

MONTHLY METEOROLOGICAL SUMMARY SOMMAIRE MÉTÉOROLOGIQUE MENSUEL

MONTH/MOIS

NOVEMBER / NOVEMBRE

19 90

AT/A WINNIPEG INT'L AIRPORT / AEROPORT INTERN. DE WINNIPEG

LAT		49° 54' N		LONG		97° 14' W		ELEVATION ALTITUDE: 239.6		METRES (ASL) MÈTRES (NMM)		STANDARD TIME USED HEURE NORMALE UTILISÉE		CENTRAL		
DATE	TEMPERATURE TEMPERATURE			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 RÉFRIGÉRATION	MAXIMUM MAXIMALE	MINIMUM MINIMALE		RAINFALL PLUIE (HAUTEUR)	SNOWFALL NEIGE (HAUTEUR)	TOTAL PRECIP. PRÉCIP. TOTALE		AVERAGE SPEED VITESSE MOYENNE	PREVAILING DIRECTION DIRECTION DOMINANTE	
	°C	°C	°C	BASE 18.0°C	BASE 5.0°C	BASE 18.0°C	%	%	mm	cm	mm	cm	km/h		km/h	
1	12.1	1.9	7.0	11.0	2.0		97	67					15.6	W	N 26	2.7
2	3.4	0.8	2.1	15.9			97	53	TR.	TR.	TR.		19.1	W	NW 28	0.3
3	1.6	-7.6	-3.0	21.0			93	64		TR.	TR.		17.9	WNW	NW 30	3.3
4	-0.1	-7.4	-3.8	21.8			96	59					12.4	SSE	SSE26*	0.1
5	3.6	-6.4	-1.4	19.4			84	53					18.0	SSE	SSE28	4.3
6	-3.1	-11.8	-7.5	25.5			83	59					15.0	W	W 22*	8.0
7	3.0	-15.0	-6.0	24.0			85	37					20.6	S	S 33*	4.4
8	5.1	-2.1	1.5	16.5			73	51	TR.		TR.		18.1	S	S 24*	1.6
9	2.8	-9.4	-3.3	21.3			81	22		TR.	TR.		22.3	W	W 41	8.3
10	-0.9	-13.5	-7.2	25.2			83	43		TR.	TR.		12.3	W	W 19*	8.2
11	-1.3	-13.6	-7.5	25.5			84	49			TR.		17.9	NW	NNW37	5.7
12	-3.6	-12.2	-7.9	25.9			76	40					5.7	ESE	SE 15	0.1
13	7.3	-5.8	0.8	17.2			63	48					32.8	S	S 44*	0.6
14	14.2	-5.5	4.4	13.6			92	38					16.0	S	S 31*	0.7
15	6.7	-4.2	1.3	16.7			90	44					7.1	WSW	WSW15	0.6
16	9.7	-7.0	1.4	16.6			91	33					14.4	SW	SW 19*	7.8
17	8.6	-3.9	2.4	15.6			64	37					21.9	S	S 28*	8.4
18	6.8	-4.0	1.4	16.6			80	54					12.0	WNW	WNW22	7.4
19	5.8	-7.9	-1.1	19.1			85	57	0.3	0.4	0.6		15.6	SSE	SSE28	1.2
20	8.0	-1.8	3.1	14.9			100	66	3.0		3.0		16.4	SE	SSE20*	0.0
21	8.9	-6.2	1.4	16.6			100	65	10.4	TR.	10.4		24.6	SE	W 43	0.0
22	-5.8	-9.7	-7.8	25.8			83	56		0.2	0.2		28.5	W	WNW35	2.9
23	-8.3	-14.6	-11.5	29.5			88	64		1.2	1.2	1	20.5	WNW	W 33*	3.6
24	-10.1	-18.6	-14.4	32.4			89	66		2.8	2.8	1	13.7	E	WNW33	1.0
25	-13.5	-20.3	-16.9	34.9			68	57		TR.	TR.	3	8.1	W	W 15*	3.7
26	-9.7	-15.6	-12.7	30.7			91	68		1.0	1.0	4	15.8	N	NNE24*	0.6
27	-12.3	-18.5	-15.4	33.4			85	73		2.2	0.4	4	11.8	N	N 19*	0.7
28	-11.0	-21.4	-16.2	34.2			83	73		TR.	TR.	5	12.5	W	WNW22	7.2
29	0.3	-18.2	-9.0	27.0			78	63				5	21.0	S	S 28	7.4
30	3.6	-9.1	-2.8	20.8			77	55				5	22.6	S	WNW44	2.5
MEAN MOYENNE	1.1	-9.6	-4.3	TOTAL 668.6	TOTAL 2.0	TOTAL	85	54	TOT 0	TOTAL 13.7	TOTAL 7.8	TOTAL 19.6	17.0	PREVAILING W	MAXIMALE S 44	TOTAL 103.3
NORMAL NORMALE	-0.3	-8.8	-4.5	676.0	3.8					5.5	21.9	25.2	19.4	S		90.7

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 PRÉCÉDENTE	NORMAL NORMALE	ABOVE 5°C AU-DESSUS DE 5°C	THIS YEAR ANNÉE EN COURS	PREVIOUS YEAR PRÉCÉDENTE	NORMAL NORMALE	02 OR MORE	10 OR MORE	20 OR MORE	100 OR MORE	500 OR MORE	02 OR MORE	10 OR MORE	20 OR MORE	100 OR MORE	500 OR MORE
TOTAL FOR MONTH TOTAL DU MOIS	668.6	772.3	676.0	TOTAL FOR MONTH TOTAL DU MOIS	2.0	0.0	3.8	OU PLUS	OU PLUS	OU PLUS	OU PLUS	OU PLUS	OU PLUS	OU PLUS	OU PLUS	OU PLUS	OU PLUS
ACCUMULATED SINCE JULY 1 ACCUMULÉE DEPUIS LE 1 ^{er} JUILLET	1239.3	1333.0	1288.1	ACCUMULATED SINCE APRIL 1 ACCUMULÉE DEPUIS LE 1 ^{er} AVRIL	1860.7	1972.9	1783.3	8	5	3	1	0	6	4	2	0	0

JDC 551 506

Note/Avis

1 Climatological Day/Journee 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'évenement

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 \$2.75 \$27.30 \$2.75 \$27.30

8 Price: single issue / Prix: numero individuel (Janv. to Dec.) / (janv. à dec.)

1	73	70	66	66	53	48	48	44	38	55	80	102	115	120	115	111	90	66	64	50	42	34	26	21
2	19	22	19	11	10	10	11	11	12	14	19	24	26	30	20	19	21	15	13	16	16	16	14	11
3	10	6	7	8	2	-2	-5	-10	-14	-12	-4	-3	6	1	-14	-8	-7	-23	-26	-58	-66	-67	-72	
4	-72	-66	-64	-62	-54	-51	-48	-45	-41	-36	-29	-18	-14	-8	-4	-3	-2	-5	-7	-13	-14	-20	-16	
5	-15	-12	-9	-6	-5	-3	-4	-4	-4	-3	4	9	19	30	29	33	18	-3	-35	-53	-25	-18	-44	
6	-63	-85	-95	-101	-106	-112	-115	-116	-115	-101	-78	-54	-52	-33	-36	-38	-38	-40	-53	-72	-75	-78	-91	
7	-106	-116	-112	-119	-121	-137	-132	-136	-136	-111	-74	-43	-17	-6	12	17	22	19	20	24	17	27	25	
8	13	4	-1	-3	-10	-20	-14	-12	-18	-14	-3	17	30	41	40	48	40	36	28	15	4	3	-2	
9	28	24	2	-9	-26	-30	-34	-43	-48	-37	-14	3	5	-4	11	16	13	-7	-22	-28	-27	-41		
10	-94	-108	-123	-119	-115	-113	-112	-116	-119	-94	-72	-52	-36	-22	-17	-13	-10	-25	-41	-24	-21	-18	-14	
11	-13	-26	-37	-51	-72	-83	-99	-106	-112	-102	-92	-82	-67	-60	-64	-65	-68	-83	-97	-106	-134	-117		
12	-113	-119	-108	-105	-104	-104	-101	-98	-95	-87	-82	-71	-61	-49	-40	-39	-37	-38	-38	-42	-41	-42	-47	
13	-53	-56	-51	-49	-48	-45	-39	-29	-23	-11	-3	4	15	37	50	61	66	63	69	70	70	71	73	
14	64	62	61	57	51	48	42	38	34	35	45	62	82	109	141	117	96	72	45	15	-12	-33		
15	-38	-40	-27	-26	-19	-18	-16	-15	-28	-26	14	37	48	62	66	66	61	55	44	37	36	20		
16	-9	-21	-26	-31	-58	-59	-51	-59	-54	-40	-4	21	41	75	92	96	82	63	60	26	30	16		
17	-1	-5	-23	-28	-27	-30	-32	-37	-37	-23	6	32	51	68	80	85	80	62	50	42	31	33		
18	4	-14	-18	-18	-11	-9	-19	-25	-26	-15	-2	21	43	57	64	62	57	31	16	-14	-14	-19		
19	-37	-56	-59	-72	-75	-73	-72	-47	-31	-15	0	11	17	37	48	54	51	47	45	50	54	47		
20	28	23	15	13	15	9	-4	-14	-9	13	35	58	68	77	71	66	64	66	67	73	75	80		
21	79	80	80	80	80	83	82	81	84	86	87	87	87	87	87	87	87	87	87	87	87	87	87	
22	-60	-63	-66	-79	-83	-88	-89	-95	-94	-92	-86	-84	-80	-76	-64	-63	-59	-69	-69	-72	-77	-82		
23	-97	-96	-98	-99	-101	-105	-108	-112	-117	-116	-111	-105	-105	-96	-89	-86	-86	-97	-105	-136	-131	-137		
24	-130	-119	-113	-111	-111	-121	-127	-127	-126	-119	-110	-104	-112	-114	-109	-114	-136	-148	-156	-156	-173	-180		
25	-183	-192	-180	-195	-197	-199	-201	-199	-195	-186	-181	-174	-165	-156	-148	-150	-159	-164	-158	-153	-149	-144		
26	-139	-137	-138	-138	-139	-138	-137	-136	-136	-136	-128	-118	-110	-106	-99	-104	-108	-103	-115	-122	-134	-137		
27	-152	-155	-158	-156	-150	-146	-137	-140	-141	-139	-141	-128	-127	-127	-129	-127	-135	-154	-151	-158	-170	-167		
28	-175	-180	-189	-212	-204	-208	-203	-204	-182	-177	-177	-160	-156	-143	-122	-112	-118	-128	-136	-132	-143	-165		
29	-180	-170	-159	-143	-130	-128	-130	-128	-133	-127	-109	-91	-69	-56	-49	-34	-29	-18	-18	-8	-14	-10		
30	1	-7	-2	-3	-9	-10	-4	8	20	34	33	15	8	2	-4	-12	-23	-48	-61	-61	-65	-69		

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

Date	WINNIPEG INTERNATIONAL AIRPORT ARROPORT INTERN. DE WINNIPEG																								MONTH: MOIS:		1990 1990	
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	NOVEMBER NOVEMBRE	1990 1990		
1	49	49	51	52	48	44	45	39	34	47	62	69	72	72	65	56	33	26	18	12	10	9	6	3				
2	0	6	1	5	-7	-10	-12	-13	-12	-10	-31	-35	-35	-47	-43	-54	-63	-66	-63	-58	-55	-57	-60	-62				
3	-54	-54	-52	-42	-40	-43	-41	-43	-32	-31	-50	-47	-43	-34	-41	-36	-56	-62	-70	-79	-84	-84	-88	-78				
4	-78	-73	-71	-71	-67	-65	-65	-64	-62	-61	-58	-61	-70	-69	-74	-70	-69	-69	-68	-72	-75	-74	-71	-71				
5	-69	-67	-65	-63	-63	-62	-62	-61	-62	-61	-60	-63	-57	-54	-51	-54	-32	-51	-68	-78	-61	-55	-69	-76				
6	-103	-112	-120	-126	-130	-135	-137	-137	-136	-130	-118	-105	-106	-102	-102	-102	-105	-104	-111	-119	-114	-119	-126	-134				
7	-139	-145	-142	-144	-146	-154	-151	-156	-159	-137	-115	-100	-99	-101	-100	-96	-90	-94	-89	-83	-82	-95	-104	-101				
8	-96	-87	-87	-87	-84	-82	-79	-77	-76	-74	-69	-64	-56	-50	-47	-41	-45	-48	-53	-59	-63	-59	-54	-52				
9	-14	-23	-27	-49	-70	-107	-112	-110	-109	-106	-99	-120	-134	-137	-137	-160	-180	-165	-144	-147	-141	-149	-150	-140				
10	-146	-148	-155	-144	-140	-143	-140	-142	-147	-135	-123	-118	-114	-111	-114	-118	-118	-120	-122	-118	-115	-113	-118	-119				
11	-116	-116	-107	-105	-111	-129	-137	-142	-142	-144	-138	-140	-134	-130	-137	-138	-124	-139	-138	-140	-157	-147	-139	-141				
12	-148	-151	-144	-141	-141	-143	-144	-149	-146	-142	-143	-146	-149	-150	-155	-157	-150	-150	-148	-143	-140	-138	-145	-143				
13	-145	-146	-142	-136	-130	-124	-119	-114	-109	-104	-100	-90	-79	-62	-51	-37	-26	-27	-25	-22	-16	-11	-7	-6				
14	-1	6	11	13	13	12	10	5	-2	-6	-8	-8	0	1	1	-7	-9	-15	-23	-30	-47	-56	-64	-57				
15	-52	-55	-44	-45	-44	-43	-44	-45	-52	-47	-22	-31	-34	-44	-27	-28	-32	-58	-51	-46	-43	-47	-52	-52				
16	-54	-62	-60	-65	-79	-78	-64	-77	-78	-73	-58	-55	-52	-51	-50	-61	-67	-67	-68	-77	-76	-79	-85	-85				
17	-81	-84	-90	-89	-91	-92	-92	-94	-95	-90	-80	-75	-69	-62	-55	-55	-56	-57	-58	-58	-59	-59	-60	-63				
18	-66	-73	-75	-75	-62	-55	-56	-53	-54	-48	-40	-32	-23	-16	-10	-23	-28	-45	-45	-52	-48	-63	-70	-74				
19	-75	-89	-86	-95	-98	-97	-95	-73	-59	-51	-40	-16	-12	-4	-1	-14	-13	-18	-23	-23	-26	-28	-36	-36				
20	-36	-35	-37	-36	-31	-30	-34	-34	-22	-3	12	28	34	43	49	50	54	58	60	65	72	77	78	79				
21	79	80	80	80	80	83	82	81	84	86	87	87	51	29	15	-5	-25	-33	-56	-78	-94	-104	-114	-113				
22	-109	-111	-112	-126	-137	-132	-133	-133	-129	-136	-142	-143	-143	-140	-137	-135	-131	-131	-130	-130	-134	-127	-117	-125				
23	-116	-121	-117	-118	-127	-144	-147	-148	-147	-148	-153	-153	-151	-144	-140	-140	-134	-138	-143	-162	-161	-161	-166	-161				
24	-150	-147	-145	-137	-148	-145	-144	-144	-142	-138	-132	-126	-132	-132	-133	-141	-167	-179	-181	-194	-220	-223	-221	-212				
25	-219	-232	-228	-243	-243	-248	-251	-246	-243	-237	-233	-224	-219	-211	-207	-210	-219	-215	-209	-204	-198	-197	-201	-201				
26	-194	-194	-172	-169	-170	-168	-162	-163	-164	-165	-154	-146	-143	-133	-129	-125	-128	-122	-131	-139	-148	-152	-159	-178				
27	-180	-181	-185	-184	-178	-172	-163	-166	-167	-165	-169	-152	-151	-152	-156	-156	-166	-179	-171	-183	-201	-202	-200	-206				
28	-202	-209	-221	-254	-239	-243	-238	-239	-213	-208	-207	-189	-185	-170	-158	-143	-148	-156	-165	-169	-180	-198	-202	-206				
29	-215	-206	-196	-184	-169	-166	-163	-160	-165	-161	-140	-129	-113	-99	-91	-75	-65	-58	-59	-65	-68	-69	-70	-64				
30	-60	-59	-57	-54	-56	-55	-51	-41	-28	-15	-9	-21	-45	-60	-78	-89	-98	-99	-114	-126	-124	-123	-116	-139				

Note/Aviis: 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

The total precipitation was 19.6 mm which was not that far off the normal of 25.2 mm. The month started out very dry with no more than a trace of moisture during the first 18 days. Over half of the monthly total fell on the 21st of the month when 10.4 mm of rain fell on thirsty soil. Rainfall was 13.7 mm, more than twice the normal of 5.5 mm while the total snowfall was 7.8 cm, just over one third of the normal 21.9 cm.

The mean temperature was -4.3, slightly above the normal of -4.5°. The mean maximum temperature was 1.4° above normal while the mean minimum was 0.8° below normal. The first three weeks of November were mild but the last 9 days were well below normal. The table below shows the contrast in the temperatures between the beginning and end of the month.

	Mean Maximum	Mean Minimum	Mean
November 1-21	4.7	-6.8	-1.0
November 22-30	-7.4	-16.2	-11.9

The warmest temperature was 14.2 on the 14th while the coldest temperature was -21.4 on the 28th. There were no temperature records tied or broken during the month.

DAILY WEATHER SUMMARY FOR NOVEMBER 1990

AT WINNIPEG, MANITOBA

1. Cloudy. Temperatures above normal. Light winds increasing to moderate with occasional gusts.
2. Cloudy with drizzle and snow overnight. Minimum temperature above normal. Moderate gusty winds decreasing to light early evening.
3. Cloudy with snow flurries, clearing late afternoon. Temperatures slightly below normal. Light winds increasing to moderate gusty mid-morning decreasing to light late afternoon.
4. Overcast. Temperatures slightly below normal. Light winds increasing to moderate gusty early evening.
5. Cloudy with sunny breaks late afternoon. Temperatures near normal. Moderate gusty winds decreasing to light early morning with occasional moderate gusts near midnight.
6. Mainly sunny. Temperatures below normal. Light winds.
7. Mainly sunny becoming cloudy near noon. Minimum temperature well below normal. Light winds increasing to moderate gusty near noon.
8. Mainly cloudy, clearing early evening with rain showers near midnight. Temperatures slightly above normal. Moderate winds decreasing to light early morning.
9. Clearing overnight with snow overnight. Minimum temperature slightly below normal. Moderate winds with occasional strong gusts decreasing to light early evening.
10. Mostly sunny becoming overcast with snow flurries early afternoon. Maximum temperature slightly below normal, minimum temperature well below normal. Light winds.
11. Mostly sunny with mid-day cloudy periods. Maximum temperature slightly below normal, minimum temperature below normal. Light winds with occasional moderate gusts overnight.
12. Mostly cloudy. Temperatures below normal. Light winds.
13. Mostly cloudy. Maximum temperature above normal. Moderate winds with strong gusts increasing to strong gusty late morning decreasing to moderate with occasional strong gusts mid afternoon.
14. Mostly cloudy. Maximum temperature well above normal. Moderate winds decreasing to light early morning.
15. Mostly cloudy, clearing late evening. Temperatures above normal. Light winds.
16. Mostly sunny, becoming cloudy late morning. Maximum temperature well above normal. Light winds.
17. Sunny. Maximum temperature well above normal. Minimum temperature above normal. Light winds increasing to moderate early morning.
18. Sunny with morning cloudy periods. Maximum temperature well above normal. Minimum temperature above normal. Winds decreasing to light overnight.
19. Becoming overcast with rain and snow early morning. Sunny breaks afternoon and evening. Maximum temperature well above normal. Minimum temperature slightly above normal. Light winds increasing to moderate late morning.
20. Clear, becoming overcast in the early afternoon with rain showers starting early in the afternoon changing to drizzle by early evening. Temperatures well above normal. Winds light.
21. Overcast with fog, light rain starting by mid morning, clearing slightly in the evening. Maximum temperatures well above normal. Minimum temperatures above normal. Winds light increasing to moderate gusting strong by early afternoon.
22. Mostly cloudy with snow showers ending by mid-morning and snow beginning late in the evening. Temperatures slightly above normal. Winds moderate occasionally gusting strong.
23. Cloudy with light snow ending early in the morning, gradually becoming clear by early evening. Maximum temperatures below normal. Minimum temperatures slightly below normal. Winds moderate decreasing to light by late afternoon.
24. Overcast with light snow becoming mainly sunny by late afternoon. Temperatures below normal. Winds light increasing to moderate by early afternoon, decreasing to light by early evening.
25. Mainly cloudy. Temperatures well below normal. Winds light.
26. Overcast with light snow early morning, mainly cloudy throughout the day clearing in the evening. Maximum temperature below normal, minimum temperature slightly below normal. Winds light occasionally moderate in the afternoon.
27. Cloudy with light snow, clearing in the late afternoon. Maximum temperature well below normal, minimum below normal. Winds light.
28. Sunny. Maximum temperature below normal, minimum well below normal. Winds light.
29. Sunny becoming mainly cloudy by mid-evening. Maximum temperature above normal, minimum below normal. Winds moderate.
30. Mainly cloudy becoming clear by late afternoon. Maximum temperature was well above normal, the minimum above normal. Winds moderate decreasing to light by mid-afternoon.