

ABSTRACT OF THE WIND AT WINNIPEG INTERNATIONAL AIRPORT FOR THE MONTH OF JULY 1984

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

STARTING 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	PEAK GUSTS	TIMES (CST)
1	SW 6	SSW 13	S 7	SSW 9	SSW 11	SSW 15	SSW 13	SSW 13	SSW 15	SSW 22	SSW 19	SSW 20	SSW 20	SSW 20	SSW 22	SSW 30	SSW 24	SSW 30	SSW 22	SSW 19	SSW 17	SSW 19	SSW 22	SSW 24	44	2341
2	S 26	SSE 24	SSE 22	S 20	S 19	S 13	S 15	S 13	S 7	SSE 9	SSE 4	SSE 7	SSE 9	SSE 7	SSE 13	SSE 17	SSE 22	SSE 17	SSE 13	SSE 9	SSE 9	SSE 11	SSE 11	35	0027	
3	WSW 13	WSW 13	W 17	W 15	WSW 15	W 17	W 13	W 15	W 17	W 13	W 19	W 19	W 19	W 20	W 24	W 26	W 19	W 20	W 11	W 11	W 11	W 7	W 11	50	1928	
4	WNW 13	W 13	W 9	W 11	W 13	W 9	W 11	W 15	W 19	W 17	W 17	W 19	W 17	W 20	W 28	W 30	W 20	W 28	W 24	W 11	W 9	W 4	W 20	6	1533	
5	WNW 6	WNW 11	WNW 11	WNW 7	WNW 11	N 13	N 15	N 20	NNW 22	N 24	N 30	N 24	N 28	N 30	N 28	N 22	N 28	N 30	N 26	N 30	N 26	N 13	N 9	6	1209	
6	N 9	NNW 9	NNW 7	NNW 7	NNW 7	NNW 6	NNW 2	NNW 7	NNW 9	NNW 6	NNW 9	NNW 6	NNW 9	NNW 11	NNW 2	NNW 7	NNW 2	NNW 7	NNW 6	NNW 6	NNW 7	NNW 7	NNW 6	6	1132	
7	SSW 6	SSW 6	S 7	S 6	SSE 9	SSE 19	SSE 22	S 19	S 24	S 33	S 39	S 35	S 24	S 20	S 22	S 28	S 31	SSE 22	SSE 24	SSE 19	SSE 28	S 6	S 17	52	1613	
8	SSW 17	S 17	S 15	S 13	S 13	S 13	S 19	S 17	S 15	SSW 9	SSW 2	SSW 15	SSW 22	S 15	SE 9	SSE 15	SSE 22	SSE 11	SSE 11	SSE 11	SSE 11	SSE 7	SSE 7	46	1350	
9	SSE 7	S 7	SSW 4	SSW 2	S 15	S 9	S 6	S 7	S 13	S 13	S 15	S 17	S 22	S 19	S 22	S 19	S 17	S 11	S 7	S 7	S 9	S 4	S 7	33		
10	SW 2	WSW 7	WSW 6	WSW 4	WSW 7	SSW 7	SSW 9	SSW 9	SSW 9	SSW 17	SSW 9	SSW 13	SSW 13	SSW 13	SSW 9	SSW 13	SSW 9	SSW 13	SSW 9	SSW 9	SSW 7	SSW 7	SSW 7	7		
11	WSW 11	WSW 7	WSW 11	WSW 9	WSW 11	W 11	W 11	W 13	W 9	W 11	W 19	W 20	W 17	W 20	W 19	W 26	W 20	W 15	W 11	W 7	W 4	W 6	W 9	9	41	1322
12	WSW 9	NNW 4	NNW 6	NNW 2	NNW 2	NE 6	NE 2	ESE 11	ESE 13	ESE 15	ESE 20	ESE 24	ESE 24	ESE 17	ESE 22	ESE 20	ESE 28	ENE 28	ENE 28	ESE 35	ESE 20	ESE 28	ESE 35	48	2228	
13	SE 28	SE 24	SSE 22	SSE 20	SSE 20	NE 9	NE 13	E 11	E 13	SE 15	SSE 20	SSE 24	SSE 11	ESE 19	ESE 20	ESE 17	ESE 19	ESE 26	ESE 22	SE 26	SE 26	SE 30	SE 30	6	0918	
14	S 6	W 11	WSW 9	W 11	W 13	W 9	W 13	W 15	W 26	WSW 22	W 26	W 30	W 33	WSW 28	W 33	W 22	W 17	W 20	W 19	W 20	W 19	W 20	W 20	20	57	2128
15	NNW 24	NNW 22	NNW 19	NNW 22	NNW 28	NNW 28	NNW 31	NNW 28	NNW 31	NNW 35	NNW 31	NNW 31	NNW 30	NNW 30	NNW 30	NNW 28	NNW 22	NNW 20	NNW 19	NNW 11	NNW 9	NNW 7	NNW 9	11	46	0733
16	SW 9	SW 13	SW 13	WSW 9	WSW 13	WSW 15	WSW 15	N 9	NNW 15	NNW 9	NNW 15	NNW 19	NNW 28	NNW 28	NNW 37	NNW 35	NNW 31	NNW 35	NNW 15	NNW 20	NNW 13	NNW 17	NNW 19	20	61	1551

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.	15.7	14.8	13.4	13.2	13.9	12.7	12.6	13.0	14.3	16.2	18.2	19.4	20.9	22.0	22.2	23.2	22.6	22.2	21.8	21.0	20.4	19.8	19.4	19.2
2.	18.7	18.9	17.9	17.6	17.4	16.6	17.2	18.4	19.7	21.0	21.8	22.4	24.7	25.9	26.2	24.6	25.1	24.6	24.0	22.6	20.2	18.0	16.9	16.5
3.	16.9	15.9	15.2	13.9	13.7	13.6	14.6	16.3	18.2	20.2	21.8	23.3	23.3	23.3	23.8	23.4	22.9	23.2	22.5	20.8	16.4	15.2	15.0	13.2
4.	13.3	12.9	13.1	12.4	12.0	11.8	12.6	15.2	17.8	18.6	18.0	19.4	20.4	21.6	21.6	21.6	21.3	21.5	21.1	20.4	18.2	15.5	15.7	13.8
5.	12.1	11.9	11.2	10.7	10.4	11.0	12.0	12.8	13.1	15.4	15.7	17.4	18.0	17.0	17.0	17.8	16.9	16.8	15.9	14.4	13.2	10.4	10.2	8.7
6.	10.1	7.5	6.0	5.1	4.8	5.2	7.3	10.8	13.8	15.2	16.4	16.6	17.6	17.5	18.8	19.5	18.5	19.9	19.7	19.0	17.3	15.0	13.8	13.4
7.	11.5	12.4	13.7	10.3	9.6	10.0	12.2	14.5	15.8	17.2	19.0	20.1	20.0	19.6	17.0	15.2	14.8	14.3	15.3	16.2	16.5	15.3	15.5	16.0
8.	15.4	14.6	13.8	13.5	13.0	13.3	14.0	15.8	17.8	19.8	21.4	22.9	24.7	25.7	25.6	25.6	26.5	26.8	26.6	25.4	23.4	19.4	18.2	16.2
9.	16.2	15.1	16.1	15.0	14.1	13.4	14.8	16.4	18.8	22.2	24.2	25.3	26.0	25.7	27.2	27.0	26.5	26.8	26.6	25.4	23.4	19.4	18.2	16.2
10.	15.9	15.4	14.4	15.6	13.3	14.6	15.3	19.2	20.2	22.4	24.3	23.5	25.6	26.2	25.0	26.8	27.0	27.2	26.0	24.9	21.7	19.8	18.2	18.4
11.	17.5	17.3	17.3	16.8	16.5	15.2	15.8	18.1	20.4	23.2	25.0	26.0	27.2	27.8	28.2	28.6	28.4	27.9	27.8	26.4	25.0	22.4	20.6	21.3
12.	20.4	17.0	15.2	15.0	14.3	15.7	18.0	18.4	21.5	24.9	25.9	26.4	26.6	26.8	28.4	29.2	29.1	27.9	26.8	24.3	23.3	22.2	22.0	18.4
13.	18.6	18.5	17.6	17.3	16.0	15.9	16.9	18.1	18.5	18.9	21.2	23.7	24.0	25.8	27.2	25.9	25.2	26.0	25.8	25.1	24.1	24.0	22.9	21.0
14.	21.2	20.9	19.0	17.0	16.4	15.1	15.5	17.6	18.9	19.4	20.4	21.0	22.0	22.6	23.6	21.5	21.3	21.7	22.0	21.3	20.2	18.8	16.0	16.0
15.	15.8	14.8	15.0	14.8	15.2	15.0	14.5	15.7	17.3	18.3	19.7	20.7	21.9	23.1	23.5	23.3	24.4	24.2	23.6	22.7	20.0	18.4	17.8	17.2
16.	16.6	16.0	16.6	16.4	15.3	14.6	14.5	16.2	16.0	17.4	19.6	20.2	21.8	21.4	21.6	21.4	15.1	15.8	14.2	15.6	14.5	14.2	14.4	14.1
17.	12.7	11.6	11.2	10.6	10.2	9.7	11.2	14.2	16.7	18.2	19.5	20.3	20.6	22.0	22.8	24.2	22.6	23.6	23.3	22.8	21.4	18.4	17.7	17.0
18.	16.4	15.6	15.0	14.5	14.2	13.9	14.2	16.9	19.5	21.5	23.5	25.8	27.3	28.6	30.0	27.2	24.2	24.0	22.9	20.9	18.3	15.3	14.1	14.4
19.	13.0	13.4	10.7	11.2	10.7	10.6	12.8	15.6	18.6	21.4	22.4	23.5	23.5	24.2	24.8	24.1	25.0	23.5	23.3	23.0	20.5	16.5	15.0	13.3
20.	12.4	12.0	10.8	9.8	10.5	11.5	12.2	16.2	16.8	17.0	20.2	21.8	24.4	25.6	26.8	25.8	26.6	26.1	25.6	24.8	23.4	23.3	22.3	21.0
21.	21.4	21.6	21.4	21.0	20.8	20.7	20.9	21.4	22.2	23.2	25.6	27.2	28.4	25.8	25.4	26.2	26.0	25.4	24.5	25.5	24.1	21.6	22.1	21.8
22.	23.0	21.8	21.0	19.6	19.7	20.5	20.8	21.2	21.5	23.2	25.2	23.3	22.0	21.7	22.5	24.2	24.2	23.9	22.0	20.6	19.7	18.0	17.8	16.3
23.	16.5	14.7	14.2	14.0	13.0	12.8	13.2	15.4	18.5	20.8	22.0	22.7	23.0	23.8	23.5	23.9	24.2	24.0	23.6	22.4	20.2	17.3	15.6	14.4
24.	14.6	14.4	13.0	12.4	11.6	11.2	14.5	16.0	18.2	20.6	22.0	23.4	24.0	24.8	24.8	26.0	26.1	25.7	25.4	24.6	22.6	19.2	17.2	16.3
25.	17.3	16.0	16.1	13.9	14.3	14.5	14.9	17.0	18.5	20.0	22.0	23.0	24.2	24.8	26.7	25.0	25.6	22.0	22.3	22.0	20.8	19.3	16.5	15.1
26.	13.0	13.2	11.8	11.6	11.8	12.2	13.8	15.2	19.1	20.6	22.0	23.1	23.7	25.7	25.6	25.8	26.4	23.3	24.2	22.9	21.4	19.8	17.8	16.3
27.	16.0	15.8	16.4	15.0	13.6	13.9	14.6	17.6	20.0	21.8	23.3	24.8	25.2	26.7	26.7	27.0	27.7	27.7	27.0	26.0	23.0	22.0	20.4	19.6
28.	19.0	18.5	18.0	17.5	16.2	16.0	16.5	17.6	20.7	23.8	26.2	28.6	29.6	29.6	29.9	30.5	30.6	30.5	29.6	28.3	26.1	24.2	22.6	22.2
29.	11.2	20.4	19.6	19.0	18.0	18.0	18.0	19.6	20.9	21.6	24.4	26.4	26.4	26.6	26.1	25.1	25.9	25.2	24.7	24.9	24.1	23.9	23.7	23.2
30.	23.4	22.9	21.9	21.8	21.1	21.0	20.8	21.9	21.6	21.4	20.9	20.4	21.0	22.6	24.2	24.9	23.3	25.0	24.2	24.2	23.0	21.8	20.7	20.3
31.	20.0	19.0	18.6	18.0	18.0	18.0	18.0	19.4	20.2	21.4	23.2	25.1	25.8	26.3	25.2	24.7	25.0	25.8	25.4	23.8	21.2	20.0	18.5	19.0
MEAN	16.6	16.0	15.2	14.7	14.2	14.1	15.0	16.8	18.6	20.2	21.8	22.8	23.7	24.2	24.6	24.4	24.0	23.9	23.5	22.6	20.9	19.1	18.0	17.1

MEAN DAILY TEMPERATURES BASED ON HOURLY READINGS

DATE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MEAN	18.0	20.7	18.6	17.1	13.8	13.7	15.0	19.3	20.8	20.9	22.5	22.4	21.6	19.6	19.0	16.8

MEAN DAILY TEMPERATURES BASED ON HOURLY READINGS

DATE	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MEAN	17.6	20.3	18.4	19.5	23.5	21.4	18.9	19.5	19.7	19.2	21.4	23.8	22.8	22.3	21.7

COMPARATIVE RECORDS RELEVÉS COMPARATIFS		MONTH MOIS				JULY / JUILLET						19 84		
Temperature/Température Precipitation/Précipitation Rainfall/Hauteur de pluie Snowfall/Hauteur de neige Wind speed/Vitesse du vent Station pressure/Pression à la station	— °Celsius — Millimetres (mm) — Millimetres (mm) — Centimetres (cm) — Kilometres per hour (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		31.1	28	33.7	14	32.9	42.2	11	1936	26.1	22,24	1884	113	
LOWEST TEMPERATURE TEMPÉRATURE LA PLUS BASSE		4.6	6	5.4	5	6.0	11.7	27 30	1943 1935	1.1	3	1972	113	
MEAN MONTHLY TEMPERATURE TEMPÉRATURE MENSUELLE MOYENNE		19.6		22.2		19.6	24.2		1936	15.4		1884	113	
TOTAL MONTHLY RAINFALL HAUTEUR TOTALE MENSUELLE DE PLUIE		38.3		29.8		75.9	197.4		1953	13.5		1875	113	
TOTAL MONTHLY SNOWFALL HAUTEUR TOTALE MENSUELLE DE NEIGE														
TOTAL MONTHLY PRECIPITATION PRÉCIPITATION TOTALE MENSUELLE		38.3		29.8		75.9	197.4		1953	13.5		1875	113	
NO OF DAYS WITH MEASURABLE PRECIPITATION NOMBRE DE JOURS AVEC PRÉCIPITATION MESURABLE		14		6		11	18		1912 1938 1914	5		1939	101	
GREATEST RAINFALL IN ONE DAY HAUTEUR DE PLUIE MAXIMALE EN UNE JOURNÉE		17.5	13	11.6	30		133.6	12					113	
GREATEST SNOWFALL IN ONE DAY HAUTEUR DE NEIGE MAXIMALE EN UNE JOURNÉE														
GREATEST PRECIPITATION IN ONE DAY PRÉCIPITATION MAXIMALE EN UNE JOURNÉE		17.5	13	11.6	30		133.6	12	1914				113	
MAXIMUM RAINFALL RECORDED IN: HAUTEUR DE PLUIE MAXIMALE ENREGISTRÉE EN:														
5 MINUTES		4.9	13	2.3	2		17.8	16	1968				26	
10 MINUTES		5.6	13	4.0	2		24.6	16	1968				26	
15 MINUTES		6.8	13	4.0	2		35.3	16	1968				26	
30 MINUTES		12.0	13	4.9	30		39.4	16	1968				26	
60 MINUTES		17.1	13	7.1	30		39.4	16	1968				26	
24 CONSECUTIVE HOURS HEURES CONSECUTIVES		17.5	13	11.6	30		133.6	12	1914				13	
MEAN WIND SPEED (km/h) VITESSE MOYENNE DU VENT (km/h)		14.0		14.6		16.0	20.9		1952	10.9		1972	64	
MAXIMUM SPEED (1 min.) (km/h) VITESSE MAXIMALE (1 min.) (km/h)		S 39	7	NNW 41	4	51	NW 68	10	1946				46	
MAXIMUM GUST SPEED (km/h) POINTE DU VENT MAXIMALE (km/h)		NW39	22	W 41	22	85	SSW 127	14	1959				40	
TOTAL HOURS OF SUNSHINE TOTAL DES HEURES INSOLATION		333.3		330.3		315.6	367.7		1974	178.3		1912	85	
MEAN STATION PRESSURE (kPa) PRESSION MOYENNE À LA STATION (kPa)		98.46		98.29		98.47	98.70		1956	98.20		1975	46	
GREATEST STATION PRESSURE (kPa) PRESSION MAXIMALE À LA STATION (kPa)		100.01	24	99.40	5	99.56	100.04	4	1972				46	
LEAST STATION PRESSURE (kPa) PRESSION MINIMALE À LA STATION (kPa)		97.43	8	96.72	3	97.13				96.28	1	1968	46	
CLIMATOLOGICAL DATA FOR THE PAST DONNÉES CLIMATOLOGIQUES POUR LES														
TEN / DIX										YEARS DERNIÈRE ANNÉES				(10)
YEAR ANNÉE	MAXIMUM TEMP. MAXIMALE	MINIMUM TEMP. MINIMALE	MEAN TEMP. MOYENNE	RAINFALL HAUTEUR DE PLUIE	SNOWFALL HAUTEUR DE NEIGE	TOTAL PRECI. 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			
1975	35.5	7.0	21.5	58.2		58.2	15.0	S 47	357.8	12.0	510.6			
1976	31.5	6.1	19.7	36.9		36.9	16.9	NNW 46	348.4	15.7	454.8			
1977	31.6	8.3	19.4	85.3		85.3	16.1	ESE 46	340.5	11.1	445.3			
1978	30.4	5.8	18.9	60.6		60.6	14.1	W 59	305.9	30.5	430.1			
1979	32.7	7.0	20.9	23.1		23.1	14.9	WNW 50	333.8	12.4	493.4			
1980	34.8	5.5	20.4	23.7		23.7	15.6	N,S 41 E 41 NW 41 WNW 41 SSW 41 NNW 41	326.1	9.7	478.7			
1981	34.0	5.6	20.3	39.0		39.0	15.2	S 52	332.4	15.3	474.6			
1982	31.1	8.4	20.0	106.9		106.9	15.1	WNW 52	307.6	7.7	465.3			
1983	33.7	5.4	22.2	29.8		29.8	14.6	W 41	330.3	12.0	532.9			
1984	31.1	4.6	19.6	38.3		38.3	14.0	NNW 41 S 39 NW 39	333.3	14.9	452.5			