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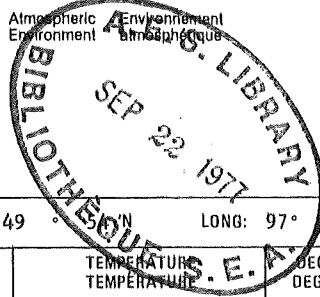
Atmospheric Environment / Environnement atmosphérique

MONTHLY METEOROLOGICAL SUMMARY SOMMAIRE MÉTÉOROLOGIQUE MENSUEL

MONTH/MOIS AUGUST / AOÛT

1977

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



LAT: 49		LONG: 97° 14 W		ELEVATION: 786 FEET (ASL) ALTITUDE: PIEDS (MER)		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 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. TOTAL 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 6.0°C	%	%		mm	cm	mm		km/h		km/h	
1	21.0	8.8	14.9	3.1	9.9	95	36				5.5	calm	SW 15	11.3		
2	23.5	12.5	18.0	0.0	13.0	96	32		4.8	4.8	8.8	WNW	NNE 26	11.4		
3	21.0	9.0	15.0	3.0	10.0	98	37				10.3	WNW	ENE 19	13.4		
4	22.8	10.4	16.6	1.4	11.6	91	54	1	8.6	8.6	14.5	WNW	NW 26	8.6		
5	20.0	11.4	15.7	2.3	10.7	93	40		1.3	1.3	16.5	WNW	WNW 24*	8.5		
6	25.3	10.5	17.9	0.1	12.9	98	36	1	13.8	13.8	18.0	SW	NE 35	10.9		
7	18.9	8.7	13.8	4.2	8.8	100	50		0.4	0.4	10.3	NW, NNW	N 17*	7.7		
8	23.8	9.8	16.8	1.2	11.8	98	41		1.0	1.0	11.2	S	S 19*	10.3		
9	28.9	10.4	19.7	0.0	14.7	89	38	1	6.0	6.0	18.1	S	S 39*	5.1		
10	15.4	7.8	11.6	6.4	6.6	92	58		2.8	2.8	28.6	W, WNW	WNW 41*	6.2		
11	23.7	6.1	14.9	3.1	9.9	95	34		1.8	1.8	20.2	W	W 33	9.1		
12	18.8	6.6	12.7	5.3	7.7	97	39		0.2	0.2	12.6	WNW	NW 22	7.5		
13	18.3	5.5	11.9	6.1	6.9	89	51				19.0	NW	NNW 28*	10.2		
14	21.3	7.6	14.5	3.5	9.5	93	39				8.5	W	NW 15*	7.7		
15	21.4	9.5	15.5	2.5	10.5	93	50		1.4	1.4	5.8	calm	N 22	2.4		
16	19.0	6.0	12.5	5.5	7.5	98	53		1.2	1.2	12.5	W	N 28	6.4		
17	18.4	5.0	11.7	6.3	6.7	92	39				16.5	WNW NW	WNW 28	12.6		
18	22.4	5.2	13.8	4.2	8.8	86	30				8.0	NW	NW 17	13.9		
19	24.6	6.8	15.7	2.3	10.7	88	36		0.4	0.4	9.2	S	NW 22	4.5		
20	20.9	8.7	14.8	3.2	9.8	100	51		0.4	0.4	16.7	NW	NNW 37	7.8		
21	20.2	5.2	12.7	5.3	7.7	97	48		3.0	3.0	9.3	WNW NW	NW 19	5.2		
22	16.2	4.6	10.4	7.6	5.4	95	42		1.2	1.2	18.2	NNW	NNW 31*	10.4		
23	17.3	2.0	9.7	8.3	4.7	94	37				8.9	calm	N 22	7.9		
24	20.5	6.0	13.3	4.7	8.3	84	35				18.0	SSE	SSE 37	5.8		
25	22.5	13.8	18.2	0.0	13.2	96	56	1	13.4	13.4	22.1	S	SSE 35	2.8		
26	21.5	9.2	15.4	2.6	10.4	96	60		Tr.	Tr.	9.0	S	SSW 20	0.6		
27	20.6	8.4	14.5	3.5	9.5	95	50				9.9	NNE	ENE 19	3.2		
28	18.0	7.0	12.5	5.5	7.5	92	55		0.5	0.5	14.0	NW	NNW 26	5.7		
29	22.9	5.1	14.0	4.0	9.0	95	45	1	18.6	18.6	19.3	S	S 33	6.3		
30	21.2	11.8	16.5	1.5	11.5	87	53				17.8	W WNW	WNW 30*	10.6		
31	14.2	7.4	10.8	7.2	5.8	98	87		8.8	8.8	14.5	NNE	NNW 24	0.4		
MEAN MOYENNE	20.8	8.0	14.4	TOTAL 113.9	TOTAL 291.0	94	46	TOTAL 5	TOTAL 89.6	TOTAL 89.6	13.9	PREVAILING DOMINANTE WNW	MAXIMUM WNW 41	TOTAL 234.6		
NORMAL NORMALE	25.0	12.2	18.7	36.7	421.9			6.0	73.7	73.7	17.1	S	52	276.2		

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 6°C AU-DESSUS DE 6°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	113.9	30.7	36.7	TOTAL FOR MONTH TOTAL DU MOIS	291.0	442.6	421.9	20	15	9	3	0	0	0	0	0	0	0
ACCUMULATED SINCE JULY 1 ACCUMULÉE DEPUIS LE 1 ^{er} JUILLET	125.0	46.4	57.3	ACCUMULATED SINCE APRIL 1 ACCUMULÉE DEPUIS LE 1 ^{er} AVRIL	1606.8	1575.2	1464.6	20	15	9	3	0	0	0	0	0	0	0

UDC 551.506.1 ()

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

Unconfirmed Hail Reported August 29, 1977

COMPARATIVE RECORDS RELEVÉS COMPARATIFS		MONTH MOIS		AUGUST / AOÛT		1977							
Temperature/Température — °Celsius Precipitation/Précipitation — Millimètres (mm) Rainfall/Hauteur de pluie — Millimètres (mm) Snowfall/Hauteur de neige — Centimètres (cm) Wind speed/Vitesse du vent — Kilomètres/par heure (km/h) Station pressure/Pression à la station — Kilopascals	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	28.9	9	36.3	24	33.3	40.6	7	1949	27.2	15 20	1885	106	
LOWEST TEMPERATURE TEMPÉRATURE LA PLUS BASSE	2.0	23	3.8	29	4.4	7.8	12	1961	-1.1	31 27 28	1888 1891 1910	106	
MEAN MONTHLY TEMPERATURE TEMPÉRATURE MENSUELLE MOYENNE	14.4		19.3		18.7	21.6		1961	14.4		1977	106	
TOTAL MONTHLY RAINFALL HAUTEUR TOTALE MENSUELLE DE PLUIE	89.6		59.0		73.7	180.6		1876	3.3		1915	106	
TOTAL MONTHLY SNOWFALL HAUTEUR TOTALE MENSUELLE DE NEIGE													
TOTAL MONTHLY PRECIPITATION PRÉCIPITATION TOTALE MENSUELLE	89.6		59.0		73.7	180.6		1876	3.3		1915	106	
NO OF DAYS WITH MEASURABLE PRECIPITATION NOMBRE DE JOURS AVEC PRÉCIPITATION MESURABLE	20		8		10	20		1977	1	1	1915	94	
GREATEST RAINFALL IN ONE DAY HAUTEUR DE PLUIE MAXIMALE EN UNE JOURNÉE	18.6	29	24.9	26		84.6	16	1884				106	
GREATEST SNOWFALL IN ONE DAY HAUTEUR DE NEIGE MAXIMALE EN UNE JOURNÉE													
GREATEST PRECIPITATION IN ONE DAY PRÉCIPITATION MAXIMALE EN UNE JOURNÉE	18.6	29	24.9	26		84.6	16	1884				106	
MAXIMUM RAINFALL RECORDED IN: HAUTEUR DE PLUIE MAXIMALE ENREGISTRÉE EN:													
5 MINUTES	7.4	6	3.3	26		10.7	11	1962				20	
10 MINUTES	7.9	6	4.3	11		16.5	15	1972				20	
15 MINUTES	8.9	25	5.8	20		20.3	15	1972				20	
30 MINUTES	9.4	25	7.4	26		35.8	15	1972				20	
60 MINUTES	9.9	6	11.2	26		35.8	15, 11 31	1962 1966				20	
24 CONSECUTIVE HOURS HEURES CONSECUTIVES	18.6	29	33.0	27		84.6	16	1884				106	
MEAN WIND SPEED (km/h) VITESSE MOYENNE DU VENT (km/h)	13.9		15.5		17.1	22.0		1964	12.6		1972	57	
MAXIMUM SPEED (1 min.) (km/h) VITESSE MAXIMALE (1 min.) (km/h)	WNW41	10	W 43 WNW43	27	52	N 77	30	1944				39	
MAXIMUM GUST SPEED (km/h) POINTE DU VENT MAXIMALE (km/h)	NNW69	9	WSW70	27	84	NW 122	18	1973				33	
TOTAL HOURS OF SUNSHINE TOTAL DES HEURES INSOLATION	234.6		307.9		276.2	350.8		1967	160.5		1912	78	
MEAN STATION PRESSURE (kPa) PRESSION MOYENNE À LA STATION (kPa)	98.35		98.61		98.50	98.91		1957	98.14		1969	39	
GREATEST STATION PRESSURE (kPa) PRESSION MAXIMALE À LA STATION (kPa)	99.52	17	99.75	29	99.67	100.44	30	1967				39	
LEAST STATION PRESSURE (kPa) PRESSION MINIMALE À LA STATION (kPa)	97.14	25	97.21	27	97.06				96.08	25	1975	39	
CLIMATOLOGICAL DATA FOR THE PAST DONNÉES CLIMATOLOGIQUES POUR LES											YEARS DERNIÈRE 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 DEGREE-DAYS DEGRÉS-JOURS DE CHAUFFE	GROWING DEGREE-DAYS DEGRÉS-JOURS DE CROISSANCE		
1968	27.8	2.2	15.5	143.0		143.0	18.7	N 48	225.4	87.2	328.9		
1969	36.7	6.7	20.9	57.2		57.2	18.0	W 60	304.4	9.4	496.1		
1970	35.6	3.9	18.9	74.9		74.9	16.3	S 48	343.9	37.8	433.9		
1971	33.9	3.3	18.8	17.0		17.0	15.1	SW 43	314.2	32.2	430.6		
1972	36.1	3.3	18.5	103.1		103.1	12.6	WNW39	284.5	51.1	422.2		
1973	32.8	5.0	19.9	65.5		65.5	13.5	NNW72	303.7	11.1	465.6		
1974	31.7	3.3	16.7	109.7		109.7	17.5	NNW51	269.7	67.2	365.6		
1975	30.4	3.3	16.7	132.8		132.8	15.6	NW 64	254.3	66.2	362.6		
1976	36.3	3.8	19.3	59.0		59.0	15.5	W WNW43	307.9	30.7	442.6		
1977	28.9	2.0	14.4	89.6		89.6	13.9	WNW 41	234.6	113.9	291.0		

August 1977 was the coolest ever recorded in Winnipeg. Temperatures averaged 14.4C which is well below the previous coolest August with a mean temperature of 15.2 in 1890. Rainfall was measured on 20 days, which is the greatest number on record, surpassing the 18 days of rain in August, 1975. Total rainfall amounted to 89.6 mm. compared to a normal of 73.7 mm.

Cloudy wet weather kept August sunshine to a total of 234.6 hours, which is 41.6 hours less than usual.

August winds were lighter than usual and averaged 13.9 km/h. compared to a normal of 17.1 km/h.

DAILY WEATHER SUMMARY FOR AUGUST 1977AT WINNIPEG, MANITOBA

1. Below normal temperatures. Partly cloudy. Light winds.
2. Near normal temperatures. Partly cloudy. Mostly light winds. Rain 3:48 a.m. to 4:45 a.m. Showers 6:07 p.m. to 9:20 p.m.
3. Below normal temperatures. Mostly sunny. Light winds.
4. Below normal temperatures. Partly cloudy. Thunder 1:20 p.m. to 1:32 p.m. Showers 6:23 a.m. to 7:03 a.m. 1:20 p.m. to 4:20 p.m. 11:40 p.m. continued. Light winds except gusty west wind in the afternoon.
5. Below normal temperatures. Partly cloudy. Showers to 10:14 a.m. Light winds except gusty west-northwest wind in afternoon.
6. Below normal temperatures. Partly cloudy. Thunder 7:11 p.m. to 8:12 p.m. Showers 6:18 p.m. to 11:10 p.m. Light winds except gusty north wind in evening.
7. Below normal temperatures. Partly cloudy. Heavy fog 1:40 a.m. to 3:00 a.m. Visibility restricted. Showers 2:28 p.m. to 3:43 p.m. Light winds.
8. Below normal temperatures. Partly cloudy. Rain 01:03 a.m. to 1:32 a.m. 6:18 p.m. to 6:32 p.m. Light winds.
9. Above normal temperatures. Mostly cloudy. Thunder 2:35 p.m. to 4:32 p.m. Showers 2:50 p.m. to 6:08 p.m. Visibility reduced in heavy showers. Gusty west-northwest to north-northwest winds afternoon and evening.
10. Below normal temperatures. Partly cloudy. Showers 11:08 a.m. to 12:25 p.m. 3:55 p.m. to 3:58 p.m. 7:16 p.m. to 10:48 p.m. Gusty west to west northwest winds.
11. Below normal temperatures. Partly cloudy. Showers 5:08 p.m. to 8:45 p.m. Mostly light winds.
12. Below normal temperatures. Partly cloudy. Showers 4:25 p.m. to 6:15 p.m. Mostly light winds.
13. Below normal temperatures. Mostly sunny. Mostly light winds.
14. Below normal temperatures. Partly cloudy. Light winds.
15. Below normal temperatures. Mostly cloudy. Showers 00:39 a.m. to 01:06 a.m. 3:49 p.m. to 4:16 p.m. Light winds.
16. Cool. Partly cloudy. Showers 10:23 a.m. to 2:53 p.m. Mostly light winds but gusty west-northwest winds in the afternoon.
17. Cool. Mostly sunny. Mostly light winds but gusty northwest wind in the afternoon.
18. Cool. Mostly sunny. Mostly light winds.
19. Below normal temperatures. Partly cloudy. Showers 12:49 p.m. to 4:42 p.m. 10:58 p.m. to 11:20 p.m. Light winds.
20. Below normal temperatures. Heavy fog 7:18 a.m. to 8:09 a.m. Showers 9:20 a.m. to 9:50 a.m. 6:13 p.m. to 6:32 p.m. Gusty north-northwest wind in the afternoon.
21. Cool. Mostly cloudy. Showers 3:07 p.m. to 4:50 p.m. Mostly light winds.
22. Cool. Mostly sunny. Showers 4:14 a.m. to 7:40 a.m. Mostly light winds.
23. Cool. Partly cloudy. Light winds.
24. Below normal temperatures. Partly cloudy. Mostly light winds.
25. Normal temperatures. Mostly cloudy. Thunder 7:19 a.m. to 8:10 a.m. Showers 7:30 a.m. to 7:53 a.m. 11:09 a.m. to 3:34 p.m. Occasional gusty south winds. Visibility reduced in thundershowers.
26. Below normal temperatures. Cloudy. Showers 8:56 a.m. to 12:49 p.m. 4:52 p.m. to 7:08 p.m. Light winds.
27. Below normal temperatures. Mostly cloudy. Light winds.
28. Below normal temperatures. Partly cloudy. Showers 6:40 a.m. to 6:50 a.m. 11:03 a.m. to 11:43 a.m. Light winds.
29. Below normal temperatures. Partly cloudy. Thunder 5:05 p.m. to 9:28 p.m. Showers 3:41 p.m. to 9:34 p.m. Winds mostly light but gusty west-northwest wind in evening. Unofficial reports of hail. Some property damage from hail especially in Charleswood. Some power outages. Telephones out. Precipitation varied from 44.4 mms. at Montrose Street to 18.6 mm. at airport. Visibility restricted in heavy thundershowers and fog. Very strong winds reported near Morris and La Salle. Some crop damage and buildings destroyed.
30. Near normal temperatures. Mostly sunny. Mostly light winds.
31. Below normal temperatures. Mostly cloudy. Rain 7:06 a.m. to 5:37 p.m. Light winds.

HOURLY TEMPERATURES AT WINNIPEG INTERNATIONAL AIRPORT FOR THE MONTH OF AUGUST 1977

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.	12.6	12.6	12.4	11.9	11.1	8.8	8.9	13.2	14.9	16.1	17.3	19.2	17.6	18.2	20.0	20.5	19.6	19.7	19.6	19.1	17.6	15.2	14.5	14.5
2.	15.2	14.4	14.1	13.0	13.1	13.5	13.6	15.4	17.3	18.5	19.8	20.5	21.0	21.6	22.0	22.0	22.5	21.5	20.5	14.9	13.9	13.7	12.6	12.6
3.	12.8	12.4	12.2	10.4	9.9	9.0	9.1	11.2	14.1	15.3	17.4	18.7	19.0	19.4	18.5	19.2	20.4	20.6	20.1	19.2	17.4	14.5	13.6	13.4
4.	12.8	12.4	11.2	10.5	11.2	11.5	11.5	12.5	13.6	16.3	16.7	19.6	20.7	21.9	17.3	20.0	16.9	18.0	18.6	17.5	15.5	14.2	12.6	12.6
5.	12.4	12.6	12.5	12.5	11.9	11.4	11.5	11.6	12.5	13.7	12.3	16.4	18.6	17.2	18.2	19.0	19.3	19.4	18.3	18.3	17.7	14.5	13.8	14.0
6.	13.4	13.0	12.0	12.2	11.6	10.5	10.8	13.0	15.4	19.4	21.0	21.7	23.2	24.2	25.1	23.4	22.4	22.8	21.7	18.1	16.9	13.3	13.2	13.2
7.	13.0	11.3	10.7	9.5	9.0	9.0	8.7	10.9	14.0	15.3	16.4	17.1	17.0	17.5	18.7	17.0	18.0	17.5	18.1	16.2	15.7	13.2	12.2	13.3
8.	13.5	13.2	12.9	12.5	11.2	10.0	9.6	12.5	14.6	16.3	18.0	19.4	21.0	21.9	22.2	22.3	22.8	22.7	22.5	21.8	21.0	19.4	18.4	17.8
9.	14.5	16.9	16.0	14.1	13.0	13.5	12.8	15.4	17.2	20.1	22.8	25.2	26.7	28.1	28.0	26.0	18.0	18.4	16.5	15.7	13.8	11.6	11.1	10.8
10	19.4	9.5	9.3	9.4	9.4	7.9	8.4	10.2	11.0	12.4	14.2	14.3	11.7	13.4	14.1	15.4	14.7	14.0	13.0	12.6	9.8	9.6	9.2	9.0
11	8.6	9.0	8.3	7.9	6.5	8.4	6.1	8.2	11.1	14.4	17.1	18.1	19.5	19.6	22.1	21.8	21.7	21.7	20.4	18.2	14.6	13.8	12.7	12.4
12	11.4	12.0	11.0	10.3	8.7	8.7	7.2	9.4	10.9	12.8	14.3	15.0	16.9	16.5	17.2	17.9	17.0	15.2	12.6	10.8	9.2	7.9	8.2	8.2
13	6.6	7.0	6.5	5.7	5.5	5.5	5.6	7.0	8.8	11.9	13.2	13.7	14.7	16.2	16.9	17.5	16.5	16.7	16.5	14.6	13.7	12.5	10.4	9.6
14	9.9	9.2	8.9	8.9	8.5	9.0	9.8	9.6	12.2	15.2	16.5	18.0	19.5	20.3	19.6	20.4	20.3	20.6	19.0	18.3	17.3	16.0	15.2	14.5
15	14.8	13.7	13.3	12.6	13.4	13.4	13.4	13.0	13.9	15.6	17.3	16.8	18.0	18.9	19.4	19.9	16.8	17.5	17.8	17.3	16.6	14.5	12.8	10.9
16	10.0	8.8	9.0	7.8	7.4	8.0	6.7	10.7	14.6	16.7	19.0	17.2	17.2	15.6	15.8	13.7	13.8	15.0	15.1	13.6	10.4	8.4	6.4	7.6
17	6.9	7.1	6.4	6.3	5.1	5.0	5.4	8.0	11.5	13.3	13.0	15.1	16.7	17.7	17.9	17.9	17.6	17.6	17.2	15.4	12.4	10.6	9.4	7.9
18	8.0	7.1	6.4	6.4	6.0	5.5	5.7	9.0	12.4	15.5	17.8	18.5	20.1	19.6	21.4	21.4	21.3	21.4	20.9	18.7	15.2	13.6	11.3	10.3
19	9.1	8.9	8.8	9.5	8.2	6.8	11.0	11.0	12.8	15.0	17.6	18.8	21.7	22.3	23.0	23.6	23.1	21.4	21.6	17.6	16.4	15.9	15.6	15.4
20	14.4	14.0	11.8	12.3	11.5	10.4	10.6	11.8	13.0	15.6	17.4	16.2	17.6	18.5	20.4	19.9	20.5	18.4	18.1	15.7	13.6	11.8	10.4	9.3
21	9.0	7.9	7.9	7.8	6.9	6.1	5.2	6.8	10.2	12.8	14.8	16.7	17.5	17.9	19.4	18.7	14.2	14.3	14.3	14.8	12.6	11.3	11.5	10.6
22	10.2	9.3	7.8	7.2	6.9	7.5	8.2	9.4	10.4	12.8	13.4	13.7	15.1	14.9	15.0	15.4	15.6	14.5	13.6	11.2	8.6	7.7	6.4	5.5
23	5.5	5.5	3.2	3.2	2.6	2.4	2.3	6.2	8.7	12.0	12.6	13.8	14.4	14.7	15.2	15.1	16.1	15.3	15.8	14.0	11.2	8.8	7.2	10.0
24	10.5	9.8	8.6	7.3	6.9	7.2	6.7	9.0	11.9	12.9	14.3	16.1	16.6	18.7	19.4	19.6	19.3	19.1	18.9	18.6	17.7	16.1	15.0	15.0
25	15.2	16.8	16.0	16.2	16.3	16.6	17.0	16.5	14.1	17.7	19.7	20.2	18.4	18.1	18.0	18.1	20.6	22.0	22.1	20.1	19.5	18.0	16.1	15.4
26	13.8	11.9	11.7	10.0	9.6	9.3	9.4	11.9	13.6	15.2	16.6	18.5	19.1	20.0	21.2	20.7	20.1	19.3	19.0	18.1	16.4	15.0	14.0	14.0
27	15.0	13.0	12.1	10.6	10.1	8.4	9.5	11.9	15.5	16.5	17.9	18.4	19.3	20.4	20.1	20.0	19.9	19.2	18.1	16.0	14.8	14.1	14.0	14.0
28	13.3	13.1	13.0	13.5	13.2	13.1	13.4	13.4	13.5	13.5	13.5	15.5	15.0	16.2	16.6	16.0	17.1	16.7	16.1	13.7	11.6	10.7	8.0	7.2
29	8.5	9.3	7.6	7.5	6.4	6.0	6.5	9.5	12.2	14.9	17.5	18.0	18.5	22.0	22.5	21.5	21.2	17.9	16.1	15.7	15.6	18.0	16.4	15.2
30	15.6	15.3	14.6	13.9	13.1	13.2	14.4	13.1	13.2	14.6	16.5	17.1	18.5	19.5	20.2	20.2	19.8	19.0	19.5	17.3	15.7	14.5	14.5	13.2
31	11.8	10.7	12.3	11.7	10.9	10.8	10.7	11.2	11.4	11.4	12.3	13.0	13.3	13.0	13.5	13.6	13.2	13.2	13.3	11.7	12.0	11.0	10.4	8.8
MEAN	11.7	11.2	10.6	10.1	9.5	9.1	9.4	11.0	13.0	15.0	16.5	17.5	18.2	18.8	19.3	19.1	18.7	18.4	17.9	16.3	14.7	13.3	12.3	11.4

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.	11.6	11.3	10.8	10.5	9.9	8.4	8.6	11.2	11.2	10.9	11.5	12.3	12.3	12.1	13.0	12.1	12.5	12.7	13.1	13.0	13.3	12.2	11.9	12.0	
2.	11.7	11.6	11.1	11.0	11.2	11.4	11.3	11.5	12.4	12.2	12.5	12.1	11.9	12.9	12.9	13.4	13.3	13.5	13.0	13.9	13.3	13.0	13.1	12.2	
3.	12.4	11.0	11.5	10.1	9.8	8.8	8.9	10.5	12.8	13.2	14.3	13.0	13.0	13.2	12.8	12.7	12.4	12.4	12.4	12.4	12.4	11.1	11.1	10.4	
4.	10.4	10.4	9.6	9.5	10.2	10.6	10.8	11.8	12.7	14.4	14.5	15.0	15.2	15.9	15.6	15.2	14.8	15.3	14.3	12.9	12.5	12.2	11.3	11.6	
5.	11.4	11.8	11.5	11.3	11.2	10.6	10.8	10.7	11.0	11.5	11.0	13.9	11.8	12.5	12.1	12.3	11.9	11.9	11.5	11.9	12.3	10.9	10.6	10.6	
6.	10.3	9.8	9.4	9.2	8.8	8.3	8.4	9.7	11.7	13.2	14.1	14.9	15.3	15.0	16.0	15.8	16.6	16.0	15.8	14.8	14.5	13.0	13.0	12.8	
7.	12.8	11.0	10.7	9.5	8.9	8.9	8.6	10.4	12.5	12.7	12.8	13.4	13.0	13.2	13.7	14.1	13.5	11.8	12.4	12.7	12.7	11.5	11.4	12.3	
8.	12.5	12.4	12.3	11.8	10.8	9.9	9.7	12.2	13.0	14.7	13.5	14.0	14.6	14.4	14.3	15.0	15.2	15.1	15.1	15.3	14.9	14.3	13.8	13.5	
9.	13.4	13.1	13.0	12.3	11.6	11.4	11.4	13.6	15.0	16.3	17.8	18.8	19.1	18.6	18.2	17.0	18.9	17.3	14.5	13.2	11.2	9.9	9.1	8.7	
10.	8.5	7.6	6.9	6.6	6.5	6.1	6.4	7.4	8.1	9.2	10.2	10.2	10.3	11.0	10.0	11.3	10.4	10.0	9.4	9.3	9.0	9.4	8.3	8.2	
11.	8.1	8.2	7.6	7.3	5.8	5.5	5.1	6.5	8.8	10.7	11.4	11.6	12.6	12.4	13.6	12.6	13.0	13.0	12.6	13.5	13.5	13.3	12.2	11.9	
12.	11.0	11.5	10.6	10.0	8.5	8.2	7.0	8.8	9.8	10.1	10.4	11.0	11.7	10.7	10.2	10.5	10.6	10.4	9.4	10.2	9.1	8.2	7.3	6.2	
13.	5.5	5.7	5.4	4.8	4.5	4.5	4.5	5.6	7.2	9.3	9.9	9.8	10.4	11.4	11.5	12.0	11.1	11.7	11.5	10.6	10.9	10.5	9.0	8.7	
14.	8.5	8.0	8.0	9.0	7.9	8.4	9.1	8.7	10.2	11.4	11.7	12.1	12.4	13.2	12.5	12.7	13.5	12.8	12.8	13.3	13.3	13.0	12.8	12.5	
15.	12.0	12.5	12.4	11.8	12.5	12.0	12.6	11.5	12.3	13.3	13.7	13.7	14.1	14.2	13.4	13.8	13.8	14.3	14.3	14.0	13.9	13.9	13.1	11.9	10.2
16.	9.4	4.2	8.9	7.8	7.2	5.7	6.3	9.9	11.7	12.2	13.4	12.8	12.2	14.0	12.7	12.2	11.2	11.3	10.6	9.5	8.9	7.6	7.3	6.8	
17.	6.1	6.4	5.7	5.3	4.3	4.1	4.9	7.0	10.0	10.7	10.3	10.1	9.7	10.1	10.9	10.9	10.6	10.4	10.4	9.1	8.1	7.2	6.7	6.0	
18.	6.2	5.7	5.4	5.0	4.7	4.5	4.5	7.2	9.0	10.7	12.0	12.0	12.6	12.1	12.5	12.1	12.0	11.8	12.2	11.6	10.3	9.8	8.5	7.8	
19.	7.1	7.1	7.4	8.2	6.9	5.2	8.9	8.9	9.9	11.2	12.7	13.4	13.4	14.1	14.1	14.7	15.4	15.3	15.8	15.1	14.2	14.0	13.8	13.6	
20.	13.3	13.2	11.4	11.6	11.0	9.9	10.3	11.3	13.0	15.0	13.4	14.5	14.3	14.4	14.8	14.3	14.4	13.9	13.7	12.8	11.8	10.5	9.4	8.5	
21.	8.3	7.3	7.4	7.3	6.5	5.8	5.0	5.6	9.3	10.8	11.6	12.1	13.1	12.5	13.1	12.6	13.4	13.3	13.1	14.0	11.6	10.4	10.3	9.4	
22.	9.1	8.4	7.2	6.8	6.5	7.0	7.7	8.9	9.7	10.5	9.6	9.0	10.4	8.7	9.2	9.0	9.6	8.4	7.6	6.9	6.5	5.7	5.0	4.5	
23.	4.2	4.1	2.7	2.5	2.1	2.0	1.9	5.0	7.0	8.4	8.5	8.6	9.4	9.2	9.1	8.6	9.5	8.3	9.1	9.0	8.2	6.7	5.8	7.7	
24.	8.0	7.4	6.7	5.9	5.7	5.9	5.3	6.9	7.3	8.3	9.0	9.8	10.0	10.7	11.4	11.6	11.4	11.9	11.6	11.5	11.1	10.5	9.9	10.1	
25.	10.5	11.9	11.7	12.0	12.4	12.9	13.1	13.0	13.4	15.6	16.6	16.6	16.6	16.9	17.1	17.5	19.3	19.9	19.9	19.3	19.0	17.6	15.6	13.3	
26.	12.8	11.5	11.4	9.7	9.2	8.9	8.9	11.0	12.3	13.8	14.4	15.1	16.0	16.6	16.3	16.4	16.2	17.4	17.4	16.9	14.8	14.2	13.2	13.0	
27.	13.1	11.9	11.1	10.0	9.5	8.0	9.0	11.0	13.0	13.7	14.9	14.7	14.8	15.0	14.3	14.4	13.8	13.8	14.0	13.2	12.7	12.6	12.4	12.0	
28.	11.8	11.8	11.4	11.8	12.4	12.4	12.6	12.2	12.3	13.5	13.5	13.7	13.5	13.2	12.6	12.6	12.9	11.8	11.6	10.7	9.6	9.0	7.3	6.7	
29.	7.6	8.2	6.9	6.7	5.7	5.2	6.1	8.9	10.9	12.6	13.8	13.4	14.1	14.6	15.1	14.5	14.6	15.1	15.3	15.0	15.0	15.9	15.3	14.6	
30.	14.4	13.8	13.5	12.6	12.0	11.6	10.4	10.1	10.3	11.0	12.6	12.4	13.5	14.5	14.6	14.5	14.5	14.0	14.7	13.3	12.7	12.0	12.0	11.2	
31.	10.6	9.9	11.1	10.6	9.9	10.0	10.0	10.4	10.9	11.2	12.0	12.5	12.6	13.1	12.7	13.0	12.8	13.0	12.7	11.2	11.5	10.5	9.8	8.4	
MEAN	10.1	9.8	9.4	8.9	8.5	8.1	8.3	9.6	10.6	12.0	12.5	12.8	13.0	13.2	13.3	13.2	13.2	13.0	12.6	12.0	11.3	10.6	10.6	10.7	

INTERNATIONAL AIRPORT FOR THE MONTH OF AUGUST 1977

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

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

HOUR STARTING	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	PEAK GUSTS	HOUR
1	N 7	NE 9	NE 7	NNE 6	C 0	C 0	C 0	SE 6	SSE 7	SSW 6	S 4	W 7	ESE 4	NE 4	C 0	NW 11	WNW 11	N 11	W 7	C 0	NNW 4	NW 7	C 0	SW 15	NW 44	19 CST
2	SSW 7	SW 9	NE 6	E 2	ESE 4	C 0	C 0	C 0	NW 4	C 0	N 6	N 7	NNW 15	W 11	WNW 13	WNW 17	WNW 7	WNW 11	WNW 7	NNE 26	NNE 20	ENE 17	ENE 9	NNW 7	NW 44	19 CST
3	NW 6	ENE 19	NE 6	W 11	WNW 13	WNW 13	WNW 9	WNW 11	WNW 11	WNW 13	WNW 7	WNW 13	WNW 13	WNW 9	WNW 11	WNW 11	WNW 13	WNW 13	WNW 17	WNW 9	WNW 6	WNW 0	WNW 9	WSW 9	NW 46	14 CST
4	SW 7	SSW 9	SW 11	SW 13	WSW 11	WSW 11	WSW 11	WSW 11	WSW 11	WSW 11	WSW 11	WSW 19	WSW 13	WSW 20	WSW 13	WSW 26	WSW 22	WSW 15	WSW 22	WSW 22	WSW 13	WSW 15	WSW 11	NNW 9	NW 46	14 CST
5	NNW 13	NNW 15	NNW 19	NNW 19	NNW 15	NNW 17	NNW 19	NNW 19	NNW 17	NNW 15	NNW 13	NNW 17	NNW 24	NNW 24	NNW 22	NNW 17	NNW 19	NNW 24	NNW 17	NNW 9	NNW 9	NNW 11	NNW 11	WSW 15	NNW 33	16 CST
6	SW 13	SW 15	SSW 17	SW 19	SW 19	SSW 19	SSW 20	SSW 20	SSW 22	SSW 19	W 17	W 6	NW 11	NW 15	NW 20	NW 2	WSW 20	WSW 17	SSW 20	SSW 28	SSW 28	SSW 35	ENE 17	ENE 13	N 48	21 CST
7	N 11	N 13	NNW 6	NNW 0	NNW 7	NNW 9	NNW 6	NNW 9	NNW 9	NNW 15	NNW 11	NNW 17	NNW 13	NNW 13	NNW 13	NNW 13	NNW 17	NNW 15	NNW 9	NNW 9	NNW 9	NNW 9	NNW 7	WSW 11	N 48	21 CST
8	W 11	WNW 13	N 11	C 0	S 6	W 6	WSW 9	WSW 9	WSW 11	WSW 7	WSW 4	WSW 11	WSW 7	WSW 7	WSW 11	WSW 13	WSW 17	WSW 17	WSW 15	WSW 15	WSW 19	WSW 19	WSW 15	WSW 15	NNW 69	18 CST
9	WSW 13	WSW 9	WSW 4	S 7	S 9	S 7	S 11	S 13	S 13	S 20	S 24	SSW 22	S 30	S 31	S 39	NW 17	NNW 15	NNW 19	NNW 39	NNW 31	NNW 22	NNW 15	NNW 15	W 19	NNW 69	18 CST
10	W 15	W 13	W 19	W 22	WSW 26	WSW 19	WSW 26	WSW 33	WSW 39	WSW 35	WSW 35	WSW 30	WSW 31	WSW 41	WSW 41	WSW 41	WSW 37	WSW 30	WSW 35	WSW 33	WSW 30	WSW 30	WSW 22	WSW 24	NNW 65	14 CST
11	NW 20	NW 20	NW 22	NW 19	NW 19	NW 13	NW 15	NW 19	NW 19	NW 28	NW 31	NW 28	NW 28	NW 28	NW 22	NW 19	NW 17	NW 17	NW 33	NW 28	NW 15	NW 7	NW 11	NW 13	NNW 48	18 CST
12	NNW 13	NNW 13	NNW 13	NNW 17	NNW 11	NNW 7	NNW 6	NNW 7	NNW 9	NNW 7	NNW 13	NNW 19	NNW 11	NNW 11	NNW 19	NNW 15	NNW 15	NNW 17	NNW 22	NNW 7	NNW 9	NNW 9	NNW 13	NNW 11	NNW 48	18 CST
13	W 7	W 11	W 22	W 13	W 19	W 15	W 22	W 20	W 20	W 22	W 20	W 28	W 28	W 24	W 28	W 24	W 28	W 28	W 26	W 19	W 13	W 13	W 11	W 11	NNW 48	18 CST
14	NNW 15	NNW 13	NNW 11	NNW 7	NNW 7	NNW 4	NNW 6	NNW 7	NNW 9	NNW 9	NNW 15	NNW 13	NNW 13	NNW 9	NNW 15	NNW 13	NNW 13	NNW 9	NNW 7	NNW 2	NNW 7	NNW 0	NNW 6	NNW 0	NNW 48	18 CST
15	C 0	SW 6	C 0	C 0	SSE 7	W 7	E 7	W 4	W 6	NNW 7	NNW 6	NNW 7	NNW 0	NNW 4	NNW 6	NNW 6	NNW 22	NNW 15	NNW 7	NNW 9	NNW 0	NNW 9	NNW 0	E 6	NNW 37	17 CST

