



CANADIAN Climate Summary

December 1996

Monthly review of Canadian climate and water

vol. 1

CLIMATIC HIGHLIGHTS

December 1996

31st - December's coldest temperature is recorded on the last day of the month when -53° is recorded at Stewart Crossing.

21st - In the wake of a cold front moving across the Maritimes winds reach 115 km/h. Signs are ripped down and trucks blown off highways. Hardest hit is Prince Edward Island, where much of the island experiences power outages. For some areas hydro is out until the 24th. The ferry to New Brunswick is blown onto a sandbar shortly after leaving the dock in Borden. It's not until two days later that tugboats are able to free the ship and to return 60 stranded passengers to shore.

4th - In Prince Rupert, winds of 110 km/h during the early morning hours tear chunks from roofs and knock down a clock tower. Power is also knocked out for several hours and the town's radio station forced off the air when the transmission tower is bent.

1st - For the first time in 32 years, Vancouver's Stanley Park is closed when strong winds hit southwestern British Columbia. Winds exceeding 100 km/h snap trees, blocking most of the park's roads. As well, the Lion's Gate bridge is closed for two hours and more 15,000 homes are without power in the Lower Mainland. The following day, Vancouver's morning rush hour is a chaotic scene as a fall of wet snow is followed by a hard freeze, resulting in ice-covered roads.

15th & 16th - Across the southern sections of the Prairies a snowfall of only a few cm is whipped up by high winds to produce blizzard conditions. The Trans-Canada highway is closed in southern Saskatchewan and schools are closed across most of southern Manitoba. The blizzard is associated with arrival of extremely cold air that settles across western Canada for the rest of December.

20th - Deadly winter conditions strike central Alberta. Calgary sees one of its biggest-ever traffic accidents when a whiteout results in a 36-car pileup. To the north of the city, an even bigger accident near Olds, this one involving nearly 60 vehicles, closes Highway 2 from Red Deer to Airdrie and results in one death. The Trans-Canada highway is also closed between Calgary and Brooks after a pedestrian is killed and blowing snow and icy roads make driving nearly impossible. As the blizzard conditions move eastward during the next two days, more weather-related traffic deaths are recorded, bringing to six the total for the Prairies.

As much as 25 cm of snow falls in the Fraser Valley on the 19th, bringing traffic to a crawl. After more snow falls two days later and temperatures remain below the freezing mark, many of the residents of southwestern British Columbia are pleased with the prospect of a white Christmas - only the seventh in the past 60 years. However happiness turns to frustration as the snow keeps coming and coming. Slow travel turns to no travel as one of the worst winter storms on record hits the area on the 30th. After 30 to 50 cm of wind-whipped snow falls over the Lower Mainland, rescue efforts are mounted to rescue hundreds of motorists stranded along the Trans-Canada. The same storm drops a record 68 cm on Victoria, bringing the city to a halt, downing power lines, and collapsing numerous roofs. Especially hard hit is the flower-growing industry, which sustains near-catastrophic damage when greenhouses are damaged by the weight of the snow or the force of the winds. Damages are in the tens of millions of dollars.

9th - A major winter storm moving up the American seaboard spills over into southern Quebec, dropping 40 cm of snow in the Eastern Townships and the lower St. Lawrence. At Quebec City, where 41.8 cm is deposited, this is the second-highest snowfall on record.

Le 1^{er} - Un front froid pénétrant dans la région, de grands vents causent des dégâts du sud-ouest de l'Ontario au sud du Québec. Doté de la puissance d'un système de printemps ou d'été en s'avancant, le front engendre des orages qui produisent des vents soufflant par rafales jusqu'à 120 km/h, abattant des arbres, renversant des voitures et endommageant des bâtiments. Le toit de plusieurs bâtiments, y compris celui d'un gymnase scolaire de Guelph, est arraché. Deux camions-remorques ayant capoté, on a fermé deux routes près de Montréal. Dans l'air chaud qui a précédé ce front, Hamilton a atteint $15,3^{\circ}\text{C}$, soit la plus forte température du pays pour le mois.



CANADIAN CLIMATE SUMMARY
VOLUME 1

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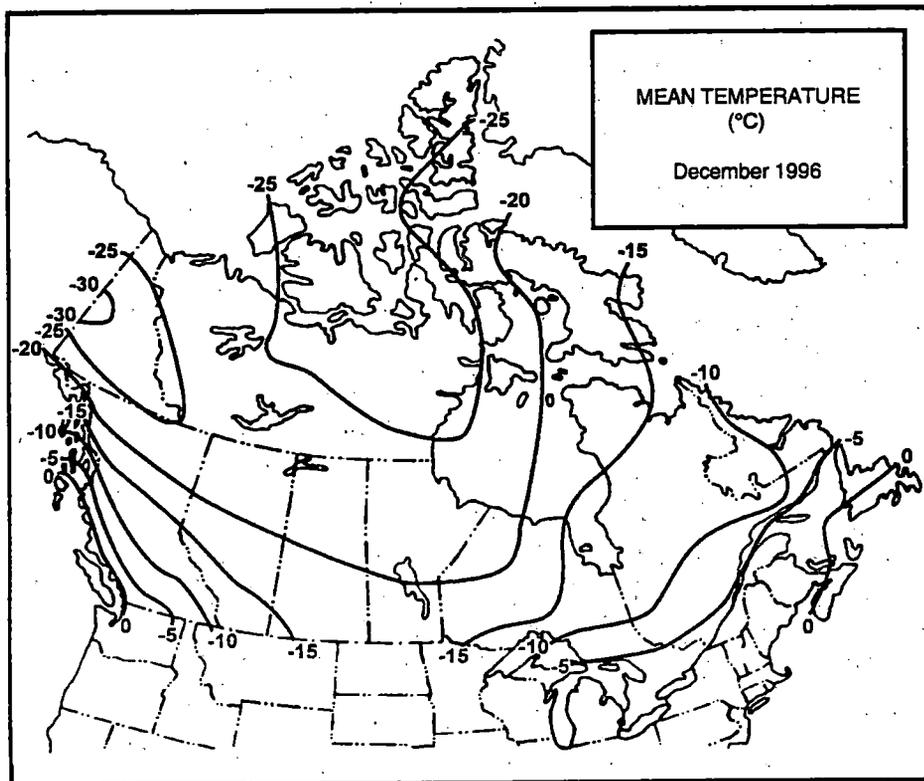
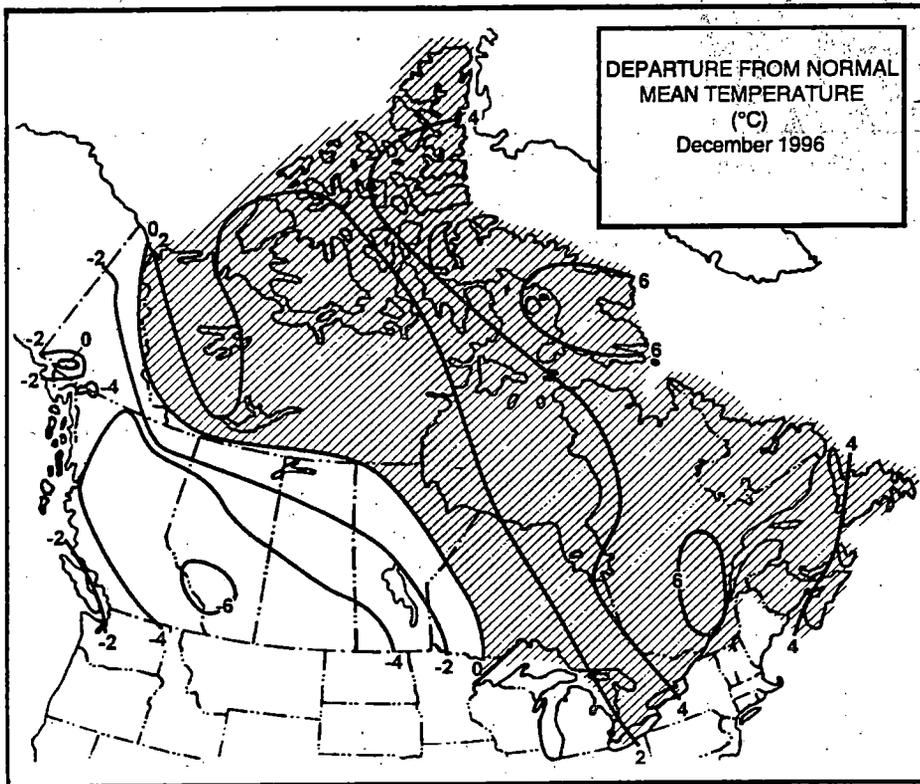
Climatic Summary is a monthly publication (disponible aussi en français) of the Canadian Meteorological Centre, Atmospheric Environment Service, 4905 Dufferin St., Downsview, Ontario, Canada M3H 5T4

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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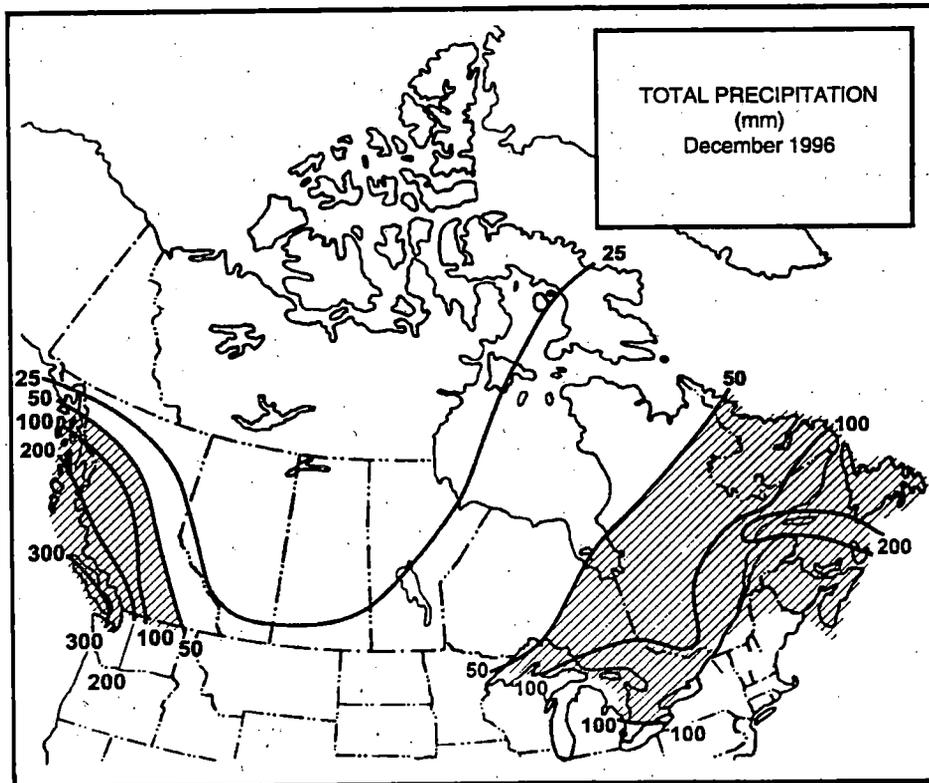
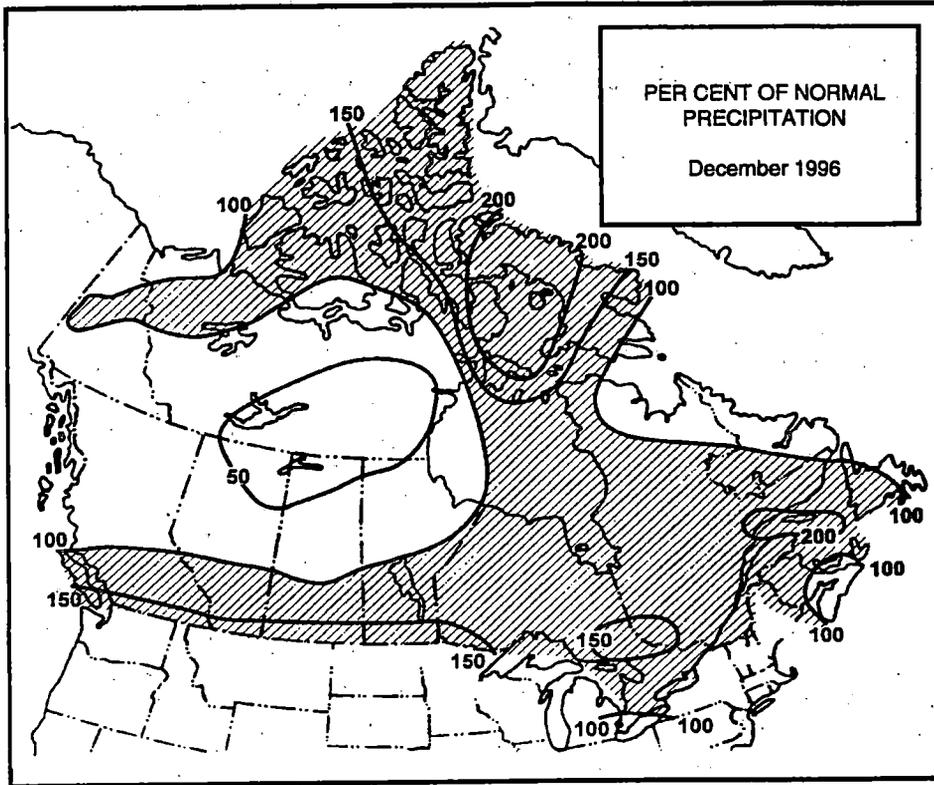


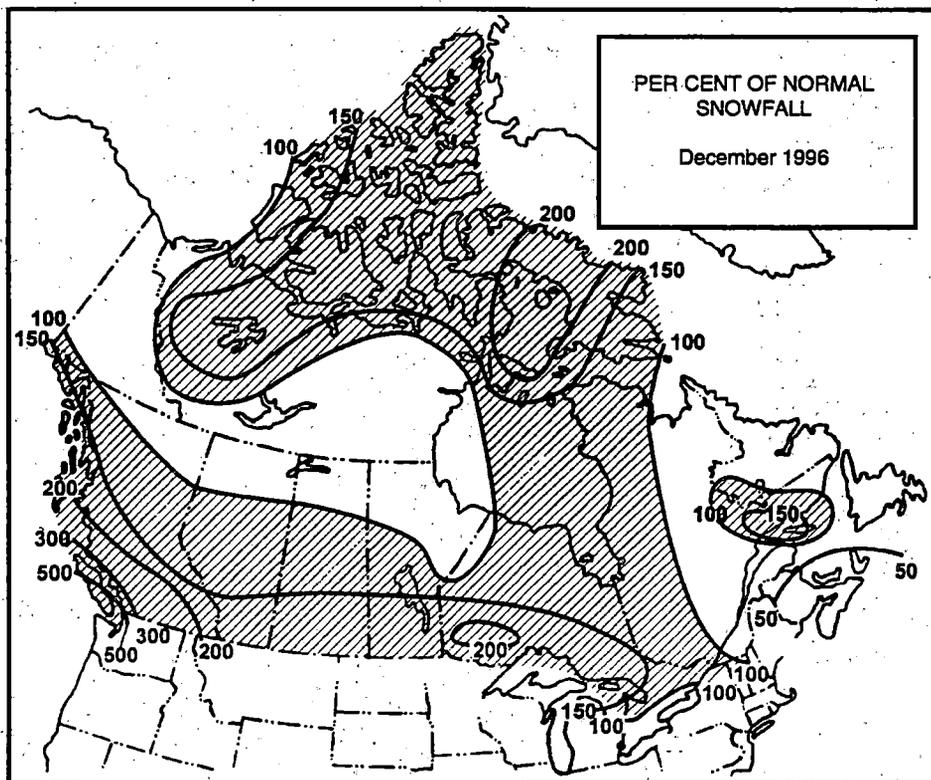
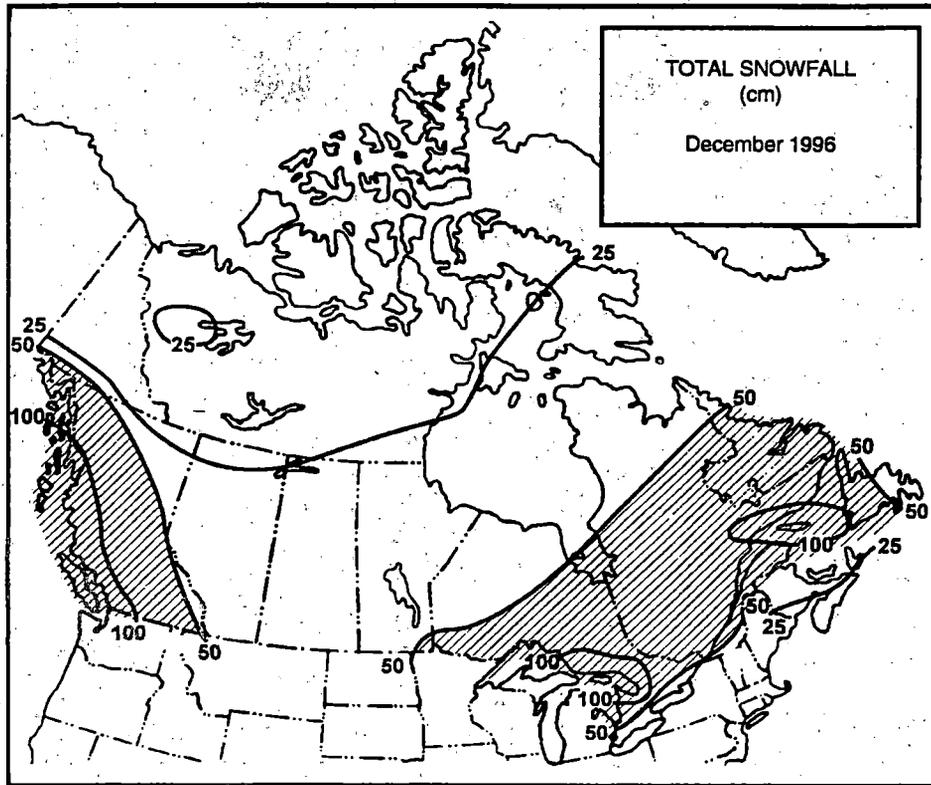
Weather Extremes, December 1996

		Maximum temperature (°C)		Minimum temperature (°C)		Greatest precipitation (mm)
British Columbia	PAM ROCKS	13.0	PUNTI MOUNTAIN	-45.6	ESTEVAN POINT CS	393.2
Yukon Territory	HAINES JUNCTION	8.1	STEWART CROSSING	-53.0	SWIFT RIVER	50.0
Northwest Territories	HALL BEACH	3.9	ENNADAI LAKE	-48.1	CORAL HARBOUR A	29.6
Alberta	CLARESHALM	8.0	FORT CHIPEWYAN A	-46.0	FORT ST. JOHN	33.7
Saskatchewan	MAPLE CREEK	5.2	KEY LAKE A	-47.7	INDIAN HEAD	51.0
Manitoba	VICTORIA BEACH	-0.3	THOMPSON A	-47.0	PORTAGE SOUTHPORT	46.0
Ontario	HAMILTON	15.3	LANSDOWNE HOUSE	-45.3	NORTH BAY	117.4
Quebec	L'ACADIE	13.3	CHIBOUGAMAU	-38.9	SEPT-ILES A	233.1
New Brunswick	MONCTON A	13.4	ST LEONARD A	-26.3	SAINT JOHN A	153.5
Nova Scotia	SABLE ISLAND	13.9	AMHERST	-22.2	SYDNEY A	212.2
Prince Edward Island	CHARLOTTETOWN A	12.4	CHARLOTTETOWN A	-19.0	CHARLOTTETOWN A	101.7
Newfoundland	STEPHENVILLE	14.6	CHURCHILL FALLS	-35.9	PORT AUX BASQUES	199.6

Across The Country...

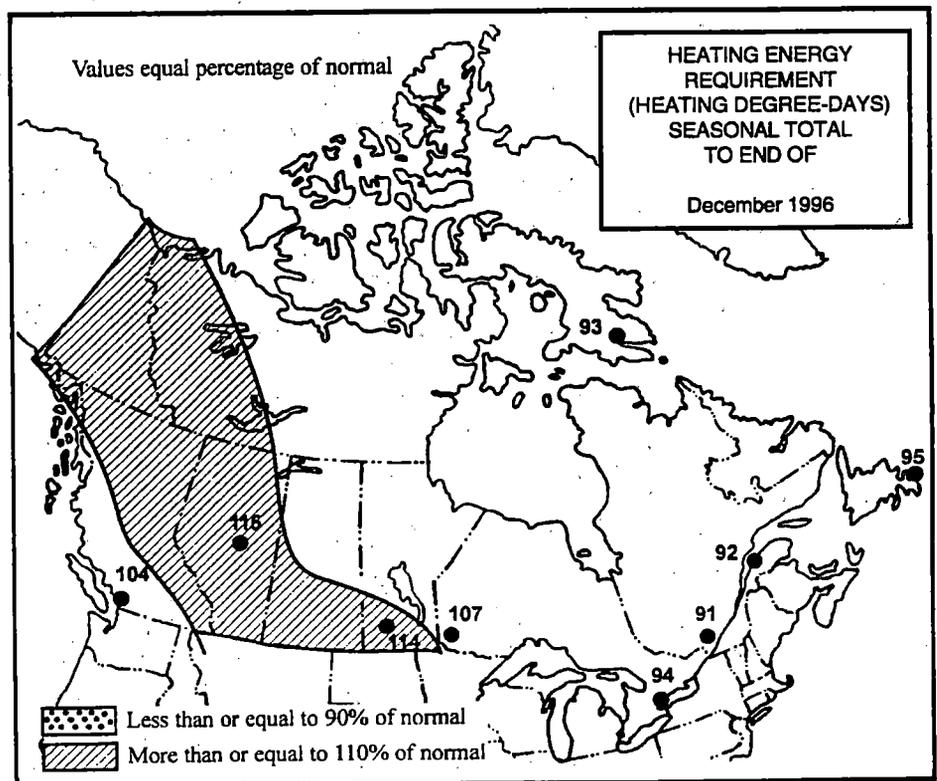
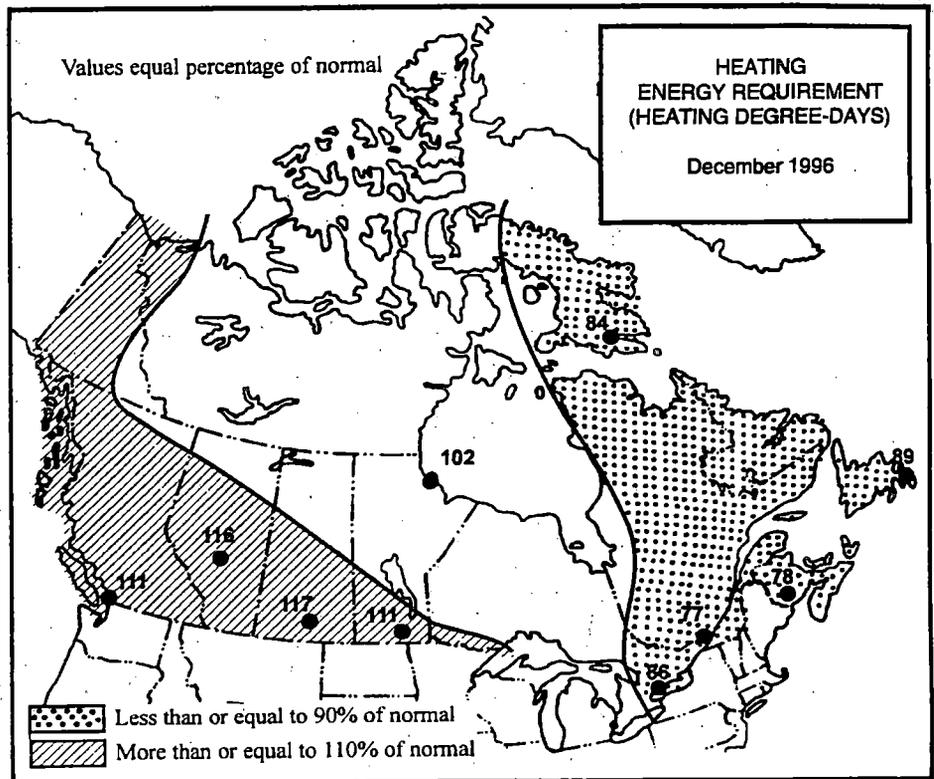
Highest Monthly Mean Temperature	RACE ROCKS	BC	4.5	°C
Lowest Monthly Mean Temperature	BEAVER CREEK	YT	-30.1	°C
Highest Temperature	HAMILTON	ONT	15.3	°C
Lowest Temperature	STEWART CROSSING	YT	-53.0	°C
Heaviest Monthly Precipitation	ESTEVAN POINT	BC	393.2	mm
Greatest Number of Bright Sunshine Hours	WAWA A	ONT	76	hrs

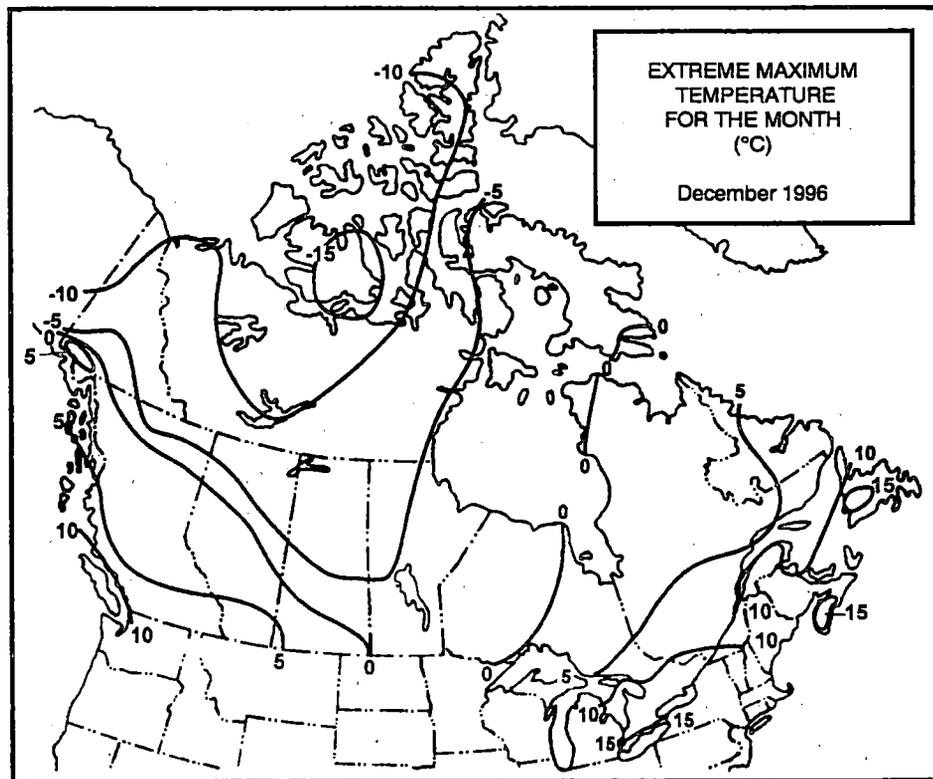
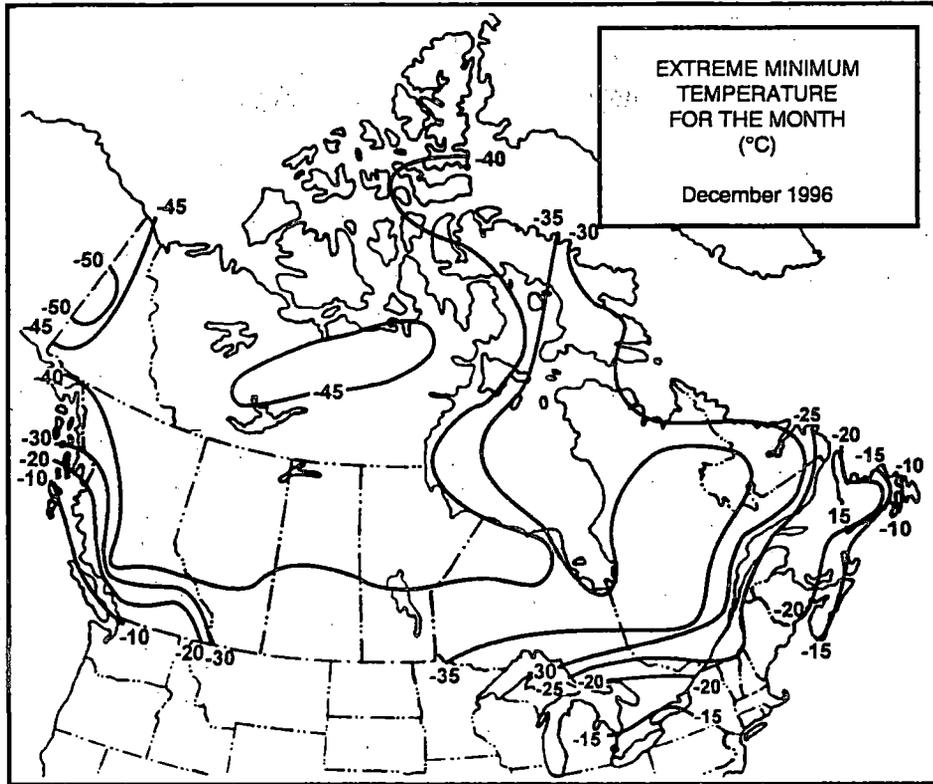




SEASONAL TOTAL OF HEATING
DEGREE-DAYS TO END OF DECEMBER

	1996	1995	Normal
British Columbia			
VICTORIA INT'L A	1365	1137	1311
PRINCE GEORGE A	2683	2346	2316
VANCOUVER INT'L A	1336	1059	1248
PENTICTON A	*	1357	1464
KAMLOOPS A	*	1478	1575
Yukon Territory			
DAWSON	4389	*	*
WATSON LAKE A	*	*	3418
North West Territories			
INUVIK A	*	*	4191
YELLOWKNIFE A	*	3454	2446
IQUALUIT A	3760	3747	4022
RESOLUTE A	5105	5418	5392
Alberta			
EDMONTON INT'L A	2867	2699	2493
CALGARY INT'L A	2643	2408	2210
MEDICINE HAT A	2395	2153	1967
PEACE RIVER A	3146	2928	2740
Saskatchewan			
MOOSE JAW A	2594	2360	2177
REGINA A	2780	2484	2354
PRINCE ALBERT A	2871	2719	2667
SASKATOON A	2879	2662	2450
Manitoba			
BRANDON A	2749	2633	2422
WINNIPEG INT'L A	*	*	2321
CHURCHILL A	*	3591	3572
LYNN LAKE A	3325	3353	3292
THOMPSON A	3306	3410	3259
Ontario			
KENORA A	2500	2516	2332
THUNDER BAY A	*	*	2245
SUDBURY A	*	*	2078
KAPUSKASING A	*	2682	2544
NORTH BAY A	1935	2239	2081
OTTAWA INT'L A	*	1876	1786
WINDSOR A	1310	1409	1314
LONDON A	*	1676	1528
TORONTO INT'L A	1442	1594	1535
Quebec			
MONTREAL INT'L A	1549	*	1721
SHERBROOKE A	*	*	2022
SEPT-ILES A	2247	2377	2453
MONT JOLI A	1950	2029	2111
BAGOTVILLE A	2044	2211	2278
VAL D'OR A	*	2580	2441
New Brunswick			
FREDERICTON A	*	1822	1820
MONCTON A	1655	1821	1791
SAINT JOHN A	1741	1803	1786
Nova Scotia			
GREENWOOD A	1433	1537	1569
YARMOUTH A	1448	1424	1487
Prince Edward Island			
CHARLOTTETOWN A	1574	1647	1674
Newfoundland			
GANDER INT'L A	1806	1911	1934
ST JOHN'S A	1694	1796	1789
GOOSE A	2411	2443	2620





December 1996

STATION	Temperature C				Snowfall (cm)	% 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									
BRITISH COLUMBIA													
ABBOTSFORD A	0.0	-2.6	9.0	-12.9				60					557.9
AGASSIZ CS	-0.6		9.2	-13.6									575.7
CLINTON	-13.1		-0.4	-35.5		38.3			6				963.7
COMOX A	0.8	-2.6	9.4	-9.8				46					533.1
CRANBROOK A	-10.6	-3.4	5.5	-30.2				70					886.0
DEASE LAKE CAMPBEL	-21.2		1.0	-40.7									1216.1
ESTEVEAN POINT CS	3.8		11.2	-5.0		393.2			23				438.7
FORT NELSON A	-22.1	-1.8	-11.6	-39.7				49					1243.1
FORT ST JOHN A	-18.4	-5.2	1.9	-38.8	41.5	119		64					1128.3
HOPE	-1.3		8.5	-15.3									
KAMLOOPS A	-8.3	-5.0	6.0	-28.0			50.6	155	39	15			815.8
KELOWNA A	-8.3	-5.0	3.6	-26.8			36.0	98	15	15			
LANGARA	1.1	-2.6	8.0	-8.5			197.1	95	2	18			524.8
LYTTON	-6.8		5.8	-22.5									769.7
MACKENZIE A	-15.4	-5.3	-0.9	-43.5			67.5	97		16			1033.9
NELSON	-3.7		3.4	-14.6									673.1
PENTICTON A	-4.3	-3.2	6.2	-18.5	61.1	242			22				
PORT ALBERNI	-0.3		6.8	-10.8									
PORT HARDY A	1.6	-1.7	7.6	-10.6					3				508.6
PRINCE GEORGE A	-14.1	-5.7	1.8	-40.3					28				995.0
PRINCE RUPERT A	-0.5	-2.2	7.8	-17.6									572.3
PRINCETON	-11.2		2.1	-27.0									906.5
QUESNEL A	-12.9	-5.4	4.5	-38.8			31.0	63	12				958.8
REVELSTOKE	-6.7		2.9	-22.6			138.0		19				767.1
SANDSPIT A	1.3	-2.2	8.2	-9.5			137.0	79	14				518.3
SHERINGHAM POINT	2.6		10.1	-5.2									478.8
SMITHERS A	-14.7	-6.7	1.5	-39.0	56.2	108			57				1014.1
SPARWOOD	-12.1		4.0	-34.5									931.6
SQUAMISH	-1.8		7.4	-12.2									614.3
SUMMERLAND CS	-4.2		6.1	-19.6									
TERRACE A	-7.4	-4.0	2.5	-23.6	141.2	152	138.1	83	45	11			788.4
VANCOUVER INT'L A	1.4	-2.1	9.5	-12.5					25		23	44	516.1
VICTORIA INT'L A	2.3	-1.5	9.8	-8.1	106.7	736	276.6	182	55	24			487.0
WILLIAMS LAKE A	-13.4	-5.7	4.7	-39.5					60				974.9

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	Mean	Difference from Normal	Maximum	Minimum									
YUKON TERRITORY													
BURWASH	-25.5		-6.6	-46.1									1347.0
DAWSON	-30.2		-11.1	-50.2									1493.9
FARO	-24.0		-3.8	-43.7									
KOMAKUK BEACH	-21.2		-6.1	-33.3									1215.3
TESLIN	-23.0		-0.5	-39.6									
WATSON LAKE A	-26.9	-4.0	-3.8	-47.4									1392.5
NORTHWEST TERRITORIES													
ALERT	-28.4	1.1	-9.1	-40.1									
BAKER LAKE A	-27.2	1.1	-6.8	-44.0									
BROUGHTON ISLAND	-15.6	5.8	-5.0	-25.9	4.0	36	2.0	21	24	1	7		1400.8
CAMBRIDGE BAY A	-29.1	0.5	-15.6	-42.7									1459.4
CAPE DORSET A	-15.3		-2.1	-30.6									1032.2
CAPE DYER	-14.3		-3.2	-26.8									
CAPE HOOPER	-15.7	6.4	-0.7	-28.3									
CAPE PARRY A	-23.1	1.4	-9.5	-30.8									1273.1
CLYDE A	-20.0	4.0	-4.7	-38.6									
CORAL HARBOUR A	-22.2	3.3	-2.9	-43.1	28.8	250	24.0	205	74	43	7		1178.3
EUREKA	-29.4	5.1	-13.0	-40.2			29.6	274	14	8			1246.8
FORT RELIANCE	-22.9		-3.7	-41.3			8.1	279	14	3	0		1468.9
FORT SIMPSON A	-21.1	2.7	-8.8	-37.9	27.2	127	14.0	74	24	7			1211.3
FORT SMITH A	-21.3	0.4	-5.2	-41.2	16.2	66	10.2	53	38	4			1218.1
HALL BEACH A	-22.3	5.3	-4.3	-40.8			20.5	230		6			
HAY RIVER A	-21.2	-0.3	-3.4	-38.8					42				1215.2
INUVIK A	-22.7	3.4	-7.6	-37.9									
IQALUIT A	-15.8	6.3	0.3	-33.9					25				1047.5
KUGLUKTUK A	-25.2		-8.9	-38.6					19				1339.1
LADY FRANKLIN POINT	-25.0	0.9	-14.2	-35.3									1332.4
LONGSTAFF BLUFF	-18.4	6.5	-3.6	-34.5									
MOULD BAY CAMP	-28.0		-14.2	-38.2									
NORMAN WELLS A	-22.1	3.1	-6.1	-39.5	38.4	191	22.0	124	38	8			1244.5
PANGNIRTUNG	-13.5		2.8	-28.1									977.7
RANKIN INLET A	-25.5		-3.9	-43.6	13.8		10.6		22	4			1347.0
RESOLUTE A	-24.7	4.3	-9.8	-35.7					19				
SHEPHERD BAY A	-29.8		-8.9	-46.9									1481.9
TUKTOYAKTUK	-24.6		-11.2	-35.7									1321.3

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	Mean	Difference from Normal	Maximum	Minimum									
SAULT STE MARIE A	-5.1	1.5	3.1	-24.9									716.8
SIOUX LOOKOUT A	-15.5	-0.1	-0.8	-34.7	42.0	117	44.4	126	46	13			1039.5
SUDBURY A	-7.0	2.9	6.0	-25.4	86.1	141		54					774.0
THUNDER BAY A	-10.7	0.6	1.9	-33.0									
TIMMINS A	-10.3	3.4	2.5	-32.2	87.9	122		65					876.4
TORONTO ISLAND A	0.7	2.2	10.1	-12.4									536.2
TORONTO LESTER B. P	-0.4	3.1	11.8	-14.7				10					571.8
TRENTON A	-0.5	4.0	12.5	-22.0				5					574.3
WATERLOO WELLINGTON	-1.1	2.9	13.1	-14.0			103.7	131	4	16			593.1
WAWA A	-8.4		2.4	-29.9			88.0	76	19				819.3
WIARTON A	-1.3	2.4	12.9	-16.0				27					597.0
WINDSOR A	-0.3	1.6	14.1	-13.2	29.0	92	79.8	98		15			566.1
QUEBEC													
BAGOTVILLE A	-5.5	6.6	8.3	-30.5	76.1	89	78.7	102	57	17			727.7
BAIE COMEAU A	-5.1	5.2	6.9	-27.7			119.1	126	10				715.5
BLANC SABLON A	-4.5		7.8	-23.5			178.2		14				697.0
CHIBOUGAMAU	-10.6		5.2	-38.9			54.1		7				887.7
GASPE A	-3.4		9.4	-21.7	47.1	53	149.1	125	3	13			663.3
ILES DE LA MADELEIN	-0.8		9.9	-14.3			119.8		3	14	32		534.5
JONQUIERE	-5.2		6.7	-29.9			71.9		16				717.7
KUUJJUAQ A	-14.9	4.2	3.7	-32.1	38.0	90	39.6	98	12	13			1018.6
KUUJJUARAPIK A	-13.3	3.3	0.7	-35.0	38.7	105	39.6	113	34	12			971.0
L'ASSOMPTION CDA	-1.4	6.8	12.5	-21.9			103.0	113	16		0	0	601.7
LA GRANDE RIVIERE A	-14.3		0.4	-34.7	61.8		58.6		46	13	4.3		1001.7
LAC FON	-11.8		2.0	-32.0			63.0		11				924.5
MANIWAKI AIRPORT	-3.7		9.4	-25.8			91.3		14				673.5
MATAGAMI	-11.5		4.3	-37.6			59.5		7				913.4
MONT JOLI A	-3.5	4.9	10.6	-23.4			94.2	100	10	15	53	89	667.7
MONTREAL/DORVAL INT	-1.3	5.6	11.0	-20.3			88.5	103	14				598.1
NATASHQUAN A	-4.2	5.2	6.7	-21.6			107.3		14				811.9
NORMANDIN	-8.2		4.6	-35.8									660.1
QUEBEC CS	-3.3		6.6	-27.0							0		752.7
ROBERVAL A	-6.3	6.1	8.5	-31.5	64.6	83	115.8	146	10	14			660.1
SEPT-ILES A	-6.8	4.2	4.4	-25.8	136.0	143	233.1	218	27	15			769.1
SHERBROOKE A	-2.4	5.9	11.2	-26.4			128.5	134	14				633.3
ST HUBERT A	-1.3	5.7	13.2	-19.9			89.0	90	16				599.6
VAL D'OR A	-8.4	4.9	5.7	-34.2			93.5	134	17				817.1
NEW BRUNSWICK													
CHARLO A	-3.5	5.2	7.8	-23.4									
FREDERICTON A	-1.2	5.4	11.7	-21.4	24.3	34	85.7	82	14	13			667.3
MONCTON A	-0.9	4.8	13.4	-21.5	27.0	36	132.9	112	0	16			774.0
SAINT JOHN A	-1.0	4.0	12.3	-20.0	4.6	7	124.1	98	0	14			586.0
ST LEONARD A	-3.4		9.8	-26.3			153.5	92	0	13			876.4
NOVA SCOTIA													
AMHERST	-0.7		13.4	-22.2									
GREENWOOD A	1.6	4.2	15.9	-16.0	11.6	18	101.6	87	14				509.8
SYDNEY A	1.3	3.3	13.8	-13.7	18.6	27	212.2	123	6	18			518.1
YARMOUTH A	2.5	2.9	11.7	-12.7	5.6	13	143.0	100	1	12	51	80	479.3
PRINCE EDWARD ISLAND													
CHARLOTTETOWN A	-0.1	4.0	12.4	-19.0	27.2	36	101.7	76	0	16			562.2
EAST POINT	0.4		10.7	-14.7									
NEWFOUNDLAND													
ARGENTIA	2.6		13.4	-6.2									
BONAVISTA	0.6	2.1	11.9	-9.7									539.7
CAPE RACE	1.8		8.8	-9.4									501.7
CARTWRIGHT	-5.5	3.9	8.6	-24.4	63.0	79			33				728.1
CHURCHILL FALLS	-14.0		3.4	-35.9									
DEER LAKE A	-1.1	4.0	13.9	-20.5									593.6
GANDER INT'L A	-1.0	2.9	12.0	-13.3	43.4	56	104.4	92	0	16			590.5
GOOSE A	-9.1	4.3	9.0	-30.1	67.0	80			38				839.8
MARY'S HARBOUR	-5.1		7.6	-24.8					7				716.8
NAIN A	-9.5		4.8	-27.7			101.4		74	14			852.2
PORT AUX BASQUES	1.2	2.9	10.0	-10.5			205.6	119	3	22			519.9
ST JOHN'S A	0.6	2.3	13.7	-10.4					0				539.9
ST LAWRENCE	1.7	2.8	11.0	-9.5					2				504.5
STEPHENVILLE A	0.4	3.1	14.6	-13.0	71.8	80	128.8	104	22	19	19	66	545.6
WABUSH LAKE A	-13.8	4.9	3.1	-34.0	80.2	103			50				985.5



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