

For/Pour: Winnipeg Int'l Airport

Year/Annee: 1998

Meteorological Data For the year /Donnees Meteorologicques Pour L'annee

NOTE: The following units are used throughout the summary -

Temperature: Degress and tenths Celcius (C)

Rain: Millimetres and tenths (mm)

Snow: Centimetres and tenths (cm)

Total Precipitation: Millimetres and tenths (mm)

Wind Speed: Kilometres per hour (km/h)

Wind Direction: Direction (true north) from which it is blowing.

Barometric Pressure: Kilopascals and hundredths (kPa)

Sunshine: Hours and tenths of bright sunshine.

MONTH	Temperature/Temperature										Degree Days	
	MEAN/MOYENNE			NORMAL/NORMALE			EXTREME/EXTREME				Degres Jours	
	MAX	MIN	MTHY	MAX	MIN	MEAN	MAX	DATE	MIN	DATE	<18C	NORM
Jan	-10.9	-18.4	-14.7	-13.2	-23.6	-18.3	-3.2	30	-31.3	13	1011.8	1129.1
Feb	-1.6	-7.6	-4.6	-9.7	-20.6	-15.1	5.4	24	-27.8	2	633.2	936.2
Mar	-1.3	-9.7	-5.5	-1.8	-12.4	-7.0	12.8	26	-25.6	10	728.8	778.5
Apr	15.6	0.2	7.9	9.8	-2.3	3.8	28.1	29	-7.1	18	303.4	428.6
May	19.9	4.7	12.3	18.6	4.5	11.6	27.9	26	-1.3	5	177.6	212.0
Jun	20.5	10.7	15.6	23.4	10.4	16.9	28.9	26	0.0	6	96.2	69.0
Jul	26.0	12.4	19.2	26.1	13.4	19.8	32.0	11	4.9	16	24.9	18.5
Aug	28.0	13.3	20.7	24.9	11.7	18.3	31.8	12	7.2	30	3.3	45.7
Sep	21.3	6.9	14.1	18.6	6.1	12.4	32.4	10	-0.4	21	128.8	178.6
Oct	11.8	1.5	6.7	11.3	0.1	5.7	22.2	22	-6.3	2	351.9	380.9
Nov	0.8	-7.1	-3.2	-0.4	-9.2	-4.7	9.7	22	-16.2	12	634.4	683.3
Dec	-8.1	-17.3	-12.7	-9.9	-19.4	-14.6	9.3	14	-31.6	31	953.6	1013.7
YEAR								Sep		Dec		
ANNEE	10.2	-0.9	4.7	8.1	-3.4	2.4	32.4	10	-31.6	31	5047.9	5874.1

MONTH	Precipitation/Precipitations													
	MONTHLY/MENSUELLE			NORMAL/NORMALE			EXTREME/EXTREME							
	RAIN	SNOW	TOTAL	RAIN	SNOW	TOTAL	RAIN/PLUIE				SNOW/NEIGE			
	FALL	FALL					6HRS	DT	24HRS	DT	6HRS	DT	24HRS	DT
Jan	0.4	45.6	32.0	0.3	22.6	19.3	M	0	M	M	0.0	0	10.0	5
Feb	26.7	19.2	50.2	0.4	17.1	14.8	M	0	M	M	0.0	0	6.0	25
Mar	TR	12.9	9.9	5.9	19.2	23.1	M	0	M	M	0.0	0	4.4	13
Apr	38.6	0.0	38.6	26.4	9.4	35.9	M	0	M	M	0.0	0	0.0	0
May	100.0	0.0	100.0	57.8	2.0	59.8	M	0	M	M	0.0	0	0.0	0
Jun	59.5	0.0	59.5	83.8	TR	83.8	M	0	M	M	0.0	0	0.0	0
Jul	38.7	0.0	38.7	72.0	0.0	72.0	M	0	M	M	0.0	0	0.0	0
Aug	95.2	0.0	95.2	75.3	0.0	75.3	M	0	M	M	0.0	0	0.0	0
Sep	10.6	0.0	10.6	50.9	0.4	51.3	M	0	M	M	0.0	0	0.0	0
Oct	59.2	TR	59.2	24.6	4.9	29.5	M	0	M	M	0.0	0	TR	12
Nov	0.8	8.3	5.0	5.3	19.0	21.2	M	0	M	M	0.0	0	4.6	11
Dec	0.0	31.2	19.4	1.6	20.1	18.6	M	0	M	M	0.0	0	12.0	17
YEAR														Dec
ANNEE	429.7	117.2	518.3	404.3	114.7	504.6	0.0	0	0.0	0	0.0	0	12.0	17

For/Pour: Winnipeg Int'l Airport

Year/Annee: 1998

Meteorological Data For the year /Donnees Meteorologicques Pour L'annee

Daily Maximum Temperatures / Temperatures Maximales Quotidiennes

Date	Jan Janv	Feb Fevr	Mar Mars	Apr Avr	May Mai	Jun Juin	Jul Juill	Aug Aout	Sept Sept	Oct Oct	Nov Nov	Dec Dec
1	-7.9	-5.8	-1.7	11.9	11.1	11.9	27.9	28.2	20.2	11.8	6.2	2.9
2	-11.7	-17.7	-3.7	13.6	18.7	10.0	25.4	28.2	21.6	13.3	6.0	0.5
3	-20.5	-12.1	-7.4	16.7	23.1	13.7	22.3	26.1	27.2	15.6	2.8	2.5
4	-12.5	-6.4	-5.4	15.8	16.8	13.2	24.7	29.4	29.2	15.7	-2.8	-1.2
5	-12.0	-5.6	-1.9	15.8	17.7	11.7	22.3	30.5	25.1	11.2	-1.9	-6.3
6	-12.5	-5.6	-2.7	6.8	4.7	16.1	22.6	31.0	23.0	10.6	-2.7	-9.9
7	-9.2	-3.6	-5.0	9.8	15.5	20.5	25.8	31.6	19.9	14.5	-0.1	-4.8
8	-5.8	-3.7	-12.1	11.8	20.9	22.3	28.0	30.5	21.9	18.9	-0.2	-5.2
9	-14.1	-2.6	-18.2	11.6	23.2	22.3	29.7	29.6	27.5	22.0	1.6	-1.0
10	-14.4	-5.0	-17.5	16.7	24.0	20.2	31.6	28.2	32.4	8.9	0.5	-0.9
11	-18.6	-2.4	-13.0	17.6	20.7	18.5	32.0	31.5	24.0	11.5	-1.8	3.7
12	-24.7	-3.4	-8.5	13.5	14.9	24.0	29.8	31.8	25.8	11.5	-5.5	2.0
13	-21.5	-4.6	-7.1	10.0	22.6	28.0	28.2	31.0	25.9	6.6	-0.1	1.8
14	-13.6	-1.0	-9.6	5.7	19.5	17.6	30.3	24.2	22.6	7.6	-0.2	9.3
15	-9.0	0.1	-2.3	7.9	20.5	21.8	20.6	26.7	24.6	10.0	-3.9	2.7
16	-7.8	2.4	-1.5	11.7	17.0	18.1	23.6	23.5	23.8	8.8	-4.7	0.0
17	-13.4	3.4	0.9	9.9	23.1	24.0	26.5	22.3	26.1	5.3	-5.6	-6.0
18	-14.4	2.5	0.6	11.1	25.8	24.1	26.8	22.5	17.7	6.2	-4.5	-5.9
19	-16.9	1.5	-0.2	13.0	19.7	23.5	25.8	31.2	13.8	7.2	-2.6	-19.7
20	-19.0	3.1	2.0	16.0	18.8	19.0	27.8	26.2	14.5	9.4	-4.5	-21.8
21	-7.4	1.5	1.3	19.5	20.5	16.3	22.2	28.5	14.4	15.8	2.0	-22.3
22	-4.7	2.6	-0.2	24.1	22.3	20.9	22.2	27.6	18.8	22.2	9.7	-16.9
23	-5.1	5.3	0.0	19.8	23.5	22.2	23.6	24.1	16.3	18.9	7.4	-19.1
24	-7.7	5.4	2.4	16.0	25.9	23.3	24.0	26.3	17.2	7.6	4.2	-16.0
25	-8.4	2.9	9.4	19.8	21.7	28.3	27.1	30.4	16.3	7.6	3.4	-16.7
26	-5.7	2.6	12.8	19.1	27.9	28.9	27.4	29.2	16.8	10.0	1.1	-12.4
27	-3.8	1.4	11.9	22.3	25.5	25.6	28.7	28.0	20.5	17.1	9.0	-10.7
28	-5.7	0.3	7.9	24.8	19.0	20.1	25.0	27.5	24.1	14.4	5.7	-14.4
29	-3.3		7.9	28.1	12.5	22.3	24.0	24.4	15.8	8.2	3.0	-21.8
30	-3.2		9.7	27.1	22.3	26.6	23.0	27.5	11.9	9.8	2.8	-19.5
31	-3.3		12.3		16.5		26.4	29.7		7.2		-24.8
Mean	-10.9	-1.6	-1.3	15.6	19.9	20.5	26.0	28.0	21.3	11.8	0.8	-8.1

Note: Unit = Degrees Celsius M = Missing

For/Pour: Winnipeg Int'l Airport

Year/Annee: 1998

Meteorological Data For the year /Donnees Meteorologiques Pour L'annee

Daily Mean Temperatures / Temperatures Moyennes Quotidiennes

Date	Jan Janv	Feb Fevr	Mar Mars	Apr Avr	May Mai	Jun Juin	Jul Juill	Aug Aout	Sept Sept	Oct Oct	Nov Nov	Dec Dec
1	-9.8	-14.9	-3.0	4.4	6.9	8.2	19.3	20.8	13.6	4.0	-0.4	-2.4
2	-16.2	-22.8	-5.6	4.9	9.3	6.7	20.4	23.8	13.1	3.5	-1.6	-4.3
3	-23.4	-17.1	-10.3	7.0	11.6	7.6	16.7	21.7	18.1	8.8	-3.2	0.3
4	-18.6	-9.5	-10.4	7.5	8.7	6.9	16.6	22.8	19.2	10.4	-7.2	-4.9
5	-17.3	-7.1	-8.1	8.9	8.2	6.9	18.8	21.8	17.2	9.6	-3.6	-10.9
6	-15.9	-7.2	-4.9	3.6	3.1	8.1	18.5	23.7	14.0	8.7	-3.9	-15.2
7	-11.1	-7.3	-9.6	3.5	9.5	12.5	21.4	23.7	11.9	8.7	-3.1	-9.7
8	-10.0	-9.5	-17.2	4.3	12.0	12.5	20.3	23.6	14.2	12.3	-1.9	-6.9
9	-16.8	-5.3	-21.3	7.0	13.7	17.0	22.2	21.5	21.4	14.6	-0.2	-6.6
10	-17.1	-6.8	-21.6	9.9	14.1	16.8	24.7	19.0	24.6	6.6	-2.2	-6.6
11	-21.8	-4.0	-18.5	8.2	13.0	15.7	26.3	23.3	17.2	8.4	-6.7	-2.1
12	-27.9	-8.3	-12.6	11.6	8.3	16.6	25.5	24.4	16.8	6.6	-10.9	-4.9
13	-26.4	-11.9	-11.1	6.2	11.6	19.7	22.8	22.7	18.2	4.1	-5.2	-5.7
14	-17.6	-3.4	-14.2	1.5	14.6	15.8	23.0	17.5	15.2	6.3	-2.5	5.1
15	-11.8	-1.4	-10.4	1.8	16.0	17.4	13.8	17.9	14.8	7.9	-7.1	-1.4
16	-10.6	-0.2	-5.2	4.0	12.8	15.6	14.3	18.5	17.2	6.9	-7.6	-4.5
17	-14.8	2.1	-0.6	3.1	13.9	18.8	17.7	17.2	18.5	3.8	-9.8	-8.8
18	-19.5	1.2	-3.2	2.0	18.3	21.4	21.8	18.2	12.2	2.5	-8.4	-13.8
19	-21.2	0.5	-3.3	5.3	14.6	19.2	20.1	22.4	11.4	2.2	-7.0	-23.9
20	-23.3	-1.5	0.2	5.2	12.1	16.3	21.4	19.1	7.7	2.1	-8.2	-25.8
21	-16.7	-0.6	-0.2	7.3	12.0	13.8	17.4	19.9	7.0	6.6	-1.7	-26.2
22	-8.0	1.5	-5.2	12.7	13.6	16.5	15.2	22.5	10.9	12.9	5.2	-22.2
23	-11.5	1.3	-5.2	10.7	15.7	15.5	15.8	20.1	11.3	10.8	1.2	-21.2
24	-10.5	0.9	-1.9	6.7	17.0	19.7	15.0	18.7	9.6	3.7	-1.5	-19.6
25	-10.5	1.2	5.0	14.0	15.7	22.5	18.9	20.3	12.7	3.0	0.2	-20.8
26	-8.7	1.6	7.3	12.1	18.3	23.6	21.0	19.9	12.4	6.8	-2.9	-17.7
27	-8.0	0.8	6.8	13.4	18.2	20.7	20.3	21.5	13.4	7.6	3.6	-16.9
28	-9.2	-1.5	3.8	16.9	10.3	17.4	18.4	19.5	14.0	5.0	2.7	-19.6
29	-7.0		2.5	17.1	6.0	18.9	16.8	16.7	8.8	5.9	1.4	-25.5
30	-5.4		3.0	15.8	13.2	20.8	15.5	17.4	6.6	5.0	-1.9	-24.7
31	-7.2		4.2		8.9		16.3	20.2		0.8		-28.2
Mean	-14.7	-4.6	-5.5	7.9	12.3	15.6	19.2	20.7	14.1	6.7	-3.2	-12.7

Note: Unit = Degrees Celsius M = Missing

For/Pour: Winnipeg Int'l Airport

Year/Annee: 1998

Meteorological Data For the year /Donnees Meteorologiques Pour L'annee

Daily Snowfall / Chutes De Neige Quotidiennes

Date	Jan Janv	Feb Fevr	Mar Mars	Apr Avr	May Mai	Jun Juin	Jul Juill	Aug Aout	Sept Sept	Oct Oct	Nov Nov	Dec Dec
1	TR	1.0	1.4	-	-	-	-	-	-	-	-	-
2	1.4	TR	0.5	-	-	-	-	-	-	-	-	-
3	0.4	-	TR	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	7.0
5	10.0	TR	TR	-	-	-	-	-	-	-	TR	2.0
6	0.2	-	1.2	-	-	-	-	-	-	-	TR	TR
7	0.2	TR	2.2	-	-	-	-	-	-	-	-	TR
8	1.8	-	-	-	-	-	-	-	-	-	-	-
9	8.6	TR	-	-	-	-	-	-	-	-	TR	0.4
10	1.0	-	-	-	-	-	-	-	-	-	2.0	-
11	2.0	-	-	-	-	-	-	-	-	-	4.6	-
12	TR	TR	TR	-	-	-	-	-	-	TR	TR	-
13	-	-	4.4	-	-	-	-	-	-	-	-	-
14	1.4	3.0	-	-	-	-	-	-	-	-	0.5	-
15	0.6	TR	-	-	-	-	-	-	-	-	-	-
16	4.0	-	TR	-	-	-	-	-	-	-	1.0	TR
17	1.4	-	TR	-	-	-	-	-	-	-	TR	12.0
18	0.6	-	-	-	-	-	-	-	-	-	-	8.2
19	TR	-	0.2	-	-	-	-	-	-	-	-	TR
20	TR	-	TR	-	-	-	-	-	-	-	TR	TR
21	TR	-	2.0	-	-	-	-	-	-	-	-	-
22	3.4	-	1.0	-	-	-	-	-	-	-	-	TR
23	0.6	-	-	-	-	-	-	-	-	-	-	-
24	5.8	-	TR	-	-	-	-	-	-	-	0.2	-
25	1.2	6.0	-	-	-	-	-	-	-	-	TR	TR
26	TR	0.8	-	-	-	-	-	-	-	-	-	0.6
27	0.6	5.2	-	-	-	-	-	-	-	-	-	TR
28	TR	3.2	-	-	-	-	-	-	-	-	-	1.0
29	TR	-	-	-	-	-	-	-	-	-	TR	-
30	0.4	-	-	-	-	-	-	-	-	-	TR	TR
31	TR	-	-	-	-	-	-	-	-	-	-	-
Total	45.6	19.2	12.9	0.0	0.0	0.0	0.0	0.0	0.0	TR	8.3	31.2

Note: TR = TRACE M = MISSING Unit = mm

For/Pour: Winnipeg Int'l Airport

Year/Annee: 1998

Meteorological Data For the year /Donnees Meteorologicques Pour L'annee

Snow on Ground / Neige au Sol

Date	Jan Janv	Feb Fevr	Mar Mars	Apr Avr	May Mai	Jun Juin	Jul Juill	Aug Aout	Sept Sept	Oct Oct	Nov Nov	Dec Dec
1	2	17	9	-	-	-	-	-	-	-	-	-
2	1	17	8	-	-	-	-	-	-	-	-	-
3	1	17	7	-	-	-	-	-	-	-	-	-
4	1	17	7	-	-	-	-	-	-	-	-	-
5	10	17	7	-	-	-	-	-	-	-	TR	7
6	12	17	8	-	-	-	-	-	-	-	-	7
7	8	17	9	-	-	-	-	-	-	-	-	6
8	10	17	9	-	-	-	-	-	-	-	-	6
9	11	17	9	-	-	-	-	-	-	-	-	4
10	18	17	8	-	-	-	-	-	-	-	1	4
11	18	17	8	-	-	-	-	-	-	-	2	3
12	18	17	8	-	-	-	-	-	-	-	2	3
13	17	15	8	-	-	-	-	-	-	-	2	1
14	12	17	11	-	-	-	-	-	-	-	2	1
15	13	17	11	-	-	-	-	-	-	-	2	TR
16	16	12	12	-	-	-	-	-	-	-	3	TR
17	15	5	10	-	-	-	-	-	-	-	3	TR
18	15	5	8	-	-	-	-	-	-	-	3	12
19	13	4	7	-	-	-	-	-	-	-	2	16
20	13	3	6	-	-	-	-	-	-	-	2	14
21	16	2	6	-	-	-	-	-	-	-	1	12
22	18	TR	6	-	-	-	-	-	-	-	TR	10
23	19	TR	4	-	-	-	-	-	-	-	-	10
24	17	TR	2	-	-	-	-	-	-	-	-	10
25	17	TR	TR	-	-	-	-	-	-	-	-	10
26	18	4	TR	-	-	-	-	-	-	-	-	10
27	13	4	TR	-	-	-	-	-	-	-	-	10
28	13	8	TR	-	-	-	-	-	-	-	-	10
29	17		TR	-	-	-	-	-	-	-	-	10
30	17		TR	-	-	-	-	-	-	-	-	10
31	17		TR	-	-	-	-	-	-	-	-	10

Note: TR = TRACE M = MISSING Unit = cm - = ZERO VALUE

For/Pour: Winnipeg Int'l Airport

Year/Annee: 1998

Monthly and Annual Extremes of Record/Extremes Mensuels et Annuels aux Registres

MONTH	Temperature/Temperature						Precipitation/Precipitations							
	ABS	YEAR	ABS	YEAR	HIEST	YEAR	LOEST	YEAR	GRTST	YEAR	LEAST	YEAR	GRTST	YEAR
	MAX		MIN		MTHLY		MTHLY		MTHLY		MTHLY		MTHLY	
					MEAN		MEAN		PCPN		PCPN		SNFL	
Jan	7.8	1942	-44.4	1877	-10.6	1944	-26.9	1875	85.3	1916	2.5	1973	85.3	1916
Feb	11.7	1958	-45.0	1966	-4.6	1998	-26.1	1875	89.9	1881	0.2	1993	89.9	1881
Mar	23.3	1946	-38.9	1873	1.6	1878	-16.1	1899	76.2	1904	1.5	1939	76.2	1904
Apr	34.3	1990	-27.8	1932	9.4	1915	-2.8	1893	143.3	1896	TR	1980	48.6	1997
May	37.8	1934	-11.7	1907	17.8	1977	4.4	1907	177.7	1977	0.8	1917	32.5	1931
Jun	38.3	1900	-6.1	1888	22.0	1988	12.3	1969	255.8	1901	3.3	1961	1.3	1875
Jul	42.2	1936	1.1	1972	24.2	1936	15.4	1884	197.4	1953	13.5	1875	0.0	SVRL
Aug	40.6	1949	-1.1	1910	22.5	1983	14.4	1977	218.0	1985	3.3	1915	0.0	SVRL
Sep	38.8	1983	-8.3	1899	16.8	1948	8.0	1965	156.2	1872	1.3	1948	18.3	1872
Oct	30.5	1992	-20.6	1936	12.8	1963	0.3	1887	144.0	1949	2.5	1976	38.6	1919
Nov	23.9	1975	-36.7	1875	1.3	1923	-13.9	1896	90.2	1955	0.8	1976	80.3	1955
Dec	11.7	1939	-47.8	1879	-3.4	1877	-25.9	1879	101.3	1909	2.5	1892	101.3	1909

Monthly and Annual Degree-Days/Degres-Jours Mensuels et Annuels

MONTH	Degree-Days Above					Degree-Days Below	
	24 C	18 C	10 C	5 C	0 C	0 C	18 C
Jan	0.0	0.0	0.0	0.0	0.0	453.8	1011.8
Feb	0.0	0.0	0.0	0.0	11.1	140.3	633.2
Mar	0.0	0.0	0.0	4.1	32.8	203.6	728.8
Apr	0.0	0.0	34.3	103.5	236.6	0.0	303.4
May	0.0	0.8	92.3	228.1	381.2	0.0	177.6
Jun	0.0	25.3	184.7	319.1	460.1	0.0	96.2
Jul	4.5	63.1	286.2	441.2	596.2	0.0	24.9
Aug	0.4	85.6	330.3	485.3	640.3	0.0	3.3
Sep	0.6	12.0	133.5	273.2	423.2	0.0	128.8
Oct	0.0	0.0	11.0	71.4	206.1	0.0	351.9
Nov	0.0	0.0	0.0	0.2	14.3	108.6	634.3
Dec	0.0	0.0	0.0	0.1	5.4	400.6	953.2
YEAR	5.5	186.8	1072.3	1926.2	3016.3	1276.9	5047.9