



Environnement
Canada

Atmospheric
Environment
Service

Environnement
Canada

Service
de l'environnement
atmosphérique

MONTHLY METEOROLOGICAL SUMMARY SOMMAIRE MÉTÉOROLOGIQUE MENSUEL

MONTH/MOIS

SEPTEMBER / SEPTEMBRE

19 90

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.			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 REFRIGÉRATION	MAXIMUM MAXIMALE	MINIMUM MINIMALE	THUNDERSTORM ORAGE	RAINFALL PLUIE (HAUTEUR)	SNOWFALL NEIGE (HAUTEUR)	TOTAL PRECIP. PRÉCIP. TOTALE		AVERAGE SPEED. VITESSE MOYENNE	PREVAILING 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	cm	km/h	km/h					
1	21.2	11.8	16.5	1.5	11.5		90	55						14.7	NNW	W 28	5.4			
2	30.9	10.6	20.8		15.8	2.8	96	28						20.0	SSE	SSE35	12.3			
3	32.7	14.9	23.8		18.8	5.8	85	51	1	6.6		6.6		21.7	S	S 35	6.6			
4	24.7	9.4	17.1	0.9	12.1		90	29						13.3	NNW	N 30	11.7			
5	29.3	11.4	20.4		15.4	2.4	91	41						14.0	S	S 22*	8.0			
6	24.9	10.5	17.7	0.3	12.7		100	41	1	1.6		1.6		15.9	NNE	NE 30	10.0			
7	25.0	8.2	16.6	1.4	11.6		93	37						13.7	S	S 24	11.2			
8	24.9	12.6	18.8		13.8	0.8	78	40		TR.		TR.		21.5	S	NNE37	11.1			
9	19.3	5.4	12.4	5.6	7.4		97	42		TR.		TR.		10.1	NW	NW 22	5.8			
10	23.9	7.3	15.6	2.4	10.6		79	26						15.8	S	S 30	10.8			
11	30.1	10.7	20.4		15.4	2.4	89	26		TR.		TR.		22.0	S	NNE30	9.5			
12	20.7	8.6	14.7	3.3	9.7		95	57						20.3	ESE	ESE39	5.0			
13	18.6	10.0	14.3	3.7	9.3		94	67		TR.		TR.		24.0	N	N 37	1.0			
14	22.3	9.2	15.8	2.2	10.8		83	39		0.4		0.4		13.8	WSW	NNW24	6.3			
15	15.5	4.6	10.1	7.9	5.1		97	51		0.4		0.4		22.8	N	N 39	7.9			
16	15.5	-1.8	6.9	11.1	1.9		100	42						9.3	SSE	SSE19*	10.2			
17	20.0	7.8	13.9	4.1	8.9		100	41		6.2		6.2		24.0	S	S 39	1.0			
18	20.3	9.1	14.7	3.3	9.7		100	38		5.7		5.7		17.1	WNW	NW 26*	9.7			
19	19.5	4.4	12.0	6.0	7.0		86	30						13.3	W	NW 22	10.9			
20	18.3	8.4	13.4	4.6	8.4		100	63		7.8		7.8		7.5	SSW	SSW15*	0.1			
21	10.6	5.6	8.1	9.9	3.1		100	71		2.0		2.0		29.5	NW	NW 44	0.0			
22	11.3	0.4	5.9	12.1	0.9		100	48		TR.		TR.		25.0	N	N 39	7.4			
23	21.7	-0.3	10.7	7.3	5.7		95	28						15.2	SW	SW 26*	8.8			
24	26.6	5.9	16.3	1.7	11.3		79	32						23.0	NW	NW 54	9.0			
25	25.8	10.4	18.1		13.1	0.1	83	27						16.8	NNW	NNW33*	9.9			
26	23.9	6.7	15.3	2.7	10.3		80	22						16.4	NNW	NW 35	9.4			
27	12.9	3.3	8.1	9.9	3.1		91	59						15.7	NW	NNW24*	0.9			
28	12.6	-0.5	6.1	11.9	1.1		100	51						13.3	NNE	NNE22	5.3			
29	12.4	-2.5	5.0	13.0			100	56						4.6	CALM	ENE13*	5.5			
30	13.0	1.5	7.3	10.7	2.3		100	59		0.8		0.8		14.4	S	S 31*	3.1			
MEAN MOYENNE	20.9	6.8	13.9	TOTAL 137.5	TOTAL 266.8	TOTAL 14.3	92	43	TOT 2	TOTAL 31.5	TOTAL 0.0	TOTAL 31.5		16.9	S	MAXIMALE NW 54	TOTAL 213.8			
NORMAL NORMALE	18.4	6.3	12.4	178.1	223.8	8.7			3	53.0	0.2	53.3		18.5	S		184.6			
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 ANNEE EN COURS		PREVIOUS YEAR ANNEE PRÉCÉDENTE		NORMAL NORMALE		ABOVE 5°C AU-DESSUS DE 5°C		THIS YEAR ANNEE EN COURS		PREVIOUS YEAR ANNEE PRÉCÉDENTE		NORMAL NORMALE		mm				
		OR MORE		OR MORE						OR MORE		OR MORE				OR MORE				
		OR PLUS		OR PLUS						OR PLUS		OR PLUS				OR PLUS				
TOTAL FOR MONTH TOTAL DU MOIS		137.5		143.9		178.1		TOTAL FOR MONTH TOTAL DU MOIS		266.8		259.2		223.8		9 6 5 0 0 0 0 0 0				
ACCUMULATED SINCE JULY 1 ACCUMULÉE DEPUIS LE 1er JUILLET		171.9		182.2		242.5		ACCUMULATED SINCE APRIL 1 ACCUMULÉE DEPUIS LE 1er AVRIL		1805.1		1895.2		1697.4		0 0 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.

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/Calm \$2.75 \$27.30 \$2.75 \$27.30

8. Price: single issue _____, annual (Jan. to Dec.) _____/Prix: numéro individuel _____, annuel (janv à dec.) _____

Date	WINNIPEG INTERNATIONAL AIRPORT TEMPERATURES AT: AEROPORT INTERN. DE WINNIPEG										MONTH: SEPTEMBER 1990 MOIS: SEPTEMBRE 1990										Page 3.		
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20		21	22
1	185	175	153	138	129	133	147	149	154	168	180	193	187	190	198	196	200	190	168	153	142	133	131
2	127	122	110	119	108	119	135	161	186	214	226	258	280	282	299	307	304	294	272	257	246	239	235
3	234	235	229	228	224	217	215	219	232	248	268	290	294	306	308	312	310	311	289	277	242	218	207
4	172	173	171	138	122	105	95	117	154	188	213	219	237	235	243	236	236	232	221	200	175	153	152
5	142	128	117	117	124	117	121	142	169	204	237	251	258	278	277	293	282	284	278	255	241	231	181
6	183	179	194	175	165	156	164	157	179	213	222	242	242	237	232	221	209	193	184	169	149	139	120
7	106	104	95	92	100	100	92	104	121	146	166	186	196	210	221	240	241	247	240	222	210	193	186
8	185	183	178	172	168	158	154	150	170	201	218	229	235	240	245	234	218	201	186	166	151	141	138
9	129	125	107	93	77	76	58	71	117	138	149	155	159	172	175	176	178	175	170	136	126	102	85
10	85	84	86	81	86	93	87	96	116	140	161	190	199	209	232	225	223	230	223	207	190	187	187
11	178	166	175	180	175	166	163	165	167	184	207	236	256	275	282	297	288	278	246	202	182	162	135
12	109	99	87	94	99	106	95	91	101	110	115	133	146	169	178	196	197	197	189	169	160	158	166
13	167	181	178	184	178	179	160	153	146	155	159	161	157	158	158	166	164	146	136	122	117	111	106
14	100	96	93	93	93	94	93	95	101	109	135	154	175	194	213	215	211	216	215	213	204	186	172
15	155	135	128	123	98	85	86	87	108	115	121	132	142	147	144	149	144	132	127	110	84	59	46
16	48	23	-2	4	-5	-9	-4	-1	56	84	96	109	123	135	135	141	149	148	138	120	118	92	88
17	80	84	90	84	86	86	87	93	98	115	129	139	142	179	189	199	186	182	171	148	138	137	133
18	132	133	135	135	135	136	136	136	123	120	128	149	165	178	187	193	192	197	191	170	126	118	96
19	91	51	67	73	67	56	52	56	82	120	145	161	175	178	184	186	187	184	158	131	117	109	95
20	94	99	91	90	93	94	99	101	109	116	130	155	176	179	158	152	163	145	135	128	124	101	101
21	98	97	94	92	88	79	77	77	77	83	86	94	98	99	99	103	94	93	84	65	62	64	59
22	58	52	46	47	43	39	41	45	51	56	67	76	86	93	102	106	98	94	91	36	35	23	6
23	15	11	11	16	23	15	20	18	54	79	110	155	166	193	203	208	212	208	194	167	160	155	143
24	112	102	94	70	82	73	73	80	95	144	200	229	241	253	259	263	254	244	228	203	158	130	126
25	119	111	108	120	118	117	107	118	143	183	211	238	246	253	254	252	247	236	191	165	135	112	130
26	127	111	106	90	86	95	87	99	109	159	203	212	224	237	232	224	218	204	184	114	116	129	119
27	68	57	50	50	49	41	43	58	87	110	117	118	117	122	124	120	119	115	107	100	94	55	42
28	41	28	23	14	3	7	8	-2	23	83	104	112	120	124	108	109	103	95	88	74	53	48	43
29	38	10	9	14	-9	-2	-2	-18	4	54	84	92	89	94	111	103	106	95	79	61	54	37	42
30	37	30	16	23	21	21	22	17	26	52	85	112	108	111	91	96	123	122	93	61	58	56	48

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 = 0.1°C

WINNIPEG INTERNATIONAL AIRPORT
AEROPORT INTERN. DE WINNIPEG

HOURLY DEW POINT TEMPERATURE AT:
TEMPERATURE DE ROSEE HORAIRE A:

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	119	126	123	115	110	115	127	125	124	126	108	110	108	111	112	111	108	110	120	122	120	115	110	108
2	106	104	101	110	112	101	107	113	117	122	119	123	121	113	106	94	99	99	102	105	115	124	126	126
3	131	146	155	163	169	172	175	183	189	194	198	199	198	197	195	195	196	198	201	198	192	156	107	138
4	130	126	118	105	93	86	80	87	91	89	69	64	69	64	64	57	46	47	51	48	49	58	75	74
5	74	76	75	75	69	70	71	76	83	90	102	109	129	158	166	170	169	173	177	177	178	179	174	166
6	164	164	160	165	165	154	156	141	135	132	127	117	102	109	117	119	107	108	107	96	113	102	94	85
7	80	85	81	80	82	81	79	86	88	99	102	96	96	93	91	88	86	88	94	97	94	88	89	95
8	94	97	105	106	107	108	111	114	119	115	126	116	111	104	104	95	81	72	57	51	66	70	76	78
9	81	83	69	65	63	60	54	66	84	76	75	73	78	77	86	81	71	46	53	37	32	37	36	31
10	34	39	44	45	40	36	35	46	44	52	58	27	28	15	23	26	26	29	30	36	36	46	57	62
11	64	79	96	104	119	134	134	135	137	146	156	158	156	140	103	93	74	81	116	124	113	104	96	93
12	90	85	78	82	85	88	83	77	80	84	86	93	95	98	101	106	109	115	117	113	115	118	126	135
13	141	160	165	172	172	155	142	138	128	129	123	118	113	109	109	106	103	116	107	93	76	68	70	70
14	69	69	68	67	62	58	58	62	71	72	70	76	80	87	87	68	74	75	77	76	74	77	86	91
15	109	127	115	100	91	80	83	81	92	82	71	65	56	53	49	50	44	40	39	38	33	25	34	23
16	20	14	-6	-1	-9	-11	-5	-1	38	42	42	27	32	32	30	32	26	23	29	30	53	50	49	49
17	48	52	53	54	56	56	60	63	65	72	74	78	87	84	68	64	63	80	95	112	121	129	131	133
18	132	133	135	135	135	136	136	118	106	104	87	79	76	47	49	59	47	55	57	56	47	51	58	54
19	38	28	35	30	25	22	18	22	39	54	58	52	54	26	18	13	7	17	28	34	34	39	62	59
20	58	59	49	51	50	50	51	58	64	78	94	107	109	109	147	120	110	115	118	120	116	107	100	98
21	98	97	90	92	74	68	64	59	71	63	57	58	60	54	52	54	51	47	46	60	62	61	53	46
22	43	45	46	38	39	38	40	36	35	32	25	24	7	0	-3	-4	-1	-2	5	-2	2	-1	-3	-3
23	3	3	0	2	2	-4	-2	-4	12	27	45	47	49	59	48	31	31	17	22	31	25	22	21	19
24	16	15	15	16	13	16	16	20	24	41	48	82	93	99	103	95	78	76	79	80	78	73	76	87
25	85	82	79	72	69	66	62	60	79	95	83	75	54	49	55	48	39	40	34	35	59	44	51	43
26	38	35	36	35	37	33	36	38	45	62	69	79	79	55	5	17	4	16	20	16	18	24	23	42
27	36	36	30	31	30	26	30	41	51	48	44	44	46	47	47	45	44	40	40	38	38	38	23	19
28	21	15	11	7	-2	4	6	-4	21	59	30	38	35	27	33	33	33	30	14	23	21	17	26	36
29	35	3	9	14	-9	-2	-21	-18	4	54	35	32	33	27	31	22	19	23	23	17	21	16	25	17
30	25	26	13	20	16	17	18	14	20	34	38	37	35	34	71	77	80	66	58	43	46	47	44	41

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 = 0.1°C

CLIMATOLOGICAL SUMMARY FOR SEPTEMBER 1990AT WINNIPEG, MANITOBA

The mean temperature was 1.5 degrees above normal. The mean minimum temperature was only 0.5 degrees above normal, but the mean maximum was 2.5 degrees above normal. The abundance of sunshine played a part in boosting the daytime maxima to above normal. The total of 213.8 hours was nearly 30 hours above normal. September was the third month in a row with below normal rainfall. Wind speeds were below normal.

DAILY WEATHER SUMMARY FOR SEPTEMBER 1990AT WINNIPEG, MANITOBA

1. Cloudy, clearing in the evening. Temperatures near normal. Winds light.
2. Sunny. Maximum temperature well above normal. Winds light increasing to moderate occasionally gusting strong by noon.
3. Sunny becoming cloudy in the afternoon with thunder and rain showers late in the evening. Temperatures well above normal. Winds moderate occasionally gusting strong early in the morning and in the evening otherwise light.
4. Sunny. Maximum temperature slightly above normal. Winds generally light, few moderate gusts.
5. Sunny with some afternoon cloudy periods. Temperatures above normal. Winds light with a few periods of moderate at mid-day.
6. Sunny becoming cloudy in the evening with rain and thunder showers. Temperatures slightly above normal. Winds light becoming moderate in the afternoon, decreasing to light in the evening.
7. Sunny. Maximum temperature above normal. Winds light with the occasional moderate gust, becoming moderate late in the evening.
8. Sunny becoming cloudy with rain showers in the evening. Temperatures slightly above normal. Winds moderate and gusty with periods of light in the morning and late in the evening.
9. Cloudy with occasional sunny periods, clearing late in the evening. Temperatures near normal. Winds light.
10. Mostly sunny with afternoon cloudy periods. Maximum temperature above normal. Winds light becoming moderate gusty with occasional strong gusts in the evening.
11. Cloudy with light rain showers becoming sunny mid-morning. Temperatures well above normal. Winds moderate occasionally gusting strong except for a period of light in the afternoon.
12. Mostly cloudy. Temperatures near normal. Winds light increasing to moderate with strong gusts in the evening.
13. Mostly cloudy with morning rain showers. Temperatures near normal. Winds moderate and gusting with a period of light in the morning.
14. Cloudy with sunny breaks near noon, rain showers late in the evening. Temperatures above normal. Winds light.
15. Mostly cloudy with early morning rain showers, clearing in the evening. Temperatures below normal. Winds light increasing moderate gusting strong late morning, decreasing to light in the evening.
16. Sunny. Temperatures below normal. Winds light.
17. Cloudy becoming overcast with rain showers and rain in the evening. Temperatures near normal. Winds moderate gusting strong, decreasing to light in the evening.
18. Cloudy becoming sunny late morning. Rain tapering off mid-morning. Temperatures slightly above normal. Light winds increasing to moderate with occasional gust mid-morning decreasing to light early evening.
19. Sunny. Temperatures near normal. Light winds.
20. Mostly cloudy becoming overcast mid-morning. Showers in the afternoon with rain or drizzle in the evening. Temperatures near normal. Light winds.
21. Overcast with early morning drizzle and evening showers. Maximum temperature below normal. Light winds increasing to moderate gusty with occasional strong gusts early morning.
22. Overcast with periods of drizzle becoming mostly sunny near noon. Temperatures below normal. Moderate gusty winds decreasing to light early evening.
23. Mostly sunny with late morning cloudy periods. Maximum temperature above normal. Minimum temperature below normal. Light winds increasing to moderate gusty near noon decreasing to light early evening.
24. Mostly sunny. Maximum temperature well above normal. Light winds increasing to moderate gusty late morning increasing to strong gusty with occasional gale force gusts early afternoon, decreasing to light mid-evening.
25. Sunny. Temperatures above normal. Light winds increasing to moderate gusty mid-morning decreasing to light early evening.
26. Mostly sunny. Maximum temperature above normal. Light winds increasing to moderate gusty with occasional strong gusts near noon decreasing to light early evening.
27. Becoming mostly cloudy in the morning with clearing late evening. Temperatures slightly below normal. Winds light with afternoon moderate periods.
28. Sunny becoming mostly cloudy near noon. Temperatures below normal. Light winds.
29. Mostly sunny with afternoon cloudy periods. Temperatures below normal. Light winds.
30. Mostly cloudy, clearing early evening. Rain showers late afternoon. Temperatures near normal. Light winds increasing to moderate gusty late morning decreasing to light early afternoon.