



Environment Canada / Environnement Canada

Atmospheric Environment Service / Service de l'environnement atmosphérique

MONTHLY METEOROLOGICAL SUMMARY SOMMAIRE MÉTÉOROLOGIQUE MENSUEL

MONTH/MOIS

SEPTEMBER / SEPTEMBRE

19 84

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

LAT: 49° 54'N			LONG: 97° 14'W			ELEVATION: 239.6 METRES (ASL) ALTITUDE: 239.6 MÈTRES (NMM)			STANDARD TIME USED: CENTRAL HEURE NORMALE UTILISÉE:								
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 HOURS HEURES	
	MAXIMUM MAXIMALE	MINIMUM MINIMALE	MEAN MOYENNE	HEATING DE CHAUFFE BASE 18.0°C	GROWING DE CROISSANCE BASE 5.0°C	MAXIMUM MAXIMALE	MINIMUM MINIMALE		RAINFALL PLUIE (HAUTEUR) mm	SNOWFALL NEIGE (HAUTEUR) cm	TOTAL PRECIP. PRÉCIP. TOTALE mm		AVERAGE SPEED VITESSE MOYENNE km/h	PREVAILING DIRECTION DIRECTION DOMINANTE	MAXIMUM SPEED AND DIRECTION VITESSE MAXIMALE ET DIRECTION km/h		
1	17.6	4.0	10.8	7.2	5.8	91	50						9.8	NE, NNE	NNE 22	0.9	
2	17.0	8.9	13.0	5.0	8.0	90	57		0.8	0.8			4.7	N	N 7	0.3	
3	16.8	5.2	11.0	7.0	6.0	100	63	1	2.8	2.8			7.3	CALM	N 24	3.9	
4	19.8	4.6	12.2	5.8	7.2	100	45						10.3	N	N 17*	9.2	
5	22.3	4.8	13.6	4.4	8.6	94	33						11.8	S	SSE 28	11.4	
6																	
7	27.0	12.6	19.8	0.0	14.8	76	38						33.6	SSE	SSE 44*	9.7	
8	22.0	13.2	17.6	0.4	12.6	100	34		3.4	3.4			13.8	WSW	SSE 30*	7.7	
9	15.2	9.9	12.6	5.4	7.6	98	69		0.2	0.2			10.4	S	NW 19*	1.2	
10	14.6	7.6	11.1	6.9	6.1	98	59		Tr.	Tr.			14.0	NNW	NNW 20*	4.6	
	14.2	5.2	9.7	8.3	4.7	100	53		Tr.	Tr.			9.2	NNW	NNE 15	1.8	
11	16.7	2.2	9.5	8.5	4.5	100	42		Tr.	Tr.			6.1	SE, S	SE 17	10.5	
12	13.2	10.0	11.6	6.4	6.6	100	70		38.8	38.8			16.6	ESE	E 28	0.0	
13	15.4	5.4	10.4	7.6	5.4	100	52		0.6	0.6			16.0	NNW, N	N 28*	7.1	
14	14.6	2.6	8.6	9.4	3.6	94	47		Tr.	Tr.			11.1	W	N 35	3.5	
15	17.9	4.1	11.0	7.0	6.0	88	33						9.2	W	W 19	11.3	
16																	
17	22.5	4.1	13.3	4.7	8.3	83	30						18.9	S	S 35	10.8	
18	27.1	9.9	18.5	0.0	13.5	77	27						11.4	S	S 24*	11.1	
19	23.0	10.8	16.9	1.1	11.9	81	31						14.3	WNW	W 30	11.8	
20	22.5	9.6	16.1	1.9	11.1	77	32						19.5	WNW	WNW 37*	11.1	
	20.1	4.6	12.4	5.6	7.4	100	36		1.4	1.4			10.6	WSW	WNW 19	8.3	
21																	
22	16.9	9.4	13.2	4.8	8.2	93	76	1	6.4	6.4			28.5	ENE	ENE 43*	0.0	
23	20.1	1.7	10.9	7.1	5.9	95	47						25.2	SSW	SW 43	4.9	
24	7.0	1.0	4.0	14.0	0.0	97	56		Tr.	Tr.			21.9	N	W 30*	1.6	
25	4.4	-0.5	2.0	16.0	0.0	100	71		0.6	5.8	6.4	0	19.1	N	NNE 30	0.2	
	5.8	-0.6	2.6	15.4	0.0	100	60			0.8	0.8	2	12.5	NW	N 20	1.2	
26																	
27	9.0	-0.9	4.1	13.9	0.0	94	38		0.4	0.4			10.9	WSW	NW 17*	3.1	
28	7.0	-1.7	2.7	15.3	0.0	93	47		Tr.	Tr.			13.7	W, WNW	NW 24	2.4	
29	12.2	-1.7	5.3	12.7	0.3	89	34						15.1	W, WSW	WNW 26	11.0	
30	15.8	-0.1	7.9	10.1	2.9	82	27						14.4	WSW	WSW 26	10.0	
	13.7	-1.5	6.1	11.9	1.1	95	34						9.7	WNW	WNW 19	10.0	
31																	
MEAN MOYENNE	16.4	4.8	10.6	TOTAL 223.8	TOTAL 178.1	93	46	TOTAL 2	TOTAL 55.4	TOTAL 6.6	TOTAL 62.0		14.3	PREVAILING W* DOMINANTE	MAXIMUM SSE 44	TOTAL 180.6	
NORMAL NORMALE	18.4	6.3	12.4	178.1	223.8	91	46	2.2	53.0	0.2	53.3		18.5	S	55	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 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	1.0	2.0	10.0	50.0	0.2	1.0	2.0	10.0	50.0
								OR MORE OU PLUS	OR MORE OU PLUS	OR MORE OU PLUS	OR MORE OU PLUS	OR MORE OU PLUS	OR MORE OU PLUS	OR MORE OU PLUS	OR MORE OU PLUS	OR MORE OU PLUS	OR MORE OU PLUS
TOTAL FOR MONTH TOTAL DU MOIS	223.8	180.6	178.1	TOTAL FOR MONTH TOTAL DU MOIS	178.1	239.4	223.8	11	6	5	1	0	2	1	1	0	0
ACCUMULATED SINCE JULY 1 DEPUIS LE 1 ^{er} JUILLET	258.2	198.4	242.5	ACCUMULATED SINCE APRIL 1 DEPUIS LE 1 ^{er} AVRIL	1745.8	1840.2	1697.4										

UDC 551.506.1 () *Indicates more than one occurrence of the same speed but not necessarily the same direction. Hail on the 3rd. *Prevailing by hours - distance WNW.

Subscription Price: \$1.06 monthly, \$10.60 per calendar year (January to December)
Prix d'abonnement: mensuel \$1.06; annuel \$10.60 (janvier à décembre)



CLIMATOLOGICAL SUMMARY FOR SEPTEMBER 1984**AT WINNIPEG, MANITOBA**

The 5.8 cm of snow of the 24th was the earliest date ever for a snowfall of 2.5 cm or more. The old record was the 25th of 1872. The first frost was recorded on the 24th giving Winnipeg a 119 day frost-free period for 1984. The warmest temperature was 27.1°C on the 17th and the coldest night was -1.7°C on the 27th and 28th. Sunshine was near normal while the average winds were again below normal.

DAILY WEATHER SUMMARY FOR SEPTEMBER 1984**AT WINNIPEG, MANITOBA**

1. Cool. Cloudy. Mostly light winds.
2. Cool. Cloudy. Showers in morning. Light winds.
3. Cool. Mostly cloudy. Smoke and light fog in morning. Thundershowers with hail in afternoon. Mostly light winds.
4. Cool. Mostly sunny. Light winds.
5. Below normal temperatures. Sunny. Smoke in morning. Visibility severely reduced. Smoke from brush fires. Mostly light winds. Bad odour.
6. Warm. Mostly sunny. Moderate winds with SSE gusts to 63 Km/h.
7. Above normal temperatures. Partly cloudy. Showers in morning and late evening. Light fog in morning. Mostly light winds.
8. Below normal temperatures. Mostly cloudy. Showers mid morning and afternoon. Drizzle in evening. Light winds.
9. Cool. Mostly cloudy. Drizzle in morning. Showers in evening. Light winds.
10. Cool. Cloudy. Showers in afternoon and early evening. Light winds.
11. Cool. Mostly sunny. Fog in morning and early afternoon. Showers in early evening continued. Light winds.
12. Below normal temperatures. Cloudy. Rain or showers till early afternoon. Rain mid evening. Drizzle early afternoon. Fog mid morning till afternoon. Mostly light winds. Visibility restricted in fog and heavy rain.
13. Cool. Partly cloudy. Rain in morning. Showers in afternoon. Light winds.
14. Cool. Mostly cloudy. Showers in afternoon. Mostly light winds but NNW gusts to 46 Km/h in afternoon.
15. Below normal temperatures. Mostly sunny. Light winds.
16. Above normal temperatures. Mostly sunny. Mostly light winds but south gusts to 54 Km/h in afternoon.
17. Mild. Mostly sunny. Mostly light winds.
18. Mild. Sunny. Mostly light winds.
19. Mild. Sunny. Mostly light winds. Aurora very bright.
20. Slightly above normal temperatures. Sunny becoming cloudy by mid afternoon. Rain late evening continued.
21. Above normal temperatures. Cloudy. Thunder in early afternoon. Rain or showers till late afternoon. Moderate winds with NE gusts to 61 Km/h.
22. Slightly above normal temperatures. Partly cloudy. Moderate winds with SW gusts to 69 Km/h. Severe snow storm in northern Manitoba created power outages, people stranded.
23. Cold. Mostly cloudy. Rain and snow in early morning. Rain in evening. Moderate winds.
24. Cold. Cloudy. Rain in afternoon and early evening. Snow late afternoon continued. This is the earliest for 2.5 cm or more since records began. Some power outages. Mostly light winds. Visibility restricted in snow and light fog.
25. Cold. Cloudy. Snow till late morning. Snow pellets in afternoon. Visibility restricted in snow and light fog in morning. Light winds.
26. Cold. Mostly cloudy. Rain showers late morning and early afternoon. Light winds.
27. Cold. Mostly cloudy. Rain showers in morning. Snow pellets in early afternoon. Light winds.
28. Cold. Mostly sunny. Light winds.
29. Below normal temperatures. Mostly sunny. Light winds.
30. Cold. Mostly sunny. Light winds.

HOURLY DEWPOINT TEMPERATURES AT WINNIPEG INTERNATIONAL AIRPORT FOR THE MONTH OF SEPTEMBER 1984
 LOCAL STANDARD TIME

ALL TEMPERATURES IN DEGREES CELSIUS

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.	5.5	4.7	2.7	5.2	5.4	5.3	5.7	5.8	6.1	6.7	6.2	6.1	6.5	6.1	6.1	6.7	6.5	6.5	6.8	6.5	7.4	7.0	6.8	6.2
2.	6.7	6.0	6.6	6.3	5.8	6.5	7.4	7.4	7.7	8.5	8.3	8.4	8.5	7.8	8.4	9.0	8.2	7.7	8.6	8.6	8.3	8.1	8.1	8.1
3.	7.5	8.0	7.0	7.2	6.8	5.6	6.6	7.4	9.2	9.0	9.3	9.4	9.0	10.5	10.4	10.4	10.2	10.2	9.8	8.8	8.3	7.5	7.1	6.1
4.	6.1	7.0	6.0	7.0	6.5	5.5	4.5	4.7	9.0	10.8	10.4	9.2	7.8	8.6	7.2	6.7	7.4	6.9	7.8	9.8	7.4	8.3	6.8	6.6
5.	6.6	6.6	5.9	4.6	4.7	4.2	4.9	6.1	7.6	8.1	7.3	6.6	5.5	5.3	5.1	5.3	4.7	4.2	5.1	5.8	6.1	6.1	6.1	6.6
6.	6.6	7.0	6.9	7.5	7.8	8.0	7.8	8.1	8.7	9.6	9.7	10.0	10.2	11.4	10.7	10.8	11.4	11.2	11.2	11.5	11.5	11.7	12.0	11.9
7.	12.0	12.1	12.2	12.4	13.3	13.9	13.2	13.4	13.1	13.4	12.6	11.3	10.7	10.5	9.2	4.8	4.2	4.6	3.8	6.5	7.2	7.2	6.9	6.7
8.	6.7	6.9	7.0	6.7	6.8	6.7	6.8	7.8	8.6	9.2	9.4	9.5	9.5	9.2	9.3	11.3	10.6	10.6	11.3	10.4	11.1	10.7	10.6	9.7
9.	9.5	9.5	9.4	9.2	8.7	8.3	8.2	8.6	7.7	7.9	7.5	7.0	6.3	6.4	5.4	7.1	6.7	6.2	5.6	5.8	6.5	6.5	6.7	6.4
10.	6.0	6.0	6.0	5.8	5.6	5.4	5.2	5.4	5.8	6.1	5.8	6.0	5.1	4.8	6.1	5.4	5.7	6.1	7.4	6.6	7.4	7.4	6.1	5.6
11.	6.5	5.3	4.2	3.0	2.8	4.0	3.3	3.8	7.0	6.3	5.7	4.3	3.3	2.0	2.2	3.2	2.7	3.8	3.8	4.3	4.2	5.0	5.0	5.5
12.	6.9	7.2	6.8	7.3	7.3	7.1	9.2	9.6	10.2	10.2	10.5	10.7	10.5	11.2	11.7	12.0	12.3	12.2	11.8	10.9	10.8	11.0	10.9	10.9
13.	10.3	10.9	10.5	10.0	8.6	7.4	6.9	7.1	7.8	6.6	6.4	6.7	4.8	6.1	4.5	4.7	7.6	8.6	7.4	8.1	7.4	6.5	6.1	5.5
14.	4.3	2.3	2.5	1.8	3.1	3.3	3.8	4.3	5.4	5.9	7.2	5.8	4.2	4.1	3.7	3.8	1.6	3.5	3.1	3.8	4.1	4.0	4.0	3.2
15.	2.9	2.8	3.3	2.6	2.4	2.1	2.1	2.3	3.2	4.3	3.9	4.9	1.7	2.5	1.1	1.2	.7	1.5	1.1	3.1	2.8	3.8	2.8	2.1
16.	1.9	1.7	1.7	1.8	2.1	1.7	1.5	1.8	3.7	5.4	7.4	7.9	8.4	4.0	4.0	4.0	3.5	3.1	5.1	4.7	4.6	5.0	5.4	6.0
17.	6.2	6.4	6.3	6.2	6.2	6.2	6.0	6.0	7.0	8.3	10.6	11.1	11.6	10.3	9.1	6.8	6.0	6.2	7.5	8.0	7.0	6.1	5.1	6.8
18.	7.7	7.8	8.0	8.0	8.2	9.4	9.5	9.6	10.8	9.6	8.0	8.1	5.9	5.8	5.4	4.4	3.8	3.9	5.4	5.1	6.6	6.1	6.9	6.9
19.	6.1	6.2	6.4	6.2	4.2	4.5	4.8	5.4	5.8	7.4	7.0	7.8	8.0	9.4	7.8	7.0	4.2	3.7	2.6	3.1	3.4	4.0	4.7	5.2
20.	5.5	5.4	5.5	5.4	5.6	5.3	4.3	4.8	6.2	6.9	5.7	5.8	4.3	4.6	3.7	3.1	3.3	2.8	2.2	3.2	4.4	3.5	5.2	5.8
21.	8.7	8.9	9.1	8.4	8.6	7.4	7.3	7.6	7.9	8.0	8.0	8.1	7.8	9.0	8.5	9.0	9.2	8.6	8.6	8.6	8.6	9.2	11.6	11.9
22.	12.7	10.9	9.5	9.7	9.5	9.1	9.0	8.8	7.8	6.8	4.7	4.7	5.0	3.8	3.5	3.0	2.9	2.0	.4	-.2	-2.1	-2.1	-2.4	-2.3
23.	-2.3	-2.6	-2.5	-1.9	-5	1.0	.6	-1.3	-2	-3	-3	-2	-3	-1.0	-9	-1.6	-1.5	-.7	-1.5	-.2	0.0	-.5	-.4	-.6
24.	-3	-1	-1	0.0	-2	-1.3	-1.7	-2.3	-1.3	-8	-6	0.0	-6	-.9	-1.1	-.3	0.0	.5	.2	.2	.1	.2	-.2	-.2
25.	-3	-5	-5	-7	-5	-7	-7	-7	-6	-6	-1	-2	-5	-4	-9	-8	-1.3	-2.3	-.7	-1.1	-1.5	-1.8	-1.6	-1.7
26.	-1.9	-1.8	-1.3	-1.3	-1.7	-2.0	-2.5	-2.3	-1.9	-1.4	.8	1.4	1.1	2.4	2.7	1.3	-.3	-5.3	-3.7	-4.5	-3.4	-1.6	-1.0	-1.0
27.	-1.8	-1.0	-1.1	-.8	-.8	-1.9	-2.6	-2.4	.7	1.5	1.7	.6	3.0	1.0	-2.0	-3.2	-5.1	-3.1	-3.0	-3.2	-3.8	-3.8	-4.1	-4.5
28.	-4.3	-4.2	-3.5	-3.0	-3.1	-3.1	-3.2	-3.3	-2.2	-1.3	0.0	.5	1.0	-1.2	-2.0	-2.6	-4.0	-3.2	-2.7	-3.8	-3.1	-3.3	-3.3	-3.5
29.	-3.6	-3.6	-3.4	-2.4	-2.9	-2.9	-3.2	-3.2	-2.6	-1.6	-1.0	-1.8	-2.0	-3.6	-2.8	-3.9	-4.1	-4.4	-3.2	-2.9	-2.9	-2.9	-2.1	-2.7
30.	-2.7	-3.0	-3.9	-3.9	-4.3	-4.3	-4.0	-2.3	-.1	2.3	3.7	1.0	-.6	-2.7	-.7	-2.3	-1.3	-1.1	-1.4	-2.5	-2.5	-2.5	-1.5	-1.6

MEAN	4.5	4.4	4.2	4.3	4.2	4.1	4.0	4.3	5.3	5.0	5.9	5.7	5.2	4.9	4.5	4.2	3.9	3.8	4.0	4.2	4.2	4.2	4.3	4.2
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MEAN DAILY DEWPOINT BASED ON HOURLY READINGS

DATE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MEAN	6.0	7.7	8.4	7.4	5.8	9.7	9.8	9.1	7.4	6.0	4.2	10.0	7.4	3.9	2.6	4.1

MEAN DAILY DEWPOINT BASED ON HOURLY READINGS

DATE	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MEAN	7.4	7.1	5.6	4.7	8.7	4.8	-.7	-.3	-.8	-1.1	-1.6	-2.5	-2.8	-1.7

NOTE: AS OF JANUARY 1 1983, HOURLY DEWPOINT TEMPERATURES HAVE REPLACED HOURLY WETBULB TEMPERATURES IN THIS PUBLICATION.

16	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	S	S	1603	S	54
17	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	S	S	0011	S	37
18	SW	WSW	WSW	W	WNW	WNW	W	WNW	WNW	W	WNW	WNW	W	WNW	WNW	W	WNW	WNW	W	WNW	WNW	W	WNW	WNW	W	WNW	1308	WNW	41	
19	E	SE	SSE	SE	ESE	SE	SE	ESE	SE	SSE	SW	W	WNW	WNW	W	WNW	WNW	W	WNW	WNW	W	WNW	WNW	W	WNW	WNW	1626	NW	54	
20	WNW	WNW	W	W	WSW	WSW	WSW	SW	WSW	WSW	SW	WSW	WSW	WSW	W	WSW	WNW	W	WNW	WNW	W	WNW	WNW	W	WNW	WNW				
21	S	SSW	NNE	E	ENE	E	E	ENE	ENE	E	ENE	E	E	ENE	E	ENE	E	ENE	E	ENE	E	ENE	E	ENE	E	ENE	1245	NE	61	
22	E	SW	SSW	SW	SSW	SSW	S	S	SSW	SW	SSW	S	S	SSW	SSW	S	S	SSW	SSW	S	S	SSW	SSW	S	S	SSW	1551	SW	69	
23	WSW	WSW	W	W	W	W	W	WNW	W	WNW	W	W	WNW	W	WNW	W	WNW	W	WNW	W	WNW	W	WNW	W	WNW	W	1145	NW	41	
24	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1248	N	33
25	N	NNW	NNW	NW	NNW	NNW	NW	NNW	NW	NNW	NW	NNW	NW	NNW	NW	NNW	NW	NNW	NW	NNW	NW	NNW	NW	NNW	NW	NNW	SSW			
26	SW	SW	SW	WSW	WSW	WSW	WSW	W	C	W	NW	W	NNW	W	NNW	W	NNW	W	NNW	W	NNW	W	NNW	W	NNW	W	WSW			
27	SW	SW	SW	W	W	W	W	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	WSW			
28	W	W	WSW	WSW	WSW	WSW	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	WSW			
29	SSW	SW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	W	WSW	WSW	W	WSW	WSW	W	WSW	WSW	W	WSW	WSW	W	WSW	WSW	W	WNW			
30	NW	NW	NW	NNW	NNW	NNW	NW	NNW	NNW	NW	NNW	NNW	NW	NNW	NNW	NW	NNW	NNW	NW	NNW	NNW	NW	NNW	NNW	NW	NNW	ESE			

MEAN 12.5 13.8 13.5 13.0 12.8 12.9 13.0 13.9 16.2 16.5 17.4 17.9 13.6 11.5 11.4
 12.5 13.2 12.9 13.0 12.8 12.8 13.0 13.9 16.2 16.6 18.5 18.5 15.7 11.7 11.9 12.6