

MONTHLY METEOROLOGICAL SUMMARY SOMMAIRE MÉTÉOROLOGIQUE MENSUEL

MONTH/MOIS MAY

19 93

AT/A

WINNIPEG INT'L AIRPORT

DATE	TEMPERATURE TEMPÉRATURE			DEGREE-DAYS DEGRÉS-JOURS			REL HUMIDITY HUMIDITÉ REL		THUNDERSTORM ORAGE	PRECIPITATION PRÉCIPITATIONS			SNOW ON GROUND NEIGE AU SOL	WIND VENT			BRIGHT SUNSHINE INSOLATION EFFECTIVE HEURES				
	MAXIMUM MAXIMALE	MINIMUM MINIMALE	MEAN MOYENNE	HEATING DE CHAUFFE	CROWING DE CROISSANCE	COOLING DE REFRIGÉRATION	MAXIMUM MAXIMALE	MINIMUM MINIMALE		RAINFALL PLUIE (HAUTEUR)	SNOWFALL NEIGE (HAUTEUR)	TOTAL PRECIP PRÉCIP. TOTALE		AVERAGE SPEED VITESSE MOYENNE	PREVAILING DIRECTION DOMINANTE	MAX & MIN MEAN SPEED & DIRECTION VITESSE MOYENNE MAX. SUR 2 MIN & DIRECTION					
	°C	°C	°C	BASE 18°C	BASE 5°C	BASE 18°C	%	%		mm	cm	mm		km/h		km/h					
1	8.8	0.1	4.5	13.5			87	57				10.9	E*	E 17	3.6						
2	14.0	-0.5	6.8	11.2	1.8		87	47				7.8	E*	ESE 22	9.3						
3	22.9	7.0	15.0	3.0	10.0		70	23		TR	TR	25.0	SSE	NW 43	9.4						
4	23.5	1.7	12.6	5.4	7.6		81	26				7.7	NE*	NNW 15	10.3						
5	24.9	5.2	15.1	2.9	10.1		87	27				15.0	NE	NE 33	13.1						
6	29.2	11.8	20.5		15.5	2.5	58	19				20.0	SSE	SE 33	12.7						
7	23.2	15.0	19.1		14.1	1.1	94	47	1	11.8	11.8	27.2	ESE	ESE 41	4.6						
8	21.8	14.2	18.0		13.0		100	68		14.4	14.4	18.2	SSE	S 30	4.0						
9	18.3	9.8	14.1	3.9	9.1		100	67		6.6	6.6	16.0	SE	WNW 46	2.7						
10	24.7	5.9	15.3	2.7	10.3		93	25				11.5	WSW	V 22	13.8						
11	28.8	9.9	19.4		14.4	1.4	76	23				14.5	NNE*	NW 22	14.1						
12	19.5	4.6	12.1	5.9	7.1		70	34				10.4	NNE	NNE 24	14.2						
13	26.5	7.3	16.9	1.1	11.9		61	34				21.7	N	NNE 37	12.0						
14	11.7	0.9	6.3	11.7	1.3		81	43		TR	TR	26.3	NNW	NW 41	6.5						
15	9.6	0.0	4.8	13.2			93	37		TR	TR	21.9	NW	NW 30	5.2						
16	12.5	-1.7	5.4	12.6	0.4		93	37				16.0	W	V 32	8.5						
17	10.9	0.1	5.5	12.5	0.5		93	53		0.4	0.4	14.6	N	NW 33	1.5						
18	10.3	-1.9	4.2	13.8			86	53		TR	TR	13.2	WNW	NW 28	2.6						
19	12.9	3.9	8.4	9.6	3.4		87	50		TR	TR	11.5	NNW	NNW 24	2.2						
20	16.6	2.9	9.8	8.2	4.8		81	23		TR	TR	17.2	W	NNW 32	12.2						
21	19.5	-3.3	8.1	9.9	3.1		74	24				12.7	SE	SE 28	11.1						
22	27.3	11.0	19.2		14.2	1.2	94	38	1	0.4	0.4	25.5	SSE	SSE 33	9.9						
23	14.2	9.5	11.9	6.1	6.9		88	53		TR	TR	28.0	N	N 41	0.0						
24	16.6	4.7	10.7	7.3	5.7		66	28				24.3	NNW	N 32	10.3						
25	13.8	2.7	8.3	9.7	3.3		87	33		0.6	0.6	20.2	SSW	N 44	6.5						
26	14.6	-2.6	6.0	12.0	1.0		93	33				9.6	NNE*	ENE 24	11.2						
27	11.9	7.4	9.7	8.3	4.7		76	46		0.2	0.2	16.3	N	NNE 26	0.5						
28	18.6	1.0	9.8	8.2	4.8		80	29				9.5	SSW*	N 19	14.7						
29	16.4	5.5	11.0	7.0	6.0		88	50		0.4	0.4	12.0	S	SSW 32	0.0						
30	16.1	2.6	9.4	8.6	4.4		81	33				21.3	N	N 35	10.4						
31	16.4	0.9	8.7	9.3	3.7		81	31				17.3	N	NW 33	14.2						
MEAN MOYENNE	17.9	4.4	11.2	TOTAL 217.6	TOTAL 193.1	TOTAL 6.2	83	38	TOT 2	TOTAL 34.8	TOTAL 0.0	TOTAL 34.8	16.9	PREVAILING DOMINANTE N	MAXIMALE WNW 46	TOTAL 251.3					
NORMAL NORMALE	18.6	4.5	11.6	212.0	214.0	13.0			3	57.8	2.0	59.8	19.0	S		276.8					
DEGREE-DAY SUMMARY/SOMMAIRE DE DEGRÉS JOURS										DAYS WITH TOTAL PRECIPITATION JOURS AVEC PRÉCIPITATIONS TOTALES						DAYS WITH SNOWFALL JOURS AVEC CHÛTE DE NEIGE					
BELOW 18°C AU-DESSOUS DE 18°C		THIS YEAR ANNÉE EN COURS	PREVIOUS YEAR ANNÉE PRÉCÉDENTE	NORMAL NORMALE	ABOVE 5°C AU-DESSUS DE 5°C		THIS YEAR ANNÉE EN COURS	PREVIOUS YEAR ANNÉE PRÉCÉDENTE	NORMAL NORMALE	0.2 OR MORE OU PLUS	1.0 OR MORE OU PLUS	2.0 OR MORE OU PLUS	10.0 OR MORE OU PLUS	30.0 OR MORE OU PLUS	62 OR MORE OU PLUS	120 OR MORE OU PLUS	220 OR MORE OU PLUS	300 OR MORE OU PLUS			
TOTAL FOR MONTH TOTAL DU MOIS		217.6	194.5	212.0	TOTAL FOR MONTH TOTAL DU MOIS		193.1	237.6	214.0												
ACCUMULATED SINCE JULY 1 ACCUMULÉE DEPUIS LE 1 ^{er} JUILLET		5860.6	5481.3	5805.1	ACCUMULATED SINCE APRIL 1 ACCUMULÉE DEPUIS LE 1 ^{er} AVRIL		222.6	275.4	268.1	8	3	3	2	0	0	0	0	0			

UOC 551 506 1 (

Note/Avr

1. Climatological Day/Jourée climatologique 00 01 C ST - 23 00 C ST

2. Normal/Normale 1951-1980

3. TR = Trace

4. M = Missing/Manquant

5. No entry/Pas de valeur - No occurrence/Pas d'événement

6. * Indicates first of more than one prevailing direction and/or maximum 2 minute mean speed (see page 4)/Indique la première de plusieurs des directions dominantes et/ou la vitesse moyenne maximale sur 2 minutes (voir page 4)

7. C = Calm/Calme \$3.00

\$29.50

\$3.00

\$29.50

8. Price single issue annual (Jan to Dec) /Prix numéro individuel annuel (janv à déc.)

DRY BULB TEMPERATURE SUMMARY
 SOMMAIRE DES TEMPERATURES DU THERMOMETRE SEC

WINNIPEG INT'L AIRPORT

MAY 1993
 PAGE 3

HOUR->	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN	
D	41	23	22	8	9	10	11	40	58	73	70	70	75	74	78	84	84	85	86	81	77	67	57	40	55	
A	44	32	13	-1	6	14	21	42	64	73	87	89	101	105	115	119	130	137	138	134	122	111	100	94	79	
T	83	73	76	71	74	75	80	86	104	137	157	168	186	182	214	219	173	182	178	150	131	117	114	108	131	
E	98	98	76	54	30	26	44	83	106	125	171	198	205	213	227	230	226	206	181	157	146	143	151	143	143	
	112	84	76	85	71	62	90	140	162	188	204	208	222	229	239	245	239	232	216	196	168	171	171	166	166	
6	171	163	152	147	131	120	122	153	175	216	233	257	267	279	284	288	286	282	273	260	246	233	222	202	215	
7	197	179	166	163	161	153	154	166	188	193	194	177	171	190	193	219	205	218	228	208	206	194	161	164	185	
8	158	157	165	160	149	148	143	143	148	152	156	182	200	201	202	196	203	210	214	211	203	199	180	166	177	
9	161	161	158	161	163	161	164	174	175	171	152	132	120	113	128	143	139	128	136	138	128	115	119	110	144	
10	99	96	93	84	74	59	75	112	137	165	198	214	223	235	239	244	241	242	241	221	218	168	161	140	166	
11	138	123	110	127	119	105	133	160	190	215	236	263	274	280	283	283	264	254	241	215	178	165	126	107	191	
12	102	98	74	77	58	47	79	106	124	130	138	143	150	160	175	180	188	192	191	188	166	144	126	146	133	
13	124	121	116	115	118	114	122	151	189	240	248	248	248	256	262	226	218	216	194	178	148	131	99	80	173	
14	102	109	86	85	85	65	72	91	103	95	90	92	102	102	101	103	98	89	71	63	55	49	30	34	81	
15	10	11	15	10	10	8	13	22	36	45	54	55	52	63	73	80	86	86	77	64	46	45	27	22	42	
16	0	-4	-9	-14	-10	-2	16	30	48	66	76	89	100	111	107	110	115	124	118	103	98	87	83	75	63	
17	55	10	23	23	31	37	48	57	65	73	86	85	85	89	91	96	97	87	75	76	53	41	30	16	59	
18	21	9	18	8	-6	-4	10	34	62	85	85	84	80	69	94	91	91	87	96	90	77	58	48	24	55	
19	45	54	53	49	51	48	52	65	79	98	104	114	105	108	111	113	105	119	109	106	93	76	69	49	82	
20	69	73	76	73	65	66	77	102	115	132	143	147	158	155	160	161	149	138	126	112	90	69	52	31	106	
21	29	21	-4	9	-15	-7	8	52	78	106	124	143	157	176	181	194	192	189	182	187	177	164	153	145	110	
22	143	137	138	142	134	133	132	135	144	181	198	214	221	246	261	261	226	256	244	214	186	171	135	130	183	
23	113	131	124	125	127	117	117	114	113	107	110	100	104	111	118	121	130	139	137	131	123	108	98	98	118	
24	96	91	90	89	85	82	83	85	100	112	122	125	135	138	145	147	153	155	149	132	105	83	73	65	110	
25	66	59	49	56	63	62	69	97	108	121	77	58	64	88	122	118	128	116	115	102	73	50	55	47	82	
26	27	-9	1	-4	-15	-17	0	46	66	82	92	104	121	134	134	138	140	138	130	118	113	109	104	99	77	
27	95	91	91	88	80	77	77	78	85	91	95	88	81	89	109	110	112	111	109	99	89	91	89	87	92	
28	81	44	34	30	17	18	24	73	98	119	128	142	145	157	167	172	173	170	182	166	148	130	123	113	111	
29	102	98	87	71	61	75	89	104	123	138	138	142	151	156	151	154	147	141	140	125	118	116	101	97	118	
30	100	74	51	28	29	28	48	78	106	123	131	132	149	148	157	156	154	148	141	123	113	105	98	92	105	
31	90	80	64	44	36	14	42	76	97	109	127	132	131	142	156	149	147	153	146	139	123	109	85	59	102	
MEAN	89	80	74	70	63	61	71	93	111	128	136	142	148	155	164	166	162	163	158	146	130	117	105	96	118	
MOYENNE																										

*TEMPERATURES IN TENTHS OF DEGREES CELSIUS
 *TEMPERATURES EN DIXIEME DEGRES CELSIUS

WIND SUMMARY
SUMMAIRE DES VENTS

WINNIPEG INT'L AIRPORT

MAY 1993
PAGE 5

HOUR ->	DIR.																								PEAK WIND SPEED	TIME	
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
D	S	S	S	SSE	SSE	SE	SE	ESE	ESE	SE	E	ESE	SE	SSE	ESE	SE	E	ESE	SE	ESE	SE	E	ESE	C	ENE	59	16:03
A	15	15	13	6	6	13	7	9	11	15	15	17	17	15	7	11	15	13	7	7	7	6	0	7			
Y	ESE	SSE	C	NE	E	C	E	NNE	NNE	ENE	SE	E	ESE	SE	E	SE	ENE	NNE	ENE	ENE	ENE	E	ESE	ESE			
O	7	6	0	6	4	0	2	4	6	6	11	7	11	9	2	6	7	2	6	11	19	13	19	22			
F	SE	SE	SSE	SSE	SSE	SSE	S	SSE	S	S	SSE	S	W	WSW	SSW	NW	NNW	NW	NNW	ENE	E	ESE	SSE				
M	26	24	20	26	28	26	32	30	32	30	28	30	32	19	33	28	43	33	28	15	7	7	11	11			
O	SE	SE	SSE	SSE	SSE	SSE	S	SSE	S	S	SSE	S	W	WSW	SSW	NW	NNW	NW	NNW	ENE	E	ESE	SSE				
N	13	11	13	7	4	0	9	9	6	4	4	0	7	6	7	7	15	15	11	6	7	9	11				
T	SE	SSE	SSE	S	NW	C	SSE	NW	SE	ENE	S	W	C	NNW	W	WSW	W	NNW	N	N	NE	NE	NE				
H	13	11	13	7	4	0	9	9	6	4	4	0	7	6	7	7	15	15	11	6	7	9	11				
	5	NNE	NNE	NNE	NE	NE	NE	E	E	E	E	E	ENE	ENE	E	E	N	NNE	NE	NE	NE	NE	ENE	E	37	17:46	
	9	6	7	7	4	4	4	4	11	17	17	20	19	15	13	4	20	28	33	28	20	15	20	24			
	6	E	E	E	E	ESE	ESE	E	SE	SE	SSE	SE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	48	18:05	
	24	17	15	13	17	17	9	9	11	9	13	15	17	28	28	28	30	26	33	28	22	24	20				
	7	SSE	SE	SE	SE	SE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SSW	ESE	67	21:31		
	20	17	15	19	26	26	22	26	28	30	28	41	37	41	41	37	19	28	39	9	22	30	33	19			
	8	SSE	SSE	SSE	ESE	ESE	ESE	ESE	ESE	SSE	SSW	S	S	S	S	SSE	SE	SE	SE	SE	SE	SE	SE	SSE	44	14:30	
	6	4	15	15	17	17	19	20	28	20	24	19	19	30	19	24	30	24	22	15	7	19	11	11			
	9	S	SSE	SE	SE	SSE	SE	SE	SE	SE	SSW	WSW	W	W	W	WSW	WSW	WSW	SSW	S	SSE	S	S	S	56	13:37	
	6	7	7	9	9	9	11	20	24	20	6	15	24	30	43	46	37	20	11	9	4	4	7	7			
	10	SSE	S	SSW	S	SSW	S	SSW	S	W	WSW	W	WSW	W	WSW	W	WSW	WSW	WSW	C	SSE	S	S	S	41	15:09	
	9	11	15	7	7	7	9	9	9	17	11	9	9	17	17	22	20	13	13	9	0	4	7	7			
	11	S	SSW	SW	WSW	WSW	W	W	NNW	W	W	W	W	NNW	NW	NNW	NW	NNW	NE	NNE	NNE	NNW	NNW	NNW	37	14:58	
	9	11	13	13	13	13	13	13	11	15	13	17	13	15	22	19	22	22	20	19	22	7	9	7			
	12	NNE	N	NNW	NW	NNW	N	N	NNE	NNE	NNE	NNE	ENE	E	NE	NE	C	C	NNE	C	S	SSE	S	SSE			
	11	9	11	11	11	11	13	13	19	20	24	22	19	15	13	9	6	2	2	0	0	6	0	4	9		
	13	S	SSE	S	SSW	SSW	SSW	SSW	SSW	SSW	NNW	NW	N	N	NNW	NNE	N	NE	N	N	N	NNW	NNW	NNW	50	09:18	
	7	11	13	22	20	20	17	20	19	24	33	33	33	20	22	37	30	26	30	30	20	17	20	15	11		
	14	NNW	NNW	W	W	NNW	W	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	59	15:20	
	15	15	15	17	7	13	26	35	33	33	33	33	41	35	37	35	33	33	33	33	22	17	11	19			
	15	NNW	W	NNW	NNW	NNW	NW	NNW	NW	NNW	NW	NNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNW	NNW	NNW	44	07:45	
	15	11	19	20	22	19	22	30	28	28	24	19	26	22	30	26	26	22	20	20	22	13	22	20			
	16	NNW	W	W	WSW	WSW	WSW	WSW	WSW	W	W	WSW	W	W	W	W	W	W	W	W	W	W	W	W	44	13:12	
	7	11	11	13	13	11	17	13	9	17	24	26	24	24	32	26	30	22	24	9	7	4	11	4			

HOUR ->	DIR.																								PEAK WIND SPEED	WIND DIRECTION	
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
17	N	C	NW	N	NNE	N	N	N	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	48	15:54	
18	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	41	12:47	
19	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	37	17:32	
20	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	50	11:58	
21	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	37	20:58	
22	SE	SE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	50	08:49	
23	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	52	17:55	
24	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	56	14:30	
25	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	56	14:44	
26	NNE	N	C	W	W	W	WSW	WSW	S	SSW	E	ENE	NW	W	E	NNE	SE	NNE	NNE	NE	ENE	E	ENE	E	ENE	37	10:54
27	E	ENE	E	ENE	NE	NE	ENE	ENE	NE	ENE	NE	ENE	NE	ENE	NE	ENE	NE	ENE	NE	ENE	NE	ENE	NE	ENE	37	10:54	
28	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	56	14:44	
29	S	SSW	SSW	SSW	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	57	12:01	
30	N	NNE	NNE	N	N	NNE	N	N	NNE	NNE	N	N	NNE	NNE	N	N	NNE	NNE	N	N	NNE	NNE	N	N	57	12:01	
31	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	48	12:17	

EQUAL TO OR OVER ->

NUMBER OF HOURS	542	424	275	165	97	23	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NUMBER OF DAYS	31	31	28	19	8	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MAX CONSECUTIVE HOURS	50	49	39	16	14	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

WINDSPEED IS
IN KM/HR

MONTHLY CLIMATE DATA

Month: MAY Year: 1993

WINNIPEG, MANITOBA

	CURRENT		NORMAL	
	VALUE	DATE	VALUE	DATE
Mean Maximum	17.9		18.6	
Mean Minimum	4.4		4.5	
Mean	11.2		11.6	
Extreme Maximum and Date	29.2	6	37.8	30/1934
Extreme Minimum and Date	-3.3	21	-11.7	3/1907
Rainfall (mm)	34.8		57.8	
Snowfall (cm)	0.0		2.0	
Total Precipitation (mm)	34.8		59.8	
Days With Thunder	2		3	
Days With Measurable Precipitation	8		10	
Sunshine Hours	251.3		276.8	
Wind (km/h)	16.9		19	
Heating Degree Days Below 18 C	217.6		212.0	
Growing Degree Days Above 5 C	193.1		214.0	
Heating Degree Days Below 0 C	0.0		0.8	
Cooling Degree Days Above 18 C	6.2		0.0	

Highlights of the Month

The month can be divided into two parts of very different weather. The first 13 days were mild and wet while the 14th to the end of the month was cool and dry. The following table illustrates the dichotomy.

	Mean Maximum	Mean Minimum	Mean	Precipitation
1st to 13th	22.0	7.1	14.6	32.8
14th to 31st	15.0	2.4	8.7	2.0

The warm beginning and the cool ending to the month of May combined to give a monthly mean temperature that was only 0.4 degrees below normal. Maxima were below normal by 0.7 degrees while the minima were below normal by 0.1 degrees. The minimum temperature fell to zero or lower on 6 days during the month while the normal is 8. However, 5 out of those 6 occurrences were during the second half of the month causing endless grief to those gardeners who planted seeds and bedding plants early.

Sunshine was close to normal but total precipitation was only 58% of normal. There was no snow during May and wind speed were less than average.