

MONTHLY CLIMATE DATA

WINNIPEG, MANITOBA

Month: June Year: 1993

| | CURRENT | | NORMAL | |
|------------------------------------|---------|------|--------|---------|
| | VALUE | DATE | VALUE | DATE |
| Mean Maximum | 21.2 | | 23.4 | |
| Mean Minimum | 9.7 | | 10.4 | |
| Mean | 15.5 | | 16.9 | |
| Extreme Maximum and Date | 30.2 | 11 | 38.3 | 1900/23 |
| Extreme Minimum and Date | 0.3 | 2 | -6.1 | 1888/1 |
| Rainfall (mm) | 78.8 | | 83.8 | |
| Snowfall (cm) | 0.0 | | 0.0 | |
| Total Precipitation (mm) | 78.8 | | 83.8 | |
| Days With Thunder | 7 | | 6 | |
| Days With Measurable Precipitation | 16 | | 12 | |
| Sunshine Hours | 240.6 | | 290.6 | |
| Wind (km/h) | 17.9 | | 17 | |
| Heating Degree Days Below 18 C | 103.1 | | 69.0 | |
| Growing Degree Days Above 5 C | 313.8 | | 357.8 | |
| Heating Degree Days Below 0 C | 0.0 | | 0.0 | |
| Cooling Degree Days Above 18 C | 26.9 | | 36.8 | |

Highlights of the Month

The month of June was cool and although there was less than normal precipitation, at least a trace of rain fell on 2 out of 3 days. The Mean temperature was below normal by 1.4 degrees. However, the minimum temperature was below normal by only 0.7 degrees while the maximum temperature was below normal by 2.2 degrees. The maximum temperature failed to reach 20 degrees on 13 days during the month. Normally, this occurs would occur on only 7 days during June. One new temperature record was set on the 26th when the mercury peaked at 13.5 degrees. The old record was 15.6 set in 1925. The maximum temperature on the 27th was even colder at 12.9 degrees but was not a new record. Rainfall was frequent with at least a trace on 21 of the 30 days in June. In the final tally however, there was a shortfall of 5.0 mm of precipitation. Hours of sunshine were on track to be near normal but in the last 6 days of the month there was only 3.4 hours of sun. The 240.6 hours of sunshine was exactly 50 hours below the normal. For those of you wondering how the temperature of June 1993 compares with last year, the mean of 15.5 degrees in 1993 ranks as the 29th coldest on record while the mean temperature of 14.9 ranked as the 14th coldest on record.

| D A Y | H O U R | HOUR --> | | | | | | | | | | | | | | | | | | | | | | | | DIR. | PEAK WIND SPEED | TIME |
|-------------|------------------|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|--------------------|------|
| | | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | |
| 17 | N | N | N | N | N | N | NNE | NNE | NNE | NNE | N | NNE | N | NNE | NNE | NNE | NE | NNE | NNE | N | NNW | NNW | N | NNW | N | 41 | 12:20 | |
| 18 | NW | C | W | C | C | C | C | C | C | C | W | W | SW | WSW | S | WSW | NW | NW | SW | C | C | S | SSW | SW | 4 | | | |
| 19 | S | SSW | S | SSE | C | S | S | S | S | S | S | S | S | S | SSE | SSW | SSE | SSW | S | S | S | S | S | S | 17 | | | |
| 20 | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | 9 | 21:33 | | |
| 21 | W | NW | N | N | N | NNE | NNE | NE | ENE | NNE | NE | NE | NE | NE | NE | NE | ENE | NE | NNE | NNE | NE | NE | E | E | 33 | 14:23 | | |
| 22 | E | ESE | ESE | E | ESE | E | SE | SSE | SE | SSE | SE | SSE | SSE | SSE | SSE | SSE | SSE | SSE | SSE | SSE | SSE | SSE | SSE | SSE | 70 | 16:31 | | |
| 23 | SSW | S | S | S | SW | SW | SW | SW | W | W | W | WNW | WNW | W | S | NNW | E | ENE | NNE | NE | E | ESE | SSW | 32 | 00:44 | | | |
| 24 | E | ESE | SE | SW | WSW | WSW | WSW | WSW | SW | SW | SSW | SSW | S | SSW | SSW | S | S | SSW | SSW | S | S | S | S | S | 65 | 14:47 | | |
| 25 | S | S | S | S | S | SSW | SW | SW | SW | WSW | WSW | WSW | W | W | WSW | W | W | WSW | W | W | W | W | W | W | 54 | 05:48 | | |
| 26 | W | W | W | W | W | W | W | W | W | W | W | W | W | W | W | W | W | W | W | W | W | W | W | W | 50 | 12:12 | | |
| 27 | WNW | W | WNW | WNW | W | NW | NW | NNW | N | NNW | NW | WNW | N | NNW | N | N | N | NE | NE | NE | NE | NE | NE | NE | 41 | 07:15 | | |
| 28 | NNE | N | C | NNE | NNE | NNE | NNE | N | C | N | C | NNE | E | C | NE | E | ENE | ENE | ENE | ENE | ENE | ENE | ENE | E | | | | |
| 29 | E | E | E | E | E | E | E | E | E | E | E | ESE | ESE | ESE | ESE | ESE | ESE | ESE | ESE | ESE | ESE | ESE | ESE | ESE | 44 | 11:01 | | |
| 30 | ESE | ESE | ESE | ESE | E | SE | SE | SE | SE | SE | SE | SE | SE | SE | SE | SE | SE | SE | SE | SE | SE | SE | SE | SE | 39 | 00:01 | | |

EQUAL TO OR OVER ----->

10 15 20 25 30 35 40 45 50 55 60 65 70

WINDSPEED 1S

NUMBER OF HOURS ----->

548 459 322 189 99 40 15 4 2 1 0 0 0

IN KM/HR

NUMBER OF DAYS ----->

30 27 26 21 15 7 4 1 1 0 0 0 0

MAX CONSECUTIVE HOURS --->

99 64 57 18 14 12 3 2 1 0 0 0 0

DEU POINT SUMMARY
 SUMMAIRE DES TEMPERATURES DE ROSEE

WINNIPEG INT'L AIRPORT

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| HOURL-> | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | MEAN |
|---------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| D | 1 | -9 | -5 | -3 | -8 | -15 | -18 | -7 | 2 | 4 | 22 | 9 | -9 | -5 | 4 | 6 | 20 | 38 | 33 | 33 | 27 | 24 | 8 | 9 | 7 |
| A | 2 | 5 | 5 | 2 | -2 | -14 | -2 | 9 | 44 | 41 | 34 | 33 | 32 | 44 | 44 | 42 | 52 | 39 | 31 | 18 | 15 | 22 | 25 | 20 | 26 |
| T | 3 | 13 | 9 | 4 | 2 | 1 | 1 | 26 | 40 | 28 | 29 | 32 | 32 | 26 | 33 | 22 | 17 | 30 | 11 | -15 | 8 | -8 | 10 | 18 | 17 |
| E | 4 | 21 | 24 | 10 | 4 | 9 | 3 | 26 | 35 | 34 | 30 | 24 | 28 | 30 | 12 | 8 | 17 | 13 | 20 | 27 | 39 | 37 | 48 | 43 | 24 |
| | 5 | 30 | 23 | 20 | 22 | 27 | 33 | 48 | 62 | 71 | 72 | 49 | 48 | 39 | 59 | 63 | 52 | 66 | 47 | 68 | 89 | 82 | 95 | 79 | 54 |
| | 6 | 85 | 80 | 86 | 85 | 82 | 82 | 83 | 83 | 83 | 60 | 54 | 52 | 43 | 34 | 39 | 38 | 38 | 35 | 27 | 34 | 33 | 38 | 24 | 57 |
| | 7 | 24 | 29 | 64 | 71 | 70 | 78 | 79 | 81 | 84 | 91 | 100 | 62 | 82 | 77 | 73 | 79 | 59 | 64 | 64 | 67 | 71 | 67 | 90 | 71 |
| | 8 | 102 | 104 | 105 | 105 | 105 | 107 | 109 | 114 | 115 | 119 | 125 | 128 | 132 | 135 | 137 | 138 | 135 | 128 | 149 | 146 | 141 | 138 | 135 | 124 |
| | 9 | 135 | 132 | 131 | 131 | 128 | 128 | 128 | 131 | 141 | 136 | 136 | 137 | 135 | 137 | 134 | 132 | 125 | 116 | 121 | 115 | 110 | 113 | 111 | 128 |
| | 10 | 108 | 100 | 88 | 95 | 94 | 96 | 107 | 123 | 135 | 145 | 150 | 158 | 164 | 149 | 148 | 137 | 146 | 124 | 138 | 143 | 130 | 133 | 129 | 128 |
| | 11 | 130 | 132 | 136 | 136 | 136 | 135 | 137 | 150 | 159 | 165 | 175 | 175 | 158 | 151 | 155 | 156 | 172 | 163 | 173 | 167 | 159 | 159 | 146 | 154 |
| | 12 | 143 | 133 | 133 | 135 | 124 | 129 | 132 | 147 | 157 | 171 | 177 | 179 | 178 | 180 | 181 | 182 | 179 | 180 | 177 | 173 | 169 | 157 | 158 | 160 |
| | 13 | 165 | 148 | 149 | 148 | 146 | 146 | 150 | 152 | 152 | 147 | 143 | 102 | 108 | 114 | 106 | 102 | 112 | 105 | 96 | 96 | 103 | 99 | 98 | 124 |
| | 14 | 96 | 97 | 106 | 106 | 91 | 91 | 86 | 71 | 63 | 65 | 58 | 57 | 64 | 70 | 63 | 66 | 65 | 64 | 64 | 64 | 58 | 61 | 59 | 75 |
| | 15 | 57 | 51 | 54 | 52 | 50 | 55 | 63 | 78 | 85 | 89 | 90 | 88 | 101 | 95 | 80 | 72 | 81 | 85 | 79 | 87 | 89 | 89 | 88 | 77 |
| | 16 | 90 | 87 | 83 | 86 | 88 | 92 | 98 | 103 | 104 | 103 | 109 | 109 | 107 | 108 | 111 | 112 | 112 | 115 | 113 | 115 | 112 | 110 | 105 | 103 |
| | 17 | 87 | 70 | 70 | 69 | 66 | 59 | 79 | 93 | 104 | 98 | 102 | 84 | 68 | 31 | 31 | 39 | 35 | 48 | 48 | 76 | 62 | 58 | 56 | 65 |
| | 18 | 54 | 63 | 66 | 65 | 70 | 69 | 80 | 88 | 84 | 66 | 68 | 70 | 77 | 79 | 79 | 81 | 64 | 71 | 89 | 73 | 74 | 74 | 85 | 75 |
| | 19 | 84 | 78 | 78 | 82 | 82 | 79 | 92 | 94 | 99 | 104 | 101 | 94 | 96 | 89 | 105 | 94 | 94 | 95 | 109 | 110 | 105 | 99 | 94 | 94 |
| | 20 | 86 | 84 | 78 | 77 | 78 | 79 | 84 | 104 | 123 | 131 | 135 | 143 | 154 | 163 | 172 | 158 | 163 | 163 | 169 | 180 | 178 | 150 | 157 | 132 |
| | 21 | 166 | 164 | 161 | 167 | 150 | 145 | 137 | 130 | 132 | 128 | 129 | 98 | 99 | 114 | 130 | 129 | 114 | 104 | 102 | 118 | 103 | 72 | 62 | 123 |
| | 22 | 60 | 71 | 68 | 69 | 75 | 84 | 91 | 86 | 93 | 111 | 143 | 156 | 174 | 175 | 178 | 189 | 157 | 171 | 180 | 167 | 155 | 157 | 161 | 130 |
| | 23 | 158 | 155 | 154 | 158 | 158 | 153 | 145 | 123 | 122 | 117 | 126 | 120 | 83 | 73 | 18 | 49 | 51 | 47 | 81 | 75 | 88 | 88 | 120 | 116 |
| | 24 | 158 | 155 | 158 | 168 | 158 | 123 | 110 | 101 | 95 | 98 | 86 | 87 | 95 | 102 | 103 | 70 | 87 | 90 | 85 | 83 | 94 | 98 | 95 | 108 |
| | 25 | 96 | 88 | 89 | 93 | 97 | 94 | 90 | 84 | 80 | 73 | 79 | 74 | 84 | 73 | 67 | 81 | 94 | 104 | 93 | 89 | 82 | 80 | 80 | 86 |
| | 26 | 74 | 70 | 69 | 66 | 61 | 60 | 68 | 74 | 80 | 74 | 69 | 73 | 66 | 65 | 68 | 68 | 75 | 77 | 86 | 92 | 76 | 71 | 59 | 71 |
| | 27 | 67 | 73 | 72 | 70 | 64 | 67 | 62 | 60 | 53 | 55 | 52 | 56 | 60 | 63 | 66 | 69 | 66 | 67 | 68 | 68 | 68 | 63 | 58 | 63 |
| | 28 | 60 | 65 | 72 | 71 | 74 | 77 | 79 | 74 | 79 | 75 | 75 | 77 | 84 | 82 | 82 | 79 | 83 | 88 | 88 | 91 | 85 | 91 | 89 | 79 |
| | 29 | 85 | 82 | 84 | 87 | 85 | 88 | 92 | 98 | 103 | 107 | 111 | 109 | 98 | 95 | 95 | 102 | 105 | 100 | 98 | 96 | 96 | 93 | 93 | 96 |
| | 30 | 94 | 92 | 81 | 78 | 73 | 77 | 86 | 102 | 107 | 109 | 113 | 121 | 118 | 120 | 127 | 131 | 132 | 137 | 139 | 137 | 137 | 132 | 132 | 113 |
| MEAN | 84 | 82 | 82 | 83 | 80 | 80 | 86 | 91 | 94 | 94 | 95 | 91 | 92 | 90 | 88 | 90 | 91 | 92 | 90 | 92 | 95 | 91 | 90 | 88 | 89 |
| MOYENNE | | | | | | | | | | | | | | | | | | | | | | | | | |

*TEMPERATURES IN TENTHS OF DEGREES CELSIUS
 *TEMPERATURES EN DIXIEME DEGRES CELSIUS

| Temperature Température Precipitation Précipitation Rainfall Hauteur de pluie Snowfall Hauteur de neige Wind speed Vitesse du vent Station pressure Pression à la station | THIS MONTH CE MOIS-CI | | PREVIOUS YEAR ANNÉE PRÉCÉDENTE | | NORMAL NORMALE | RECORD FOR THE MONTH RECORD POUR LE MOIS | | | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------|-----------------------------------|-------------|-------------------|---------------------------------------------|-------------|---------------|-------------------------------|-------------|---------------|----------------|------|-----|
| | VALUE RELEVÉ | DAY JOUR | VALUE RELEVÉ | DAY JOUR | | HIGHEST EVER MAXIMUM ABSOLU | | | LOWEST EVER MINIMUM ABSOLU | | | RECORD DATE | | |
| | | | | | | VALUE RELEVÉ | DAY JOUR | YEAR ANNÉE | VALUE RELEVÉ | DAY JOUR | YEAR ANNÉE | | | |
| HIGHEST TEMPERATURE (MAXIMUM) TEMPÉRATURE MAXIMALE | 30.2 | 11 | 32.4 | 11 | | 38.3 | 23 | 1900 | | | | 121 | | |
| LOWEST TEMPERATURE (MINIMUM) TEMPÉRATURE MINIMALE | 0.3 | 2 | 0.7 | 8 | | | | | | | -6.1 | 1 | 1888 | 121 |
| MEAN MONTHLY TEMPERATURE TEMPÉRATURE MENSUELLE MOYENNE | 15.5 | | 14.9 | | 16.9 | 22.0 | | 1988 | 12.3 | | | 1969 | 121 | |
| TOTAL MONTHLY RAINFALL HAUTEUR TOTALE MENSUELLE DE PLUIE | 78.8 | | 58.8 | | 83.8 | 255.8 | | 1901 | 3.3 | | | 1961 | 121 | |
| TOTAL MONTHLY SNOWFALL HAUTEUR TOTALE MENSUELLE DE NEIGE | 0.0 | | 0.0 | | TR | 1.3 | | 1875 | 0.0 | | | SVRL | 121 | |
| TOTAL MONTHLY PRECIPITATION PRÉCIPITATION TOTALE MENSUELLE | 78.8 | | 58.8 | | 83.8 | 255.8 | | 1901 | 3.3 | | | 1961 | 121 | |
| NO OF DAYS WITH MEASURABLE PRECIPITATION NOMBRE DE JOURS AVEC PRÉCIPITATION MESURABLE | 16 | | 12 | | 12 | 20 | | 1901 | 3 | | | 1961 | 121 | |
| GREATEST RAINFALL IN ONE DAY HAUTEUR DE PLUIE MAXIMALE EN UNE JOURNÉE | 15.8 | 12 | 14.8 | 4 | | 152.4 | 26 | 1901 | | | | | 121 | |
| GREATEST SNOWFALL IN ONE DAY HAUTEUR DE NEIGE MAXIMALE EN UNE JOURNÉE | 0.0 | 0 | 0.0 | 0 | | 1.3 | 1 | 1875 | | | | | 121 | |
| GREATEST PRECIPITATION IN ONE DAY PRÉCIPITATION MAXIMALE EN UNE JOURNÉE | 15.8 | 12 | 14.8 | 4 | | 152.4 | 26 | 1901 | | | | | 121 | |
| MAXIMUM RAINFALL RECORDED IN: HAUTEUR DE PLUIE MAXIMALE ENREGISTRÉE EN | | | | | | | | | | | | | | |
| 5 MINUTES | 2.1 | 12 | 2.1 | 16 | | 13.2 | 20 | 1983 | | | | | 40 | |
| 10 MINUTES | 4.3 | 12 | 3.0 | 16 | | 19.0 | 21 | 1984 | | | | | 40 | |
| 15 MINUTES | 6.4 | 12 | 3.3 | 16 | | 22.8 | 21 | 1984 | | | | | 40 | |
| 30 MINUTES | 8.6 | 12 | 3.5 | 16 | | 39.5 | 21 | 1984 | | | | | 40 | |
| 60 MINUTES | 14.3 | 12 | 4.8 | 3 | | 56.2 | 21 | 1984 | | | | | 40 | |
| 24 CONSECUTIVE HOURS HEURES CONSÉCUTIVES | 15.8 | 12 | 18.6 | 3 | | 152.4 | 26 | 1901 | | | | | 121 | |
| MEAN WIND SPEED (km/h) VITESSE MOYENNE DU VENT (km/h) | 18.3 | | 14.8 | | 17.0 | 23.0 | | 1965 | 13.4 | | | 1928 | 72 | |
| MAXIMUM SPEED (2 min. mean) VITESSE MAXIMALE (moyenne sur 2 min.) (km/h) | S 56 | 12 | NNW 37 | 3 | | N 90 | 7 | 1954 | | | | | 54 | |
| MAXIMUM GUST SPEED (km/h) POINTE DU VENT MAXIMALE (km/h) | WSW 82 | 20 | NW 69 | 3 | | WNW 127 | 29 | 1967 | | | | | 46 | |
| TOTAL HOURS OF SUNSHINE TOTAL DES HEURES INSOLATION | 240.6 | | 213.0 | | 290.6 | 376.0 | | 1974 | 172.8 | | | 1925 | 111 | |
| MEAN STATION PRESSURE (hPa) PRESSION MOYENNE À LA STATION (hPa) | 98.31 | | 98.42 | | 98.29 | 98.60 | | 1961 | 97.86 | | | 1973 | 54 | |
| GREATEST STATION PRESSURE (hPa) PRESSION MAXIMALE À LA STATION (hPa) | 99.61 | 18 | 99.66 | 20 | | 100.37 | 1 | 1967 | | | | | 54 | |
| LEAST STATION PRESSURE (hPa) PRESSION MINIMALE À LA STATION (hPa) | 96.64 | 8 | 96.53 | 17 | | | | | 94.86 | 7 | 1954 | | 54 | |

CLIMATOLOGICAL DATA THIS MONTH FOR THE PAST
DONNÉES CLIMATOLOGIQUES CE MOIS-CI 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 WIND SPEED VITESSE MOYENNE DES VENTS | MAXIMUM WIND SPEED VITESSE MAXIMALE DES VENTS | SUNSHINE HEURES INSOLATION | HEATING DEGRÉS-JOURS DE CHAUFFE | GROWING DEGRÉS-JOURS DE CROISSANCE | COOLING DEGRÉS-JOURS DE RÉFRIGÉRATION | RAINFALL APRIL 1 |
|---------------|-----------------------------|-----------------------------|----------------------|---------------------------------|---------------------------------|------------------------|----------------------------------------------------|--------------------------------------------------------|----------------------------------|---------------------------------------|------------------------------------------|---------------------------------------------|---------------------|
| 1984 | 30.1 | 3.2 | 17.0 | 227.9 | 0.0 | 227.9 | 15.2 | WNW 41 | 267.6 | 57.6 | 358.6 | 0.0 | 300.6 |
| 1985 | 27.4 | 2.3 | 14.0 | 67.4 | TR | 67.4 | 16.7 | WNW 54 | 228.8 | 155.9 | 270.6 | 0.0 | 138.8 |
| 1986 | 32.6 | 3.4 | 16.8 | 59.2 | 0.0 | 59.2 | 14.6 | WNW 54 | 303.5 | 64.0 | 355.4 | 0.0 | 170.7 |
| 1987 | 35.0 | 2.2 | 19.0 | 55.2 | 0.0 | 55.2 | 15.4 | W 39 | 366.5 | 39.9 | 419.2 | 68.6 | 87.6 |
| 1988 | 37.2 | 6.2 | 22.0 | 94.9 | 0.0 | 94.9 | 16.4 | WNW 52 | 361.9 | 11.6 | 511.5 | 133.1 | 125.2 |
| 1989 | 30.6 | -0.8 | 16.5 | 150.2 | 0.0 | 150.2 | 14.5 | NNW 46 | 278.7 | 70.6 | 343.7 | 24.3 | 185.0 |
| 1990 | 29.2 | 1.3 | 17.6 | 143.1 | 0.0 | 143.1 | 14.4 | NNE 57 | 291.4 | 54.7 | 377.7 | 42.4 | 186.0 |
| 1991 | 30.2 | 6.9 | 18.9 | 131.2 | 0.0 | 131.2 | 18.4 | SSE 56 | 276.9 | 16.5 | 418.8 | 45.3 | 241.9 |
| 1992 | 32.4 | 0.7 | 14.9 | 58.8 | 0.0 | 58.8 | 14.8 | NNW 37 | 213.0 | 115.6 | 298.3 | 23.9 | 104.4 |
| 1993 | 30.2 | 0.3 | 15.5 | 78.8 | 0.0 | 78.8 | 18.3 | S 56 | 240.6 | 103.1 | 313.8 | 26.9 | 137.8 |

- Note/Aviz 1. Climatological Day/Journée climatologique 0001 C ST - 2300 C ST
 2. Normal/Normale 1951-1980
 3. Extremes for period of record/Extrêmes pour la période de registre
 4. Maximum rainfall recorded in may overlap calendar days/Hauteur de pluie maximale enregistrée en peut-être pour plus d'une journée du calendrier
 5. ** Indicates most recent occurrence/Indique le plus récent
 6. * Indicates first of more than one occurrence/Indique le premier de plusieurs