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Rothamsted Meteorological Data

Monthly and Annual Summary 2008

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Description: Contains the monthly and annual summaries for daily weather data collected at Rothamsted Met Station 2008. 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 2008.

Page 13 Weather summary for year 2008.

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](https://doi.org/10.23637/OARES30YrMeans8180)

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Weather Summary for January 2008.

January was above average for just about all measurements and thus turned out to be wet, sunny and mild. Although the second half of the month was relatively dry we had exceeded the average rainfall by day 15. Sunshine was above average and temperatures were well above average with 1 record broken.

Rainfall was above average with 103.2mm (+33.5); by far the highest since 1999 and the 10th wettest January recorded at Rothamsted. We had 24 days with 0.2mm or more of rain and 10 had more than 5.0mm. The most on one day was 14.2mm on the 11th.

Sunshine was also above average at 73.3hrs (+18.2); the most was 6.9 hours on the 27th. We had 8 days without any sun at all.

January had very high average maximum and minimum temperatures, 9.26 (+2.92) and 3.45 (+2.59) respectively. This is the 3rd highest mean maximum recorded at Rothamsted. The average minimum is the 4th highest recorded (the record is 4.3 in 1921). The highest day temperature was 13.4 in the 20th, which is the 3rd highest on record, the highest being 13.9 in 1930. The lowest minimum temperature was -0.7 on the 17th, this is the warmest minimum since our records began.

We had 3 air frosts and 11 ground frosts.

Weather Summary for February 2008.

In relation to the average, this February was very sunny, warm and dry.

The average rainfall was below average with 21.9mm (-26.9); the driest February figure since 1998. The most on one day was 4.9mm on the 4th. We had 13 days with over 0.2mm, and there were no days exceeding 5.0mm.

Sunshine was well above average at 145hrs (+74.8); by far the sunniest February since records began at Rothamsted in 1891. The previous record was 116.7 hrs in 1998. We had 2 days without any sun at all. The most was 9.1hrs on both the 17th and 18th.

The mean maximum and the mean minimum temperatures were both above average with 9.72°C (+3.01) and 1.09°C (+0.35) respectively. The lowest minimum was -5.1°C on the 17th, 0.1° C above average. The highest maximum was 14.6°C on the 9th, 2.7° C above average. This is the 6th highest February temperature in our records, (since 1908) and highest since 2004.

We had 12 air frosts and 20 ground frosts.

Weather Summary for March 2008.

The first week of March was dry and bright with warm days but from week 2 onwards March became very wet.

Rainfall was more than double the average, with 108.5mm, which is 54.6mm above the mean. We had 22 days with 0.2mm or more of rain, and 8 days with more than 5mm. The most was 24.7mm on the 15th.

Sunshine was above average at 122.4hrs (average for March is 107.2); the most was 9.9 hours on the 30th. There was only one day when the sun didn't shine at all.

The maximum and minimum temperatures were both very close to average at 9.28°C (-0.21) and 2.52°C (+0.19) respectively, the highest maximum temperature was 13.3°C on the 15th and the lowest minimum was -3.7°C on the night of the 5th.

We had 5 air frosts and 15 ground frosts.

Weather Summary for April 2008.

April was a sunny but other wise fairly average April.

Rainfall was recorded to be equal to the average at 53.5 mm. We had 22 days with 0.2mm or more of rain, and 3 had more than 5mm. The wettest day was the 29th with 14.6mm.

Sunshine was above average with 160hrs (the average for April is 146.8), the most was 9.7 hours on the 26th. There were 3 days where the sun didn't shine.

The maximum and minimum temperatures were slightly above average with, 12.25°C (+0.31) and 3.75°C (+0.13) respectively. The warmest day reached 20°C on the 26th, 0.8 higher than the average max for April and the coldest night dropped to -2.2°C, 0.2 below the average.

We had 6 air frosts and 14 ground frosts.

Weather Summary for May 2008.

Although rainfall for May was nearly 50 mm less than last May, it can still be described as a very wet Month compared to the average.

Rainfall this May was above average, with 87.0 mm, which is 37.3 mm above the mean. We had 14 days with 0.2 mm or more of rain and 6 days had more than 5.0 mm. The most was 28.6 mm on the 26th May.

Sunshine was slightly below average at 193.2hrs (average for May is 194.9); the most was 13.9 hours on the 6th. We had 3 days with no sunshine at all.

The average maximum temperature was above the mean for May at 17.98 °C (+2.23). The minimum was also above the mean with 8.76 °C (+2.44). The warmest day was 24.6 °C on the 11th; the lowest temperature was 1.5 °C on the night of the 20th.

We had five ground frosts and no air frosts.

Weather Summary for June 2008.

June has been a sunny and dry month with slightly above average temperatures, a much better month for hay making than last June.

Rainfall was 35.3mm, which is 24.9mm below the mean. We had 13 days with 0.2mm or more of rain, and 3 of these had more than 5.0mm. The most was 10.3mm on the 2nd.

Sunshine was above average with 229hrs (average for June is 190.3); the most was 14.5 hours on the 9th.

The maximum temperature was slightly above average at 18.8°C (+0.2) and the minimum above average at 10.2°C (+1.0). The warmest day was on the 9th reaching 24.5°C and the coolest dropped to 5.5°C on the 16th.

Weather Summary for July 2008.

July was a wet month with a little more cloud than average; temperatures were very close to the average. Looking at records it scores as the 20th wettest July since 1890. The wettest July was in 1950 during which 137.6 mm fell.

Rainfall was well above average, with 90.3 mm, which is 48.2mm above the mean. We had 17 days with 0.2mm or more of rain, and 5 of these had more than 5 mm. The greatest rainfall was 22.3mm recorded on the 9th. Well over half of the total rain (60.9mm) fell on the 3 days of the 6th, 9th and 11th.

Sunshine was 8.6 hours below average with 194.7hrs. The most was 14 hours on the 1st. The only day with no sun was the 9th, which was also the wettest.

The average maximum temperature was slightly below average at 20.9°C (-0.52) and the average minimum was slightly above average at 12.25°C (+0.89). The warmest day reached 27.1°C on the 27th. The lowest minimum (night time) temperature was 7.7°C on the 4th.

We had no air or ground frosts.

Weather Summary for August 2008.

August was a very cloudy and very wet month, a month when it rained on all but 6 days. It was mild, neither hot nor cold, with maximum and minimum temperatures below and above average respectively.

Rainfall was well above average with 107.8mm, which is virtually twice the average of 53.7mm and the 11th wettest since records began here in 1890. We had 25 days with 0.2mm or more of rain, 6 of which had more than 5.0 mm; the most was 34mm on the 31st.

The mean maximum temperature was slightly below average and mean minimum slightly above average with 20.07°C (-1.36) and 13.08°C (+1.73) respectively. The highest temperature was 24.4°C on the 30th which is 2.3° below average, and the lowest (night) temperature was 8.4°C on the 15th, this is 2.2° above average.

The sunshine was well below average at 121.2hrs (75.6 hrs below average) making it the 5th cloudiest since records began here and the cloudiest since 1968. There were 3 days where the sun didn't shine at all, and the sunniest days were the 4th and 15th with 8.6 hours each.

Weather Summary for September 2008.

September was relatively cloudy and damp, with less extreme maximum and minimum temperatures but with very typical mean temperatures.

Rainfall was 66.2 mm, which is 5.2 mm above the mean. We had 18 days with 0.2mm or more of rain and 5 with over 5 mm – the most was 14 mm on the 12th.

Sunshine was 127.4 hrs which is 14.9 hrs below average. We had 2 days without any sun at all and the most was 10 hours on the 26th.

Both the mean maximum and the mean minimum temperatures were close to the mean, with 17.1°C (-0.9) and 9.9 (+0.5) respectively. The highest daily temperature was 19.5°C on the 19th, which is 4.3 below average. The lowest (night) temperature was 5.2°C which is 1.6 above average.

Weather Summary for October 2008.

October was a varied month, mild and mostly dry, almost summery earlier on, then turning cold with typically winter conditions by the month's end. The cutting of hay on the long term classical experiment, Park Grass, was interrupted by the snow fall which must have been a first! This early snow also caused considerable damage to the Rothamsted biomass crops with 2.5m tall miscanthus being completely bent over and buried under the snow! So, in the end, October turned out to be slightly cooler than average, with very average total rain, but at least we can report it was relatively sunny.

Rainfall was very close to the average at 74.3mm, which is 0.4mm above the mean. We had 24 days with 0.2mm or more of rain and 5 with over 5.0mm. The most was 18.8mm which fell mostly as snow on the 28th.

Sunshine was above average at 139.6hrs (average for October is 112.1) the most was 8.8 hours on the 9th. We had only 3 days without any sun at all.

October temperatures were slightly below average. The mean maximum and minimums were, 13.6°C (-0.2) and 5.3°C (-1.3) respectively. The highest temperature was 20.7°C on the 12th and the lowest was -2.9°C on the 25th.

14 ground frosts were recorded.

Weather Summary for November 2008.

November was a relatively cloudy and wet month with close to average temperatures.

Rainfall was above the average for the eighth month this year, with 91.1mm, which is 24.9mm above the mean. We had 24 days with 0.2mm or more of rain, and three days with over 10mm. The most was 17.9mm on the 10th.

Sunshine was below average with 53.9hrs (-16.2) the most was 5.8 hours on the 11th. We had 9 days with no sun at all.

Both the maximum and minimum mean temperatures were slightly above average with 9.5 (+0.1) and 4.2(+0.8) respectively. The warmest day reached 14.5°C on the 14th; the lowest minimum was -2.7 on the 23rd.

We had 5 air frosts and 10 ground frosts.

Weather Summary for December 2008.

Overall December was a relatively sunny and dry month with below average max, min and mean temperatures.

Rainfall was below the average, with 42.0mm, which is 28.1mm below the mean. We had 15 days where at least 0.2mm was recorded, 3 of these with at least 5mm. The most was 16.1mm on the 13th.

Sunshine was well above average at 76.3hrs (average for December is 48.1), the most was 6.8 hours on the 6th and 7th. We had 5 days without any sun at all. December 2008 is recorded as the 4th sunniest since sunshine records began in 1890. Decembers in 1962, 2005 and 2007 recorded 87, 82 and 76.9 hours respectively.

December had slightly below average maximum and minimums, 5.9°C (-1.3) and 0.8°C (-1.1) respectively. The highest temperature was 12.5°C on the 20th and the lowest temperature was -4.2°C in the early hours of the 30th

We had 15 air frosts and 21 ground frosts.

Weather Summary for 2008.

Rainfall

The total for 2008 was 881.1mm, the average is 703.6mm. This is the wettest year since 2002. It rained (rain 0.2mm or more) on 231 days (226 in 2007). The most on one day was 34.0mm on 31st August; the wettest month was March with 108.5mm. The driest month was February with 21.9mm. Of the twelve months, four had below average rainfall.

Sunshine

Hours of sun figures were 98.8 hours above average totalling 1636.5 hours. The 'sunniest' month was June with 229 hours.

Temperature

The year was slightly warmer than average with the mean maximum and the mean minimums slightly above average at 13.7°C (+0.4) and 6.3°C (+0.7) respectively. This follows on from the last four years when both sets of temperatures were above average.

The hottest day was the 27th July reaching 27.1°C; this is 0.1°C above the average maximum for July. The coldest night was the 17th February dropping to -5.1°C; this is 0.3°C above the average minimum for February. We had 112 ground frosts (70 in 2007).

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