

MONTHLY METEOROLOGICAL SUMMARY

SOMMAIRE METEOROLOGIQUE MENSUEL

Environment Canada
Environnement Canada

WINNIPEG INTL A (YWG) MONTH/MOIS: March/mars 2003

DATE	TEMPERATURE TEMPERATURE			DEGREE-DAYS DEGRES-JOURS			REL HUMIDITY HUMIDITE REL		PRECIPITATION PRECIPITATIONS			Snow On
	MAX	MIN	MEAN	Heating	Growing	Cooling	MAX	MIN	Rainfall	Snowfall	Total	Ground
	C	C	C	de chauffe base 18	de crois- sance base 5	de refri- geration base 18	%	%	de pluie hauteur mm	de neige hauteur cm	precip. totales mm	neige au sol cm
1	-7.9	-32.8	-20.4	38.4	0.0	0.0	75	43	0.0	1.5	1.5	
2	-21.2	-37.4	-29.3	47.3	0.0	0.0	59	43	0.0		0.0	
3	-16.4	-28.9	-22.7	40.7	0.0	0.0	61	47	0.0	2.5	2.5	
4	-18.7	-30.5	-24.6	42.6	0.0	0.0	58	49	0.0		0.0	
5	-11.6	-30.5	-21.1	39.1	0.0	0.0	68	49	0.0	0.5	0.5	
6	-11.0	-28.3	-19.7	37.7	0.0	0.0	76	52	0.0	3.0	3.0	
7	-18.7	-32.6	-25.7	43.7	0.0	0.0	56	43	0.0	0.0	0.0	
8	-19.4	-34.6	-27.0	45.0	0.0	0.0	55	47	0.0	0.0	0.0	
9	-16.4	-24.4	-20.4	38.4	0.0	0.0	56	49	0.0	0.0	0.0	
10	-13.5	-25.9	-19.7	37.7	0.0	0.0	59	48	0.0	0.0	0.0	
11	-10.7	-21.9	-16.3	34.3	0.0	0.0	68	56	0.0	1.0	1.0	
12	-11.1	-25.5	-18.3	36.3	0.0	0.0	65	43	0.0	0.0	0.0	
13	-0.8	-20.2	-10.5	28.5	0.0	0.0	76	54	0.0	1.0	1.0	
14	5.7	-3.3	1.2	16.8	0.0	0.0	80	63	0.0	0.0	0.0	
15	3.7	-4.6	-0.5	18.5	0.0	0.0	82	71	0.0	0.0	0.0	
16	-0.1	-5.4	-2.8	20.8	0.0	0.0	78	73	TR	0.0	TR	
17	4.2	-3.1	0.6	17.4	0.0	0.0	78	66	0.0	0.0	0.0	
18	1.6	-5.2	-1.8	19.8	0.0	0.0	78	71	0.0	0.0	0.0	
19	4.8	-0.8	2.0	16.0	0.0	0.0	75	61	0.0	0.0	0.0	
20	4.2	-1.2	1.5	16.5	0.0	0.0	87	70	1.0	0.5	1.5	
21	8.9	-3.2	2.9	15.1	0.0	0.0	88	44	0.0	0.0	0.0	
22	15.2	-3.2	6.0	12.0	1.0	0.0	81	43	0.0	0.0	0.0	
23	11.0	-1.6	4.7	13.3	0.0	0.0	89	62	TR	0.0	TR	
24	4.8	0.8	2.8	15.2	0.0	0.0	89	70	1.0	0.0	1.0	
25	2.5	-3.2	-0.4	18.4	0.0	0.0	82	68	0.0	TR	TR	
26	6.6	-4.7	1.0	17.0	0.0	0.0	87	39	0.0	0.0	0.0	
27	5.4	-5.9	-0.3	18.3	0.0	0.0	89	53	0.0	0.0	0.0	
28	5.9	-8.4	-1.3	19.3	0.0	0.0	90	42	0.0	0.0	0.0	
29	1.7	-6.5	-2.4	20.4	0.0	0.0	85	45	0.0	0.0	0.0	
30	4.8	-3.1	0.9	17.1	0.0	0.0	85	45	0.0	TR	0.0	
31	13.8	-0.1	6.9	11.1	1.9	0.0	89	63	6.5	TR	6.5	
TOTAL				812.7	2.9	0.0			8.5	10.0	18.5	totale
MEAN	-2.3	-14.1	-8.2				76	54				moyenne
ORMAL	-1.1	-11.0	-6.1	746.1	1.7	0.0			7.5	15.8	23.3	normale

- NOTE/AVIS:
1. Climatological Day / Journee Climatologique: 00 01 CST - 00 00 CST
 2. 30 Yr Normals / Normales duree 30 ans.
 3. TR = Trace.
 4. No entry = Missing / Pas de valeur = Manquant.

WINNIPEG INTL A (YWG) MONTH/MOIS: March/mars 2003

DRY BULB TEMPERATURES / TEMPERATURES DU THERMOMETRE SEC

HOOR / HEURE

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-81	-84	-88	-91	-112	-145	-162	-183	-189	-198	-212	-216	-215	-215	-216	-220	-229	-245	-267	-283	-301	-306	-309	
2	-327	-320	-354	-348	-339	-367	-334	-323	-295	-271	-257	-249	-246	-240	-234	-227	-224	-226	-223	-220	-213	-219	-223	
3	-219	-217	-216	-209	-209	-203	-206	-206	-204	-202	-200	-195	-181	-178	-167	-165	-170	-173	-185	-187	-223	-238	-269	
4	-286	-291	-296	-304	-285	-278	-275	-293	-283	-271	-249	-233	-212	-201	-194	-189	-190	-199	-206	-215	-222	-240	-246	
5	-252	-265	-270	-276	-277	-288	-292	-295	-278	-276	-240	-212	-200	-191	-181	-173	-167	-160	-153	-150	-147	-143	-132	-118
6	-118	-120	-119	-118	-118	-120	-120	-121	-118	-115	-117	-113	-131	-131	-136	-140	-140	-146	-172	-187	-195	-204	-230	-257
7	-280	-269	-291	-282	-265	-262	-260	-244	-244	-230	-208	-198	-188	-193	-191	-194	-199	-210	-229	-221	-244	-264	-290	-310
8	-301	-332	-342	-310	-307	-308	-305	-301	-294	-284	-266	-242	-219	-212	-203	-197	-197	-197	-202	-212	-215	-219	-221	-228
9	-233	-235	-236	-237	-236	-242	-240	-243	-238	-228	-218	-197	-185	-173	-167	-164	-166	-166	-184	-212	-203	-210	-213	-221
10	-224	-229	-237	-237	-243	-249	-252	-257	-248	-236	-215	-187	-185	-167	-160	-150	-144	-140	-135	-139	-144	-144	-157	
11	-153	-158	-154	-149	-146	-155	-153	-145	-142	-141	-135	-125	-118	-111	-110	-111	-118	-131	-143	-164	-159	-196	-205	-205
12	-212	-220	-249	-243	-230	-220	-201	-226	-201	-175	-153	-139	-130	-119	-116	-118	-113	-120	-134	-167	-167	-162	-166	-166
13	-160	-177	-180	-186	-183	-191	-178	-151	-134	-120	-108	-92	-71	-56	-41	-32	-26	-20	-17	-16	-15	-11	-11	-13
14	-10	-10	-11	-16	-18	-32	-28	-26	-20	-15	-8	-2	6	23	26	49	20	16	11	2	-1	-8	-15	-18
15	-26	-28	-19	-26	-11	-10	-26	-44	9	15	28	34	21	8	19	8	13	11	7	12	2	14	10	16
16	-2	-16	-30	-29	-49	-47	-51	-30	-38	-24	-17	-11	-8	-6	-6	-6	-4	-2	-3	-2	-2	-3	-1	-2
17	-2	-2	-1	-1	0	1	9	9	10	12	15	17	21	27	31	37	37	39	24	12	-1	-4	-21	-31
18	-26	-34	-35	-16	-20	-25	-37	-48	-22	-25	-19	-11	-7	-2	6	5	9	7	7	8	8	7	10	13
19	15	11	10	11	5	2	2	-1	-5	2	18	24	30	43	44	41	39	38	28	19	14	11	11	12
20	9	9	6	6	4	3	3	4	4	6	14	11	14	24	28	33	33	27	23	18	17	15	11	4
21	-7	-12	-4	-6	-13	-15	-19	-18	-7	14	30	39	54	65	78	79	82	86	60	30	20	0	-4	-22
22	-24	-9	-20	-11	2	-8	3	-3	21	29	59	72	87	105	121	139	149	145	128	100	75	77	58	49
23	30	14	-6	-8	-5	19	16	19	36	58	78	67	75	100	103	93	97	94	79	71	68	60	52	48
24	40	34	29	28	28	27	37	37	41	42	40	37	36	44	35	31	27	27	23	19	16	13	15	9
25	9	6	4	3	2	1	-1	-1	5	11	10	11	11	18	19	18	23	23	20	-3	-2	-13	-24	-28
26	-28	-32	-30	-32	-26	-36	-40	-40	-6	18	24	34	42	48	61	61	59	55	49	20	12	8	0	-10
27	-7	-8	-23	-39	-33	-37	-38	-28	-8	11	23	14	27	30	34	44	39	45	36	2	-13	-41	-45	-42
28	-51	-61	-65	-62	-62	-81	-72	-51	-24	-2	12	29	35	48	47	40	42	23	28	-6	-26	-36	-44	-44
29	-47	-54	-58	-56	-59	-57	-63	-61	-47	-37	-20	-4	6	8	12	10	9	12	-3	-11	-8	-12	-5	-7
30	-13	-14	-20	-20	-21	-25	-27	-30	-24	-10	3	8	22	32	33	35	37	42	30	7	-1	7	2	-2
31	-2	2	6	2	7	11	13	16	20	40	56	74	95	110	119	127	110	113	96	47	57	24	15	2

NOTE/AVIS: 1. Unit = 0.1 C 1. Unite = 0.1 C

WINNIPEG INTLA (YWG) MONTH/MOIS: March/mars 2003

PRECIPITATION OCCURRENCES / EVENEMENT DES PRECIPITATIONS

HOUR / HEURE

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
2		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
3		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
4		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
5		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
6	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
7		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
8		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
9		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
10		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
11		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
12		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
13		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
14		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
15		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
16		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
17		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
18		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
19		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
20	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								
31																								

Note/Avvis:

R = Rain/pluie : S = Snow/neige : W = Showers/averse de : T = Thunderstorm/orage : L = Drizzle/bruine : Z = Freezing/verglacante
 SP = Snow Pellets/neige roulee : SG = Snow Grains/neige en grains : A = Hail/grele : IP = Ice Pellets/gresil

WINNIPEG INTL A (YWG) MONTH/MOIS: March/mars 2003

		WINDS (km/h) / DES VENTS (km/h)																						Pk	Hour	
Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Gust	Heur
Date																								Rafale		
1	S	S	WNW	NNWN	N	N	N	NNWN	NNWN	N	NNWN	NNWN	N	NNWN	NNWN	N	N	NW	NW	NW	NW	NNW	N	N	56	600
2	13	6	7	13	28	43	39	24	35	33	41	32	35	32	33	30	30	26	15	22	17	17	17	13	56	600
3	N	NNW	WNW	WNW	NNW	WNW	C	S	S	SSE	S	S	SSE	S	SSE	S	S	SSE	SE	SE	SE	SSE	SSE	SE	56	600
4	11	9	9	13	9	6	0	6	4	6	11	13	9	15	17	22	22	19	19	20	20	20	20	19	56	600
5	SE	SE	SE	SE	ESE	ESE	E	ENE	ENE	NNE	NNE	N	N	N	N	N	NNW	NNW	NW	N	NNW	NNW	WNW	N	56	600
6	17	20	22	20	17	15	17	9	11	11	15	20	20	22	24	17	19	20	15	26	22	15	17	15	32	1400
7	WNW	WNW	WNW	W	W	W	W	W	W	W	W	W	W	W	W	W	WSW	SW	SSW	SSW	SW	SW	SW	SW	32	1400
8	15	15	17	15	19	15	15	15	15	19	13	15	11	13	15	15	13	11	7	9	11	17	13	13	56	600
9	SW	SW	SW	SW	WSW	WSW	SW	SW	S	S	S	S	S	SSE	S	S	SSE	SSE	SSE	SSE	SSE	SSE	S	S	56	600
10	13	11	15	11	15	11	9	13	11	11	13	17	17	26	33	32	37	33	35	37	37	39	44	48	65	2300
11	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	56	600
12	46	50	48	44	39	37	32	26	24	22	15	22	35	33	32	33	26	28	30	28	24	17	15	65	100	
13	N	W	WNW	W	W	WSW	WSW	W	W	WSW	W	WSW	W	WNW	WNW	WNW	NW	NW	WSW	W	WNW	WNW	WNW	W	56	600
14	15	15	13	11	15	13	9	15	11	9	7	13	17	15	15	17	19	13	7	6	15	20	17	9	56	600
15	W	WNW	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	W	WSW	W	W	W	W	W	W	W	56	600
16	11	17	17	15	17	17	20	24	22	22	24	26	30	30	33	35	33	32	30	28	28	35	37	54	2300	
17	W	W	W	W	W	W	W	W	W	W	W	W	W	WNW	WNW	NW	WNW	WNW	W	W	W	W	W	W	56	600
18	30	32	33	39	37	30	33	28	28	32	32	33	33	32	32	33	32	26	15	13	13	17	15	50	1500	
19	WSW	W	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	50	1500
20	15	17	15	17	17	15	11	11	13	9	7	7	11	9	11	7	11	11	9	4	4	7	7	9	50	1500
21	SW	WSW	W	SSW	S	SW	W	WSW	W	W	WNW	WNW	NW	NW	NW	WNW	WNW	NNW	NW	NW	W	N	NNW	WNW	56	600
22	9	7	9	4	11	7	7	13	17	22	20	30	30	30	33	33	28	26	30	22	20	13	6	11	39	1600
23	NW	NW	NNE	C	C	SSE	SE	ESE	SE	ESE	SE	SSE	SSE	SSE	S	SSW	SSW	W	WNW	N	C	SE	SE	56	600	
24	4	4	7	0	0	6	6	11	7	13	13	9	13	9	13	17	13	9	7	6	4	0	4	4	56	600
25	S	SE	SE	SSE	SSE	SSE	SE	SSE	SE	SE	SE	SSE	S	S	S	S	S	S	SSE	S	S	S	S	SSE	56	600
26	9	9	13	13	11	11	15	17	20	26	28	35	39	54	52	46	37	39	41	37	37	32	28	32	67	1300
27	S	S	S	S	SSE	ESE	SE	SE	E	ESE	SE	ESE	E	NNE	S	NW	N	NNE	NE	NE	NE	NE	E	SSE	56	600
28	24	24	20	20	17	4	13	11	11	13	15	9	13	6	6	6	9	11	11	7	9	7	6	6	39	100
29	NE	ESE	SSE	SE	ESE	SE	SE	S	SSE	SSE	SSW	WSW	WNW	W	WSW	SSW	SSW	SE	S	SSW	SW	W	W	SSW	56	600
30	6	7	7	11	7	6	7	7	11	13	19	15	9	7	13	9	13	9	7	9	9	13	11	13	32	1100
31	NW	W	W	WNW	NW	NNW	NW	N	NNE	N	NNW	N	N	N	N	NNE	NNE	NNE	NE	NNE	NNE	N	NE	NE	56	600
32	6	17	13	9	11	11	4	19	22	20	20	22	17	15	19	17	17	19	19	19	17	13	9	11	33	1800
33	N	NE	NNE	NNE	ENE	NNWE	E	E	E	E	E	E	E	E	E	E	ENE	ENE	NNE	NE	N	NE	N	56	600	
34	9	9	11	11	11	6	9	15	13	19	17	17	20	17	11	9	9	9	13	13	9	11	9	7	56	600
35	NE	NE	ENE	ENE	NE	ENE	NNE	E	ESE	E	ENE	NE	NNE	NE	NE	N	NNE	N	N	N	N	N	N	56	600	
36	7	9	7	7	7	6	7	15	15	6	9	11	6	17	17	9	11	11	11	9	7	13	9	56	600	
37	N	NNE	NNE	NNE	NNE	NNWN	N	NNE	NNE	NNE	N	NNW	NNW	N	NNE	NNW	NW	WNW	NW	WNW	NW	W	WNW	56	600	
38	13	11	15	17	13	6	7	11	7	7	4	7	9	7	9	9	7	9	6	7	11	6	9	11	56	600
39	W	W	WNW	WNW	NW	W	WNW	NW	NW	NNW	NNW	N	N	N	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	56	600	
40	11	13	11	13	11	7	11	13	17	20	20	22	26	24	28	22	26	11	11	13	15	17	13	41	1600	
41	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNW	NW	N	NNW	NW	N	NNW	NNW	NW	WNW	NNW	NNW	WNW	WNW	WNW	56	600	
42	11	6	13	17	13	13	9	9	13	11	13	9	9	17	13	17	11	9	9	11	4	0	6	56	600	
43	SSW	S	S	S	S	S	S	S	S	S	S	S	S	S	S	WSW	WSW	SW	SW	SW	WSW	WSW	WSW	SSW	56	600
44	6	6	11	13	17	13	17	15	19	19	22	26	24	24	17	17	15	13	9	11	17	13	11	35	1300	
45	SW	S	S	SSE	SSE	S	SSE	SSE	SE	SSE	SSE	SSE	SE	WSW	SW	W	W	SW	SSW	SSW	SW	SW	SW	56	600	
46	11	4	9	9	9	11	9	15	13	17	22	20	19	17	7	17	15	32	11	15	19	22	19	22	37	1200
47	SW	SW	SSW	SSW	SSW	SW	SW	WSW	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	56	600
48	19	22	26	24	28	24	24	22	28	37	41	39	48	39	48	52	43	43	41	32	28	22	26	17	69	1400
49	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	56	600
50	20	15	13	15	15	13	7	9	7	9	15	13	9	9	11	11	7	13	6	4	6	4	6	33	100	
51	SSE	ESE	SE	SE	ENE	SSE	E	E	SSE	SE	ESE	E	E	ESE	E	E	E	NE	NE	NE	NE	NNE	NNE	56	600	
52	7	4	6	4	9	4	6	4	11	13	15	15	17	19	13	19	11	20	17	22	20	15	15	15	56	600
53	NNE	NNE	NNE	NNE	N	NNE	N	NNE	NNE	N	NNE	N	N	N	N	N	NNE	N	NNE	NNE	N	N	NE	N	56	600
54	11	13	13	11	13	15	13	13	19	19	24	24	26	22	22	20	17	22	15	13	13	7	7	9	33	1100
55	N	N	NW	NNW	N	NNW	N	NNE	NNE	NNE	N	N	N	N	N	N	WNW	NNW	NW	NW	NW	NW	NW	NW	56	600
56	6	7	9	7	6	7	9	9	9	15	19	20	24	26	28	24	26	32	30	32	35	24	22	20	46	1700
57	NW	NW	NW	NW	NW	NNW	NW	NNW	NW	NNW	NNW	NNW	NNW	NW	NW	NW	WNW	NW	N	C	S	S	SSE	NNW	56	600
58	26	22	30	20	26	24	26	28	30	30	24	24	20	26	22	24	24	17	9	6	0	6	7	11	35	500
59	ESE	SE	ESE	E	E	ENE	ENE	ENE	ENE	ENE	E	E	E	E	E	S	SSE	SE	SE	SE	SE	SE	SE	SE	56	600
60	9	13	11	11	11	17	19	24	19	19	20	19	24	19	15	11	11	13	11	17	17	20	30	26	41	0
61	SSE	SSE	SSE	SSE	S	SSE	SSE	SSE	SSE	S	S	S	SW	NW	NW	WNW	WNW	NW	NNW	NNW	N	N	NNE	S	56	600
62	30	24	24	24	24	26	26	19	30	26	39	28	19	17	20	26	20	26	22	11	20	35	22	13	50	1000

SUMMARY / SOMMAIRE

Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Pdir	N	S	N	W	SSE	S	W	W	W	WSW	W	SE	S	S	SSW	N	E	N	NNE	NW	NNWS	SSE	WNW	WNW	E	N	N	NW	E	SSE	
avgV	25	13	18	14	24	31	13	25	28	11	18	7	28	12	10	15	12	10	9	16	11	16	15	32	11	13	16	19	20	17	24
dir2										W					SE																ENE

NOTE/AVIS: * indicates/indique < 24 hrs and/et >=18 hrs Pdir=Prevailing direction/Direction dominante dir2=2nd Pdir/2ieme Pdir