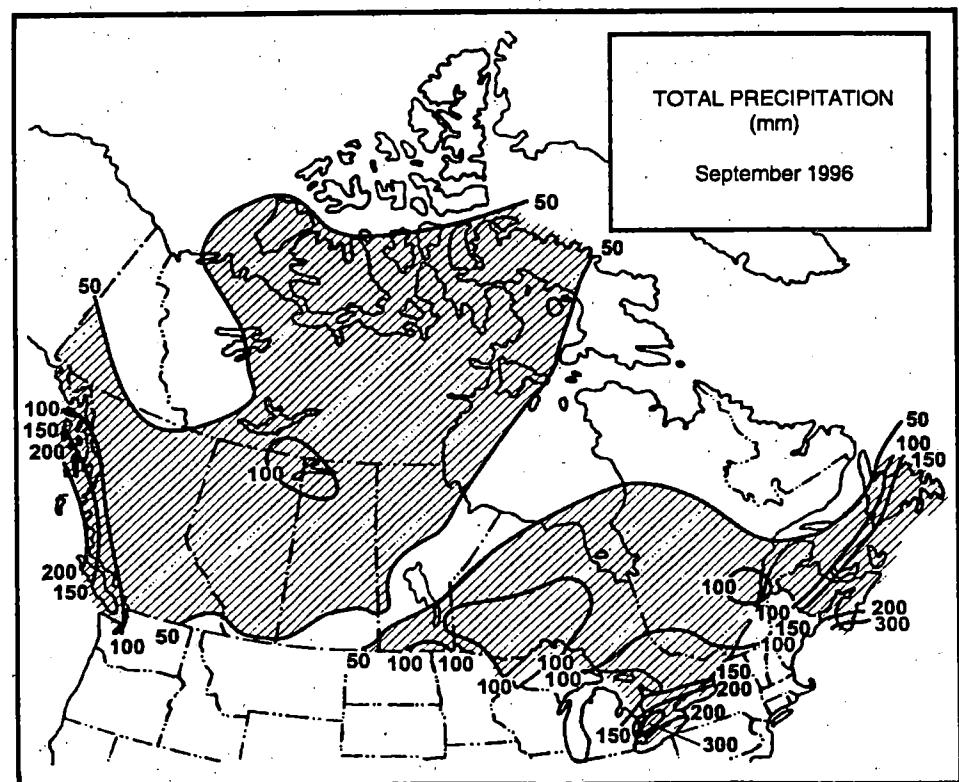
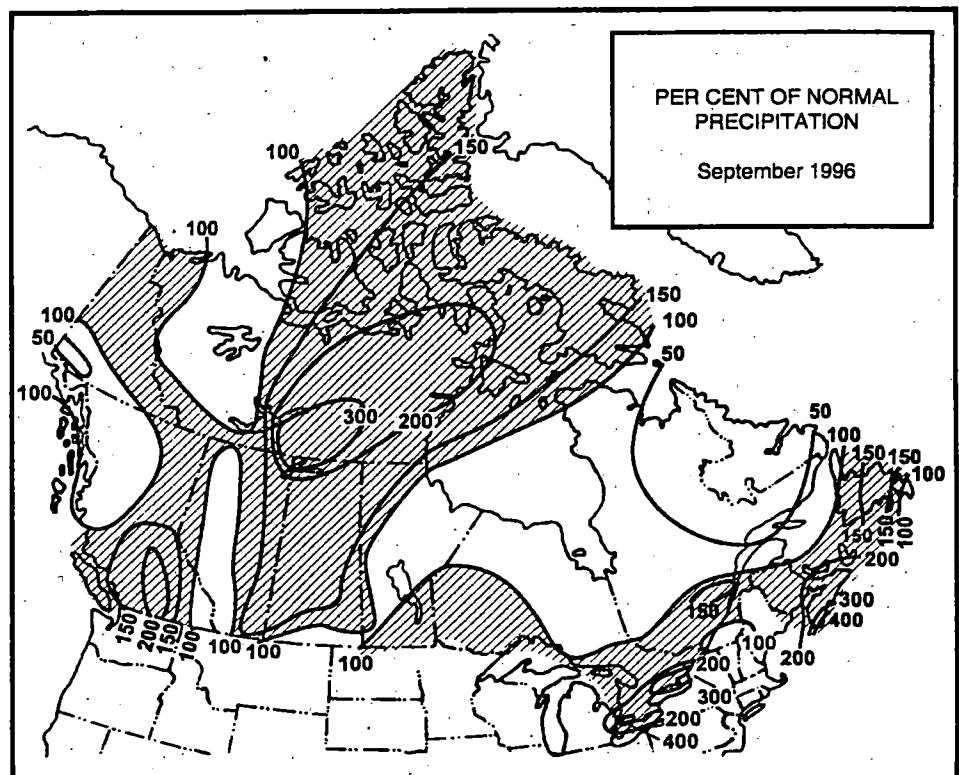


Weather Extremes, September 1996

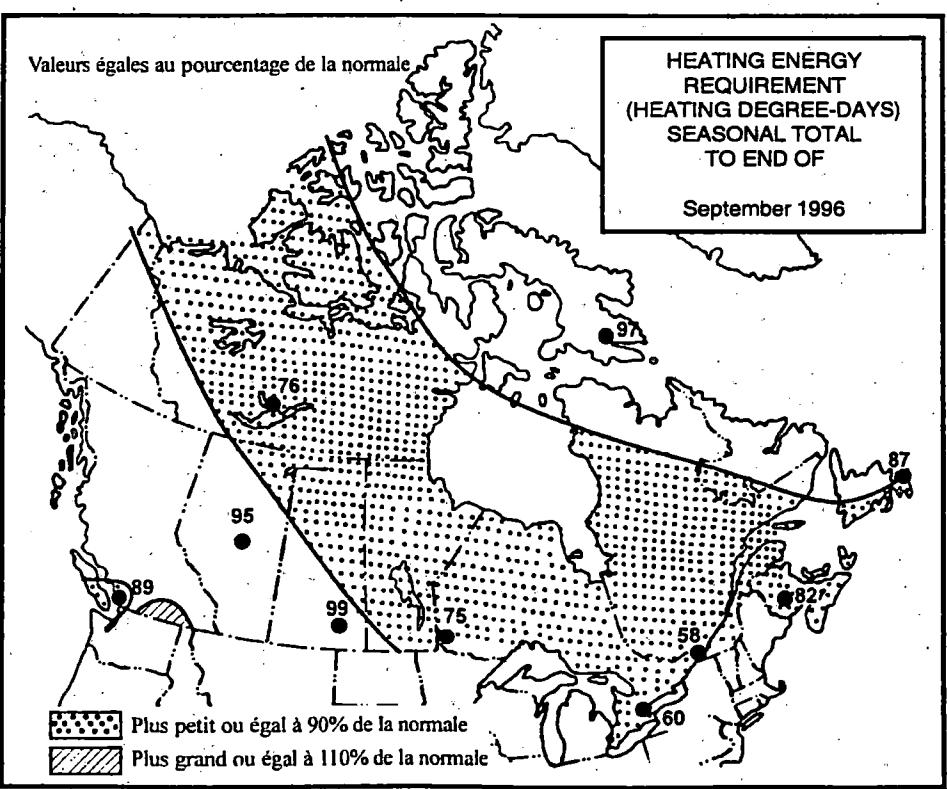
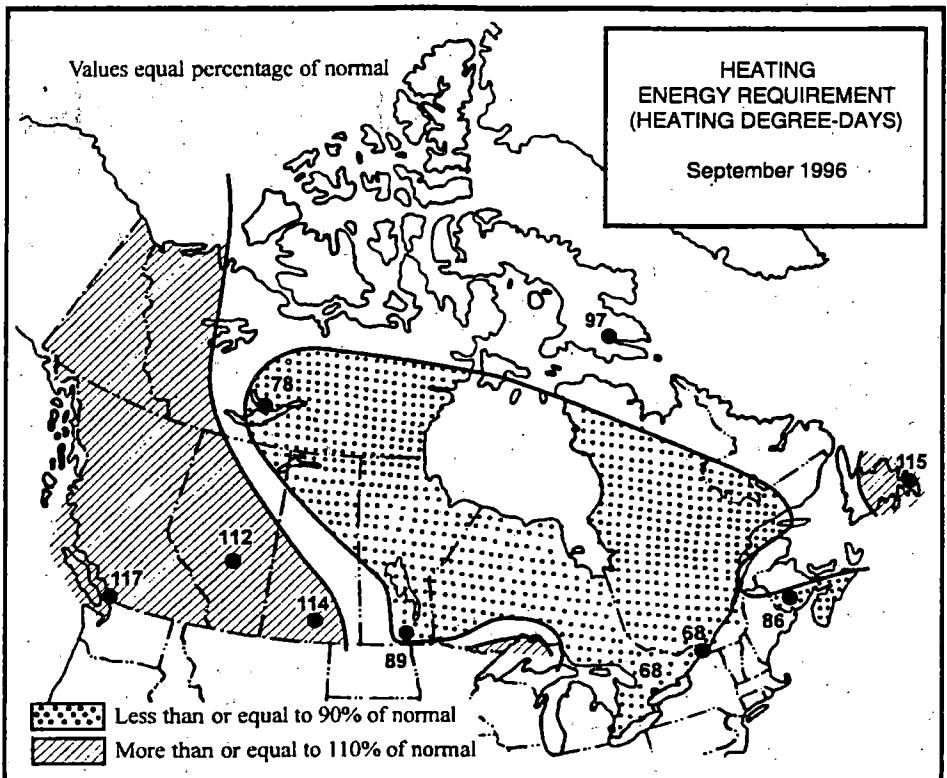
		Maximum temperature (°C)	Minimum temperature (°C)	Greatest precipitation (mm)
British Columbia	SUMMERLAND CS	32.2	HORSEFLY RIVER	-17.3
Yukon Territory	HAINES JUNCTION	20.6	IVVAVIK NAT. PARK	-17.9
Northwest Territories	HAY RIVER	27.5	EUREKA	-25.9
Alberta	LETHBRIDGE A	30.5	PRIMROSE LAKE 2	-10.7
Saskatchewan	MAPLE CREEK	31.0	MEADOW LAKE A	-8.3
Manitoba	STONY MOUNTAIN	32.0	ROBLIN	-7.5
Ontario	BRITT	31.4	KAPUSKASING A	-3.3
Quebec	MANIWAKI	31.2	LAC BOEUF	-5.5
New Brunswick	FREDERICTON A	30.3	CHARLO A	-1.9
Nova Scotia	GREENWOOD A	28.3	TRURO	0.8
Prince Edward Island	CHARLOTTETOWN A	27.8	CHARLOTTETOWN A	2.5
Newfoundland	GOOSE A	28.6	CAPE KAKKIVIAK	-5.1
				LANGARA 255.1
				BLANCHARD RIVER 71.8
				FORT SMITH A 123.2
				WAINWRIGHT CFB AIRFIELD 128.4
				ANEROID 124.0
				INDIAN BAY 156.8
				LONDON 314.2
				ROBERVAL A 143.8
				MONCTON A 195.0
				YARMOUTH A 363.4
				CHARLOTTETOWN A 155.2
				GANDER INT'L A 187.6

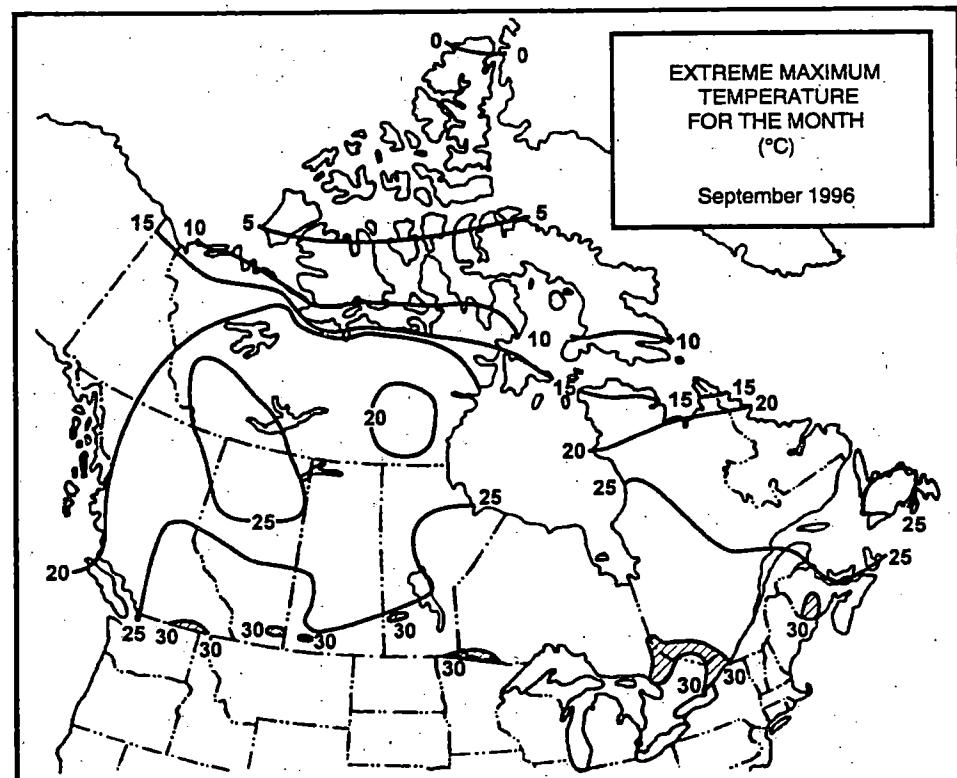
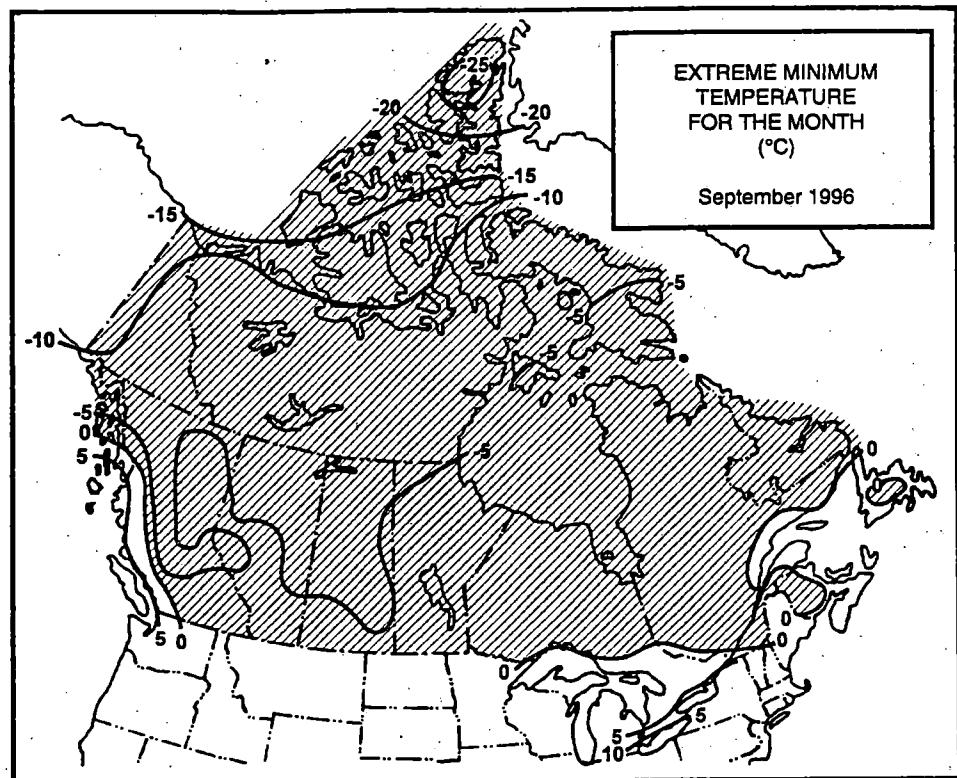
Across The Country...

Highest Monthly Mean Temperature	BELLE RIVER	ONT	18.7	°C
Lowest Monthly Mean Temperature	ALERT	NWT	-11.1	°C
Highest Temperature	SUMMERLAND CS	BC	32.2	°C
Lowest Temperature	EUREKA	NWT	-25.9	°C
Heaviest Monthly Precipitation	YARMOUTH A	NS	363.4	mm
Greatest Number of Bright Sunshine Hours	LA GRANDE RIVIERE A	QUE	230.1	hrs



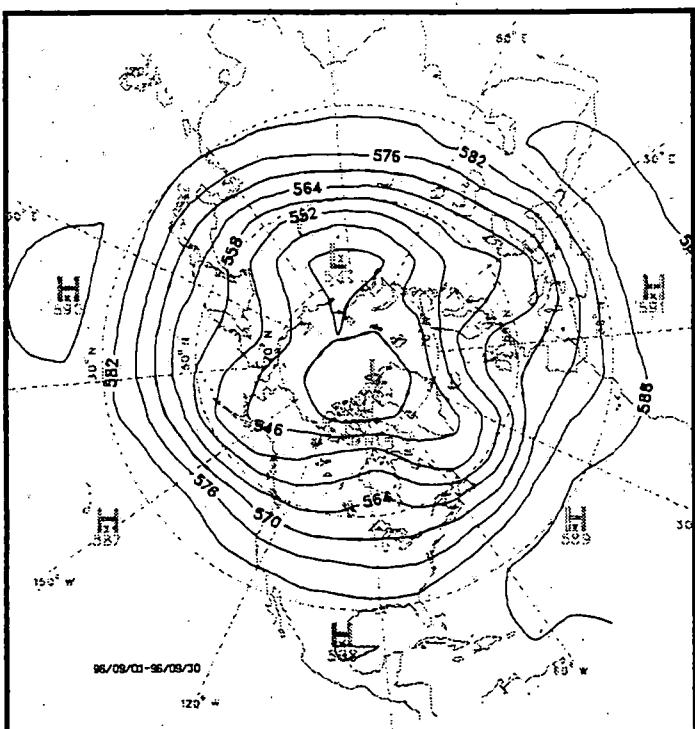
SEASONAL TOTAL OF HEATING DEGREE-DAYS TO END OF SEPTEMBER			
	1996	1995	Normal
British Columbia			
VICTORIA INT'L A	226	195	255
PRINCE GEORGE A	473	420	451
VANCOUVER INT'L A	174	114	188
PENTICTON A	173	101	136
KAMLOOPS A	138	85	131
Yukon Territory			
WATSON LAKE A	536	577	
North West Territories			
INUVIK A	*	816	
YELLOWKNIFE A	407	558	536
IQALUIT A	1107	1133	1140
RESOLUTE A	1684	1662	1626
Alberta			
EDMONTON INT'L A	403	440	424
CALGARY INT'L A	378	395	381
MEDICINE HAT A	218	*	216
PEACE RIVER A	494	*	456
Saskatchewan			
MOOSE JAW A	236	227	239
REGINA A	276	248	275
PRINCE ALBERT A	306	326	369
SASKATOON A	312	336	301
Manitoba			
BRANDON A	254	261	288
WINNIPEG INT'L A	192	204	243
CHURCHILL A	602	779	785
LYNN LAKE A	408	*	554
THOMPSON A	446	572	558
Ontario			
KENORA A	194	222	259
THUNDER BAY A	*	*	320
SUDBURY A	185	261	259
KAPUSKASING A	323	353	414
NORTH BAY A	193	283	279
OTTAWA INT'L A	94	175	164
WINDSOR A	50	80	72
LONDON A	*	191	141
TORONTO INT'L A	84	149	140
Quebec			
MONTREAL INT'L A	92	*	154
SHERBROOKE A	*	*	300
SEPT-ILES A	416	443	478
MONT JOLI A	312	293	343
BAGOTVILLE A	265	273	330
VAL D'OR A	304	396	394
New Brunswick			
FREDERICTON A	179	237	218
MONCTON A	192	276	234
SAINT JOHN A	276	312	266
Nova Scotia			
GREENWOOD A	142	207	200
YARMOUTH A	232	232	248
Prince Edward Island			
CHARLOTTETOWN A	188	*	211
Newfoundland			
GANDER INT'L A	344	401	378
ST JOHN'S A	338	404	388
GOOSE A	475	438	499



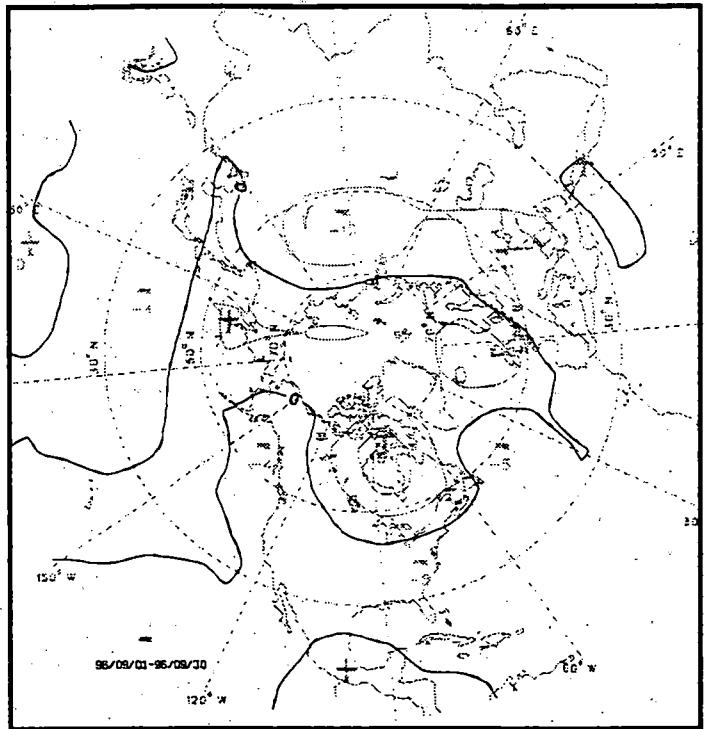


50-kPa ATMOSPHERIC CIRCULATION

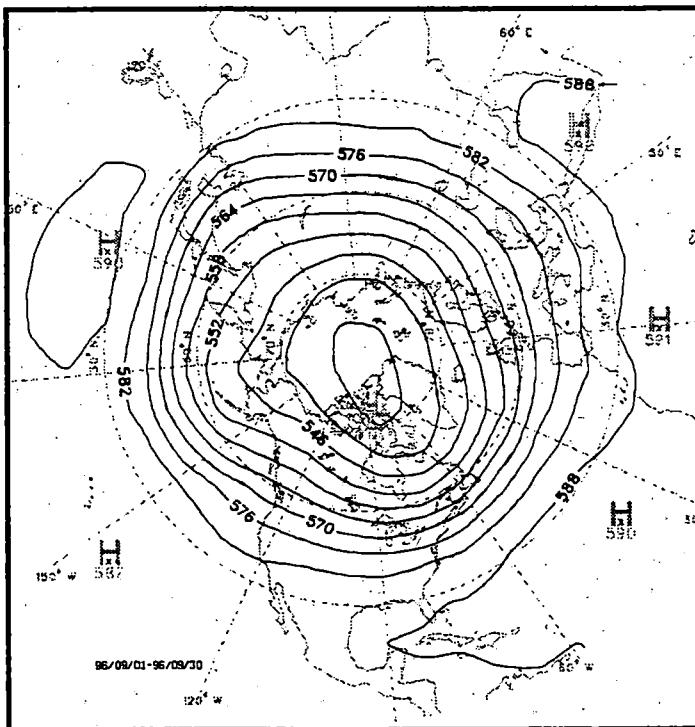
September 1996



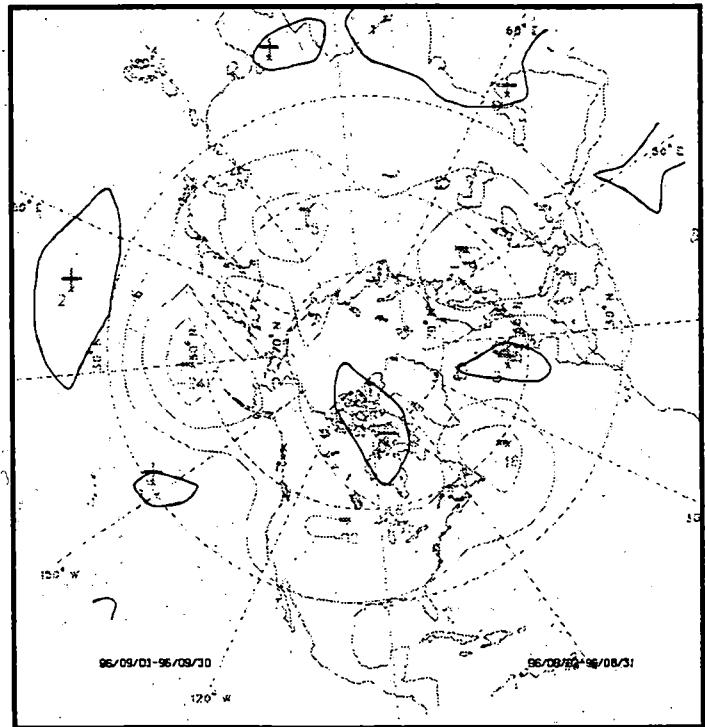
Mean geopotential heights
6-decametre interval



Mean geopotential height anomaly
6-decametre interval



Normal geopotential heights for the month
6-decametre interval



Mean height difference w/r to previous month
6-decametre interval

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STATION	Temperature C				% of Normal Snowfall	Total Precipitation (mm)	% of Normal Precipitation	Snow on ground at end of month (cm)	No. of days with Precip 1.0 mm or more	Bright Sunshine (hours)	% of Normal Bright Sunshine	Degree Days below 18 C
	Mean	Difference from Normal	Maximum	Minimum								
THUNDER BAY A	12.6	1.4	28.1	-0.9	0.2	11	57.6	63	7		165.0	49.9
TIMMINS A	13.0	2.7	29.2	-2.3			165.2	223	12		71.7	
TORONTO ISLAND A	17.5	1.2	26.7	6.5	0.0							
TORONTO LESTER B. P.	16.5	1.3	28.1	3.5	0.0							
TRENTON A	16.5	1.6	30.4	3.6	0.0		234.5	317	11		74.9	
WATERLOO WELLINGTON	14.8	0.5	27.7	1.7								
WAWA A	12.6		25.2	0.4	0.0		105.4	98	13		107.7	
WIARTON A	14.8	0.6	27.2	0.6	0.0							
WINDSOR A	17.9	0.5	28.8	5.4	0.0		167.4	193	10		49.0	
QUEBEC												
BAGOTVILLE A	12.5	1.5	27.8	-1.0	0.0	0	122.1	123	13		168.9	
BAIE COMEAU A	10.8	1.2	22.9	0.0			42.2		5		217.2	
BLANC SABLON A	7.6		18.7	-1.8			66.7		11		311.9	
CHIBOUGAMAU	10.9		25.9	-3.1							213.8	
GASPE A	10.7		28.5	-1.8	0.0		12.2		4		221.0	
ILES DE LA MADELEIN	13.9		21.8	6.4			86.8		11		122.0	
JONQUIERE	12.6		27.4	-0.5			127.0		10		167.0	
KUJJUUAQ A	6.5	1.2	24.4	-2.4	0.0	0	27.6	49	8		344.6	
KUUJUARAPIK A	8.7	1.5	26.8	-1.0	1.6	64	54.8	59	0		282.9	
L'ASSOMPTION CDA	15.7	1.9	29.8	1.1			61.2		0		90.8	
LA GRANDE RIVIERE A	10.2		26.8	-1.7	4.4						237.8	
LAC EON	7.3		24.0	-2.0								
MANIWAKI	15.0		31.2	-1.0			63.0		9		110.1	
MATAGAMI	11.9		28.7	-4.9							190.8	
MONT JOLIA	11.4	0.3	26.3	0.4	0.0		67.0	82	10		200.3	
MONTRÉAL/DORVAL INT	16.3	1.8	29.8	2.2			115.5	134	12		80.9	
NATASHQUAN A	9.5	0.2	19.9	-2.9			136.7		13		253.9	
NORMANDIN	12.4		27.9	-2.3							172.5	
QUEBEC CS	13.9		27.4	2.9							130.6	
ROBERVAL A	12.7	1.4	28.0	-1.0			143.8	159	14		167.2	
SEPT-ILES A	10.4	1.2	21.9	-0.3	0.0		35.2	32	9		227.7	
SHERBROOKE A	13.8	1.8	28.8	-1.7			57.5	58	13		134.7	
ST HUBERT A	15.8	1.6	29.8	1.3			89.5	99	11		89.9	
VAL D'OR A	13.2	2.8	28.8	-2.0			87.0	84	9		156.3	



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