
WIND CHILL FOR NOVEMBER 1983

YWG - WINNIPEG MANITOBA

EXPRESSED IN WATTS/SQ.M.

DAY	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	0	1279	1349	1440	1533	1572	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	1134	1151	1161	1207	1205	1220	1139	1132	0	1126	1220	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	997	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	1043	974	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	1070	1067	0	0	0	0	0	0	0	0	0	0	1235	0	1129	1111	1074	1031	997	0	0	0	0
12	0	1128	1120	1142	1114	1120	1120	1151	1164	1173	1240	1192	1217	1176	1184	1152	1134	0	0	0	0	0	1024	0
13	1113	1113	1068	1095	1153	1132	1100	1150	1119	1146	1071	1129	1100	1096	1058	1071	1055	0	0	0	0	0	1110	1133
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	962	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	1020	0	1068	1009	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	1057	1089	1096	1089	1143	1266	1222	1233	0	1178	1165	1206	0
17	1207	1089	1231	1224	1210	1234	1273	1265	1279	1279	1296	1292	1261	1207	1200	1244	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	1301	1331	1336	1294	1333	1313	1309	1313	1294	1253	1281	1285	1281	1256	1256	1249	1243	1243	1254	1247	1232	1216	1204	1198
22	1185	1263	1168	1174	1204	1216	1180	0	0	0	1304	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1238	0	0	1213	1354	1339
24	1344	1344	1354	1327	1378	1437	1371	1385	1378	1459	1503	1496	1462	1417	1436	1455	1451	1438	1398	1513	1516	1502	1332	1412
25	1480	1471	1476	1525	1528	1540	1441	1500	1507	1438	1510	1489	1461	1527	1477	1461	1462	1521	1516	1347	1440	1419	1378	1358
26	1360	1331	1394	1329	1397	1349	1302	1293	1276	1259	1207	1287	1201	1243	1283	1214	1173	1220	1185	1108	1130	1061	0	0
27	1087	0	1044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1151	1246	1233	1286	1119
28	1220	1113	0	1213	0	0	1261	1349	1253	1250	1342	1324	1263	1294	1360	1297	1291	1341	1367	1405	1397	1379	1386	1452
29	1448	1490	1531	1516	1453	1453	1487	1522	1571	1543	1532	1614	1561	1561	1588	1611	1657	1621	1610	1585	1589	1536	1543	1495
30	1507	1597	1522	1474	1549	1464	1403	1473	1462	1472	1495	1356	1290	1328	1341	1337	1324	1352	1388	1332	1232	0	0	1321

SUMMARY

RANGE	RANGE	RANGE	RANGE
1200-1599 W/SQ.M	1600-1999 W/SQ.M	2000-2299 W/SQ.M	> 2299 W/SQ.M.
194	5	0	0
NUMBER OF HOURS=			
NUMBER OF DAYS=	17	1	0
LONGEST CONSECUTIVE HOURS			0

HOURLY TEMPERATURES AT WINNIPEG INTERNATIONAL AIRPORT FOR THE MONTH OF NOVEMBER 1983
 LOCAL STANDARD TIME

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.	9.1	8.7	8.5	8.0	7.5	7.0	6.5	5.9	5.5	6.5	8.1	10.2	11.9	13.7	14.8	13.7	11.9	9.0	6.3	6.9	7.0	7.5	7.2	6.8
2.	6.6	6.2	5.5	5.4	5.4	4.4	3.7	2.9	2.3	3.1	3.0	3.0	4.5	5.6	6.0	6.4	5.9	4.3	3.1	2.1	2.0	1.0	.5	-5.5
3.	-1.0	-1.3	-1.5	-2.0	-1.4	-2.0	-1.8	2.2	-1.6	-1.4	0.0	1.2	2.3	4.4	5.1	4.4	5.7	5.7	5.2	5.0	4.9	4.9	4.9	4.9
4.	4.9	4.9	4.9	4.7	4.8	5.1	5.0	4.8	4.7	4.7	5.5	6.5	7.1	7.6	7.4	7.4	7.5	7.2	7.2	7.4	6.9	6.5	6.1	6.0
5.	6.4	6.8	7.4	7.4	7.5	7.5	7.6	7.6	7.8	8.0	9.8	11.2	11.2	11.2	10.8	10.4	10.0	9.2	7.8	6.6	6.8	6.2	5.8	5.5
6.	4.1	3.6	2.1	1.2	1.2	0.0	0.0	.6	.7	.7	4.0	4.7	5.9	7.1	8.8	9.5	7.9	5.1	4.0	2.8	2.9	3.2	3.9	4.3
7.	4.7	5.1	5.3	6.2	7.3	7.7	7.7	7.2	7.0	6.6	7.2	8.0	8.8	10.4	10.1	10.3	8.7	7.2	7.3	6.3	5.5	4.4	4.0	2.2
8.	2.1	2.9	1.8	1.7	.2	-7	-6	.5	1.5	2.2	2.6	3.6	4.4	4.1	4.3	4.1	3.4	1.8	.8	-2	-3.1	-5.1	-4.8	-5.7
9.	-7.6	-7.2	-6.5	-7.4	-7.1	-5.8	-5.4	-4.3	-3.6	-2.4	-6	-2.2	1.6	1.6	1.8	1.0	1.3	1.3	-2.2	-3.0	-3.8	-5.2	-6.3	-5.6
10.	-8.3	-8.0	-9.4	-6.7	-7.8	-10.8	-7.0	-6.7	-8.1	-5.2	-3.7	-2.4	-1.5	-1.0	-1.0	-1.1	0.0	-2.4	2.6	-3.9	-3.8	-5.3	-6.2	-7.0
11.	-7.6	-9.4	-9.3	-8.3	-6.7	-7.3	-7.5	-6.9	-6.1	-4.6	-2.9	-1.7	-.3	-.2	.4	.4	-.1	-2.9	-4.6	-4.1	-5.9	-4.3	-3.9	-4.1
12.	-4.3	-4.3	-4.2	-4.6	-4.9	-5.1	-5.5	-5.3	-4.0	-3.4	-2.4	-.5	.6	.6	.5	.7	-.4	-1.1	-1.2	-1.2	-1.5	-1.5	-1.7	-1.8
13.	-1.6	-1.6	-1.4	-1.5	-1.6	-1.7	-1.6	-1.5	-1.2	-.7	-.2	.5	1.0	1.8	2.5	2.6	2.3	2.0	1.8	1.6	1.5	1.5	1.3	1.2
14.	1.0	.4	0.0	-.1	-.2	-.3	-.1	-.4	-.3	-.2	-.2	.7	1.0	1.4	1.9	2.1	1.6	1.0	.4	-.2	-.5	-.7	-.7	-.6
15.	-1.0	-1.0	-1.3	-1.5	-1.5	-1.8	-2.1	-2.1	-2.1	-2.1	-1.9	-1.5	-1.2	-1.0	-1.0	-1.1	-1.3	-1.7	-1.9	-1.9	-2.0	-1.9	-2.1	-2.2
16.	-2.3	-2.2	-2.2	-2.3	-2.2	-2.2	-2.2	-2.2	-2.4	-2.2	-1.4	-1.1	-.6	-.2	.3	-.2	-.3	-1.0	-1.5	-2.2	-1.7	-1.5	-1.6	-1.8
17.	-2.0	-1.8	-1.8	-1.9	-1.8	-2.1	-1.5	-1.3	-.5	.4	.8	1.1	1.1	1.2	2.6	2.4	2.6	2.4	2.2	2.0	1.9	2.0	1.8	1.8
18.	.6	.6	.6	.8	.8	.8	.6	.7	1.0	1.2	1.2	1.6	2.1	1.5	1.5	1.8	1.8	1.8	1.5	1.5	.4	.1	.2	.1
19.	1.8	1.5	2.0	2.0	1.6	1.4	1.0	1.0	.4	.5	.7	1.1	1.2	1.5	1.5	1.8	1.8	1.8	1.5	1.5	.4	.1	.2	.1
20.	.1	.2	.2	.2	.2	.3	.3	.4	.4	.4	0.0	-.3	-.5	-.6	-1.2	-1.8	-2.5	-3.0	-3.2	-3.6	-3.9	-4.0	-4.1	-4.0
21.	-3.9	-4.0	-4.0	-4.2	-4.3	-4.2	-4.1	-4.1	-3.9	-3.7	-3.7	-3.4	-3.4	-3.2	-3.4	-3.6	-4.0	-4.7	-5.3	-5.0	-5.9	-6.1	-5.9	-6.3
22.	-6.3	-6.1	-5.8	-6.3	-8.3	-12.0	-11.4	-11.9	-10.2	-9.4	-7.3	-6.6	-6.9	-6.1	-5.6	-5.4	-5.5	-5.7	-5.6	-5.5	-5.6	-5.9	-6.2	-6.6
23.	-6.7	-6.8	-7.1	-8.4	-9.1	-10.4	-10.7	-11.3	-11.3	-12.4	-11.3	-9.0	-9.7	-10.4	-9.4	-7.4	-7.0	-7.3	-6.7	-6.7	-6.7	-7.0	-6.5	-7.0
24.	-6.8	-7.9	-7.7	-7.6	-7.1	-7.3	-7.2	-7.5	-8.1	-7.5	-7.9	-8.1	-8.3	-8.6	-8.7	-8.8	-8.9	-8.7	-8.9	-8.7	-9.3	-10.6	-10.7	-10.4
25.	-11.3	-11.3	-11.5	-11.2	-11.6	-11.8	-11.9	-12.1	-12.4	-11.9	-11.0	-10.5	-9.2	-8.4	-7.6	-7.0	-7.0	-7.1	-6.5	-6.3	-6.3	-5.6	-5.0	-5.0
26.	-4.8	-5.2	-5.4	-6.6	-7.2	-7.5	-5.8	-5.2	-5.6	-5.2	-4.9	-4.5	-4.3	-3.9	-3.5	-3.6	-3.5	-3.5	-3.2	-3.0	-3.0	-3.0	-3.2	-3.4
27.	-4.2	-4.2	-3.8	-4.2	-3.8	-4.0	-4.0	-4.0	-4.4	-3.9	-3.6	-4.6	-4.6	-4.2	-4.5	-4.9	-5.7	-5.6	-5.4	-5.4	-5.6	-6.2	-6.2	-6.5
28.	-7.3	-7.6	-7.5	-7.4	-7.7	-7.8	-8.8	-8.8	-8.9	-8.7	-9.2	-9.0	-9.0	-8.5	-8.7	-8.5	-8.7	-8.5	-8.4	-9.0	-9.1	-9.2	-9.2	-9.2
29.	-9.5	-9.9	-10.2	-10.5	-10.8	-10.9	-11.0	-11.2	-11.3	-11.2	-11.1	-10.8	-10.6	-10.6	-10.7	-10.3	-10.5	-10.4	-10.4	-10.1	-10.0	-9.9	-9.6	-9.5
30.	-9.4	-9.1	-8.8	-8.5	-8.1	-7.8	-7.6	-7.8	-8.2	-8.1	-7.7	-7.7	-7.3	-7.1	-6.8	-6.9	-7.0	-7.6	-9.1	-9.6	-10.6	-12.3	-14.1	-15.3

MEAN	-2.1	-2.2	-2.3	-1.9	-2.4	-2.8	-2.7	-2.6	-2.7	-2.3	-1.5	-8	-.3	0.0	.3	.3	0.0	-.7	-1.0	-1.5	-1.9	-2.1	-2.3	-2.5
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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	8.7	3.9	1.9	6.0	8.2	3.7	6.9	.9	-2.5	-4.6	-4.4	-2.3	.3	.3	-1.5	-1.5

MEAN DAILY TEMPERATURES BASED ON HOURLY READINGS

DATE	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MEAN	-.2	1.5	1.2	-1.2	-4.3	-7.1	-8.5	-8.4	-9.0	-4.4	-4.6	-8.4	-10.4	-8.8

COMPARATIVE RECORDS RELEVÉS COMPARATIFS				MONTH MOIS		NOVEMBER/NOVEMBRE		19 83						
Temperature/Température Précipitation/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		15.4	1	12.3	1	10.8	23.9	5	1975	2.2	5	1972	112	
LOWEST TEMPERATURE TEMPÉRATURE LA PLUS BASSE		-16.0	30	-23.8	26	23.3	-7.8	12	1899-1923	36.7	28	1875	112	
MEAN MONTHLY TEMPERATURE TEMPÉRATURE MENSUELLE MOYENNE		-1.9		-5.8		-4.5	1.3		1899	-13.9		1896	112	
TOTAL MONTHLY RAINFALL HAUTEUR TOTALE MENSUELLE DE PLUIE		0.7		3.8		5.5	62.2		1918	NIL (SEVERAL)		112		
TOTAL MONTHLY SNOWFALL HAUTEUR TOTALE MENSUELLE DE NEIGE		19.2		3.2		21.9	80.3		1955	TR.		1928	112	
TOTAL MONTHLY PRECIPITATION PRÉCIPITATION TOTALE MENSUELLE		16.3		5.7		25.2	90.2		1955	0.8		1976	112	
NO OF DAYS WITH MEASURABLE PRECIPITATION NOMBRE DE JOURS AVEC PRÉCIPITATION MESURABLE		11		5		9	20		1955	1		1901	100	
GREATEST RAINFALL IN ONE DAY HAUTEUR DE PLUIE MAXIMALE EN UNE JOURNÉE		0.7	19	*2.1	19		44.5	17	1918				112	
GREATEST SNOWFALL IN ONE DAY HAUTEUR DE NEIGE MAXIMALE EN UNE JOURNÉE		4.4*	20	*1.2	4		31.0	10	1919				112	
GREATEST PRECIPITATION IN ONE DAY PRÉCIPITATION MAXIMALE EN UNE JOURNÉE		5.2*	20	*2.7	20		44.5	17	1918				112	
MAXIMUM RAINFALL RECORDED IN: HAUTEUR DE PLUIE MAXIMALE ENREGISTRÉE EN:														
5 MINUTES		0.2	19				1.3	8	1980				15	
10 MINUTES		0.2	19				1.8	14	1971				15	
15 MINUTES		0.2	19				2.0	14	1971				15	
30 MINUTES		0.4	19				2.8	14	1971				15	
60 MINUTES		0.4	19				3.8	14	1971				15	
24 CONSECUTIVE HOURS HEURES CONSECUTIVES		0.7	19	3.6	19-20		44.5	17	1918				112	
MEAN WIND SPEED (km/h) VITESSE MOYENNE DU VENT (km/h)		17.6		15.7		19.4	25.4		1953	13.7		1972	63	
MAXIMUM SPEED (1 min.) (km/h) VITESSE MAXIMALE (1 min.) (km/h)		W48	7	NNW48	11	57	NW80	11	1940				45	
MAXIMUM GUST SPEED (km/h) POINTE DU VENT MAXIMALE (km/h)		SSE69	4	NNW76	11	80	NNW124	21	1960				38	
TOTAL HOURS OF SUNSHINE TOTAL DES HEURES INSOLATION		52.6		115.9		90.7	139.7		1976	25.1		1944	84	
MEAN STATION PRESSURE (kPa) PRESSION MOYENNE À LA STATION (kPa)		98.48		98.74		98.63	99.19		1943	98.20		1949	45	
GREATEST STATION PRESSURE (kPa) PRESSION MAXIMALE À LA STATION (kPa)		100.32	27	100.50	26	1005.2	101.52	20	1978				45	
LEAST STATION PRESSURE (kPa) PRESSION MINIMALE À LA STATION (kPa)		96.18	20	96.66	20	96.38				94.56	20	1962	45	
CLIMATOLOGICAL DATA FOR THE PAST DONNÉES CLIMATOLOGIQUES POUR LES													TEN (10) DIX	YEARS DERNIÈRE ANNÉES
YEAR ANNÉE	MAXIMUM TEMP. TEMP. MAXIMALE	MINIMUM TEMP. TEMP. MINIMALE	MEAN TEMP. TEMP. MOYENNE	RAINFALL HAUTEUR DE PLUIE	SNOWFALL HAUTEUR DE NEIGE	TOTAL PRECIP. PRÉCIP. TOTALE	MEAN WINDSPEED VITESSE MOYENNE DES VENTS	MAXIMUM WINDSPEED VITESSE MAXIMALE DES VENTS	HOURS SUNSHINE HEURES INSOLATION	HEATING DEGREE-DAYS DEGRES-JOURS DE CHAUFFE	GROWING DEGREE-DAYS DEGRES-JOURS DE CROISSANCE			
1974	11.7	-18.3	-3.3	0.8	10.4	5.6	18.5	NW45	87.8	635.6	2.2			
1975	23.9	-25.4	-2.0	2.3	15.5	13.0	16.4	S40 NN40	122.9	598.4	28.9			
1976	13.3	-26.7	-5.9	TR.	1.7	0.8	20.3	NNW56	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	NW57	100.7	688.6	0.0			
1980	16.0	-21.5	-2.0	4.3	20.7	25.0	17.1	NW46	125.0	601.1	2.2			
1981	18.2	-10.7	1.0	3.6	2.5	5.9	17.7	NW54	112.4	510.5	22.3			
1982	12.3	-23.8	-5.8	3.8	3.2	5.7	15.7	NNW48	115.9	713.8	0.0			
1983	15.4	-16.0	-1.9	0.7	19.2	16.3	17.6	W48	52.6	597.0	11.0			

NOV.19-20/82 -24 Hr.Precip. 4.2 mm. Nov. 4-5 - 24 Hr. Snow 1.8 Cm, Nov.19-20 - 24 Hr. Rain 3.6 mm
NOV.19-20/83 -24 Hr. Snow 7.4 cm. Nov.19-20/83 - 24 Hr.Precip.8.9 mm