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# MONTHLY METEOROLOGICAL SUMMARY SOMMAIRE MÉTÉOROLOGIQUE MENSUEL



MONTH/MOIS NOVEMBER / NOVEMBRE

1979

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

LAT: 49° 54' N		LONG: 97° 14' W		ELEVATION: METRES (ASL) ALTITUDE: 239.6 MÈTRES (NMM)		STANDARD TIME USED: HEURE NORMALE UTILISÉE: 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 HEURES	
	MAXIMUM MAXIMALE	MINIMUM MINIMALE	MEAN MOYENNE	HEATING DE CHAUFFE	GROWING DE CROISSANCE	MAXIMUM MAXIMALE	MINIMUM MINIMALE		RAINFALL PLUIE (HAUTEUR)	SNOWFALL NEIGE (HAUTEUR)	TOTAL PRECIP. PRÉCIP. TOTALE		AVERAGE SPEED VITESSE MOYENNE	PREVAILING DIRECTION DOMINANTE	MAXIMUM SPEED AND DIRECTION VITESSE MAXIMALE ET DIRECTION		
	°C	°C	°C	BASE 18.0°C	BASE 5.0°C	%	%		mm	cm	mm		km/h		km/h		
1	-0.2	-2.9	-1.6	19.6	0.0	100	85			2.7	2.7	3	43.1	NW	NW 57	0.0	
2	1.5	-1.0	0.3	17.7	0.0	98	67			1.3	1.3	4	29.6	NNW	NW 39*	2.0	
3	2.0	-2.0	0.0	18.0	0.0	89	60			Tr.	Tr.	2	8.0	S	NNW19	4.4	
4	2.0	-7.0	-2.5	20.5	0.0	96	78					2	7.8	calm	NNW24	2.7	
5	-1.1	-3.5	-2.3	20.3	0.0	91	67			Tr.	Tr.	2	12.5	N	NNW24	0.3	
6	2.0	-4.8	-1.4	19.4	0.0	84	60					2	16.3	W	W 30	9.0	
7	-2.0	-14.9	-8.5	26.5	0.0	92	71			1.6	1.4	2	15.5	NNW	N 35	1.6	
8	-7.5	-16.0	-11.8	29.8	0.0	89	62			Tr.	Tr.	3	6.2	calm	NW 13*	5.3	
9	-5.2	-16.9	-11.1	29.1	0.0	91	67			0.2	0.2	3	7.2	NNW	NNW15	3.9	
10	-7.5	-14.0	-10.8	28.8	0.0	89	73			0.4	0.2	3	10.8	S	SSE20	2.2	
11	-7.2	-12.8	-10.0	28.0	0.0	88	76			2.2	2.2	5	10.9	SSE	NW 17	2.7	
12	-1.5	-14.7	-8.1	26.1	0.0	96	70			0.8	0.8	6	15.3	WSW	W 24	4.1	
13	-2.5	-18.1	-10.3	28.3	0.0	91	60			Tr.	Tr.	6	15.0	N	NNE33	8.0	
14	1.2	-9.0	-3.9	21.9	0.0	98	73		0.6	0.2	1.0	6	13.5	SSW	SSW30	0.0	
15	0.7	-1.3	-0.3	18.3	0.0	97	83		Tr.		Tr.	4	11.6	S	SSW31	0.0	
16	7.5	-1.8	2.9	15.1	0.0	95	48					4	22.8	SSW	SSW37*	8.1	
17	6.8	-2.9	2.0	16.0	0.0	93	59					1	12.0	S	S 20*	3.3	
18	7.4	-3.8	1.8	16.2	0.0	97	57					Tr.	6.1	SSE	S 13*	7.5	
19	1.8	-3.2	-0.7	18.7	0.0	97	76		Tr.		Tr.	Tr.	19.0	NW	NW 31*	0.5	
20	3.7	-7.4	-1.9	19.9	0.0	94	52					Tr.	11.0	WNW	NW 20	8.6	
21	3.8	-9.5	-2.9	20.9	0.0	92	55					Tr.	7.3	WNW	WNW15*	7.3	
22	3.3	-8.1	-2.4	20.4	0.0	89	55					Tr.	8.5	S	SSW15*	8.5	
23	-5.2	-11.2	-8.2	26.2	0.0	95	88			Tr.	Tr.	Tr.	13.8	N	NNE26	0.0	
24	-4.8	-8.8	-6.8	24.8	0.0	93	86			2.2	1.8	Tr.	8.9	W	WSW17	0.0	
25	-4.5	-9.2	-6.9	24.9	0.0	89	80			1.4	0.6	2	9.0	S,SSE	SE15	0.0	
26	-5.1	-7.7	-6.4	24.4	0.0	92	84			0.4	0.4	3	13.8	E	N 20	0.0	
27	-5.5	-9.9	-7.7	25.7	0.0	90	84			2.2	1.8	4	26.3	NNW	NNW37*	0.0	
28	-5.7	-12.4	-9.1	27.1	0.0	89	74			0.4	0.2	5	38.8	N	N 50	5.2	
29	-6.8	-12.1	-9.5	27.5	0.0	89	80			0.2	Tr.	5	19.3	NW	NNW28	0.1	
30	-6.6	-14.4	-10.5	28.5	0.0	89	69			Tr.	Tr.	5	17.1	NNW	NE 30	5.4	
31																	
MEAN MOYENNE	-1.2	-8.7	-5.0	688.6	0.0	92	70			0.6	16.2	14.6		15.2	PREVAILING NNW DOMINANTE	MAXIMUM NW 57	TOTAL 100.7
NORMAL NORMALE	-0.5	-8.4	-4.4	674.1	2.5	87	62			7.1	21.3	27.2		20.3	SOUTH	57	81.2

DEGREE-DAY SUMMARY - SOMMAIRE DE DEGRÉS-JOURS

DAYS WITH TOTAL PRECIPITATION:  
JOURS AVEC PRÉCIPITATIONS  
TOTALES:

DAYS WITH SNOWFALL:  
JOURS AVEC CHÔTE 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	mm					cm					
								0.2 OR MORE OU PLUS	1.0 OR MORE OU PLUS	2.0 OR MORE OU PLUS	10.0 OR MORE OU PLUS	50.0 OR MORE OU PLUS	0.2 OR MORE OU PLUS	1.0 OR MORE OU PLUS	2.0 OR MORE OU PLUS	10.0 OR MORE OU PLUS	50.0 OR MORE OU PLUS	
TOTAL FOR MONTH TOTAL DU MOIS	688.6	791.2	674.1	TOTAL FOR MONTH TOTAL DU MOIS	0.0	11.0	2.5											
ACCUMULATED SINCE JULY 1 ACCUMULÉE DEPUIS LE 1 <sup>er</sup> JUILLET	1352.9	1382.6	1263.0	ACCUMULATED SINCE APRIL 1 ACCUMULÉE DEPUIS LE 1 <sup>er</sup> AVRIL	1574.6	1857.9	1787.8	13	7	2	0	0	14	7	3	0	0	0

UDC 551.506.1 ( )

\*Indicates more than one occurrence  
of same speed but not necessarily the same direction.

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COMPARATIVE RECORDS RELEVÉS COMPARATIFS		MONTH MOIS NOVEMBER / NOVEMBRE											1979
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 (mm) - Millimètres (mm) - Centimètres (cm) - Kilomètres par heure (km/h) - Kilopascals (kPa)	THIS MONTH CE MOIS-CI		PREVIOUS YEAR ANNÉE PRÉCÉDENTE		NORMAL NORMALE	RECORD FOR THE MONTH RECORD POUR LE MOIS						YEARS OF RECORD ANNÉES D'OBSERVATIONS
		VALUE RELEVÉ	DATE	VALUE RELEVÉ	DATE		HIGHEST MAXIMUM ABSOLU			LOWEST MINIMUM ABSOLU			
							VALUE RELEVÉ	DAY JOUR	YEAR ANNÉE	VALUE RELEVÉ	DAY JOUR	YEAR ANNÉE	
HIGHEST TEMPERATURE TEMPÉRATURE LA PLUS ÉLEVÉE		7.5	16	17.3	2	10.7	23.9	5	1975	2.2	5	1972	108
LOWEST TEMPERATURE TEMPÉRATURE LA PLUS BASSE		-18.1	13	-30.7	20	-23.5	-7.8	12	1899	-36.7	28	1875	108
MEAN MONTHLY TEMPERATURE TEMPÉRATURE MENSUELLE MOYENNE		-5.0		-8.4		-4.4	1.3		1923	-13.9		1896	108
TOTAL MONTHLY RAINFALL HAUTEUR TOTALE MENSUELLE DE PLUIE		0.6		8.2		7.1	62.2		1918	Nil	(Several)		108
TOTAL MONTHLY SNOWFALL HAUTEUR TOTALE MENSUELLE DE NEIGE		16.2		36.4		21.3	80.3		1955	Tr.		1928	108
TOTAL MONTHLY PRECIPITATION PRÉCIPITATION TOTALE MENSUELLE		14.6		42.6		27.2	90.2		1955	0.8		1976 1976	108
NO OF DAYS WITH MEASURABLE PRECIPITATION NOMBRE DE JOURS AVEC PRÉCIPITATION MESURABLE		13		14		10	20		1955	1		1901	96
GREATEST RAINFALL IN ONE DAY HAUTEUR DE PLUIE MAXIMALE EN UNE JOURNÉE		0.6	14	8.2	4		44.5	17	1918				108
GREATEST SNOWFALL IN ONE DAY HAUTEUR DE NEIGE MAXIMALE EN UNE JOURNÉE		2.7*	1	12.2	13*		31.0	10	1919				108
GREATEST PRECIPITATION IN ONE DAY PRÉCIPITATION MAXIMALE EN UNE JOURNÉE		2.7*	1	10.0*	13*		44.5	17	1918				108
MAXIMUM RAINFALL RECORDED IN: HAUTEUR DE PLUIE MAXIMALE ENREGISTRÉE EN:													
5 MINUTES				0.5	4		1.3	14	1971				11
10 MINUTES				0.8	4		1.8	14	1971				11
15 MINUTES				1.0	4		2.0	14	1971				11
30 MINUTES				2.0	4		2.8	14	1971				11
60 MINUTES				3.3	4		3.8	14	1971				11
24 CONSECUTIVE HOURS HEURES CONSECUTIVES		0.6	14	8.2	4		44.5	17	1918				108
MEAN WIND SPEED (km/h) VITESSE MOYENNE DU VENT (km/h)		15.2		16.1		20.3	25.4		1953	13.7		1972	59
MAXIMUM SPEED (1 min.) (km/h) VITESSE MAXIMALE (1 min.) (km/h)		NW57	1	W59	5	57	NW80	5	1952				41
MAXIMUM GUST SPEED (km/h) POINTE DU VENT MAXIMALE (km/h)		NW74	1	W106	5	81	NNW124	21	1960				34
TOTAL HOURS OF SUNSHINE TOTAL DES HEURES INSOLATION		100.7		99.6		81.2	139.7		1976	25.1		1944	80
MEAN STATION PRESSURE (kPa) PRESSION MOYENNE À LA STATION (kPa)		98.69		98.89		98.63	99.19		1943	98.20		1949	41
GREATEST STATION PRESSURE (kPa) PRESSION MAXIMALE À LA STATION (kPa)		100.29	5	101.52	20	100.54	101.52	20	1978				41
LEAST STATION PRESSURE (kPa) PRESSION MINIMALE À LA STATION (kPa)		96.93	18	96.05	8	96.35				94.56	20	1962	41
CLIMATOLOGICAL DATA FOR THE PAST TEN (10) YEARS DONNÉES CLIMATOLOGIQUES POUR LES DERNIÈRES ANNÉES													
YEAR ANNÉE	MAXIMUM TEMP. MAXIMALE	MINIMUM TEMP. MINIMALE	MEAN TEMP. MOYENNE	RAINFALL HAUTEUR DE PLUIE	SNOWFALL HAUTEUR DE NEIGE	TOTAL PRECIP. TOTALE	MEAN WINDSPEED VITESSE MOYENNE DES VENTS	MAXIMUM WINDSPEED VITESSE MAXIMALE DES VENTS	HOURS SUNSHINE HEURES INSOLATION	HEATING DEGREES-DAYS DE CHAUFFE	GROWING DEGREES-DAYS DE CROISSANCE		
1970	11.7	-23.3	-4.7	14.2	16.8	26.7	17.5	S 56	70.3	678.3			
1971	4.4	-23.9	-5.6	5.3	18.8	22.4	16.4	S 48	74.3	704.4			
1972	2.2	-21.7	-6.7	1.0	17.0	10.4	13.7	NNW42	51.6	737.2			
1973	3.3	-21.7	-7.5	6.9	37.1	40.1	16.6	W 42 S 42	77.6	760.6			
1974	11.7	-18.3	-3.3	0.8	10.4	5.6	18.5	NW 45	87.8	635.6	2.2		
1975	23.9	-25.4	-2.0	2.3	15.5	13.0	16.4	S 40 NNE40	122.9	598.4	28.9		
1976	13.3	-26.7	-5.9	Tr.	1.7	0.8	20.3	WNW56	139.7	714.7	3.4		
1977	17.8	-25.3	-4.8	0.6	28.4	28.4	19.9	N 70	102.1	682.6	14.6		
1978	17.3	-30.7	-8.4	8.2	36.4	42.6	16.1	W 59	99.6	791.2	11.0		
1979	7.5	-18.1	-5.0	0.6	16.2	14.6	15.2	NW 57	100.7	688.6			

November 1-2 (24 hours) 3.3 CM snow  
3.3 MM precipitation

November 12-13 17.6 CM snow  
16.4 MM precipitation

November was a dry month, only 14.6 MM of precipitation was recorded and of this total 16.2 CM fell in snow. The normal precipitation is 27.2 MM. Although there were 17 consecutive days, the longest period this year, where mean temperatures were above normal. The monthly mean of -5.0 ended up slightly below the normal -4.4. The high temperature for the month was 7.5 on the 16th while the low was -18.1 on the 13th. Sunshine was above normal 100.7 hours as compared to the normal 81.2. Winds were lighter than normal with a mean of 15.2 the normal is 20.3 Km/h. There were 13 days with measurable precipitation; 3 more than normal.

## DAILY WEATHER SUMMARY FOR NOVEMBER 1979

AT WINNIPEG, MANITOBA

1. Below normal temperatures. Cloudy. Snow all day. Blow snow 7:16 a.m. to 8:10, 9:45 a.m. to 10:37 a.m. Drifting snow. Strong NW winds gusting to 74 Kms. Visibility reduced in snow. Power outages.
2. Near normal temperatures. Mostly cloudy. Snow or flurries to 2:47 p.m. Drifting snow. Moderate NW winds gusting to 59 Kms in the morning. Visibility reduced in snow.
3. Normal temperatures. Sunny in early afternoon otherwise cloudy. Snow grains 3:45 a.m. to 4:10 a.m. Light winds.
4. Below normal temperatures. Mostly cloudy. Mostly light winds.
5. Below normal temperatures. Mostly cloudy. Light snow 5:48 a.m. to 1:14 p.m. Light winds. Visibility slightly restricted in snow.
6. Slightly below normal temperatures. Mostly sunny. Mostly light winds.
7. Below normal temperatures. Mostly cloudy. Snow or snow flurries 3:47 a.m. to 1:22 p.m., 2:35 p.m. to 6:11 p.m. Visibility severely restricted in snow. Mostly light winds but occasional NNW to NNE gusts in evening. Roads very icy, traffic very slow.
8. Cold. Partly cloudy. Ice crystals 7:55 to 9:11 a.m., 10:55 p.m. continued. Light snow 6:40 p.m. to 10:55 p.m. Light winds.
9. Cold. Partly cloudy. Ice crystals to 00:30 a.m., 10:45 a.m. to 10:52 a.m. Snow 10:12 a.m. to 10:45 a.m. Flurries 01:18 p.m. to 2:13 p.m. Visibility severely restricted in snow. Light winds.
10. Cold. Partly cloudy. Snow 4:42 a.m. to 10:39 a.m., 11:34 a.m. to 6:31 p.m. Ice crystals 10:39 a.m. to 11:34 a.m. Visibility restricted in snow. Light winds.
11. Cold. Partly cloudy. Snow 00:11 a.m. to 12:41 p.m., 5:46 p.m. to 7:45 p.m. Ice crystals 6:25 a.m. to 7:30 a.m. Visibility slightly restricted in snow. Light winds.
12. Below normal temperatures. Partly cloudy. Snow 8:17 p.m. continued. Mostly light winds but gusty west wind near noon. Visibility restricted in snow.
13. Cold. Light snow to 2:15 a.m. Sunny. Mostly light winds but drifting snow in morning. Gustly NNE winds in morning. Smoke over the city in the evening.
14. Slightly above normal temperatures. Cloudy. Light rain 5:05 p.m. to 8:56 p.m. Snow 5:14 p.m. to 10:55 p.m. Drizzle 8:56 p.m. continued. Cloudy. Light fog in evening. Visibility reduced. Mostly light winds.
15. Above normal temperatures. Cloudy. Drizzle to 00:21 a.m. Light winds except gusty SSW winds late evening. Occasional light fog. Visibility slightly restricted.
16. Mild. Mostly sunny. Light fog in morning. Moderate winds. Gustly south to SSW winds to 54 Km early morning.
17. Mild. Partly cloudy. Light winds.
18. Mild. Sunny. Light winds.
19. Above normal temperatures. Mostly cloudy. Drizzle 2:45 p.m. to 5:25 p.m. Light fog. Visibility slightly restricted. Mostly light winds but gusty NW winds in the afternoon.
20. Above normal temperatures. Sunny. Light winds.
21. Above normal temperatures. Sunny. Light winds.
22. Above normal temperatures. Sunny. Light winds.
23. Near normal temperatures. Cloudy. Heavy fog 6:22 a.m. to 10:50 a.m. Visibility severely restricted. Light fog till early afternoon. Snow grains 10:55 a.m. to 11:40 a.m., 1:39 p.m. to 6:41 p.m. Light snow or ice crystals 6:41 p.m. continued. Mostly light winds.
24. Above normal temperatures. Cloudy. Snow or snow flurries all day. Light winds. Light fog in morning. Visibility restricted most of the day.
25. Above normal temperatures. Cloudy. Snow ending 11:37 p.m. Visibility restricted in late morning and in afternoon. Light winds.
26. Above normal temperatures. Cloudy. Light winds. Snow or snow grains 01:17 a.m. to 08:15 a.m. Snow 5:14 p.m. continued. Visibility slightly restricted in evening.
27. Above normal temperatures. Cloudy. Snow all day. Visibility restricted. Drifting snow. Moderate NW to north winds.
28. Above normal temperatures. Cloudy clearing late morning. Snow to 10:58 a.m. Ice crystals 10:00 p.m. continued. Blowing snow 00:15 a.m. to 12:15 p.m. Visibility restricted in morning. Moderate NNW to NE winds gusting to 72 Kms. Drifting snow.
29. Above normal temperatures. Cloudy. Ice crystals to 00:16 a.m., 4:20 a.m. to 4:40 a.m. Snow or flurries 4:40 a.m. to 2:10 p.m. Visibility slightly restricted in morning. Mostly light winds.
30. Above normal temperatures. Partly cloudy. Snow or flurries 5:42 a.m. to 12:35 p.m., 2:20 p.m. to 8:10 p.m. Ice crystals 12:15 p.m. to 12:45 p.m. Light fog in the afternoon and early evening. Visibility restricted. Mostly light winds.

HOURLY TEMPERATURES AT WINNIPEG INTERNATIONAL AIRPORT FOR THE MONTH OF NOVEMBER 1979  
 LOCAL STANDARD TIME

ALL TEMPERATURES IN DEGREES CELSIUS

	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	-1.6	-1.9	-1.1	-1.1	-1.5	-2.0	-2.5	-2.7	-1.7	-1.0	-1.6	-1.6	-1.9	-1.4	-1.5	-1.5	-1.8	-1.8	-1.5	-1.7	-1.0	-1.0	-1.0
	-1.0	-1.2	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.2	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
	-1.8	-1.7	-1.5	-1.4	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5
	-2.0	-2.9	-3.5	-4.5	-5.4	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2
	-2.5	-1.5	-1.4	-1.6	-2.0	-2.2	-2.6	-3.1	-3.5	-3.1	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6
	-2.1	-2.5	-2.4	-2.2	-2.8	-2.4	-2.9	-4.0	-4.6	-3.9	-2.4	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8
	-2.1	-2.6	-3.0	-3.2	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6
	-14.9	-14.5	-13.8	-15.1	-14.9	-15.2	-14.8	-14.0	-13.1	-13.4	-11.6	-9.6	-8.1	-7.5	-8.1	-8.1	-8.2	-8.4	-9.1	-9.4	-9.5	-9.1	-11.5	-11.9
	-14.5	-15.0	-13.5	-13.5	-13.5	-13.5	-14.0	-12.2	-13.0	-11.4	-9.6	-8.0	-7.9	-5.8	-7.5	-7.5	-8.6	-9.8	-11.0	-13.3	-14.0	-13.8	-12.5	-12.8
	-12.5	-13.0	-13.3	-14.0	-12.5	-11.0	-10.4	-10.7	-10.7	-10.1	-9.2	-9.2	-9.1	-8.5	-8.0	-8.2	-8.9	-8.9	-9.0	-11.5	-11.5	-11.1	-10.9	-10.9
	-11.2	-10.5	-9.6	-9.6	-9.3	-9.3	-8.8	-8.8	-8.5	-8.0	-7.6	-9.1	-9.2	-9.2	-8.6	-8.8	-9.5	-9.9	-9.8	-10.5	-8.6	-10.4	-11.6	-12.4
	-12.8	-13.2	-13.7	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5	-14.5
	-2.5	-3.2	-5.0	-6.5	-8.8	-10.5	-11.8	-14.2	-17.8	-16.2	-14.2	-12.8	-12.2	-11.2	-10.3	-10.1	-10.9	-11.5	-12.0	-11.0	-12.0	-11.4	-10.4	-9.9
	-9.0	-8.2	-7.5	-6.8	-6.2	-6.0	-5.4	-4.3	-3.8	-2.8	-1.8	-1.9	-1.2	-1.5	-1.1	-1.2	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
	0.0	.1	.1	0.0	-0.2	-0.5	-0.8	-1.0	-1.2	-1.1	-1.0	-1.1	-1.2	-1.0	-0.7	-0.8	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7
	.4	.2	-.2	-.3	-.1	-.1	.2	.2	.4	1.0	2.4	4.8	5.9	7.4	7.4	7.0	6.6	4.4	4.8	3.4	3.3	2.1	1.9	.7
	-1.8	-2.1	-1.9	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
	-3.0	-3.2	-3.0	-2.6	-3.2	-3.0	-2.0	-3.5	-3.4	-1.6	2.6	4.0	5.5	6.5	7.2	6.5	3.9	3.2	2.3	1.5	1.3	.8	-2.2	-3.5
	-1.9	-1.9	-2.8	-3.1	-4.4	-4.4	-4.7	-6.0	-7.4	-4.4	-2.4	-1.8	1.2	1.5	1.7	1.4	1.6	1.3	1.4	1.4	1.8	1.7	1.4	1.1
	-3.2	-3.7	-6.8	-6.5	-8.1	-8.2	-8.6	-8.7	-8.5	-6.8	-4.1	-1.8	1.2	2.2	3.0	3.2	2.4	0.0	-2.2	-1.6	-2.6	-2.8	-4.0	-3.3
	-3.4	-3.2	-4.4	-6.8	-6.8	-6.9	-7.5	-6.5	-7.6	-5.8	-2.9	-1.3	1.1	2.3	2.8	2.9	1.0	1.0	-2.5	-2.8	-3.7	-3.2	-3.8	-3.8
	-6.5	-9.1	-8.7	-9.9	-10.0	-10.8	-9.4	-6.8	-6.0	-6.0	-5.6	-5.5	-5.5	-6.1	-6.8	-6.5	-6.8	-7.2	-7.1	-7.2	-7.0	-5.0	-6.3	-6.3
	-7.6	-7.6	-7.4	-7.3	-7.2	-7.2	-7.1	-6.8	-6.4	-6.2	-6.0	-5.7	-5.3	-5.1	-4.9	-5.1	-5.2	-5.7	-5.7	-6.4	-7.0	-7.3	-7.6	-8.3
	-8.8	-8.3	-7.5	-7.5	-7.4	-7.6	-7.5	-7.3	-7.1	-6.9	-6.1	-5.4	-5.2	-5.0	-4.7	-4.6	-4.7	-4.8	-4.7	-4.8	-4.8	-4.9	-5.0	-5.0
	-5.2	-5.1	-5.1	-5.4	-5.6	-5.7	-5.9	-6.0	-6.1	-6.0	-5.8	-5.6	-5.7	-5.6	-5.5	-5.5	-5.5	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6
	-7.7	-8.1	-8.8	-9.1	-8.8	-7.0	-7.2	-7.5	-7.7	-7.5	-7.2	-6.7	-6.3	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2
	-7.1	-7.0	-7.2	-6.8	-6.0	-6.0	-6.0	-6.6	-7.4	-7.8	-8.2	-7.7	-7.2	-6.2	-6.0	-6.0	-7.2	-7.8	-9.1	-9.9	-11.2	-10.8	-11.2	-11.4
	-12.0	-12.1	-10.8	-10.8	-10.9	-10.7	-9.9	-9.5	-9.8	-10.2	-9.6	-9.0	-8.5	-8.2	-7.8	-7.8	-7.8	-7.5	-8.0	-7.9	-8.1	-7.3	-7.6	-7.2
	-6.8	-6.8	-7.0	-8.2	-9.8	-10.7	-12.3	-10.1	-11.8	-11.8	-10.2	-11.0	-11.1	-11.0	-11.7	-11.8	-11.9	-12.2	-12.2	-12.3	-12.3	-12.3	-13.0	-14.0
	-5.3	-5.5	-5.6	-6.0	-6.1	-6.0	-6.0	-5.9	-6.3	-5.5	-4.5	-3.7	-3.0	-2.4	-2.2	-2.3	-2.8	-3.4	-3.9	-4.3	-4.8	-4.7	-5.1	-5.5

HOURLY METEOROLOGICAL TEMPERATURES AT WINNIPEG INTERNATIONAL AIRPORT FOR THE MONTH OF NOVEMBER 1979

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	24	25	26	27	28	29	30	
1	-1.2	-1.0	-1.2	-1.5	-2.0	-2.5	-2.8	-2.7	-2.2	-1.6	-1.4	-1.4	-1.2	-1.4	-1.0	-1.1	-1.0	-1.3	-1.2	-1.0	-1.2	-1.4	-1.2	-1.4	-1.2	-1.4	-1.2	-1.4	-1.2	-1.4	-1.2	
2	-1.2	-1.0	-1.2	-1.5	-2.0	-2.5	-2.8	-2.7	-2.2	-1.6	-1.4	-1.4	-1.2	-1.4	-1.0	-1.1	-1.0	-1.3	-1.2	-1.0	-1.2	-1.4	-1.2	-1.4	-1.2	-1.4	-1.2	-1.4	-1.2	-1.4	-1.2	
3	-2.1	-2.5	-2.2	-2.0	-2.2	-2.1	-2.1	-2.1	-2.0	-1.9	-1.8	-1.8	-1.6	-1.0	-0.8	-0.8	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	
4	-2.5	-3.3	-3.8	-4.7	-5.6	-6.3	-6.6	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	
5	-2.6	-1.9	-1.9	-2.1	-2.6	-3.0	-3.8	-4.0	-4.0	-3.5	-3.5	-3.4	-2.9	-3.2	-3.4	-3.4	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	
6	-3.3	-3.3	-3.6	-3.3	-3.8	-4.0	-4.2	-4.4	-4.0	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	
7	-3.1	-3.3	-3.7	-4.0	-4.1	-4.1	-4.5	-4.3	-4.0	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	
8	-15.0	-14.6	-13.9	-15.2	-15.0	-14.8	-14.0	-13.1	-13.5	-11.8	-10.2	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	
9	-14.5	-15.0	-13.5	-13.5	-13.5	-14.8	-14.8	-12.2	-13.0	-11.4	-9.7	-8.2	-8.4	-6.6	-7.6	-7.9	-9.1	-10.2	-11.6	-13.9	-14.4	-11.2	-13.0	-12.4	-11.2	-13.0	-12.4	-11.2	-13.0	-12.4	-11.2	
10	-12.9	-13.3	-13.5	-14.2	-12.7	-11.5	-11.0	-11.1	-11.1	-10.7	-10.2	-9.5	-8.5	-8.9	-8.5	-8.5	-9.2	-9.1	-8.2	-11.6	-11.5	-11.0	-11.0	-11.0	-11.0	-11.0	-11.0	-11.0	-11.0	-11.0	-11.0	
11	-11.3	-10.7	-9.7	-9.7	-9.5	-9.0	-9.0	-8.7	-8.2	-7.9	-9.3	-9.4	-9.5	-9.0	-9.4	-9.4	-9.8	-9.4	-10.2	-10.8	-9.1	-10.6	-11.7	-12.5	-12.5	-12.5	-12.5	-12.5	-12.5	-12.5	-12.5	
12	-13.1	-14.0	-14.2	-14.2	-14.2	-14.0	-10.5	-9.1	-9.6	-8.2	-7.0	-6.1	-4.9	-4.0	-3.3	-3.7	-3.3	-3.0	-2.7	-2.5	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	
13	-2.7	-3.5	-5.2	-6.8	-9.2	-10.7	-11.9	-14.3	-17.3	-16.3	-14.3	-13.0	-12.5	-11.7	-11.0	-11.2	-11.7	-12.0	-12.5	-11.6	-12.4	-11.8	-11.3	-10.5	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1	
14	-9.5	-9.0	-8.2	-7.3	-6.6	-6.4	-5.8	-4.7	-4.3	-3.4	-2.5	-1.9	-1.1	-0.9	-0.7	-0.4	-0.3	-0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	
15	-1.1	-1.1	-2.2	-4.4	-5.5	-9.9	-1.0	-1.3	-1.3	-1.6	-1.7	-1.9	-1.8	-1.8	-1.8	-1.5	-1.4	-1.2	-1.0	-0.8	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	
16	1.1	-1.1	-1.5	-1.6	-1.7	-1.8	-1.7	-1.9	-1.8	-1.5	4	1.9	2.5	3.3	3.3	3.4	3.4	3.4	2.3	2.4	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	
17	-2.3	-2.6	-2.5	-2.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	
18	-1.0	-1.9	-1.6	-2.9	-3.3	-3.0	-2.3	-3.5	-3.6	-1.1	-1.9	2.2	3.0	3.5	3.8	3.5	1.8	1.2	1.2	1.7	1.3	1.0	0.0	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	
19	-2.8	-3.3	-3.2	-3.7	-2.1	-1.0	-1.3	-1.1	-1.3	-1.2	1.5	1.7	1.9	1.1	1.9	1.0	1.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	
20	-2.2	-2.1	-3.7	-3.9	-4.8	-4.8	-5.3	-6.3	-7.6	-5.0	-2.6	-2.0	-1.6	-1.4	-1.5	-1.4	-1.9	-2.3	-3.0	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	
21	-4.2	-4.3	-7.1	-6.9	-8.2	-8.3	-8.6	-8.8	-8.5	-7.0	-4.8	-2.1	-1.9	-2.0	0.0	0.0	-1.3	-1.7	-2.2	-2.6	-4.3	-3.3	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	
22	-4.4	-4.5	-5.2	-2.2	-2.3	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	
23	-6.7	-9.1	-8.7	-9.9	-10.0	-10.8	-9.5	-7.0	-6.0	-5.7	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	
24	-1.7	-7.9	-7.4	-7.4	-7.3	-7.2	-7.1	-6.8	-6.5	-6.3	-6.2	-5.9	-5.6	-5.5	-5.3	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	
25	-9.0	-8.7	-7.9	-7.9	-7.6	-7.8	-7.8	-7.7	-7.5	-7.3	-6.9	-5.9	-5.6	-5.4	-5.1	-4.9	-5.2	-5.4	-5.4	-5.4	-5.4	-5.4	-5.4	-5.4	-5.4	-5.4	-5.4	-5.4	-5.4	-5.4	-5.4	
26	-5.7	-5.6	-5.6	-6.0	-6.0	-6.1	-6.1	-6.1	-6.3	-6.2	-6.0	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	-5.9	
27	-2.9	-8.2	-8.9	-9.3	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4	
28	-7.4	-7.2	-7.5	-7.0	-6.4	-6.4	-6.5	-7.0	-7.9	-8.2	-8.6	-8.3	-7.7	-7.0	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8
29	-12.1	-12.1	-11.0	-11.1	-10.9	-10.1	-9.9	-10.1	-10.5	-9.9	-9.4	-8.2	-8.6	-8.6	-8.3	-8.3	-8.3	-8.3	-8.3	-8.3	-8.3	-8.3	-8.3	-8.3	-8.3	-8.3	-8.3	-8.3	-8.3	-8.3	-8.3	
30	-7.3	-7.2	-7.5	-8.5	-10.0	-10.9	-12.4	-10.3	-11.8	-11.8	-10.5	-11.3	-11.4	-11.5	-12.2	-12.3	-12.3	-12.3	-12.3	-12.3	-12.3	-12.3	-12.3	-12.3	-12.3	-12.3	-12.3	-12.3	-12.3	-12.3	-12.3	

MEAN -5.7 -5.9 -6.0 -6.4 -6.4 -6.4 -6.3 -5.6 -6.0 -5.2 -4.5 -4.0 -3.7 -3.6 -3.6 -3.9 -4.4 -4.7 -5.0 -5.4 -5.3 -5.7 -6.0

ABSTRACT OF THE WIND AT WINNIPEG INTERNATIONAL AIRPORT FOR THE MONTH OF NOVEMBER

ALL TIMES ARE C.S.T. VELOCITY IN KILOMETERS PER HOUR

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
STARTING																									
1	NNW 46	NNW 50	NNW 48	NNW 50	NNW 41	NNW 42	NNW 46	NNW 54	NNW 50	NNW 57	NNW 52	NNW 43	NNW 42	NNW 41	NNW 48	NNW 43	NNW 37	NNW 37	NNW 31	NNW 31	NNW 31	NNW 37	NNW 37	NNW 33	
2	NNW 37	NNW 33	NNW 37	NNW 33	NNW 39	NNW 39	NNW 33	NNW 33	NNW 33	NNW 28	NNW 31	NNW 31	NNW 37	NNW 35	NNW 37	NNW 28	NNW 31	NNW 20	NNW 20	NNW 20	NNW 17	NNW 15	NNW 13	N 11	
3	NNW 19	NNW 0	NNW 2	NNW 2	NNW 0	NNW 2	NNW 2	NNW 2	NNW 0	NNW 11	NNW 11	NNW 6	NNW 2	NNW 2	NNW 2	NNW 2	NNW 13	NNW 19	NNW 17	NNW 17	NNW 17	NNW 17	NNW 17	NNW 17	
4	SW 17	SW 15	SW 13	SW 13	SW 7	SW 7	SW 2	SW 0	SW 4	SW 0	SW 2	SW 11	SW 0	SW 0	SW 2	SW 20	SW 24	SW 22	SW 11	SW 6	SW 0	SW 4	SW 0	SW 6	
5	NW 9	NW 7	NW 17	NW 11	NW 11	NW 19	NW 17	NW 11	NW 6	NW 9	NW 9	NW 15	NW 15	NW 15	NW 24	NW 15	NW 11	NW 9	NW 6	NW 7	NW 11	NW 13	NW 17	NW 17	
6	W 13	W 13	W 11	W 11	W 11	W 9	W 15	W 17	W 13	W 19	W 26	W 26	W 30	W 24	W 28	W 26	W 17	W 9	W 9	W 9	W 19	W 13	W 6	W 15	
7	NNE 7	NNE 4	NNE 9	NNE 4	NNE 2	NNE 11	NNE 7	NNE 6	NNE 4	NNE 22	NNE 18	NNE 22	NNE 31	NNE 20	NNE 24	NNE 20	NNE 20	NNE 30	NNE 35	NNE 22	NNE 20	NNE 17	NNE 17	NNE 15	
8	NNW 9	NNW 13	NNW 11	NNW 7	NNW 7	NNW 9	NNW 7	NNW 9	NNW 0	NNW 6	NNW 0	NNW 2	NNW 6	NNW 12	NNW 11	NNW 9	NNW 9	SSE 9	SSE 2	SSE 0	SSE 2	SSE 0	SSE 0	SSE 0	
9	C 0	C 6	C 6	C 7	C 7	C 7	C 7	C 9	C 9	C 9	C 9	C 2	C 11	C 15	C 7	C 9	C 6	C 4	C 9	C 11	C 11	C 6	C 7	C 0	
10	NW 7	NW 0	NW 0	NW 0	NW 0	NW 2	NW 2	NW 9	NW 7	NW 13	NW 9	NW 13	NW 17	NW 20	NW 19	NW 15	NW 17	NW 17	NW 13	NW 13	NW 17	NW 9	NW 19	NW 13	
11	S 15	S 13	S 15	S 13	S 13	S 13	S 7	S 9	S 7	SSE 7	SSE 9	SSE 13	SSE 17	SSE 20	SSE 20	SSE 19	SSE 15	NW 17	NW 15	NW 13	NW 13	NW 9	NW 11	NW 15	
12	W 17	W 19	W 17	W 15	W 15	W 17	W 17	W 15	W 17	W 15	W 17	W 22	W 24	W 20	W 22	W 17	W 17	W 17	W 19	W 17	W 7	W 4	W 0	W 0	
13	NE 17	NE 28	NE 33	NE 30	NE 24	NE 26	NE 22	NE 19	NE 11	NE 13	NE 17	NE 11	NE 15	NE 9	NE 6	NE 0	NE 2	NE 0	NE 6	NE 6	NE 11	NE 15	NE 17	NE 22	
14	SSW 20	SSW 24	SSW 22	SSW 20	SSW 24	SSW 28	SSW 30	SSW 26	SSW 20	SSW 19	SSW 20	SSW 11	SSW 9	SSW 9	SSW 2	SSW 4	SSW 2	SSW 4	SSW 11	SSW 7	SSW 2	SSW 0	SSW 0	SSW 2	
15	N 4	N 7	N 11	N 9	N 9	N 9	N 9	N 9	N 13	N 11	N 6	N 4	N 7	N 4	N 7	N 9	N 11	N 9	N 9	N 17	N 19	N 22	N 28	N 31	
16	SSW 30	SSW 37	SSW 30	SSW 32	SSW 33	SSW 30	SSW 28	SSW 31	SSW 24	SSW 28	SSW 22	SSW 24	SSW 20	SSW 19	SSW 15	SSW 13	SSW 19	SSW 19	SSW 17	SSW 17	SSW 17	SSW 15	SSW 15	SSW 0	

PEAK GUSTS	10 CST	05 CST	17 CST	14 CST	19 CST	12 CST	03 CST	06 CST	00 CST	02 CST
NW 74	NW 59	NNW 33	W 41	N 50	W 39	NNE 41	S 39	SSW 46	S 54	



