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Rothamsted Meteorological Data

Monthly and Annual Summary 2009

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Description: Contains the monthly and annual summaries for daily weather data collected at Rothamsted Met Station 2009. 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 2009.

Page 13 Weather summary for year 2009.

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 2009.

January was a sunny month with below average maximum and minimum temperatures and close to average rainfall.

Rainfall was close to the average with 70.4mm (+0.7). We had 21 days with 0.2mm or more of rain and 6 had more than 5.0mm. The most on one day was 10.7mm on the 21st.

Sunshine was above average at 76.2hrs (+21.2); the most was 7 hours on the 6th. We had 6 days without any sun at all.

January was colder than average with mean maximum and minimum temperatures of 5.2°C (-1.1) and -0.8°C (-1.6) respectively. The highest day temperature was 9.3°C (-2.1) on the 12th, and the lowest minimum was -8.8°C (-2.8) on the 7th.

We had 17 air frosts and 23 ground frosts.

Weather Summary for February 2009.

February was a sunny month with greater than average “precipitation”, the majority falling as sleet and snow during the first half of the month. This snow covered large areas from day 2 with repeated snow falls and freezing temperatures to make it last an unusually long time for Harpenden. The snow gradually dissolved over about 3 days and, apart from the occasional shady hedge bottom, was gone by day 14. Temperatures were, not surprisingly, well below average during first half of the month, but after day 15 rose above average. So the overall mean temperatures ended up being very typical for February. Sunshine was spread across the month fairly evenly although with a slight trend for more sunshine days during the snow period.

“Rainfall” was above average at 73.9mm (+25.1) with up to 66mm of this falling mostly as snow and sleet during days 2 to 15. The most recorded was 39.6mm on day 9, but this was mainly due to snow melt rather than actual snow fall. We had 14 days with over 0.2mm, and 5 days exceeding 5.0mm. Note: Due to the challenges that heavy snowfall poses for automatic rain recording equipment the above details may not reflect precisely the actual amounts of precipitation during that period.

Sunshine was above average at 85hrs (+14.3). We had 5 days without any sun at all; the most was 8.6hrs on the 21st.

The mean maximum and the mean minimum temperatures were both close to average with 6.4°C (-0.4) and 1.0C (+0.3) respectively. The lowest minimum was -6.8°C (-1.9) on the 3rd, and the highest maximum was 12.8°C (+0.9) on the 27th.

We had 13 air frosts and 17 ground frosts.

Weather Summary for March 2009.

March was a relatively dry month with especially large amounts of sunshine and was the 7th sunniest since records began in 1891.

Rainfall was 16.6mm below average, with 37.3mm. We had 18 days with 0.2mm or more of rain, and 1 day with more than 5mm. The most recorded was 13.4mm on the 3rd.

Sunshine was well above average at 182hrs (average for March is 107.2); the most recorded was 11.2 hours on the 21st. There was only one day when the sun didn't shine at all.

The mean maximum temperatures was a little above average at 11.3°C (+1.8) and the mean minimum was close to the average at 2.4°C (+0.1); the highest maximum temperature was 15.3°C on the 16th and the lowest minimum was -1.9°C on the night of the 30th.

We had 7 air frosts and 19 ground frosts.

Weather Summary for April 2009.

April was a warmer, sunnier and drier than average month. Most notable was the high lowest minimum night temperature which stayed well above zero and was the second highest lowest min for April on record.

Rainfall was 6.8 mm below average at 46.7 mm. We had 16 days with 0.2 mm or more of rain, and 4 had more than 5mm. The wettest day was the 10th with 10.7 mm.

Sunshine was 37.9 hours above average with 184.7 hours; the most was 12.3 hours on the 21st. There were 4 days where the sun didn't shine.

The average maximum and minimum temperatures were both above average with, 14.7°C (+2.8) and 5.4°C (+1.7) respectively. The warmest day reached 19.7°C on the 15th, 0.5 higher than the average max for April and the coldest night on the 29th was a mild 1.2°C, the second highest minimum on record.

We had 0 air frosts and 11 ground frosts.

Weather Summary for May 2009.

May was generally a warm dry month with below average rainfall and above average temperatures.

Rainfall this May was 24.8mm, which is 24.9mm below the mean. We had 13 days with 0.2mm or more of rain and only 1 day with more than 5.0mm. The most was 12.0mm on the 25th May.

Sunshine was also above average at 242.1hrs (average for May is 194.9); the most was 15.0 hours on the 24th and 30th. We had 1 day with no sunshine at all on the 13th.

The average maximum temperature was above the mean for May at 17.1°C (+1.4). The minimum was also above the mean with 7.7°C (+1.3). The warmest day was 23.6°C on the 31st; the lowest temperature was 3.3°C on the night of the 4th.

We had four ground frosts and no air frosts.

Weather Summary for June 2009.

June has been on the whole a sunny and what seems a relatively dry month. However, with temperatures again above average there was the occasional heavy shower which meant rainfall was above average.

Rainfall was 68.1mm, which is 7.9mm above the mean. We had 13 days with 0.2mm or more of rain, and 6 of these had more than 5.0mm. The most was 17.9mm on the 6th.

Sunshine was above average with 208hrs (average for June is 190.3); the most was 14.9 hours on the 2nd.

The mean maximum temperature was above average at 20.0°C (+1.4) and the mean minimum above average at 10.2°C (+0.9). The highest maximum was recorded on the 29th reaching 27.8°C with the lowest minimum being 5.1°C on the 4th.

Weather Summary for July 2009.

July was another wet July with very slightly above average amounts of cloud. Temperatures were also very close to the average.

Rainfall was above average, with 73.3 mm, which is 31.2 mm above the mean. We had 19 days with 0.2mm or more of rain, and 7 of these had more than 5 mm. The greatest rainfall was 12 mm recorded on the 7th.

Sunshine was 3.6 hours below average with 199.7hrs. The most was 12.7 hours on the 1st. The sun shone on every day with the least amount being recorded on the 21st where there was only 0.2 hours.

The average maximum temperature was slightly below average at 20.8°C (-0.6) and the average minimum was slightly above average at 12.3°C (+0.9). The warmest day reached 27.4°C on the 1st. The lowest minimum (night time) temperature was 9.3°C on the 28th.

We had no air or ground frosts.

Weather Summary for August 2009.

With overall temperatures only slightly above the average August certainly wasn't "hot"! Even the hottest day only "crept" above the average. It was also relatively cloudy with above average rainfall, but it did at least have 18 days rain free.

Rainfall was above average with 63.4mm, (+9.7mm). We had 13 days with 0.2mm or more of rain, 3 of which had more than 5.0 mm; the most was 28.4mm on the 6th.

The mean maximum and minimum temperatures were slightly above average with 22.0°C (+0.5) and 12.7°C (+1.3) respectively. The highest temperature was 27.4°C on the 19th (0.7° below average), and the lowest (night) temperature was 7.4°C on the 15th, (1.2° above average).

Sunshine was below average at 185.2hrs which is 11.6 hrs below average. There was only 1 day where the sun didn't shine (the 4th), and the sunniest day was the 19th with 12.3 hours.

Weather Summary for September 2009.

September was generally a dry sunny month, with less than average rainfall and above average maximum and minimum temperatures.

Rainfall was 15.9 mm, which is 45.1 mm less than average. We had 9 days with 0.2mm or more of rain and 1 with over 5 mm – the most was 10.9 mm on the 2nd.

Sunshine was 144.7 hrs which is 2.3 hrs above average. We had 1 day without any sun at all and the most was 9.9 hours on the 25th.

Both the mean maximum and the mean minimum temperatures were above the average, with 18.8°C (+0.8) and 10.6 (+1.2) respectively. The highest daily temperature was 26.1°C on the 8th and the lowest (night) temperature was 6.3°C.

Weather Summary for October 2009.

October was dry, mild, and particularly overcast this year.

Rainfall was well below average with 39.1mm, which is 35.6 mm below the mean. We had 15 days with 0.2mm or more of rain and 4 with over 5.0mm. The most was 7.5 mm which fell on the 7th.

Sunshine well below average with 79.9 hrs (average for October is 112.1) the most was 8.1 hours on the 13th. There was only 1 day without any sun at all, the 21st.

October temperatures were slightly above average. The mean maximum and minimums were, 14.7°C (+1.0) and 8.0°C (+1.3) respectively. The highest temperature was 18.6°C on the 6th and the lowest was 1.0°C on the 18th.

5 ground frosts were recorded.

Weather Summary for November 2009.

November was a relatively mild and sunny month with above average temperatures and sunshine. While this sounds pleasant, it was also the fourth wettest month on our records.

Rainfall was more than double the average with 146mm, which is 79.9mm above the mean. We had 23 days with 0.2mm or more of rain, and 10 days with over 5mm. The most was 18.7mm on the 28th.

Sunshine was above average with 77hrs (+6.89) the most was 7.1 hours on the 7th. We had 3 days with no sun at all.

Both the maximum and minimum mean temperatures were above average with 11.3°C (+1.96) and 5.9°C (+2.62) respectively. The warmest day reached 16.2°C on the 1st; the lowest minimum was 0.1°C on the 10th.

We had 0 air frosts and 8 ground frosts.

Weather Summary for December 2009.

Whilst December was relatively sunny it still provided well above average precipitation, some of this falling as snow during the middle of the month. Temperatures were a little below the average for December.

Rainfall was above average, with 105.2mm, which is 35.08 mm above the mean. We had 21 days where at least 0.2mm was recorded, 7 of these with at least 5mm. The most was 17.91 mm on the 29th.

Sunshine was well above average at 72.4hrs (average for December is 48.1), the most was 6.7 hours on the 10th. We had 8 days without any sun at all.

December had slightly below average maximum and minimums, 5.4°C (-1.74) and 0.0°C (-1.92) respectively. The highest temperature was 11.87°C on the 5th and the lowest temperature was -8.38°C in the early hours of the 23rd.

We had 15 air frosts and 16 ground frosts.

Weather Summary for 2009.

Rainfall

The total for 2009 was 764.2mm, the average is 703.6mm. It rained (rain 0.2mm or more) on 195 days (231 in 2008). The most on one day was 39.6mm on 9th February although this was due to snow melt rather than actual precipitation; the wettest month was November with 146.1mm. The driest month was September with 15.9mm. Of the twelve months, five had below average rainfall.

Sunshine

Hours of sun figures were above average totalling 1737.2 hours. the average is 1537.7 hours. The 'sunniest' month was May with 242 hours.

Temperature

The year was slightly warmer than average with the mean maximum and the mean minimums slightly above average at 14.0°C (+0.7) and 6.3°C (+0.7) respectively. This follows on from the last five years when both sets of temperatures were above average.

The hottest day was the 29th June reaching 27.8°C and the coldest night was the 7th January dropping to -8.8°C; we had 105 ground frosts (112 in 2008).

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