

Rothamsted Meteorological Data

Monthly and Annual Summary 2007

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Description: Contains the monthly and annual summaries for daily weather data collected at Rothamsted Met Station 2007. Each month includes a general summary and summaries of rainfall (mm), sunshine total hours, temperature mean, maximums and minimums (°C) and numbers of ground frosts;

Pages 1-12 Weather summaries for months January-December 2007.

Page 13 Weather summary for year 2007.

Site: Rothamsted Meteorological Station, Rothamsted Research, West Common, Harpenden, Hertfordshire, AL5 2JQ, UK. Latitude 51.8066 N, Longitude -0.3602 E, 128m asl.

Related Resources:

- Month and Annual Summaries for current and other years: http://www.era.rothamsted.ac.uk/Met/monthly
- 30-year Mean Weather Data for Rothamsted Met Station 1981-2010: 10.23637/OARES30YrMeans8180

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Weather Summary for January 2007.

Above average for just about all measurements. Despite a dry end to the month the beginning and middle produced enough to give us above average rainfall, sunshine was above average and even though we had that short cold snap temperatures were well above average.

Rainfall was above, with 91.6mm, which is 21.9mm above the mean and the highest since 2003. We had 26 days with 0.2mm or more of rain and seven had more than 5.0mm. The most on one day was 13.8mm on the 18th.

Sunshine was also above average at 71.4hrs (average for January is 55.1), the most was 7.3 hours on the 31st. We had six days without any sun at all.

January had very high average maximum and minimum temperatures, 9.47 (+3.13) and 4.04 (+3.81) respectively. This is the highest mean maximum recorded at Rothamsted and the second highest mean minimum (the record is 4.3 in 1921). The highest day temperature was 13.1 in the 18^{th} and the lowest minimum temperature was only -2.4 on the 26^{th} .

We had 5 air frosts and 9 ground frosts. We also had some sleet on the 22nd and some snow overnight of the 24th.

Weather Summary for February 2007.

Despite the snow fall early in the month February was sunny, wet and warm.

The average rainfall was above average with 97.4mm, which is 48.6mm above the mean and the highest February figure since 2001. The most on one day was 14.0mm on the 10th, we had 23 days with over 0.2mm and nine were over 5.0mm.

Sunshine was above average at 89.2hrs (average for February is 70.7), we had four days without any sun at all. The most was 8.1hrs on the 3rd and 7th.

The mean maximum and the mean minimum temperature were well above average, 8.62 (+1.91) and 2.87 (+2.13) respectively. The high minimum is despite having the coldest night on the 7th when the minimum temperature went down to -6.1. Which is the coldest night temperature since December 2000 and the coldest February night since 1996. The warmest day was the 1st at 12.2°C.

We had 8 air frosts and 11 ground frosts and we had snow on the 8th and 9th.

Weather Summary for March 2007.

The month started wet and warm but a cold snap towards the end of the month gave us some air frosts and plunging temperatures.

Rainfall was slightly above average, with 57.6mm, which is only 3.7mm above the mean. We had 20 days with 0.2mm or more of rain, but only 3 had more than 5.00mm. The most was 14.0mm on the 2nd.

Sunshine was well above average at 177.1hrs (average for March is 107.2), the most was 10.2 hours on the 27th. This is the highest March total since 1995. We had only 2 days without any sun at all.

The maximum and minimum temperatures were both above average, 11.09 (+1.6) and 2.93 (+0.6) respectively, the highest maximum temperature was 16.3 on the 11^{th} and the lowest minimum was -3.3 on the night of the 22^{nd} .

We had 3 air frosts and 15 ground frosts. We also had four days with snow flurries and two days with hail.

Weather Summary for April 2007.

April has been an unusually dry, sunny and warm month breaking the Rothamsted record as the driest April on record. The previous record was held by April 1938 with 2.7mm. Also with sunshine of 239.2 hours was the second sunniest on record, this still being held by April 1938 with 270 hours.

Rainfall was well below average, with only 2mm, which is 51.5mm below the mean. We had only 8 days with 0.2mm or more of rain, and none had more than 5mm. The wettest days were the 2^{nd} and 18^{th} which had a tiny 0.4mm each.

Sunshine was well above average with 239.2hrs (the average for April is 146.8), the most was 13.8 hours on the 30th. There were no days where the sun didn't shine.

The maximum and minimum temperatures were above average, 16.63 (+4.69) and 5.74 (+2.12) respectively. The warmest day reached 21.6 on the 15th, 2.4 higher than the average max for April.

We had one air frost and nine ground frosts.

Weather Summary for May 2007.

Firstly I need to report that due to a severed cable at the MET site we recorded and reported incorrect rainfall for April. After checking with the adjacent ECN site we have updated the rainfall figure. It is officially 2.8 mm instead of 2.0 mm, not quite the driest April on record as April 1938 had 2.7 mm.

On to May's weather.

Rainfall this May was well above average, with 135.8 mm, which is 86.1 mm above the mean. This is the highest rainfall figure ever recorded for May. It beats the 1967 May record of 124.5 mm. It is also the highest rainfall figure recorded since November 2003. Although the highest figure ever recorded is still held by October 1987 with 198.7 mm. recorded. We had 21 days with 0.2 mm or more of rain and 10 days had more than 5.00 mm. The most was 39.0 mm on the 27th May.

With all the cloud cover sunshine was below average at 160.1 hrs (average for May is 194.9), the most was 13.9 hours on the 2nd. We only had 3 days without any sun at all. This is the lowest May total since 1994.

The average maximum temperature was $16 \,^{\circ}\text{C}$ which is the mean for May and the minimum was below the mean with $3.1 \,^{\circ}\text{C}$ (-3.22). The warmest day was $23.2 \,^{\circ}\text{C}$ on the 24^{th} ; the lowest temperature was $3.1 \,^{\circ}\text{C}$ on the night of the 30^{th} .

We had two ground frosts and no air frosts.

Weather Summary for June 2007.

Although June has had above average temperatures it certainly hasn't been flaming with below average sunshine and above average rainfall! Not a good month for those "hay makers" out there!?

Rainfall was 72.4mm, which is 12.2mm above the mean. This is the wettest June since 1999. We had 21 days with 0.2mm or more of rain, and five of these had more than 5.00mm. The most was 11.8mm during on 30th.

Sunshine was below average with 151.5hrs (average for June is 190.3), the most was 13.7 hours on the 2nd. This is the lowest sunshine figure since 1991 and is the 10th lowest figure since 1977.

The maximum temperature was slightly below average at 23.4 (-0.4)) and the minimum above average at 6.9 (+2.07). The warmest day was on the 2^{nd} and the coolest on the 28^{th} .

Weather Summary for July 2007.

July was a cool and wet month. Looking at records it scores as the 21st wettest July since 1890. The wettest July was in 1950 during which 137.6 mm fell.

Rainfall was well above average, with 86.8 mm, which is 42.2mm above the mean. We had 22 days with 0.2mm or more of rain, and five of these had more than 5 mm. The most was 20.2mm most falling around lunch time on the 20th and over half July's rain fell during the week beginning Sunday 15th.

Sunshine was below average with 174hrs (average for July is 203.3). The most was 10.5 hours on the 31st. There were no days without any sun at all.

The average maximum temperature was below average at 19.67 (-1.75) and the average minimum was slightly above average at 11.95 (+0.59). The warmest day was 22.7 on the 19^{th} . Just over 10 degrees lower than the same day last year, and the 9^{th} lowest maximum since records began in 1908. The lowest minimum (night time) temperature was 8.1° C on the 31^{st} .

We had no air or ground frosts.

Weather Summary for August 2006.

Rainfall was above average with 64.4mm, which is 10.7mm above the mean. We had 16 days with 0.2mm or more of rain, 5 of which had more than 5.0 mm; the most was 12.2mm on the 14th.

The temperatures were slightly cooler than average with the both the maximum and minimum down. The mean maximum and the mean minimum temperatures were, 20° (-1.43) and 11.15° (-0.2) respectively. The highest temperature was 27.6° on the 5th which is 1.2° above average and the lowest (night) was 7.4° on the 10th, this is 1.3° above average.

The sunshine was a little below average at 193.5hrs (3.3 hrs below average). There were 3 days where the sun didn't break through at all, and the most was on the 5th with 13.5 hours.

Weather Summary for September 2007.

September was a relatively dry and sunny month with very average temperatures.

Rainfall was well below average with 29.2mm, which is 31.8mm below the mean. Mind you this was only the second month of the year to have below average rainfall and we are still running at 123.8mm above the average for the first nine months of the year. We had 14 days with 0.2mm or more of rain but only 2 with over 5 mm - 1 mm the most was 11.4mm on the 23^{rd} .

Sunshine was above average at 153.6hrs (average for September is 142.3); we only had one day without any sun at all. The most was 10.9 hours on the 11th.

Both the mean maximum and the mean minimum temperatures were very close to the mean, with 18.4 (+0.05) and 10.05 (+0.61) respectively. The highest daily temperature was 22.5 on the 5^{th} , which is 1.4 below average. The lowest (night) temperature was 4.8 which is 1.2 above average

Weather Summary for October 2007.

October was a drier than average month with only slightly above average mean temperatures. There was also less sunshine than average.

Rainfall was below average with 57.1mm, which is 17.6mm below the mean. We had 18 days with 0.2mm or more of rain and 3 with over 5.0mm. The most was 21.6mm on the 9th. This is only the third month this year with below average rainfall.

Sunshine was below average at 99.6hrs (average for October is 112.1) the most was 8.8 hours on the 4th and 23rd. We had 7 days without any sun at all.

October temperatures were a little above average. The mean maximum and mean minimums were, $14.05 \ (+0.31)$ and $7.13 \ (+0.48)$ respectively. The highest temperature was 17.6 on the 11^{th} and the lowest was 0.2 on the 25^{th} .

No ground frosts were recorded.

Weather Summary for November 2007.

The month started off relatively dry with plenty of sunshine keeping the daytime temperatures up creating some beautiful mild autumn days. It was colder at night and so we experienced the first frosts of the winter. With less sunshine in middle of the month the days became cooler and then the bulk of the 80 mm of rain fell over 4 days from the 18th to the 21st. This was followed by another brief sunny spell which ended with the coldest night on the 24th. The last week continued mostly dry and mild before the rain came back on the 30th.

Rainfall was above the average for the eighth month this year, with 80mm, which is 13.8mm above the mean. We had 21 days with 0.2mm or more of rain, and four days with at least 10mm. The most was nearly 24.1mm was recorded on the 19th.

Sunshine was also above average at 92hrs (+22.2) the most was 7.6 hours on the 16^{th} . We had four days with no sun at all.

Both the maximum and minimum mean temperatures were above the long-term average with $10.07 \ (+1.32)$ and $3.46 \ (+0.13)$ respectively. The warmest day was 15.4° C on the 2^{nd} ; the lowest minimum was -3.4 on the 24^{th} .

We had 7 air frosts and 12 ground frosts.

Weather Summary for December 2007.

December was relatively bright month with plenty of sunshine and below average rainfall. Mean temperatures were very typical for December but max and min temperatures were above and below the average respectively.

Rainfall was below the average, with 67.1mm, which is 3mm below the mean. We had 18 days with 0.2mm or more of rain and 7 days with more than 5mm. The most was 11.7mm on the 24th.

Sunshine was well above average at 76.9hrs (average for December is 48.1), the most was 6.6 hours on the 12th. We had 7 days without any sun at all. December 2007 is recorded as the 3rd sunniest since sunshine records began in 1890. Decembers in 1962 and 2005 recorded 87 and 82 hours respectively.

December had only slightly above average maximum and minimums, 7.6 (+0.41) and 1.96 (+0.04) respectively. The highest daily temperature was 14 on the 6^{th} (the highest daytime figure since 1994 and 2 above average) and the lowest night temperature was -4.5 on the 20^{th} (the coldest night time figure since 2000 and 0.7 below average)

We had 11 air frosts and 12 ground frosts.

Weather Summary for 2007.

Rainfall

The total for 2007 was 842.2mm the average is 703.6mm. This was the most since 2002. It rained (rain 0.2mm or more) on 226 days (216 in 2006). The most on one day was 39.0mm on 28th May, the wettest month was May with 135.8mm. The driest month was April with 2.8mm. Of the twelve months, four had below average rainfall.

Sunshine

Hours of sun figures were 141.5 above average totalling 1679.2 hours. The 'sunniest' month was April with 239.2 hours.

Temperature

The year was slightly warmer than average with both the mean maximum and the mean minimums slightly above average at 14.2(+0.87) and 6.72(+1.13) respectively. This follows on from the last three years when both sets of temperatures were above average.

The hottest day reached 27.6C on the 6th August which is 0.3 above the August average. The coldest night dropped to -6.1C on 7th February, this is 1.2 below February's average. We had 70 ground frosts (79 in 2006).

Note: the average refers to the 30-year means 1971-2000.