

# MONTHLY METEOROLOGICAL SUMMARY

## SOMMAIRE MÉTÉOROLOGIQUE MENSUEL

MONTH/MOIS: AUGUST / AOÛT 19 91  
 AT/A: WINNIPEG INT'L AIRPORT / AÉROPORT INTERN. DE WINNIPEG

LAT: 49° 54' N		LONG: 97° 14' W		ELEVATION ALTITUDE: 239.6		METRES (ASL) MÉTRES (NMM)		STANDARD TIME USED: CENTRAL												
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			
	MAXIMUM MAXIMALE	MINIMUM MINIMALE	MEAN MOYENNE	HEATING DE CHAUFFE	GROWING DE CROISSANCE	COOLING DE RÉFÉRIERATION	MAXIMUM MAXIMALE	MINIMUM MINIMALE		RAINFALL PLUIE (HAUTEUR)	SNOWFALL NEIGE (HAUTEUR)	TOTAL PRECIP. TOTALE		AVERAGE SPEED VITESSE MOYENNE	PREVAILING DIRECTION DIRECTION DOMINANTE	MAX 2 MIN MEAN SPEED & DIRECTION VITESSE MOYENNE MAX. SUR 2 MIN & DIRECTION		HOURS HEURES		
	°C	°C	°C	BASE 18.0°C	BASE 5.0°C	BASE 18.0°C	%	%	mm	cm	mm	km/h		km/h						
1	23.1	11.8	17.5	0.5	12.5		88	53				21.4	W	WNW37	13.7					
2	19.3	13.5	16.4	1.6	11.4		98	69	1.4		1.4	15.0	NNE	NNE24	0.0					
3	23.3	13.1	18.2		13.2	0.2	100	45	0.4		0.4	13.9	N	NNE28	10.8					
4	25.8	9.1	17.5	0.5	12.5		93	36				4.2	CALM	E 11*	12.1					
5	22.7	14.5	18.6		13.6	0.6	87	53	0.2		0.2	10.1	SE	SW 22	1.3					
6	21.5	15.7	18.6		13.6	0.6	96	72	4.0		4.0	23.3	ESE	SE 35	1.5					
7	26.5	14.9	20.7		15.7	2.7	85	41				17.0	SE	SE 31	13.2					
8	29.1	11.7	20.4		15.4	2.4	85	29				4.0	CALM	S 13	13.7					
9	30.1	12.8	21.5		16.5	3.5	88	30				7.5	SSW	S 19*	13.5					
10	30.9	16.2	23.6		18.6	5.6	69	29				10.1	S	SSW19*	13.7					
11	31.9	13.4	22.7		17.7	4.7	82	30				6.4	CALM	SE 17	11.6					
12	32.5	15.3	23.9		18.9	5.9	83	29				6.0	CALM	SSE17	13.0					
13	32.7	16.8	24.8		19.8	6.8	77	28				9.0	WSW	WSW26*	13.5					
14	33.6	16.9	25.3		20.3	7.3	71	27	TR.		TR.	17.0	S	SW 33	10.1					
15	26.8	15.6	21.2		16.2	3.2	88	47				15.9	NNE	NNE31	7.5					
16	28.2	12.8	20.5		15.5	2.5	91	31				13.6	N	N 26	8.2					
17	22.2	10.3	16.3	1.7	11.3		90	49				23.1	N	N 41	8.9					
18	23.5	7.2	15.4	2.6	10.4		97	35				9.3	NW	S 22	13.3					
19	28.4	11.7	20.1		15.1	2.1	72	34				32.1	S	S 44*	12.8					
20	32.8	17.1	25.0		20.0	7.0	78	41	TR.		TR.	27.3	S	S 37	10.9					
21	25.9	15.3	20.6		15.6	2.6	94	40				20.5	NW	N 33*	13.5					
22	24.8	12.0	18.4		13.4	0.4	91	40	TR.		TR.	12.5	NNW	NNW24	6.9					
23	24.1	8.0	16.1	1.9	11.1		97	34				11.9	NE	NE 20	12.5					
24	31.9	15.7	23.8		18.8	5.8	84	44				29.1	S	S 54	11.2					
25	33.7	16.6	25.2		20.2	7.2	92	34	TR.		TR.	10.5	SSE	SSE28	9.3					
26	26.8	17.0	21.9		16.9	3.9	91	46	0.2		0.2	14.5	N	NW 30	8.0					
27	35.1	16.6	25.9		20.9	7.9	98	26	TR.		TR.	13.1	S	SE 22	8.0					
28	37.1	24.0	30.6		25.6	12.6	70	30	TR.		TR.	37.0	SSE	S 61*	11.2					
29	33.9	17.7	25.8		20.8	7.8	71	21				21.5	W	W 39	12.3					
30	24.7	8.4	16.6	1.4	11.6		87	39				20.7	NNE	NNE31*	12.7					
31	24.2	6.9	15.6	2.4	10.6		87	41				18.0	SSE	SSE28	13.0					
MEAN MOYENNE	28.0	13.8	20.9	TOTAL 12.6	TOTAL 493.7	TOTAL 103.3	86	39	TOT 1	TOTAL 6.2	TOTAL 0.0	TOTAL 6.2		PREVAILING DIRECTION DOMINANTE S	MAXIMALE S 61	TOTAL 321.9				
NORMAL NORMALE	24.7	11.8	18.3	43.3	411.7	52.0			6	75.2	0.0	75.2		S		283.3				
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	02 OR MORE OU PLUS	10 OR MORE OU PLUS	20 OR MORE OU PLUS	100 OR MORE OU PLUS	500 OR MORE OU PLUS	02 OR MORE OU PLUS	10 OR MORE OU PLUS	20 OR MORE OU PLUS	100 OR MORE OU PLUS	500 OR MORE OU PLUS	
TOTAL FOR MONTH TOTAL DU MOIS		12.6	16.5	43.3	TOTAL FOR MONTH TOTAL DU MOIS		493.7	465.5	411.7	5	2	1	0	0	0	0	0	0	0	
ACCUMULATED SINCE JULY 1 ACCUMULÉE DEPUIS LE 1er JUILLET		21.6	34.4	64.4	ACCUMULATED SINCE APRIL 1 ACCUMULÉE DEPUIS LE 1er AVRIL		1782.3	1538.3	1473.6	5	2	1	0	0	0	0	0	0	0	

UDC 551.506.1 ( ) Note/Avis 1. Climatological Day/Journée climatologique 00 01 C S.T. - 00 00 C S.T.

- Normal/Normale 1951-1980
- TR = Trace
- M = Missing/Manquant
- No entry/Pas de valeur = No occurrence/Pas d'événement
- \* 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).
- C = Calm/Calm
- Price: single issue \$3.00 (annual (Jan. to Dec.) \$29.50 /Prix: numéro individuel \$3.00 annuel (janv. à déc.) \$29.50

COMPARATIVE RECORDS AT: RELEVÉS COMPARATIFS À:		WINNIPEG INTERNATIONAL AIRPORT AÉROPORT INTERN. DE WINNIPEG				MONTH MOIS	AUGUST AOÛT			19 91			
Temperature/Température Precipitation/Précipitation Rainfall/Hauteur de pluie Snowfall/Hauteur de neige Wind speed/Vitesse du vent Station pressure/Pression à la station	— ° Celsius — Millimètres/millimètres (mm) — Centimètres/centimètres (cm) — Kilomètres/h / kilomètres/h (km/h) — Kilopascals (kPa)		THIS MONTH CE MOIS-CI		PREVIOUS YEAR ANNÉE PRÉCÉDENTE	NORMAL NORMALE	RECORD FOR THE MONTH RECORD POUR LE MOIS			NO OF YEARS NO D'ANNÉES			
	VALUE RELEVÉ	DAY JOUR	VALUE RELEVÉ	DAY JOUR	VALUE RELEVÉ		DAY JOUR	YEAR ANNÉE	VALUE RELEVÉ		DAY JOUR	YEAR ANNÉE	
HIGHEST TEMPERATURE (MAXIMUM) TEMPÉRATURE MAXIMALE	37.1	28	33.2	1			40.6	7	1949		120		
LOWEST TEMPERATURE (MINIMUM) TEMPÉRATURE MINIMALE	6.9	31	4.4	12						-1.1	28	1910**	120
MEAN MONTHLY TEMPERATURE TEMPÉRATURE MENSUELLE MOYENNE	20.9		20.0			18.3	22.5		1983	14.4		1977	120
TOTAL MONTHLY RAINFALL HAUTEUR TOTALE MENSUELLE DE PLUIE	6.2		16.9			75.2	218.0		1985	3.3		1915	120
TOTAL MONTHLY SNOWFALL HAUTEUR TOTALE MENSUELLE DE NEIGE													
TOTAL MONTHLY PRECIPITATION PRÉCIPITATION TOTALE MENSUELLE	6.2		16.9			75.2	218.0		1985	3.3		1915	120
NO OF DAYS WITH MEASURABLE PRECIPITATION NOMBRE DE JOURS AVEC PRÉCIPITATION MESURABLE	5		11			11	20		1977	1		1915	120
GREATEST RAINFALL IN ONE DAY HAUTEUR DE PLUIE MAXIMALE EN UNE JOURNÉE	4.0	6	5.8	13			84.6	12	1884				120
GREATEST SNOWFALL IN ONE DAY HAUTEUR DE NEIGE MAXIMALE EN UNE JOURNÉE													
GREATEST PRECIPITATION IN ONE DAY PRÉCIPITATION MAXIMALE EN UNE JOURNÉE	4.0	6	5.8	13			84.6	12	1884				120
MAXIMUM RAINFALL RECORDED IN: HAUTEUR DE PLUIE MAXIMALE ENREGISTRÉE EN:													
5 MINUTES	0.6	6	2.7	13			10.9	5	1981				39
10 MINUTES	0.8	6	2.7	13			19.1	1	1979				39
15 MINUTES	1.0	6	3.1	13			25.4	1	1979				39
30 MINUTES	1.8	6	4.0	13			36.3	15	1972				39
60 MINUTES	2.6	6	5.6	13			39.3	1	1979				39
24 CONSECUTIVE HOURS HEURES CONSÉCUTIVES	4.2	5/6	5.8	13			98.1	6/17	1985				120
MEAN WIND SPEED (km/h) VITESSE MOYENNE DU VENT (km/h)	16.0		14.8			16.4	22.0		1964	12.6		1972	71
MAXIMUM SPEED (2 min. mean) (km/h) VITESSE MAXIMALE (moyenne sur 2 min.) (km/h)	S 61	28	NNE41	16			N 77	30	1944				53
MAXIMUM GUST SPEED (km/h) POINTE DU VENT MAXIMALE (km/h)	S 94	28	NW 71	13			NW122	18	1973				45
TOTAL HOURS OF SUNSHINE TOTAL DES HEURES INSOLATION	321.9		334.5			283.3	350.8		1967	160.5		1912	110
MEAN STATION PRESSURE (kPa) PRESSION MOYENNE À LA STATION (kPa)	98.83		98.66			98.49	98.91		1957	98.14		1969	53
GREATEST STATION PRESSURE (kPa) PRESSION MAXIMALE À LA STATION (kPa)	99.93	31	99.88	5			100.17	23	1987				53
LEAST STATION PRESSURE (kPa) PRESSION MINIMALE À LA STATION (kPa)	97.47	28	97.47	31						95.82	4	1980	53

CLIMATOLOGICAL DATA THIS MONTH FOR THE PAST TEN / DIX YEARS DERNIÈRE ANNÉES (10)  
DONNÉES CLIMATOLOGIQUES CE MOIS-CI POUR LES

YEAR ANNÉE	MAXIMUM TEMP MAXIMALE	MINIMUM TEMP MINIMALE	MEAN TEMP. TEMP. MOYENNE	RAINFALL HAUTEUR DE PLUIE	SNOWFALL HAUTEUR DE NEIGE	TOTAL PRECIP. TOTALE	MEAN WIND SPEED VITESSE MOYENNE DES VENTS	MAXIMUM WIND SPEED VITESSE MAXIMALE DES VENTS	SUNSHINE HOURS HEURES INSOLATION	HEATING DEGREE-DAYS DEGRÉS-JOURS DE CHAUFFE	GROWING DEGREE-DAYS DEGRÉS-JOURS DE CROISSANCE	COOLING DEGREE-DAYS DEGRÉS-JOURS DE REFRIGÉRATION
1982	29.5	0.7	16.8	59.0		59.0	16.7	ESE 74	312.9	74.3	366.6	37.9
1983	36.5	8.8	22.5	85.2		85.2	13.0	SSE 46	326.3	5.8	541.8	144.3
1984	36.5	5.9	21.0	21.6		21.6	13.4	SSE 41	312.1	19.5	496.2	111.7
1985	30.0	4.2	16.3	218.0		218.0	13.9	N 46	193.3	79.1	349.6	25.7
1986	32.6	3.2	17.5	17.0		17.0	13.8	SSE 39	314.3	53.6	387.1	37.7
1987	31.3	2.8	17.3	97.1		97.1	13.7	S 46	263.0	52.7	380.1	29.8
1988	38.7	7.5	20.1	8.5		8.5	14.6	NW 44	256.9	17.4	470.0	84.4
1989	38.7	5.1	19.5	76.6		76.6	15.1	SSE 37	258.6	37.9	450.6	85.5
1990	33.2	4.4	20.0	16.9		16.9	14.8	NNE 41	334.5	16.5	465.5	79.0
1991	37.1	6.9	20.9	6.2		6.2	16.0	S 61	321.9	12.6	493.7	103.3

Note/avis 1. Climatological Day/Journée climatologique 00 01 C.S.T. - 0000 C.S.T.  
 2. Normal/Normale 1951-1980  
 3. Extremes for period of record/Extrêmes pour la période de registre  
 4. Maximum rainfall recorded in: may overlap calendar days/Hauteur de pluie maximale enregistrée en: peut-être pour plus d'une journée du calendrier  
 5. \*\* Indicates most recent occurrence/Indique le plus récent  
 6. \* Indicates first of more than one occurrence/Indique le premier de plusieurs

**DRY-BULB TEMPERATURES AT:** **WINNIPEG INTERNATIONAL AIRPORT** **MONTH: AUGUST** **1991**  
**TEMPERATURES DU THERMOMETRE SEC A:** **AEROPORT INTERN. DE WINNIPEG** **MOIS: AOÛT** **1991**

Date	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	164	146	133	132	131	122	126	146	178	201	211	219	219	215	218	215	212	208	203	190	167	145	142	149
2	150	144	137	137	143	142	143	148	154	156	155	165	164	171	179	187	186	182	174	169	160	154	150	149
3	147	148	144	146	144	138	131	136	150	159	185	200	213	223	226	233	230	227	222	211	183	163	148	141
4	136	118	112	109	101	95	108	147	179	205	223	225	232	235	245	254	249	242	241	241	223	203	195	176
5	174	165	156	149	147	151	149	154	167	185	210	211	221	226	226	218	216	222	218	182	172	168	164	169
6	170	165	166	161	157	162	164	166	166	161	175	164	170	176	184	195	215	211	206	203	199	195	191	190
7	188	185	177	180	168	151	151	170	191	206	217	226	239	248	256	256	263	262	258	245	228	210	200	193
8	172	163	152	142	128	120	124	157	200	218	247	264	272	276	281	284	271	283	283	274	252	230	204	193
9	180	175	164	149	140	141	138	172	208	239	258	275	281	288	275	298	288	283	280	266	239	229	205	211
10	196	174	191	188	168	164	164	185	210	234	258	280	294	293	295	296	303	297	288	279	261	233	215	201
11	189	175	170	164	147	141	155	197	250	271	273	286	299	309	304	304	304	305	297	280	268	225	215	206
12	199	197	203	183	168	163	160	191	234	256	278	300	307	312	318	316	319	318	310	288	262	241	219	220
13	207	189	189	186	186	176	180	195	227	251	278	292	297	312	315	311	317	319	309	291	262	254	221	207
14	214	203	194	199	196	178	172	190	215	256	289	305	312	330	320	306	291	280	270	282	270	243	245	243
15	233	211	198	193	185	166	157	182	217	236	246	264	257	252	260	248	254	249	240	232	208	179	175	174
16	165	166	165	153	143	135	132	152	170	197	225	248	232	253	265	268	272	268	264	251	222	220	209	171
17	182	173	171	160	155	155	156	166	171	181	195	213	206	207	207	209	203	190	176	173	159	147	128	109
18	109	102	92	80	81	77	76	99	137	167	184	196	195	219	211	229	231	232	227	212	197	181	160	155
19	147	139	129	128	124	122	118	136	165	196	226	248	257	266	277	283	280	276	270	257	246	229	214	206
20	203	192	185	178	178	175	173	172	190	223	247	260	277	297	314	311	317	316	306	297	276	268	258	258
21	207	201	174	166	157	162	160	176	196	216	235	243	239	239	253	252	249	248	237	213	195	178	176	171
22	160	153	143	140	145	135	137	153	165	180	202	222	234	242	230	224	187	182	189	175	157	137	149	125
23	126	130	113	104	91	98	106	120	148	170	197	206	215	222	232	235	235	232	223	196	164	174	166	171
24	172	166	159	162	167	171	171	181	205	228	249	272	285	305	306	309	306	306	301	289	279	268	255	247
25	240	223	205	202	175	175	173	197	223	246	271	274	279	294	312	315	328	315	311	271	245	225	236	198
26	189	193	192	175	179	174	178	172	187	191	205	220	220	221	235	239	254	260	264	255	230	220	213	206
27	200	192	197	190	180	171	171	182	187	200	236	276	294	317	336	338	341	326	312	301	281	276	279	265
28	259	259	242	247	254	248	243	242	257	274	289	308	319	343	360	369	370	368	363	350	339	327	301	279
29	261	240	221	201	190	191	186	197	220	249	276	309	330	332	333	326	323	320	310	279	235	212	218	188
30	213	197	189	170	160	145	133	147	180	207	218	228	233	239	239	239	222	208	190	175	153	129	91	91
31	88	75	77	121	121	109	105	117	137	163	184	198	208	220	230	238	239	240	232	219	210	197	178	173

Note/avis: 1. Climatological Day/Journee climatologique 0001 C.S.T. - 0000 C.S.T.  
 2. Hours are C.S.T./Les heures sont a l'heure normale de la localite  
 3. Unit/Unite = 0.1°C

WINDS (km/h) AT:  
DES VENTS (km/h) A:

WINNIPEG INTERNATIONAL AIRPORT  
AEROPORT INTERN. DE WINNIPEG

MONTH: AUGUST  
MOIS: AOÛT 1991

Page 4.

Date	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Peak Gust Rafale Max	Hour/Date Heure/Date
1	W	W	W	W	W	W	W	W	W	WNW	WNW	NW	WNW	NW	N	N	NNW	N	NNE	N	NNW	N	N	N	WNW	0959
2	22	19	15	17	17	15	17	17	20	30	37	33	31	31	31	26	24	22	24	19	7	7	15	17	52	
2	NNE	N	N	N	NNE	NE	ENE	ENE	ENE	N	NNE	NE	NE	NNE	NNE	NE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE		
3	11	7	9	9	11	7	19	15	15	11	13	17	17	20	22	19	20	22	24	15	19	11	11	15		
3	N	NNE	N	NNE	NNE	N	N	N	N	N	N	NNE	NNE	NNE	NNE	N	NNE	NNE	NE	ENE	ENE	N	W	W	NNE	1223
4	7	6	6	13	11	11	9	11	11	15	24	26	28	24	20	22	22	22	11	15	4	4	7	4	41	
4	C	C	C	C	C	WNW	C	W	W	W	C	ENE	C	W	SSW	WNW	W	SSE	C	C	E	NE	E	SE		
5	4					4	7	4	6		7		9		6	7	7	7				11	11	4		
5	ESE	SSE	SE	SSE	ESE	SE	SE	SSE	SSE	S	S	SSE	S	SE	SE	SE	SE	ESE	NNE	SW	SW	C	C	NE		
6	7	13	9	4	4	6	6	13	9	13	7	13	17	15	13	19	11	13	13	22	9			6		
6	SSE	ESE	ESE	ESE	E	E	E	ESE	SE	ESE	SE	SE	ESE	SE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SE	SE	1045
7	2	11	17	26	26	22	19	26	28	24	28	35	26	26	19	24	24	26	26	28	24	24	22	26	46	
7	SE	SE	SE	SSE	S	SE	SE	SSE	ESE	SSE	SSE	SE	SSE	SE	ESE	ESE	ESE	ESE	ESE	ESE	SE	SE	SE	C	SSE	1311
8	22	19	15	20	17	7	7	9	11	17	19	15	28	31	24	28	24	22	22	17	15	11	7		50	
8	C	C	C	C	ENE	NE	C	C	S	S	SE	SE	SE	SSE	S	S	SSE	S	S	C	C	W	NNE	C		
9	4					4	6		6	4	4	6	11	4	7	13	11	7	4			4	4			
9	C	WSW	C	C	C	S	C	C	SSW	SSE	S	SSW	SSE	S	S	SSW	SSW	SSW	S	SSW	SSW	SSW	S	S	S	1210
10	4					2			2	4	7	9	15	19	13	15	15	19	11	13	11	7	7	7	35	
10	S	S	S	S	S	SSW	S	S	S	SSW	SSW	SSW	SSW	SSE	S	S	SSW	SSW	SSW	S	S	SW	C	C	SW	1330
11	7	9	6	13	9	15	6	9	9	4	4	13	19	19	19	17	19	15	13	7	6	4			37	
11	C	C	C	C	N	C	C	C	ENE	ESE	SSE	SSE	SE	SE	ESE	SSW	S	S	SSE	SE	SE	C	C	ENE		
12	4					9	9		9	9	9	6	11	17	13	11	13	9	15	13	9			6		
12	E	C	SSE	W	C	C	C	C	C	C	E	WSW	SSW	SSE	ESE	S	SSE	S	S	WSW	NW	NNW	C	WSW		
13	4	7	7						2	6	9	11	13	13	17	15	11	7	11			4		6		
13	C	C	C	C	C	S	SSW	S	W	WSW	W	WSW	SW	SW	SW	WSW	SW	WSW	WSW	WSW	WSW	WSW	C	SSE	WSW	1422
14	4					4	6	4	7	7	13	7	13	15	19	26	26	26	15	11	9	4		4	41	
14	S	S	S	S	S	S	SSW	SW	SSW	SSW	SW	SW	WSW	SW	SW	SW	W	WNW	S	WSW	SSW	SSW	WSW	WSW	SW	1304
15	13	11	13	19	19	15	15	13	13	15	19	30	30	28	33	24	19	9	4	9	7	15	17	17	48	
15	W	NNE	C	NNW	W	NW	NNW	NNW	NNE	NE	NNE	NNE	N	N	NNE	NNE	N	NNE	N	NNE	NNE	NNW	N	N	N	1301
16	15	15		11	15	7	6	2	17	26	24	22	26	30	31	28	24	20	17	19	9	6	4	7	46	
16	N	N	C	NNE	N	WNW	C	NW	NNW	N	N	N	N	NNW	N	NNW	NNW	NW	NW	NW	W	W	WNW	NNW	NNW	1512
17	9	11		7	4	9		6	2	17	20	26	22	17	20	22	20	24	22	11	11	13	17	17	39	
17	NW	WNW	WNW	WNW	WNW	NW	NNW	N	N	N	N	N	N	N	N	N	N	N	NNE	NNE	NNE	NNW	NW	NNW	N	1214
18	19	15	11	15	15	15	19	31	33	35	35	31	35	41	30	30	28	22	26	24	13	7	11	13	59	
18	NW	NW	NW	NW	NNW	C	WNW	NW	N	NE	W	NNW	NW	ESE	E	ESE	S	SE	SSW	S	SSE	SSE	S	S		
19	11	13	13	9	4	7	4	7	9	9	9	7	9	9	7	7	7	7	6	9	11	15	20	22		
19	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	1130
20	22	22	24	28	24	22	24	28	26	30	35	39	43	41	41	43	44	44	39	33	31	28	28	31	59	
20	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	2330
21	35	26	30	31	26	30	28	22	26	22	28	26	28	37	35	31	31	31	26	7	13	26	30	30	56	
21	N	NNE	N	NW	NW	W	W	WNW	NW	NW	NW	NW	WNW	WNW	NW	NNW	WNW	WNW	N	N	NE	NE	E	E	NW	1241
22	33	17	9	9	11	11	15	17	24	30	31	33	31	31	28	28	26	26	20	11	17	13	11	9	57	
22	E	NE	E	SE	E	SE	E	ESE	SE	S	C	WNW	WNW	N	NNW	NNW	W	WSW	W	WNW	NNW	NNW	NW	NW	NNW	1355
23	11	13	9	11	9	11	4	9	9	13	13	19	19	24	22	20	22	19	7	6	15	9	7	35		
23	NW	W	W	NW	NNW	N	N	N	N	NNE	NE	NNE	NNE	NE	NE	NE	NE	NE	N	NNE	ENE	ENE	E	E	NNE	1110
24	7	7	9	15	13	11	11	7	13	13	20	19	19	19	13	13	9	11	6	11	11	13	9	7	39	
24	E	ESE	E	SE	SSE	SSE	SE	SE	SSE	SSE	S	SSE	SSE	S	S	S	S	S	S	SSW	SSW	SSW	SSW	S	S	1340
25	9	7	11	15	19	19	13	22	28	31	30	37	39	52	54	44	41	52	44	33	26	28	22	22	76	
25	S	S	WNW	WNW	NNW	ENE	ENE	E	NNE	SE	SSE	SE	SSE	S	SSE	C	SSE	SSE	SSE	NNE	NNE	NE	NNE	N	NNE	1908
26	13	2	11	13	9	2	4	4	4	6	7	6	6	11	28	15	19	11	22	26	4	11	19	39		
26	N	N	NE	N	NE	ENE	NNE	N	E	ESE	SE	N	NW	NW	NNE	NNE	NE	E	ENE	E	ENE	NE	ENE	ESE	E	0756
27	22	7	6	13	13	13	19	13	28	26	19	7	30	22	11	22	13	11	11	11	7	7	6	11	37	
27	SE	SE	SE	SSW	SSE	S	S	S	S	S	S	SW	S	SSW	SW	SSE	SSW	S	SSE	SSE	SSE	SSE	S	SE	SSW	1450
28	9	11	22	9	11	9	7	17	19	13	4	6	9	15	17	20	20	19	15	15	13	13	7	15	37	
28	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	S	SSW	S	S	S	S	SSW	SSW	W	S	1416
29	17	22	24	19	24	26	31	31	37	44	50	46	52	61	61	61	52	54	48	33	37	15	13	30	94	
29	W	W	WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	W	WSW	WSW	W	W	W	W	W	W	WSW	W	W	W	W	1145
30	24	15	15	13	17	19	20	19	20	19	19	26	37	37	39	30	26	33	22	11	13	13	13	17	67	
30	W	W	NNE	N	WNW	NW	NW	NW	N	NNW	N	NW	N	NW	N	NNW	NNE	NNE	NNE	NE	NNE	N	NNE	NNE	NW	1230
31	15	17	19	17	13	11	7	13	24	22	28	30	30	26	24	28	30	31	31	28						

Date	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	100	97	96	98	100	98	103	115	134	129	109	118	128	126	125	120	124	117	119	113	119	112	121	127
2	130	129	127	129	132	126	122	123	127	129	129	130	127	125	128	127	131	131	136	134	141	142	144	138
3	142	143	139	139	139	135	129	131	140	146	142	141	139	130	119	108	102	99	97	95	82	82	86	91
4	91	83	87	86	86	82	85	119	122	112	98	91	89	89	91	95	86	92	94	10	90	96	94	97
5	100	98	99	103	105	110	109	115	126	132	137	143	136	137	124	120	123	122	131	134	138	138	138	144
6	147	148	139	130	133	129	128	124	134	148	157	158	156	156	158	166	168	159	161	160	158	157	155	153
7	152	148	149	142	128	123	125	129	138	145	129	131	126	125	127	127	132	118	118	108	113	114	108	110
8	108	109	106	109	98	96	10	129	131	131	130	120	121	108	112	116	109	113	88	127	109	116	112	115
9	117	115	114	120	120	116	113	120	131	131	134	122	118	106	96	107	95	99	100	111	107	104	112	110
10	109	103	103	104	104	99	99	109	126	138	134	123	114	113	106	112	104	121	115	118	119	129	134	134
11	132	120	118	129	114	112	120	148	136	129	131	140	131	131	112	114	117	124	132	141	137	149	149	138
12	142	148	143	139	137	135	122	150	153	161	160	126	142	139	133	136	119	119	128	135	123	128	139	140
13	146	150	150	143	129	130	127	136	137	135	136	126	120	123	126	115	123	116	111	106	106	104	121	132
14	121	119	121	123	123	121	118	121	129	132	126	120	109	118	122	106	121	164	178	144	140	148	148	147
15	148	152	145	143	143	140	136	149	167	164	168	170	167	162	151	130	141	136	138	136	127	131	126	117
16	118	125	126	124	120	117	115	129	131	113	102	76	59	91	79	87	101	122	121	123	119	123	122	128
17	134	138	139	136	131	135	139	140	136	126	116	115	108	110	107	98	94	93	95	88	87	93	88	81
18	83	83	79	69	74	74	68	85	98	98	98	95	77	71	65	71	69	69	63	73	69	69	74	73
19	69	68	68	65	65	69	71	79	91	101	106	104	107	115	115	113	116	117	117	118	115	113	111	112
20	113	115	117	116	118	120	119	123	136	149	159	161	164	164	166	162	169	170	176	178	166	175	173	176
21	164	162	155	151	142	146	151	154	156	128	126	124	122	127	118	107	118	110	100	92	125	123	116	110
22	112	108	107	106	97	93	89	94	104	110	112	115	109	104	88	95	117	139	148	140	131	118	129	111
23	111	114	99	94	77	85	92	107	119	126	119	109	109	98	97	88	81	65	58	92	80	120	122	123
24	118	114	109	102	105	120	135	151	168	182	186	185	183	183	176	177	175	170	189	196	197	197	198	198
25	197	195	187	185	163	161	159	173	184	190	194	195	189	194	174	155	150	151	142	181	175	169	168	173
26	167	168	163	158	152	148	150	153	152	149	153	159	164	171	162	159	152	149	141	145	138	142	145	155
27	153	150	148	151	152	149	153	175	181	192	196	192	184	156	143	131	119	134	152	175	183	180	159	154
28	145	162	180	189	189	180	173	172	178	181	178	185	186	181	171	169	167	164	163	164	174	169	169	167
29	153	151	144	139	137	125	112	110	113	113	116	107	86	82	78	81	79	71	70	85	89	85	88	93
30	94	94	129	131	132	123	115	120	124	126	110	101	102	104	89	96	109	100	84	68	76	75	65	62
31	60	51	53	69	69	70	72	78	89	101	101	95	95	96	103	105	104	101	97	99	103	106	109	109

Note/avis:  
 1. Climatological Day/Journee climatologique 0001 C.S.T. - 0000 C.S.T.  
 2. Hours are C.S.T./Les heures sont a l'heure normale de la localite  
 3. Unit/Unite = 0.1°C

Date	HOURLY RELATIVE HUMIDITY AT: HUMIDITE HORAIRE A:		WINNIPEG INTERNATIONAL AIRPORT AEROPORT INTERN. DE WINNIPEG																								MONTH: MOIS:		1991 1991		PAGE 6.
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
1	65	72	77	81	81	87	87	82	75	64	53	53	55	58	55	55	57	56	58	61	74	80	88	86							
2	88	90	94	96	92	92	86	84	83	84	84	79	78	74	71	69	70	73	78	79	88	92	96	92							
3	98	96	96	96	96	100	98	94	92	77	68	68	62	55	52	45	45	45	46	47	51	58	65	72							
4	75	78	86	86	91	93	84	84	70	55	44	43	41	39	37	36	36	39	40	41	41	49	53	59							
5	61	65	69	73	76	76	76	77	77	72	63	66	60	57	53	53	56	54	57	75	81	81	85	85							
6	87	90	85	83	86	83	79	77	83	92	89	96	90	89	84	82	74	72	76	75	76	79	81	79							
7	79	79	85	78	76	84	84	78	72	69	58	56	48	46	45	44	41	41	41	42	47	54	55	57							
8	67	70	75	82	81	85	85	84	65	57	49	44	39	35	35	36	34	29	29	40	41	49	55	60							
9	66	68	72	82	88	86	84	72	60	51	46	39	36	32	33	30	30	31	32	39	43	45	55	53							
10	57	63	58	58	66	64	65	61	59	54	46	38	32	32	31	29	34	34	34	36	41	52	61	65							
11	69	71	72	79	82	82	79	74	50	41	41	41	35	33	30	31	31	33	36	43	44	61	66	66							
12	70	74	67	75	81	83	79	77	60	56	48	35	37	35	32	34	29	29	32	39	42	50	60	61							
13	69	77	77	77	70	75	71	69	57	48	42	37	34	32	31	30	31	28	30	32	38	53	63	63							
14	55	58	62	61	63	68	71	64	58	47	37	32	29	27	30	29	36	49	58	44	45	54	54	54							
15	58	69	70	73	77	85	88	82	74	64	62	56	59	58	51	47	49	50	52	55	59	73	73	69							
16	74	77	77	82	84	89	91	88	78	58	45	33	33	35	31	32	35	39	41	45	53	54	57	76							
17	75	78	81	86	86	88	90	85	79	70	60	52	54	54	54	52	49	53	59	56	62	70	75	82							
18	84	90	93	92	96	97	95	91	77	65	57	53	47	38	39	36	35	35	35	41	44	48	56	59							
19	59	62	66	63	66	70	72	69	62	54	47	40	40	39	37	34	36	38	38	43	44	47	52	55							
20	55	61	65	66	66	71	69	74	71	63	59	54	51	45	41	41	41	41	46	50	51	56	59	60							
21	78	79	89	92	92	92	94	87	77	58	50	47	47	50	42	40	44	41	43	45	65	70	68	67							
22	73	73	78	80	72	75	73	68	67	63	57	51	45	42	40	43	64	77	77	80	86	89	88	91							
23	91	89	89	93	97	91	93	91	82	76	62	54	51	46	42	39	37	35	34	51	57	69	76	74							
24	71	72	72	68	67	72	79	84	80	75	68	60	54	48	46	45	46	44	51	57	61	64	71	76							
25	77	84	90	91	92	91	91	88	78	71	64	62	57	55	44	38	34	37	36	58	64	70	66	84							
26	86	84	84	91	84	83	84	90	82	77	72	68	71	74	64	60	53	51	46	50	56	61	65	73							
27	75	77	74	77	84	87	90	96	98	95	80	60	52	39	31	28	26	32	38	47	56	56	48	50							
28	49	54	70	70	67	65	64	65	63	57	51	47	45	38	33	30	30	30	30	33	38	40	45	50							
29	52	57	60	68	71	66	62	58	51	42	33	29	22	21	23	22	22	21	22	29	39	40	46	45							
30	45	53	67	78	83	86	87	84	70	61	50	45	43	42	39	40	49	50	50	50	59	69	77	83							
31	81	85	87	72	72	78	79	78	73	66	59	50	47	45	45	42	42	41	43	46	50	57	63	66							

Note/Avis: 1. Climatological Day/Journée climatologique 0001 C.S.T. - 0000 C.S.T.  
2. Hours are C.S.T./Les heures sont a l'heure normale de la localité  
3. Unit/Unite = percent/pour cent

## CLIMATOLOGICAL SUMMARY FOR JUNE 1991 - WINNIPEG, MANITOBA

August was the second month in a row with less than normal precipitation. The total rain fall of 6.2 mm was just over 8% of the normal 75.2 mm. August of 1991 ranks as the 3rd driest since record keeping began in 1872. Augusts of 1961 and 1915 were drier with 4.1 and 3.3 mm of rainfall respectively.

The mean temperature was 2.6 degrees above normal. The mean minimum temperature was only 2.0 degrees above normal, but the mean maximum was 3.3 degrees above normal. Two temperature records were broken on the 28th as the maximum peaked at 37.1 C and the minimum fell only to 24.0 C. August of 1991 ties as the 7th warmest on Record.

The 28th will be remembered not only because of the record high temperatures but also because of the strong south winds that caused blowing dust. The peak wind gust for the day was 94 km/h.

Sunshine hours were well above normal. The total of 321.9 hours was exceeded only six times during this century.

1. Sunny. Maximum temperature slightly above normal minimum near normal. Winds light increasing to moderate gusting strong late morning, reducing to light early evening.
2. Overcast, showers mid-morning and beginning again mid-evening. Maximum temperature below normal, minimum near normal. Winds light.
3. Showers ending overnight, becoming sunny early afternoon. Maximum slightly above normal, minimum near normal. Winds light increasing to moderate late morning, decreasing to light early evening.
4. Sunny. Maximum temperature near normal, minimum slightly above normal. Winds light.
5. Becoming cloudy mid-afternoon with showers beginning late evening. Maximum slightly below normal, minimum near normal. Winds light.
6. Cloudy to overcast with showers ending mid-afternoon. Maximum below normal, minimum slightly above normal. Winds increasing to moderate overnight.
7. Sunny. Maximum near normal, minimum slightly above normal. Winds light increasing to moderate early afternoon, decreasing to light early evening.
8. Sunny. Maximum temperature slightly above normal, minimum near normal. Winds light.
9. Sunny. Maximum temperature above normal, minimum near normal. Winds light.
10. Sunny. Temperatures above normal. Winds light.
11. Sunny. Maximum temperature above normal, minimum near normal. Winds light.
12. Sunny. Maximum temperature above normal, minimum slightly above normal. Winds light.
13. Sunny. Maximum temperature well above normal, minimum above normal. Winds light with a short period of moderate in the afternoon.
14. Sunny with some late afternoon cloudy periods with showers. Maximum temperature well above normal, minimum above normal. Winds light increasing to moderate late morning, decreasing to light late afternoon.
15. Sunny becoming cloudy late morning, sunny again late afternoon. Maximum temperature near normal, minimum slightly above normal. Winds light increasing to moderate mid-morning, decreasing to light late afternoon.
16. Mainly sunny. Maximum temperature slightly above normal, minimum near normal. Winds light except for a period of moderate late morning to early evening.
17. Sunny becoming cloudy early afternoon. Maximum temperature slightly below normal, minimum near normal. Winds increasing to moderate gusting strong early morning decreasing to light by early evening.
18. Sunny. Maximum temperature near normal, minimum below normal. Winds light increasing to moderate late evening.
19. Sunny. Maximum temperature above normal, minimum near normal. Winds moderate gusting strong.
20. Showers overnight, sunny becoming cloudy early evening. Maximum well above normal, minimum above normal. Winds moderate, increasing to moderate gusting strong from early afternoon to early evening.
21. Sunny. Maximum temperature near normal, minimum above normal. Winds light increasing to moderate gusting strong by mid-morning, decreasing to light early evening.
22. Sunny becoming cloudy by early afternoon with showers, late afternoon, clearing by mid-evening. Temperatures near normal. Winds light except for a period of moderate during showers.
23. Sunny. Maximum temperature near normal, minimum slightly below normal. Winds light.
24. Mainly sunny with a few cloudy periods. Maximum temperature well above normal, minimum above normal. Winds light increasing to moderate gusting to strong, occasionally gusting to gale by mid-morning decreasing to light late evening.
25. Mainly sunny becoming cloudy with thunder and showers early evening, clearing mid-evening. Maximum temperature well above normal, minimum above normal. Winds light with periods of moderate late afternoon to early evening.
26. Cloudy with showers ending early afternoon, clearing late afternoon. Maximum temperature slightly above normal, minimum above normal. Winds light occasionally moderate.
27. Cloudy. Visibility reduced in fog early morning, clearing late morning. Maximum temperature well above normal, minimum above normal. Winds light.
28. Showers overnight. Sunny through the day. Temperatures well above normal. Winds increasing to strong gusting to gale force late morning, decreasing to light late evening.
29. Sunny. Temperatures well above normal. Winds light, increasing to moderate gusting strong early afternoon, decreasing to light early evening.
30. Sunny. Temperatures near normal. Winds light increasing to moderate gusting strong late morning, decreasing to light mid evening.
31. Sunny. Maximum temperature near normal, minimum slightly below normal. Winds light increasing to moderate early evening.