
WIND CHILL FOR MARCH 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	0	0	0	0	0	1243	0	1174	0	0	0	0	0	1153	1107	1081	1127	1075	1057	0	0	0	1009
2	1039	1046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1015	0	1003	1000	1028	0	0	0
3	0	0	0	1003	1028	0	0	1024	0	1065	1037	1074	980	980	1077	1071	1006	968	994	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	0	0	0	0	0	0	0	0	0	0	0	0	0
7	1240	1207	1265	1242	1205	1246	1249	1336	1405	1439	1498	1490	1529	1557	1588	1574	1574	1588	1628	1628	1574	1635	1646	1646
8	1630	1601	1630	1696	1651	1674	1651	1651	1667	1619	1619	1619	1667	1658	1653	1699	1595	1591	1571	1439	1462	1426	1444	1409
9	1313	1335	1412	1459	1435	1380	1433	1369	1345	0	1438	0	0	0	0	1368	1328	1342	1349	1357	1341	1261	1249	1252
10	1217	0	0	0	0	0	0	1336	1293	1299	1372	1325	0	0	1351	1479	1439	1370	1297	1240	1230	1253	1260	1133
11	1214	1223	1173	1217	1290	1362	1322	1387	1336	1376	1407	1423	1394	1407	1415	1374	1353	1326	1314	0	0	0	0	0
12	0	0	1174	1185	1161	1186	1193	1158	1150	1153	1152	1162	1158	1192	1217	1195	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	1077	1024	0	1244	1193	1252	1297	1289	1330	1331	1447	0
14	1397	1391	1478	1473	1455	1559	1518	1536	1550	1553	1613	1570	1595	1675	1644	1615	1564	1524	1493	1456	1370	1402	1420	1374
15	1350	1358	1391	1371	1318	1295	1354	1402	1369	1316	1319	1322	1360	1350	1294	1295	1279	1239	1130	1127	1052	0	0	0
16	1078	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1057	1112	1100	1106	1106	1112
17	1160	1051	1086	1089	1063	1102	1075	1075	1041	0	1197	1182	1192	1192	1287	1293	1256	1235	1223	1264	1219	1250	1254	1236
18	1264	1301	1295	1312	1329	1368	1332	1339	1341	1322	1360	1344	1315	1322	1363	1439	1481	1413	1381	1317	1300	1348	1309	1326
19	1299	1311	1300	1405	1422	1412	1419	1373	1370	1433	1405	1385	1434	1429	1440	1504	1450	1429	1398	1385	1357	1352	1351	1327
20	1329	1340	1382	1389	1430	1395	1396	1357	1370	1325	1357	1405	1438	1424	1475	1402	1325	1284	1368	1371	1364	1350	1392	1385
21	1319	1321	1303	1322	1386	1351	1288	1337	1337	1315	1362	1371	1336	1421	1383	1371	1370	1412	1402	1436	1405	1422	1369	1398
22	1395	1322	1309	1264	1376	1422	1333	1387	1387	0	1429	0	0	0	1423	1319	1264	1303	1306	1228	1311	1271	1229	1285
23	1226	1222	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1090	0	1029	0	1015
24	0	0	1067	1078	1101	0	1148	1156	1224	1262	1226	1259	1238	1232	1182	1170	1199	1165	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	1147	1134	1120	1134	1134	0	0	0	0	0	0	0	0
26	0	0	0	0	0	1259	1239	1290	1314	1350	1334	1229	1337	1358	1384	1388	1361	1384	1296	1263	1246	1229	1184	1209
27	1058	1156	1151	0	1215	1270	0	1200	0	0	1244	1220	0	1312	1319	1332	1276	1287	1260	1151	1186	1149	1122	0
28	1111	1096	1136	1201	1171	1194	1197	1215	1246	1255	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	1023	0	0	0	0	0	0	1033	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SUMMARY

	RANGE	RANGE	RANGE	RANGE
NUMBER OF HOURS=	1200-1599 W/SQ.M	1600-1999 W/SQ.M	2000-2299 W/SQ.M	> 2299 W/SQ.M.
	294	25	0	0
NUMBER OF DAYS=	22	3	0	0
LONGEST CONSECUTIVE HOURS				

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.	-8.4	-7.9	-7.5	-7.3	-6.8	-6.3	-6.2	-6.0	-5.8	-5.4	-5.2	-4.3	-3.4	-2.8	-2.2	-1.6	-1.7	-1.8	-1.6	-1.6	-1.1	-1.5	-1.7	-1.8
2.	-1.7	-1.6	-1.4	-1.5	-1.6	-1.5	-1.4	-1.4	-1.2	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.	.8	-1.1	0.0	-0.5	-0.8	-0.8	-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.	.8	.6	.7	.7	.6	.5	.5	.6	.7	.7	1.0	1.2	1.2	1.0	1.0	1.2	1.3	1.2	1.2	1.2	1.1	1.1	1.0	
5.	.4	.4	.4	.4	.4	.4	.3	.4	.5	.6	.7	.8	.8	.9	1.1	1.2	1.3	1.2	1.2	1.2	1.1	1.1	1.0	
6.	1.1	.8	1.0	.9	1.0	1.0	.8	.8	.8	.8	.7	.6	.6	.7	.2	0.0	0.0	-0.3	-0.4	-0.6	-1.4	-2.0	-2.0	
7.	-4.6	-7.2	-8.5	-9.5	-10.5	-11.0	-11.4	-12.2	-13.1	-12.7	-12.7	-13.1	-12.9	-12.9	-12.7	-13.1	-13.4	-13.4	-13.6	-13.5	-13.6	-14.2	-14.2	
8.	-14.2	-14.2	-14.0	-14.0	-14.0	-14.0	-14.0	-14.4	-15.0	-14.9	-14.1	-12.5	-11.3	-9.5	-8.8	-8.4	-8.4	-7.7	-7.9	-8.3	-9.0	-10.1	-11.1	
9.	-12.1	-12.6	-13.4	-14.3	-14.9	-15.4	-15.3	-15.9	-15.9	-14.2	-12.8	-11.7	-10.6	-9.7	-9.2	-9.0	-8.6	-8.7	-9.0	-10.3	-10.2	-11.7	-11.8	
10	-12.3	-11.5	-11.6	-11.8	-12.7	-12.7	-12.7	-13.1	-12.0	-11.5	-10.3	-9.1	-7.8	-6.0	-4.8	-4.0	-3.6	-3.6	-4.3	-4.6	-4.9	-5.3	-5.1	
11	-5.4	-5.6	-5.2	-5.3	-5.7	-5.7	-5.8	-5.7	-5.1	-4.0	-2.8	-1.8	-1.6	2.0	3.3	3.5	3.5	3.5	3.0	1.9	2.0	2.0	1.7	
12	-1.1	-1.2	-1.6	-1.7	-2.4	-2.7	-2.6	-2.2	-1.8	-.7	.1	.6	1.4	-1.3	-1.7	-1.9	-2.5	-4.0	-5.0	-6.2	-7.2	-8.0	-8.6	
13	1.2	.8	.7	.5	.2	-.1	-.1	.2	.2	.1	-.2	-.2	-.4	-1.0	-1.3	-1.7	-2.5	-4.0	-5.0	-6.2	-7.2	-8.0	-8.6	
14	-9.8	-10.3	-10.7	-11.4	-11.9	-12.6	-13.3	-13.6	-14.0	-13.9	-13.2	-12.0	-11.1	-10.0	-9.1	-8.4	-7.6	-6.9	-6.5	-7.1	-7.4	-7.5	-7.5	
15	-7.0	-7.7	-8.2	-8.4	-8.5	-8.6	-8.8	-8.5	-7.7	-6.8	-5.5	-4.3	-3.5	-3.4	-3.3	-3.2	-2.9	-2.5	-2.9	-2.8	-3.2	-3.0	-3.2	
16	-3.0	-3.0	-3.8	-5.0	-5.0	-4.4	-4.4	-4.4	-3.4	-2.8	-2.4	-2.2	-2.2	-2.0	-1.6	-1.8	-1.8	-2.0	-1.9	-2.0	-2.1	-2.2	-2.4	
17	-2.8	-2.8	-2.9	-3.4	-3.6	-3.8	-4.2	-4.5	-5.0	-5.2	-4.8	-4.6	-3.8	-3.7	-3.7	-3.3	-3.4	-3.5	-3.7	-4.2	-4.6	-5.1	-5.6	
18	-7.1	-7.3	-8.2	-8.6	-8.8	-9.3	-9.5	-9.7	-9.9	-9.5	-8.2	-7.4	-7.1	-5.9	-5.4	-5.0	-5.0	-5.5	-6.1	-7.3	-7.9	-8.5	-9.8	
19	-9.7	-10.2	-9.1	-8.6	-8.5	-7.9	-8.0	-8.5	-8.8	-9.4	-9.1	-8.5	-7.6	-6.6	-5.8	-5.1	-4.6	-4.4	-5.0	-5.9	-6.5	-6.7	-7.3	
20	-9.0	-9.7	-10.1	-9.8	-9.7	-9.3	-11.2	-11.8	-11.4	-10.1	-8.7	-8.5	-7.4	-6.8	-6.6	-6.2	-6.8	-6.6	-6.7	-7.6	-8.0	-8.6	-9.5	
21	-9.9	-10.2	-10.2	-10.8	-11.0	-11.3	-11.5	-11.7	-11.7	-11.3	-10.1	-9.5	-9.2	-8.7	-8.5	-8.3	-8.2	-8.3	-8.2	-8.6	-9.3	-10.6	-10.3	
22	-11.4	-13.2	-13.2	-14.3	-14.9	-14.6	-15.2	-15.5	-14.4	-12.5	-10.6	-9.1	-8.1	-7.9	-7.3	-7.0	-6.7	-6.5	-6.6	-7.7	-9.0	-9.4	-10.5	
23	-11.2	-12.4	-12.0	-11.7	-13.2	-15.0	-15.2	-14.6	-12.4	-9.4	-5.7	-4.2	-3.7	-3.3	-2.8	-2.5	-2.1	-2.0	-2.3	-3.2	-3.8	-4.2	-5.0	
24	-6.6	-5.5	-5.5	-5.8	-6.6	-6.6	-7.0	-6.8	-5.2	-3.8	-3.1	-.3	.3	1.3	1.5	1.9	2.1	2.1	1.9	1.7	1.8	1.6	1.4	
25	1.1	.7	.5	.2	0.0	-.3	-.5	-.7	-.5	0.0	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.3	.2	0.0	
26	-3.6	-5.1	-5.8	-6.2	-6.4	-6.7	-6.5	-7.1	-7.2	-7.3	-7.2	-7.2	-6.0	-5.0	-4.5	-4.0	-3.4	-3.4	-3.5	-5.5	-6.7	-7.9	-8.9	
27	-8.9	-8.7	-8.4	-8.9	-10.5	-9.9	-9.1	-9.7	-9.4	-8.5	-7.1	-5.4	-5.0	-4.2	-3.2	-2.7	-2.3	-2.3	-2.9	-4.8	-6.2	-7.0	-8.2	
28	-8.3	-8.9	-10.0	-10.3	-11.3	-11.3	-12.2	-10.5	-9.2	-6.3	-3.8	-1.4	-1.0	.4	2.5	2.6	2.4	2.5	1.2	-.1	-.8	-1.2	-2.2	
29	-2.3	-1.9	-2.6	-3.4	-1.7	-3.2	-3.2	-1.4	.2	1.0	1.9	2.3	2.6	1.6	1.3	.9	.9	.9	.7	.6	.8	.7	.6	
30	.3	.2	.2	.2	.2	.2	.1	.2	.3	.7	2.5	3.4	4.1	5.8	5.8	6.1	5.6	4.1	4.4	5.0	4.4	3.5	4.0	
31	3.0	2.5	2.4	2.2	2.0	2.2	2.0	2.2	2.0	2.8	2.6	1.9	1.8	1.6	1.4	1.5	1.4	1.2	.9	.6	.8	1.0	.6	
MEAN	-5.1	-5.5	-5.6	-5.9	-6.2	-6.4	-6.6	-6.6	-6.5	-6.2	-5.6	-4.7	-3.5	-2.9	-2.5	-2.3	-2.2	-2.3	-2.6	-3.1	-3.5	-3.9	-4.2	

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	-4.0	-6.6	0.0	.7	.8	.1	-11.9	-11.7	-11.9	-8.3	-2.3	.5	-2.1	-10.0	-5.2	-2.7

MEAN DAILY TEMPERATURES BASED ON HOURLY READINGS

DATE	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MEAN	-4.0	-7.7	-7.4	-8.6	-9.8	-10.6	-7.3	-1.8	.1	-5.9	-6.6	-4.0	0.0	2.7	1.7

COMPARATIVE RECORDS RELEVÉS COMPARATIFS		MONTH MOIS		MARCH / MARS									19	83
Temperature/Température Precipitation/Précipitation Snowfall/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		6.7	30	8.2	28	8.1	23.3	27	1946	-1.7	24	1899	112	
LOWEST TEMPERATURE TEMPÉRATURE LA PLUS BASSE		-16.1	22	-26.4	7	-28.6	-10.6	24	1878	-38.9	3	1873	112	
MEAN MONTHLY TEMPERATURE TEMPÉRATURE MENSUELLE MOYENNE		-4.7		-7.3		-8.2	1.6		1878	-16.1	10	1880	112	
TOTAL MONTHLY RAINFALL HAUTEUR TOTALE MENSUELLE DE PLUIE		40.4		25.2		3.3	67.8		1945	(Nil Several)			112	
TOTAL MONTHLY SNOWFALL HAUTEUR TOTALE MENSUELLE DE NEIGE		27.0		9.4		21.1	76.2		1904	.8		1946	112	
TOTAL MONTHLY PRECIPITATION PRÉCIPITATION TOTALE MENSUELLE		65.6		35.8		22.7	76.2		1904	1.5		1939	112	
NO OF DAYS WITH MEASURABLE PRECIPITATION NOMBRE DE JOURS AVEC PRÉCIPITATION MESURABLE		17		11		9	17		1983	3	(several)	100		
GREATEST RAINFALL IN ONE DAY HAUTEUR DE PLUIE MAXIMALE EN UNE JOURNÉE		28.0	6	14.2	30		32.0	9	1878				112	
GREATEST SNOWFALL IN ONE DAY HAUTEUR DE NEIGE MAXIMALE EN UNE JOURNÉE		14.9	2	3.2	12		38.1	4	1935				112	
GREATEST PRECIPITATION IN ONE DAY PRÉCIPITATION MAXIMALE EN UNE JOURNÉE		28.0	6	16.2	30		38.1	4	1935				112	
MAXIMUM RAINFALL RECORDED IN: HAUTEUR DE PLUIE MAXIMALE ENREGISTRÉE EN:														
5 MINUTES		NOT IN		0.5	30		0.8	10	1973				15	
10 MINUTES		OPERATION		0.7	30		1.0	10	1973				15	
15 MINUTES				1.5	30		1.8	10	1973				15	
30 MINUTES				2.7	30		2.7	30	1982				15	
60 MINUTES				4.2	30		4.2	30	1982				15	
24 CONSECUTIVE HOURS HEURES CONSECUTIVES				14.2	30		32.0	9	1878				112	
MEAN WIND SPEED (km/h) VITESSE MOYENNE DU VENT (km/h)		18.1		23.4		19.3	25.6		1944	12.6		1924	63	
MAXIMUM SPEED (1 min.) (km/h) VITESSE MAXIMALE (1 min.) (km/h)		S48	11			56	WNW 81	13	1982				45	
MAXIMUM GUST SPEED (km/h) POINTE DU VENT MAXIMALE (km/h)		S65	11	WNW106	13	78	N 113	4	1966				45	
TOTAL HOURS OF SUNSHINE TOTAL DES HEURES INSOLATION		133.6		178.4		176.2	217.4		1970	103.0		1903	84	
MEAN STATION PRESSURE (kPa) PRESSION MOYENNE À LA STATION (kPa)		98.81		98.54		98.82	99.83		1947	98.09		1945	45	
GREATEST STATION PRESSURE (kPa) PRESSION MAXIMALE À LA STATION (kPa)		100.30	9	100.37	26	100.50	101.80	12	1951				45	
LEAST STATION PRESSURE (kPa) PRESSION MINIMALE À LA STATION (kPa)		96.93	13	95.01	12	96.61				95.01	12	1982	45	
CLIMATOLOGICAL DATA FOR THE PAST DONNÉES CLIMATOLOGIQUES POUR LES														
TEN (DIX) 10 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 DEGRES-JOURS DE CHAUFFE	CROWING DEGREE DAYS DEGRES-JOURS DE CROISSANCE			
1974	2.8	-32.2	-11.2	0.8	14.5	15.2	19.3	N 52	182.5	901.7				
1975	3.8	-27.9	-10.8	1.5	19.5	18.9	20.3	NNE48	192.3	892.0				
1976	6.2	-32.7	-10.0	3.8	29.2	23.1	16.9	N 61	186.1	868.8				
1977	16.0	-22.5	-2.8	7.3	4.3	9.9	20.1	NNE67	189.8	644.7	4.4			
1978	5.8	-26.7	-8.2	8.2	3.4	11.4	18.2	NW 59	202.3	812.4	0.0			
1979	4.2	-26.6	-9.9	8.1	38.1	45.3	20.5	WSW63	142.7	864.2	0.0			
1980	8.0	-30.7	-10.0	TR.	13.6	13.2	14.9	NNW56	206.4	868.4	0.0			
1981	14.8	-16.8	-1.0	5.8	7.6	14.6	15.5	N 43	201.2	589.7	3.0			
1982	8.2	-26.4	-7.3	25.2	9.4	35.8	23.4	WNW81	178.4	782.2	0.0			
1983	6.7	-16.1	-4.7	40.4	27.0	65.6	18.1	S 48 NW48	133.6	702.6	0.0			

* HIGHEST MIN. FOR MONTH SHOULD BE 1878 NOT 1978 CORRECTION FOR 1982 SUMMARY