Environment Canada Imaging Cover Page

Report N.: *CDS-04-58*

SKP Box Number: 672572447

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WINTER TEMPERATURE DATA FOR BUILDING DESIGN IN CANADA

Prov.	Station	Location	Elevation Ft.	Period of Record Used	Lowest Temp. in Period °F.	Mean Annual Mn. Temp. °F.	Winter Design Temps. 1% °F.	2½% °F.	5% °F.	10% °F.	Mean Winter Wind Speed m.p.h.
ALTA.											
	Calgary	AP	3540	1921-1950	-46	-31	-35	-29	-25	-16	10.1
	Edmonton	AP	2219	1921-1950	-55	-39	-39	-33	-29	-21	7.6
	Grande Prairie	AP	2190	1942-1950	-62	-47	-43	-39	-34	-27	7.9
	Lethbridge	AP	3018	1921-1950	-45	-32	-38	-32	-28	-19	15.0
	McMurray	AP	1216	1921-1950	-64	-51	-48	-42	-37	-30	
	Medicine Hat	AP	2365	1921-1950	-49	-34	-41	-35	-31	-22	9.0
B. C.											
	Estevan Point	CO	20	1924-1950	7	22	14	17	21	27	9.9
	Fort Nelson	AP	1230	1938-1950	-61	-47	-42	-38	-33	-28	3.7
	Penticton	AP	1121	1921-1950	-16	-1	-14	-6	-1	4	
	Prince George	AP	2218	1921-1950	-58	-42	-43	-32	-25	-16	7.2
	Prince Rupert	CO	170	1921-1950	-3	12	5	8	12	18	8.0
	Vancouver	AP	22	1938-1950	0	13	8	11	15	21	7.7
	Victoria	CO	228	1921-1950	6	20	12	15	19	25	12.3
MAN.											
	Brandon	CO	1200	1921-1950	-49	-40	-36	-32	-28	-24	
	Churchill	AP	115	1932-1950	-50	-43	-43	-42	-40	-37	14.7
	The Pas	AP	894	1921-1950	-54	-42	-43	-39	-30	-26	6.4
	Winnipeg	AP	786	1921-1950	-44	-35	-33	-29	-25	-21	12.0
N. B.											
	Campbellton	CO	42	1938-1950	-31		-14	-11	-8	-3	
	Fredericton	CO	164	1923-1950	-38	-24	-9	-6	-3	2	9.2
	Moncton	AP	248	1921-1950	-36	-23	-11	-8	-5	0	14.9
	Saint John	CO	119	1921-1950	-21	-12	-6	-3	0	5	13.8
NFLD.											
	Corner Brook	CO	40	1933-1950	-25	-12	-4	-1	2	6	
	Gander	AP	482	1937-1950	-16	-10	-6	-3	0	4	17.2
	Goose Bay	AP	144	1942-1950	-35	-30	-29	-26	-24	-20	10.3
	St. John's	AP	463	1926-1950	-10	-2	-1	1	4	7	19.3
N.W.T.											
	Aklavik	CO	30	1927-1950	-62	-42	-50	-46	-43	-39	
	Fort Norman	CO	300	1925-1950	-65	-54	-46	-42	-39	-35	
	Frobisher	AP	68	1942-1950	-49	-44	-51	-47	-43	-39	
	Resolute	CO	56	1948-1950	-55	-53	-45	-42	-40	-36	9.2
	Yellowknife	AP	682	1942-1950	-60	-51	-49	-47	-45	-41	
N.S.											
	Halifax	CO	83	1921-1950	-21	-6	0	4	7	11	9.6
	Halifax	AP	136	1944-1950	-11		-3	2	5	9	12.4
	Sydney	AP	197	1921-1950	-23	-9	-7	1	4	8	13.1
	Yarmouth	AP	136	1921-1950	-11	1	4	7	10	13	13.5
ONT.											
	Port William	AP	644	1921-1950	-41	-29	-30	-24	-20	-15	9.6
	Hamilton	CO	303	1939-1950	-17	-6	-4	0	5	10	
	Kapuskasing	AP	752	1921-1950	-53	-42	-34	-30	-27	-22	10.0
	Kingston	CO	340	1921-1950	-31	-17	-15	-11	-6	-1	10.8
	Kitchener	CO	1100	1921-1950	-29	-11	-8	-3	2	7	
	London	AP	912	1921-1950	-27	-11	-5	-1	3	8	11.9

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ONT.	(Cont'd)										
	North Bay	AP	1210	1925-1950	-46	-33	-24	-20	-16	-11	11.3
	Ottawa	AP	339	1921-1950	-38	-26	-18	-15	-11	-7	11.1
	Peterborough	CO	648	1921-1950	-38	-21	-15	-11	-6	-1	
	Sioux Lookout	AP	1227	1931-1950	-50	-39	-38	-33	-29	-24	8.5
	Sudbury	CO	837	1921-1934	-45		-21	-17	-12	-5	
	Timmins	CO	1100	1921-1950	-55	-34	-30	-26	-22	-17	
	Toronto	CO	379	1921-1950	-22	-7	-4	0	5	10	14.1
	Toronto	AP	578	1938-1950	-24	-13	-9	-4	1	6	12.1
	Windsor	AP	637	1921-1950	-10	-2	0	3	7	11	12.3
P.E.	I.										
	Charlottetown	CO	74	1921-1950	-23	-11	-6	-3	0	4	11.3
QUE.											
	Arvida	CO	375	1932-1950	-42	-31	-23	-19	-16	-11	8.2
	Knob Lake	AP	1605	1948-1950	-59	-48	-44	-40	-34	-30	
	Mont Joli	AP	150	1943-1950	-28		-14	-11	-8	-3	13.3
	Montreal	CO	187	1921-1950	-29	-16	-12	-9	-6	-2	12.3
	Montreal	AP	98	1942-1950	-28	-20	-14	-11	-8	-4	13.1
	Port Harrison	CO	66	1942-1950	-49	-42	-43	-39	-35	-31	13.4
	Quebec City	CO	296	1921-1950	-32	-19	-16	-12	-9	-4	12.4
	Seven Islands	AP	190	1944-1950	-43		-23	-20	-17	-12	
	Sherbrooke	CO	620	1921-1950	-39	-24	-15	-12	-9	-5	8.2
	Three Rivers	CO	50	1921-1950	-43	-24	-17	-13	-10	-5	
SASK.											
	Prince Albert	AP	1414	1921-1950	-56	-46	-48	-41	-37	-30	4.9
	Regina	AP	1884	1921-1950	-54	-39	-39	-34	-30	-25	12.1
	Saskatoon	AP	1645	1921-1950	-54	-41	-45	-37	-33	-26	9.7
	Swift Current	AP	2677	1921-1950	-54	-34	-39	-33	-29	-24	14.6
Y.T.											
	Dawson	CO	1062	1921-1950	-73	-54	-62	-56	-50	-39	
	Whitehorse	AP	2289	1941-1950	-62	-51	-49	-43	-37	-26	8.7

NOTES:

(a) Location: AP indicates that the observations were taken at the airport at least for the ten years 1941 to 1950. CO indicates that all the observations used were taken at an office in the city, town or settlement.

(b) Elevation: ground elevation above mean sea level.

(c) Period: where available the standard thirty-year period 1921 to 1950 has been used for the temperatures in the next two columns. In some cases records from more than one location have been used.

(d) The winter design temperatures are all based on the January temperatures in the ten years 1941 to 1950.

(e) Winter wind speed: most of the wind speeds are based on periods ending in 1947 which are somewhat shorter than the periods for the minimum temperatures. The three months, December, January and February were used.