



Environment Canada / Environnement Canada
 Atmospheric Environment Service / Service de l'environnement atmosphérique

MONTHLY METEOROLOGICAL SUMMARY SOMMAIRE MÉTÉOROLOGIQUE MENSUEL

MONTH/MOIS

OCTOBER / OCTOBRE

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) MÉTRES (NMM)		STANDARD TIME USED: CENTRAL									
DATE	TEMPERATURE TEMPERATURE			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 RÉFRIGÉRATION	MAXIMUM MAXIMALE	MINIMUM MINIMALE	THUNDERSTORM ORAGE	RAINFALL PLUIE (HAUTEUR)	SNOWFALL NEIGE (HAUTEUR)		TOTAL PRECIP. PRÉCIP. TOTALE	AVERAGE SPEED VITESSE MOYENNE		PREVAILING DIRECTION DIRECTION DOMINANTE	MAX. 2 MIN. MEAN SPEED & DIRECTION VITESSE MOYENNE MAX. SUR 2 MIN. & DIRECTION
	°C	°C	°C	BASE 18.0°C	BASE 5.0°C	BASE 18.0°C	%	%		mm	cm	mm	cm	km/h		km/h	HOURS HEURES
1	19.4	2.4	10.9	7.1	5.9		86	28						15.7	W	N 26	9.9
2	23.2	5.5	14.4	3.6	9.4		65	33						18.8	SE	S 33	1.7
3	14.6	6.9	10.8	7.2	5.8		79	37		TR.		TR.		20.0	W	W 30*	4.8
4	11.5	3.2	7.4	10.6	2.4		69	43		TR.		TR.		24.6	W	W 39*	5.5
5	11.0	1.9	6.5	11.5	1.5		93	53		0.4		0.4		13.8	ENE	NNE30	7.9
6	7.3	-5.4	1.0	17.0			92	40						15.5	WNW	WNW26*	6.7
7	8.6	-7.6	0.5	17.5			88	36						7.9	W	WNW19	1.9
8	11.1	-6.2	2.5	15.5			90	30		TR.		TR.		12.0	SSW	SSW30	6.6
9	15.5	-3.6	6.0	12.0	1.0		94	23						15.6	S	S 30	9.4
10	13.3	3.4	8.4	9.6	3.4		61	30						33.7	S	S 56	0.5
11	10.5	-1.6	4.5	13.5			74	34						18.7	W	W 26*	7.5
12	9.9	-6.2	1.9	16.1			85	37						16.3	S	S 30	7.1
13	15.3	4.1	9.7	8.3	4.7		92	34		0.6		0.6		11.9	S	S 28	6.9
14	13.7	-0.4	6.7	11.3	1.7		88	41		TR.		TR.		10.0	W	NW 26	3.6
15	8.7	-1.4	3.7	14.3			94	42						9.2	W	W 19	2.3
16	8.1	-3.4	2.4	15.6			79	40						13.3	NE	NE 22*	5.5
17	3.4	-4.9	-0.8	18.8			86	61						20.5	N	NNE31	1.6
18	4.0	-5.6	-0.8	18.8			90	49						9.3	SSE	SSE26	3.8
19	9.8	-0.2	4.8	13.2			85	46						18.1	SSE	SE 28	0.9
20	5.1	0.8	3.0	15.0			100	69		0.2		0.2		16.0	NW	NW 28	0.0
21	9.0	-2.1	3.5	14.5			100	33						12.9	W	S 26	5.4
22	12.6	-4.5	4.1	13.9			90	40						18.6	S	S 30	8.1
23	8.7	-5.7	1.5	16.5			100	71		1.6	1.2	2.8		8.0	WNW	WNW15*	3.1
24	7.5	-3.9	1.8	16.2			92	54						10.1	NW	NNW20	7.8
25	12.1	-0.1	6.0	12.0	1.0		83	43						24.3	S	S 33	8.8
26	23.8	3.2	13.5	4.5	8.5		80	25		TR.		TR.		21.5	S	WSW33*	7.4
27	5.7	-5.0	0.4	17.6			100	53		4.8		4.8		24.1	NNW	NW 37	9.2
28	10.0	-6.8	1.6	16.4			97	44						21.7	S	S 43	5.4
29	12.3	2.1	7.2	10.8	2.2		75	29						6.0	WSW	SSW15	3.8
30	13.5	-3.4	5.1	12.9	0.1		78	45						10.2	SW	S 30	7.3
31	17.2	4.8	11.0	7.0	6.0		85	48						17.9	S	S 30*	2.8
MEAN MOYENNE	11.5	-1.3	5.1	398.8	53.6	0.0	86	42	0	7.6	1.2	8.8		16.0	PREVAILING DOMINANTE	MAXIMALE S 56	TOTAL 170.2
NORMAL NORMALE	11.5	0.7	6.1	369.6	82.1	0.5				25.9	5.2	30.9		19.6	S		151.5

DEGREE-DAY SUMMARY/SOMMAIRE DE DEGRÉS JOURS

DEGREE-DAY SUMMARY/SOMMAIRE DE DEGRÉS JOURS				DAYS WITH TOTAL PRECIPITATION JOURS AVEC PRÉCIPITATIONS TOTALES					DAYS WITH SNOWFALL JOURS AVEC CHUTE 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	398.8	378.5	369.6	TOTAL FOR MONTH TOTAL DU MOIS	53.6	77.7	82.1	5	2	2	0	0	1	1	0	0	0
ACCUMULATED SINCE JULY 1 ACCUMULÉE DEPUIS LE 1 ^{er} JUILLET	570.7	560.7	612.1	ACCUMULATED SINCE APRIL 1 ACCUMULÉE DEPUIS LE 1 ^{er} AVRIL	1858.7	1972.9	1779.5										

JDC 551 506 11

Note/Avia

1 Climatological Day/Journee climatologique 00 01 C ST - 00 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'evenement

6 * Indicates first of more than one prevailing direction and/or maximum 2 minute mean speed (see page 4)/Indique la premiere 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 _____ annual (Jan. to Dec.) _____ /Prix: numero individuel _____ annuel (janv. a dec.)



DRY-BULB TEMPERATURES AT:
TEMPERATURES DU THERMOMETRE SEC A:

WINNIPEG INTERNATIONAL AIRPORT
AEROPORT INTERN. DE WINNIPEG

MONTH: OCTOBER
MOIS: OCTOBRE

1990
1990

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	47	51	53	35	38	32	30	31	46	84	122	151	173	179	186	193	183	172	138	84	84	71	76	63
2	65	61	66	59	63	80	75	79	102	117	155	182	185	194	200	220	229	214	199	182	163	153	153	135
3	129	122	107	94	88	82	76	69	75	84	93	106	117	131	129	128	130	127	117	99	96	91	89	84
4	74	62	55	46	47	44	42	36	37	50	58	73	84	90	102	96	100	90	56	57	43	40	46	54
5	50	50	49	39	43	47	37	44	48	59	63	76	84	100	107	103	81	67	51	44	40	37	29	20
6	21	18	4	-14	-9	-2	-3	-5	8	19	28	41	56	60	72	70	69	61	20	-28	-27	-15	-29	-38
7	-54	-41	-50	-61	-51	-57	-50	-58	-31	-18	19	52	62	66	69	76	71	69	42	9	9	38	36	30
8	15	-22	-32	-33	-47	-54	-56	-53	-29	5	50	87	105	106	87	92	101	72	78	51	42	44	35	10
9	15	14	4	-22	-23	-18	-18	-26	-6	28	80	103	129	141	146	152	151	140	84	75	66	67	64	64
10	58	51	45	42	39	38	35	37	48	58	27	92	108	125	129	128	131	130	119	113	110	103	97	89
11	91	80	67	71	62	52	40	33	37	46	53	66	84	91	97	102	95	88	66	57	43	9	-6	-9
12	-3	-27	-30	-30	-38	-44	-42	-60	-25	5	25	48	57	69	91	95	88	95	92	92	93	95	95	91
13	85	83	89	84	78	71	66	65	59	62	74	92	120	123	141	150	143	141	106	85	69	59	49	48
14	41	17	8	11	19	16	30	30	40	60	60	68	88	105	129	132	110	102	78	67	57	43	30	25
15	4	4	0	-4	-10	-7	-3	-7	-8	22	46	61	65	78	76	81	80	65	28	22	30	28	25	21
16	15	31	31	13	9	-1	-6	3	-12	29	53	73	73	71	72	70	62	52	44	40	19	13	11	-1
17	-2	-9	-17	-17	-2	-2	-2	-4	-6	-9	0	11	15	20	22	26	29	18	-2	-11	-13	-43	-44	-32
18	-36	-52	-33	-27	-20	-12	-13	-12	-4	2	7	13	26	34	36	40	34	33	29	15	25	25	22	15
19	10	6	3	-1	1	8	8	11	15	26	38	55	55	69	84	87	80	75	62	51	44	42	48	47
20	43	34	31	24	19	25	33	33	33	36	33	37	44	45	47	37	32	28	28	26	24	24	10	11
21	9	3	-4	1	4	4	-3	-15	-19	-14	2	32	58	76	83	87	81	74	48	55	48	58	54	55
22	60	60	60	60	59	57	55	55	54	58	78	88	107	117	117	116	104	82	55	29	18	4	-14	-11
23	-22	-36	-38	-44	-14	-7	-11	-3	0	1	6	14	36	57	55	63	66	60	41	40	44	33	27	18
24	15	18	13	1	1	4	-7	-31	-22	7	25	37	46	45	59	65	50	37	31	18	11	14	19	19
25	20	8	8	5	1	2	4	2	5	20	43	65	78	92	100	116	120	107	98	95	90	76	71	62
26	57	44	38	36	38	39	33	36	47	60	104	148	171	220	235	235	226	206	181	170	136	96	83	64
27	52	39	37	47	34	21	15	14	16	27	38	41	39	41	50	49	40	16	-29	-29	-28	-29	-36	-50
28	-47	-57	-54	-51	-64	-50	-48	-44	-30	-13	14	37	59	74	82	93	95	86	78	80	72	66	59	61
29	59	56	46	29	40	30	32	44	31	56	75	102	109	113	111	109	104	97	89	54	49	25	36	41
30	32	24	15	8	5	3	-4	-27	-14	20	40	70	94	116	135	131	114	93	94	110	105	105	99	98
31	86	77	65	60	63	60	51	51	52	67	88	102	118	135	153	168	156	141	133	103	111	113	94	78

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	35	30	14	5	-1	-4	-6	-8	4	30	42	41	21	12	7	6	4	1	-1	2	2	0	-4	1
2	-5	-4	-2	1	2	-2	-5	-1	1	10	14	17	25	38	52	87	96	99	77	54	50	47	23	23
3	19	28	29	31	35	36	36	34	32	24	22	18	13	18	1	-2	-11	-14	-9	-14	-8	7	13	13
4	26	-17	-19	-25	-26	-26	-25	-27	-26	-25	-28	-21	-19	-21	-19	-23	-20	-8	-13	-12	-16	-15	-8	-14
5	-15	-11	-9	-5	1	10	18	15	11	14	7	9	10	12	12	17	9	-2	12	6	-6	-6	-5	9
6	3	-19	-30	-30	-22	-22	-27	-29	-24	-21	-33	-31	-41	-45	-55	-56	-56	-55	-58	-71	-69	-55	-61	-66
7	-76	-68	-73	-77	-76	-72	-75	-76	-57	-55	-44	-46	-49	-75	-70	-63	-64	-63	-68	-59	-64	-55	-57	-61
8	-66	-80	-89	-91	-96	-99	-98	-96	-86	-75	-64	-63	-67	-31	-18	-24	-29	13	-13	-4	4	10	4	-7
9	-3	-7	-16	-35	-35	-32	-40	-42	-34	-24	-12	-20	-28	-30	-34	-45	-59	-66	-67	-66	-66	-56	-46	-46
10	-48	-48	-48	-44	-41	-38	-35	-35	-32	-29	-23	-28	-27	-29	-35	-31	-35	-38	-45	-50	-50	-48	-46	-42
11	-17	-7	-10	-10	-11	-16	-23	-22	-21	-20	-22	-25	-33	-42	-42	-52	-51	-49	-52	-61	-67	-69	-62	-56
12	-43	-61	-58	-64	-72	-73	-72	-80	-61	-53	-53	-50	-55	-53	-48	-46	-42	-43	-42	-40	-40	-36	-35	-24
13	-13	-7	-4	-5	10	20	20	28	44	49	55	58	62	12	6	-5	-9	-14	-25	-7	-3	-4	4	-7
14	-9	-23	-24	-28	-31	-28	-17	-14	-3	7	5	12	29	34	15	2	1	4	3	38	36	22	11	-3
15	-12	-14	-19	-26	-33	-32	-28	-24	-20	3	1	-8	-9	-4	-20	-19	-19	-59	-60	-55	-42	-40	-36	-28
16	-30	-35	-39	-39	-46	-49	-50	-36	-41	-24	-2	-6	-15	-39	-56	-53	-49	-48	-46	-29	-31	-34	-33	-36
17	-37	-45	-45	-44	-43	-45	-45	-43	-42	-30	-37	-39	-38	-33	-38	-42	-41	-47	-51	-51	-47	-63	-62	-53
18	-57	-67	-56	-54	-48	-46	-48	-49	-48	-45	-51	-52	-55	-53	-56	-57	-58	-58	-61	-59	-53	-47	-40	-31
19	-32	-36	-44	-40	-35	-34	-43	-46	-42	-38	-35	-31	-30	-27	-27	-28	-25	-20	-21	-20	-21	-16	-9	-7
20	-6	-7	-6	-9	-11	-21	-11	8	11	8	16	7	-5	-3	-6	3	13	11	6	10	5	6	10	10
21	8	1	-6	-3	3	-6	-16	-27	-33	-29	-21	-16	-28	-54	-60	-70	-70	-69	-68	-69	-62	-58	-58	-50
22	-41	-39	-36	-33	-29	-24	-20	-16	-14	-12	-7	-8	-7	-6	-13	-18	-6	-9	-15	-23	-24	-28	-39	-28
23	-34	-41	-42	-47	-16	-7	-11	-3	0	1	6	14	36	42	33	30	37	16	-8	-3	0	3	3	-5
24	-1	1	5	-12	-14	-22	-28	-41	-32	-15	-11	-14	-17	-18	-18	-23	-24	-23	-26	-28	-21	-20	-20	-13
25	-17	-20	-19	-21	-26	-30	-37	-44	-45	-39	-30	-27	-20	-14	-11	-8	-6	-3	-3	-2	-1	-1	2	2
26	1	0	-1	-2	0	1	1	0	3	7	21	32	44	36	37	24	22	24	27	28	27	21	11	11
27	20	34	35	30	8	-11	-12	-11	-14	-13	-22	-20	-29	-31	-29	-37	-42	-39	-56	-56	-59	-55	-58	-62
28	-60	-65	-65	-64	-71	-57	-53	-55	-45	-33	-23	-26	-21	-19	-21	-21	-26	-27	-22	-21	-18	-16	-15	-11
29	-8	-4	-4	-9	-6	-7	-8	-11	-7	-5	-6	-27	-36	-58	-52	-43	-40	-34	-34	-29	-24	-24	-17	-11
30	-21	-25	-33	-35	-44	-52	-51	-56	-47	-23	-71	-4	7	13	21	21	27	22	26	16	8	4	10	7
31	4	4	2	0	2	3	3	6	9	16	24	32	40	47	55	59	62	65	64	59	61	62	58	51

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

The month of October was another dry month. October 1990 ranks as the 9th driest October on record with only 8.8 mm of precipitation compared to a normal of 30.9 mm. Over half of that total fell in a three hour period in the wee hours of the 27th.

This is the fourth month in a row with below normal precipitation. In fact the four month period from July to October, 1990 is the driest July to October on record.

The mean temperature was one degree below normal because of cooler than normal minima. Minimum temperatures were 2.0 degrees below normal while maxima were exactly normal. The highest temperature for the month was 23.8 on the 26th. The coldest temperature, which had occurred nearly three weeks earlier, was -7.6 on the 7th.

DAILY WEATHER SUMMARY FOR OCTOBER 1990AT WINNIPEG, MANITOBA

1. Sunny becoming mainly cloudy overnight. Maximum temperature above normal. Light winds with occasional moderate gusts mid-day.
2. Mainly cloudy. Maximum temperature well above normal. Light winds increasing to moderate with strong gusts late morning decreasing to light late afternoon.
3. Mainly cloudy with sunny periods late afternoon. Late evening rain showers. Minimum temperature slightly above normal. Light winds increasing to moderate gusty with occasional strong gusts mid-morning.
4. Mainly cloudy with few sunny periods. Maximum temperature slightly below normal. Moderate gusty winds with occasional strong gusts decreasing to light late afternoon.
5. Mainly cloudy with mid-day sunny periods. Occasional rain showers throughout the day. Temperatures slightly below normal. Light winds increasing to moderate with occasional gusts late afternoon.
6. Mainly cloudy becoming clear mid-afternoon. Temperatures well below normal. Light winds increasing to moderate with occasional gust late morning decreasing to light mid-afternoon.
7. Sunny becoming cloudy early morning, clearing near midnight. Temperatures well below normal. Light winds.
8. Mainly sunny becoming mainly cloudy late morning, clearing near midnight. Maximum temperature slightly below normal. Minimum temperature well below normal. Light winds increasing to moderate gusty near noon decreasing to light early evening.
9. Mainly sunny. Minimum temperature below normal. Light winds increasing to moderate gusty late morning.
10. Mainly cloudy becoming overcast late morning becoming cloudy late afternoon. Temperatures near normal. Moderate gusty winds increasing to strong gusty late morning decreasing to moderate gusty late afternoon decreasing to light late evening.
11. Mainly cloudy, clearing near noon. Temperatures slightly below normal. Light winds with moderate gusts early morning through late afternoon.
12. Clear, becoming mainly cloudy late morning, becoming overcast late afternoon, becoming mainly cloudy late evening. Maximum temperature slightly below normal. Minimum temperature well below normal. Light winds increasing to moderate gusty with few strong gusts mid-afternoon decreasing to light overnight.
13. Mainly cloudy with early morning overcast period, with rain showers, clearing late afternoon. Temperatures slightly above normal. Light winds with occasional moderate gust.
14. Becoming mainly cloudy early morning, rain shower early evening, clearing mid-evening. Temperatures near normal. Light winds with occasional moderate gusts.
15. Mainly sunny with early morning and evening cloudy periods. Temperatures slightly below normal. Light winds.
16. Overnight cloudy periods becoming mainly sunny, returning to mainly cloudy near noon, becoming overcast mid-afternoon. Temperatures below normal. Light winds increasing to moderate with occasional gusts late morning decreasing to light late afternoon.
17. Overcast, clearing late afternoon becoming mainly cloudy late evening. Temperatures well below normal. Light winds becoming moderate gust with occasional strong gusts overnight decreasing to light late afternoon.
18. Mainly cloudy with overcast periods. Temperatures well below normal. Light winds increasing to moderate gusty late evening.
19. Mainly cloudy with overcast periods. Temperatures near normal. Moderate gusty winds decreasing to light late afternoon.
20. Overcast with drizzle, rain showers in the morning and afternoon, and rain and snow in the evening. Maximum temperature below normal. Light winds increasing to moderate gusty late morning decreasing to light late afternoon.
21. Mainly cloudy, clearing late morning, becoming mainly cloudy late afternoon. Temperatures slightly below normal. Light winds increasing to moderate gusty late evening.
22. Overcast, clearing late morning. Minimum temperature below normal. Winds moderate gusty decreasing to light late afternoon.
23. Becoming overcast with fog early morning, variable cloudiness evening and overnight. Freezing rain early morning turning to snow and drizzle tapering off late afternoon. Minimum temperature below normal. Light winds.
24. Mainly cloudy with morning sunny breaks. Temperatures near normal. Light winds.
25. Mostly sunny with few cloudy periods. Maximum temperature slightly above normal. Light winds increasing to moderate gusty with occasional strong gusts decreasing to light overnight.
26. Mostly sunny with few cloudy periods becoming overcast with some showers late evening. Maximum temperature well above normal. Light winds becoming moderate gusty with occasional strong gusts early afternoon.
27. Overcast with rain becoming mostly sunny with few cloudy periods overnight. Minimum temperature slightly below normal. Moderate gusty winds with few strong gusts decreasing to light late afternoon.
28. Becoming mostly cloudy early morning. Maximum temperature slightly above normal, minimum temperature below normal. Light winds increasing to moderate with strong gusts mid-morning decreasing to light overnight.
29. Mostly cloudy, clearing early evening. Temperatures above normal. Light winds.
30. Mostly sunny with afternoon cloudiness. Maximum temperature well above normal. Light winds increasing to moderate mid-evening.
31. Mostly sunny with mid-day cloudy periods. Temperatures well above normal. Moderate winds with occasional gusts decreasing to light mid-afternoon.