

WIND CHILL FOR JANUARY 1984

YWG - WINNIPEG MANITOBA

EXPRESSED IN WATTS/SQ.M.

DAY	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	1339	1411	1443	1430	1296	1417	1336	1312	0	1339	0	1316	1373	1246	0	0	0	0	0	0	0	0	0
2	0	0	1406	1388	1405	1433	1390	1322	1367	1341	1334	1364	1336	1288	1281	1273	1257	1226	1212	1176	1175	1106	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	1368	1489	1350	1341	1474	1459	1479	1480	1372	0	0	1383	1441	1462	1337	1457	1350	1451	1419	1401	1404	1330	1229
5	1163	1123	1081	1122	1000	0	0	0	0	0	0	0	1215	1116	1006	1330	1114	1263	1195	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	1171	0	1120	1067	0	0	0	0	1026	0	0	0
7	0	0	1192	1329	0	1213	1350	1342	1497	1483	0	1356	1483	1398	1346	1497	1452	1598	1608	1578	1661	1588	0
8	0	1580	0	0	0	0	1548	1559	1684	1685	1578	1602	1573	1588	1588	1588	1666	1652	1646	1533	1537	1408	1309
9	1351	0	1303	1445	1464	1654	1618	1547	1650	1794	1741	1808	1854	1981	1899	1808	1881	1827	1887	1872	1792	0	0
10	0	0	0	0	0	0	0	1835	1757	1845	1783	1652	1617	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	1684	1723	1764	1770	1696	1822	1699	1636	1712	1669	0	1666	0	1629	1693	0	0
12	0	1493	0	0	0	0	0	1783	0	0	0	0	1691	1693	0	0	1767	0	1603	1551	0	0	0
13	1530	1536	0	0	1609	1600	1628	1619	1653	1676	1624	1646	1690	1641	1625	1673	1651	1728	1698	1756	1763	1729	1770
14	1701	1714	1728	1700	1790	1749	1681	1710	0	0	0	0	0	0	0	0	0	1664	1675	1780	1761	1742	1798
15	1794	1724	1778	1805	1805	1753	1720	1688	1720	1767	1731	1671	1662	1629	1539	1373	1419	1425	1462	1489	1508	1639	1618
16	1677	1705	1732	1727	1575	1696	1757	1690	1758	1767	1681	1591	1718	1774	1771	1718	1603	1693	1742	0	0	1739	1822
17	1754	1728	1853	1831	1726	1795	1795	1810	1869	1826	1857	1771	1759	1687	1738	1684	1701	0	0	0	0	0	0
18	1880	1780	1919	1916	0	0	1849	0	1841	1800	1768	1783	0	0	1729	0	1753	0	1753	0	0	0	0
19	1768	1859	1730	1866	1984	2099	2125	2146	2207	2170	2174	2180	2159	2186	1993	2040	2015	1873	1955	0	0	1893	1955
20	2006	2018	2030	2027	1979	1959	1970	1959	1896	1943	1965	1862	1926	1974	1850	1987	1927	2007	1948	1993	2007	2004	1948
21	1843	1552	0	0	1670	1509	1609	1645	0	0	1507	1516	1580	1483	0	1441	0	0	0	0	0	0	0
22	0	0	0	1576	0	1495	1604	1462	1578	1571	1589	1579	1432	1276	0	0	0	0	0	0	0	0	0
23	1513	1513	1461	1644	1588	1723	1715	1705	1683	1675	1554	1556	1502	1462	1419	1336	1302	1288	1297	1350	1312	1428	1379
24	1344	1386	1388	1271	1388	1272	1170	1111	1071	1219	1155	1204	1252	1381	1289	1336	1252	1481	1556	1574	1595	1611	1519
25	1540	1640	1612	1567	1622	1662	1606	1659	1568	0	0	0	0	0	0	0	0	0	1417	1415	1417	1394	1429
26	1452	1399	1430	1427	1506	1542	1468	1525	1411	1387	1370	1630	1772	1852	1896	1898	1851	1784	1761	1808	1860	1822	0
27	0	0	0	0	1639	1764	1778	1850	1872	1890	1847	1853	1823	1771	1826	1835	1806	1750	1719	1562	1527	1284	1346
28	1539	1690	1730	1633	1675	1588	1653	1626	1626	1650	1503	1544	1508	1489	1451	1454	1369	0	0	0	0	0	0
29	1498	1489	1417	1405	1478	1390	1424	0	1468	1387	0	1405	1405	1468	1427	1369	1372	1506	1406	1494	1555	1507	0
30	1627	0	0	0	0	0	1715	1616	1627	1683	1595	1622	1544	1546	1515	1584	1527	1527	1490	1396	1288	1264	0
31	1331	1415	1330	0	0	0	0	1365	1345	1279	1232	1230	1243	1246	1312	1246	1312	1256	1078	0	1178	1144	1122

SUMMARY

	RANGE	RANGE	RANGE	RANGE
	1200-1599 W/SQ.M	1600-1999 W/SQ.M	2000-2299 W/SQ.M	> 2299 W/SQ.M.
NUMBER OF HOURS=	229	233	19	0
NUMBER OF DAYS=	23	23	2	0
LONGEST CONSECUTIVE HOURS			10	0

HOURLY TEMPERATURES AT WINNIPEG INTERNATIONAL AIRPORT FOR THE MONTH OF JANUARY 1984
 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.	-13.2	-12.6	-12.4	-12.0	-11.7	-11.6	-11.5	-12.3	-13.3	-13.2	-12.8	-10.9	-10.2	-10.0	-9.7	-9.5	-10.1	-10.9	-11.8	-13.1	-13.1	-13.7	-15.6	-15.1
2.	-16.6	-15.9	-15.5	-14.9	-13.8	-13.3	-11.9	-9.7	-10.0	-9.2	-8.0	-7.2	-7.3	-5.8	-4.4	-4.2	-3.4	-3.5	-2.6	-2.2	-2.4	-1.7	-3	1.0
3.	1.3	2.2	2.5	2.4	1.2	2.0	2.3	1.8	2.2	2.3	2.1	2.4	2.7	2.7	2.8	3.1	2.3	1.8	1.4	1.0	1.3	1.8	1.3	-4.8
4.	-6.1	-7.5	-8.5	-9.2	-9.8	-10.9	-11.5	-12.5	-12.7	-12.9	-12.6	-11.5	-11.7	-11.3	-11.0	-10.2	-9.3	-8.5	-7.9	-7.0	-6.0	-5.2	-4.5	-4.0
5.	-3.6	-3.3	-3.0	-2.3	-1.5	3.7	3.8	3.5	3.0	2.9	2.8	2.9	1.5	1.4	-1.8	-1.6	-1.5	-4.0	-4.1	-5.0	-5.6	-6.2	-6.5	-7.2
6.	-7.5	-7.7	-8.0	-8.8	-9.2	-9.3	-8.1	-8.4	-8.3	-10.6	-8.1	-7.2	-6.0	-5.2	-4.3	-3.8	-3.2	-3.0	-2.3	-1.9	-2.6	-2.4	-2.4	-3.9
7.	-5.7	-5.8	-6.7	-8.8	-7.5	-6.2	-5.6	-7.4	-9.2	-10.8	-11.2	-10.8	-10.8	-11.0	-10.5	-11.2	-12.7	-12.7	-14.5	-15.5	-17.0	-19.9	-22.2	-23.4
8.	-24.9	-23.4	-21.5	-21.2	-21.1	-20.4	-22.2	-20.4	-20.4	-20.8	-20.0	-18.8	-18.0	-17.4	-16.5	-15.8	-15.8	-16.2	-15.8	-14.8	-14.1	-12.4	-11.3	-10.6
9.	-9.5	-10.4	-10.4	-11.4	-12.0	-14.3	-15.7	-17.0	-17.7	-19.1	-19.1	-19.4	-19.5	-20.0	-20.9	-21.3	-21.4	-23.6	-24.5	-25.0	-25.9	-26.7	-26.6	-26.6
10.	-27.5	-28.1	-28.7	-27.8	-27.9	-27.8	-28.4	-29.2	-28.1	-27.6	-26.6	-24.6	-24.0	-22.8	-21.7	-21.0	-21.5	-22.4	-22.8	-23.8	-27.6	-28.1	-29.1	-29.6
11.	-30.1	-30.9	-27.1	-26.8	-28.5	-25.2	-24.9	-25.1	-24.4	-24.0	-24.2	-23.5	-27.7	-21.9	-23.5	-22.3	-22.6	-22.4	-22.5	-23.5	-23.2	-23.4	-24.9	-25.6
12.	-25.5	-18.5	-28.1	-30.2	-27.3	-26.5	-26.3	-27.5	-28.7	-28.5	-27.6	-23.8	-21.5	-20.3	-22.0	-21.7	-21.0	-23.1	-24.5	-22.6	-21.8	-18.8	-20.5	-19.6
13.	-19.0	-19.8	-20.0	-20.0	-20.0	-20.6	-20.3	-19.6	-19.3	-19.0	-18.5	-18.1	-17.6	-16.9	-16.4	-15.9	-16.4	-16.7	-16.4	-16.3	-16.5	-16.7	-17.2	-17.6
14.	-18.2	-18.6	-19.0	-20.5	-22.0	-23.5	-25.0	-26.0	-26.6	-27.3	-27.1	-25.7	-24.3	-22.9	-20.1	-20.5	-19.2	-21.8	-24.4	-22.8	-23.0	-22.4	-21.8	-21.1
15.	-21.0	-20.0	-19.5	-18.6	-18.6	-17.9	-17.8	-17.8	-17.8	-16.8	-16.8	-14.6	-13.5	-12.2	-11.8	-11.0	-10.2	-10.6	-11.0	-11.8	-12.4	-15.4	-14.8	
16.	-15.7	-16.5	-17.3	-18.0	-17.9	-19.2	-21.0	-21.6	-22.3	-21.3	-20.0	-19.8	-19.4	-19.3	-19.3	-19.8	-20.4	-21.7	-23.3	-24.3	-24.6	-25.6	-27.7	-27.6
17.	-27.5	-26.6	-25.3	-24.6	-24.5	-25.0	-26.8	-27.3	-27.4	-27.8	-27.0	-26.0	-25.6	-25.2	-24.9	-25.1	-25.7	-26.8	-27.2	-27.8	-27.9	-29.1	-28.9	-29.9
18.	-29.6	-28.4	-29.0	-28.9	-29.9	-30.1	-30.4	-30.8	-30.8	-30.5	-29.1	-28.0	-26.4	-25.2	-24.8	-24.6	-24.6	-24.9	-25.4	-26.0	-26.7	-27.3	-25.1	-24.3
19.	-25.9	-25.5	-26.7	-25.7	-26.7	-29.0	-28.7	-29.3	-30.1	-31.1	-31.2	-30.5	-30.3	-29.7	-29.5	-29.7	-29.7	-30.4	-31.6	-32.1	-32.9	-32.4	-32.3	-32.1
20.	-31.8	-32.2	-32.6	-32.5	-32.9	-32.2	-32.6	-32.2	-32.4	-31.7	-30.5	-29.0	-27.6	-26.4	-25.2	-23.8	-22.1	-21.6	-21.2	-21.8	-22.2	-21.5	-21.2	-20.6
21.	-19.7	-18.7	-17.6	-16.0	-15.5	-17.0	-19.0	-21.8	-21.8	-20.4	-20.3	-19.0	-17.5	-16.7	-16.4	-16.3	-16.7	-17.6	-18.7	-19.7	-19.8	-22.7	-24.0	-22.7
22.	-22.8	-21.8	-22.0	-21.5	-20.0	-18.0	-16.8	-16.3	-15.7	-14.5	-13.4	-11.8	-11.5	-10.1	-9.5	-8.8	-8.9	-11.5	-11.9	-13.7	-11.9	-13.2	-11.9	-12.0
23.	-11.7	-11.7	-11.9	-12.2	-12.4	-11.9	-12.0	-12.1	-11.9	-11.7	-10.8	-9.8	-8.8	-8.2	-7.0	-5.8	-6.2	-6.6	-7.8	-8.5	-9.4	-10.9	-10.4	-10.8
24.	-9.3	-9.6	-8.0	-7.0	-6.6	-6.1	-4.8	-2.9	-1.6	-2.4	-1.1	-1	-2.3	-4.2	-5.8	-6.8	-7.2	-8.7	-10.0	-11.5	-12.7	-14.1	-15.5	-17.6
25.	-18.3	-18.6	-20.7	-19.2	-19.4	-19.3	-20.5	-20.6	-21.1	-20.1	-19.1	-19.5	-19.0	-17.9	-17.7	-17.3	-17.2	-17.1	-16.7	-15.9	-15.8	-15.9	-15.1	-14.6
26.	-13.9	-13.6	-13.2	-13.1	-13.3	-13.4	-13.2	-12.9	-12.6	-11.8	-10.1	-10.9	-13.5	-15.6	-16.4	-17.2	-17.9	-18.8	-19.6	-20.4	-21.0	-23.0	-23.0	-24.0
27.	-24.8	-25.3	-23.0	-22.3	-22.5	-21.6	-21.2	-20.5	-19.9	-19.1	-18.4	-17.8	-16.9	-16.1	-15.7	-15.3	-14.8	-14.4	-13.7	-13.3	-12.7	-12.1	-11.3	-10.5
28.	-11.0	-12.5	-13.6	-13.7	-13.6	-13.3	-13.6	-13.5	-13.5	-13.5	-13.2	-12.6	-12.4	-11.8	-11.6	-11.7	-12.6	-14.1	-16.4	-17.1	-17.6	-17.6	-17.0	-14.8
29.	-15.4	-16.6	-14.2	-13.8	-13.5	-13.3	-13.0	-12.7	-13.2	-13.2	-13.3	-13.8	-13.8	-13.2	-13.1	-12.2	-12.6	-12.7	-13.3	-15.5	-14.0	-14.8	-15.7	-20.2
30.	-21.2	-21.8	-23.0	-22.5	-22.7	-22.2	-21.3	-22.4	-19.2	-18.2	-16.7	-15.0	-14.1	-12.6	-11.9	-11.0	-10.1	-9.0	-9.0	-9.0	-9.0	-9.9	-10.6	-12.3
31.	-10.0	-10.5	-11.3	-12.3	-10.6	-12.6	-12.3	-14.7	-15.0	-14.1	-11.8	-9.6	-6.8	-4.8	-4.4	-3.8	-3.5	-2.4	-2.9	-3.3	-1.8	-3.0	-2.3	-4.1

MEAN -17.2 -17.0 -17.2 -17.1 -17.1 -16.9 -17.0 -17.3 -17.3 -17.2 -16.5 -15.5 -15.2 -14.4 -14.2 -13.9 -13.9 -14.6 -15.1 -15.5 -15.7 -16.1 -16.3 -16.7

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	-12.0	-7.5	1.8	-9.2	-1.1	-5.8	-11.4	-18.0	-19.0	-26.0	-24.8	-23.9	-18.0	-22.6	-15.0	-21.0
DATE	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
MEAN	-26.6	-27.4	-29.6	-27.3	-18.8	-14.5	-9.9	-7.2	-18.1	-15.8	-17.5	-13.7	-13.9	-15.5	-7.7	

COMPARATIVE RECORDS
RELEVÉS COMPARATIFS

MONTH
MOIS JANUARY/JANVIER

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)		Centimetres (cm)		Kilometres per hour (km/h)		Kilopascals (kPa)		RECORD FOR THE MONTH RECORD POUR LE MOIS			YEARS OF RECORD ANNÉES OBSERVATIONS
	THIS MONTH CE MOIS-CI		PREVIOUS YEAR ANNÉE PRÉCÉDENTE		NORMAL NORMALE	HIGHEST MAXIMUM ABSOLU			LOWEST MINIMUM ABSOLU					
	VALUE RELEVÉ	DATE	VALUE RELEVÉ	DATE		VALUE RELEVÉ	DAY JOUR	YEAR ANNÉE	VALUE RELEVÉ	DAY JOUR	YEAR ANNÉE			
HIGHEST TEMPERATURE TEMPÉRATURE LA PLUS ÉLEVÉE	4.3	5	0.9	8,9	-0.1	7.8	23	1942	-11.7	11	1950	113		
LOWEST TEMPERATURE TEMPÉRATURE LA PLUS BASSE	-33.1	20	-30.2	25	-37.3	-25.0	14	1931	-44.4	15	1877	113		
MEAN MONTHLY TEMPERATURE TEMPÉRATURE MENSUELLE MOYENNE	-16.7		-12.4		-19.3	-10.6		1944	-26.9		1875	113		
TOTAL MONTHLY RAINFALL HAUTEUR TOTALE MENSUELLE DE PLUIE	0.0		0.2		0.2	3.8		1944	NIL (MOST YEARS)			113		
TOTAL MONTHLY SNOWFALL HAUTEUR TOTALE MENSUELLE DE NEIGE	16.2		14.8		23.7	85.3		1916	2.8		1881 1902 1973	113		
TOTAL MONTHLY PRECIPITATION PRÉCIPITATION TOTALE MENSUELLE	12.2		12.7		21.3	85.3		1916	2.5		1973 1903	113		
NO OF DAYS WITH MEASURABLE PRECIPITATION NOMBRE DE JOURS AVEC PRÉCIPITATION MESURABLE	12		10		12	20		1954	3		1973	101		
GREATEST RAINFALL IN ONE DAY HAUTEUR DE PLUIE MAXIMALE EN UNE JOURNÉE	TR.	2,4,26	0.2	8		3.8	20	1944				13		
GREATEST SNOWFALL IN ONE DAY HAUTEUR DE NEIGE MAXIMALE EN UNE JOURNÉE	4.0	27	2.8	19*		31.8	2	1907				13		
GREATEST PRECIPITATION IN ONE DAY PRÉCIPITATION MAXIMALE EN UNE JOURNÉE	3.0	27	2.3	23*		31.8	2	1907				13		
MAXIMUM RAINFALL RECORDED IN: HAUTEUR DE PLUIE MAXIMALE ENREGISTRÉE EN:														
5 MINUTES														
10 MINUTES														
15 MINUTES														
30 MINUTES														
60 MINUTES														
24 CONSECUTIVE HOURS HEURES CONSECUTIVES	TR.	2,4 26	0.2	8		3.8	20	1944				113		
MEAN WIND SPEED (km/h) VITESSE MOYENNE DU VENT (km/h)	16.0		19.8		18.6	22.9		1947 1948	12.6		1979	64		
MAXIMUM SPEED (1 min.) (km/h) VITESSE MAXIMALE (1 min.) (km/h)	SSE43	27	SSE50	8	57	N79	13	1942				46		
MAXIMUM GUST SPEED (km/h) POINTE DU VENT MAXIMALE (km/h)	SSE61	27	SSE65	3,8	77	SSE106	26	1982				38		
TOTAL HOURS OF SUNSHINE TOTAL DES HEURES INSOLATION	125.6		76.9		121.6	160.4		1959	63.5		1931	85		
MEAN STATION PRESSURE (kPa) PRESSION MOYENNE À LA STATION (kPa)	989.5		98.81		98.96	99.72		1966	98.21		1947	46		
GREATEST STATION PRESSURE (kPa) PRESSION MAXIMALE À LA STATION (kPa)	1020.5	14	100.72	15	100.84	102.11*	10	1949				46		
LEAST STATION PRESSURE (kPa) PRESSION MINIMALE À LA STATION (kPa)	963.4	24	96.52	8	96.61				94.81	14	1947	46		
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 DEGRES-JOURS DE CHAUFFE	GROWING DEGREE-DAYS DEGRES-JOURS DE CROISSANCE			
1974	-2.2	-41.7	-22.4	0.5	40.4	39.1	15.3	SSE48	123.2	1255.6				
1975	-2.1	-33.0	-15.9	0.3	51.7	45.9	17.5	NW66*	101.9	1055.1				
1976	3.3	-35.8	-18.1	TR.	37.2	29.8	19.6	S60	108.7	1120.3				
1977	-1.2	-38.0	-21.0	TR.	12.9	12.5	16.0	N57	116.3	1208.4				
1978	-2.1	-33.3	-21.1	Nil	10.9	10.3	18.6	NNE65	144.5	1212.4				
1979	-5.2	-37.7	-22.5	Nil	9.3	9.0	12.6	S41	123.6	1255.7				
1980	0.0	-32.3	-18.8	TR.	35.5	34.0	19.4	NW65	123.8	1140.0				
1981	2.0	-31.8	-14.1	0.4	24.4	23.2	15.4	S44	139.6	994.4				
1982	-3.6	-38.9	-25.2	0.2	32.1	25.7	22.8	SSE70	124.0	1337.5				
1983	0.9	-30.2	-12.4	0.2	14.8	12.7	19.8	SSE50	77.0	942.1				
1984	4.3	-33.1	-16.7	TR.	16.2	12.2	16.0	SSE43	125.6	1074.8				