

Rothamsted Meteorological Data

Monthly and Annual Summary 2016

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Description: Contains the monthly and annual summaries for daily weather data collected at Rothamsted Met Station 2016. 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 2016.

Page 13 Weather summary for year 2016.

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: <u>10.23637/OARES30YrMeans8180</u>

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Weather Summary for January 2016.

January was relatively mild and sunny but with above average rainfall. Some of this fell as snow in the middle of the month.

Rainfall was above average with 92.3 mm (\pm 22.34 mm). We had 25 days with 0.2 mm or more of rain and 8 had more than 5.0 mm. The most on one day was 13.1 mm on the \pm 10th. Some of the precipitation fell as snow or sleet on the morning of the \pm 17th which settled and remained for approximately 24 hours.

Sunshine was above average with 64.51 hours (+2.46); the most was 6.9 hours on the 15th. We had 3 days with no sunshine at all.

January's mean maximum and minimum temperatures were above average at 8.1°C (+1.4) and 1.8°C (+0.6) respectively. The highest day temperature was 13.7°C on the 24th; the 5th warmest January day recorded at Rothamsted (since 1878). The lowest minimum was -5.3°C on the 19th.

We had 7 air frosts and 16 ground frosts.

Weather Summary for February 2016.

February was notably sunny along with above average temperatures and below average rainfall.

Rainfall was below average with 46.9 mm (-3.27). We had 18 days with over 0.2 mm, and 3 days exceeded 5.0 mm. The most amount of rainfall was 9.3 mm on 17th.

Sunshine was above average with 111.5 hrs. (+31.19). We had 2 days without any sunshine; the most was 9.0 hrs on the 16th. It was the 4th sunniest February since sunshine records began at Rothamsted in 1891.

The mean maximum and the mean minimum temperatures were above average with 8.0°C (+1.09) and 1.6°C (+0.67) respectively. The lowest minimum was -3.8°C on the 16^{th} , and the highest maximum was 13.6°C on the 21^{st} .

We had 11 air frosts and 18 ground frosts.

Weather Summary for March 2016.

March was relatively cool and wet but with above average sunshine.

Rainfall was above average with 84.3 mm recorded, (+33.52 mm). We had 16 days with 0.2 mm or more of rain, and 6 days with more than 5 mm. The most recorded was 24.6 mm on the 27^{th} .

Sunshine was above average with 133.4 hrs (average for March is 114.9); the most recorded was 10.0 hours on the 25^{th} . There were 2 days without sunshine.

The mean maximum and minimum temperatures were below average with 9.2°C (-0.65) and 1.8°C (-0.92) respectively. The highest maximum temperature was 13.4°C on the 25^{th} and the lowest minimum was -3.0°C on the 8^{th} .

We had 6 air frosts and 18 ground frosts.

Weather Summary for April 2016.

April had above average sunshine but was cooler and wetter than average. This precipitation included some light snow and sleet as well as some hail showers.

Rainfall was 62.0 mm which is 6.96 mm above average. We had 24 days with 0.2 mm or more of rain, and 4 days with more than 5mm. The wettest day was the 15th with 12.7 mm.

Sunshine was above average with 167.6 hours (+6.37); the most was 12.3 hours on the 20th and there was sunshine recorded on every day.

The average maximum and min temperatures were both below average with 11.9 °C (-0.73) and 3.5 °C (-0.52) respectively. The warmest day was the 13th which reached 16.2°C, and the coldest night was the 10th when it dropped to -1.7°C

We had 5 air frosts and 12 ground frosts.

Weather Summary for May 2016.

May was mainly sunny and dry with above average air temperature.

Rainfall was 39.4 mm, which is 15.30 mm below the mean. We had 11 days with 0.2 mm or more of rain and 3 days with more than 5.0 mm. The most was 12.0 mm on the 18th May.

Sunshine was above average with 197.0 hrs. (\pm 2.40 hrs.); the most was 13.9 hours on the 4th. There was 2 days without sun.

The average maximum temperature for May was above average at 17.4°C (+1.34°C) and the average minimum was above average at 7.9°C (+0.99°C). The highest temperature was 25.1°C on the 8th; the lowest temperature was -1.1°C on the night of the 1st.

We had 7 ground frosts and 1 air frosts.

Weather Summary for June 2016.

June 2016 was cloudy and wet when compared to the average along with slightly above average overall temperatures. Thunder and lightning were also reported on site.

Rainfall was 84.8 mm, which is 31.58 mm above the mean. We had 22 days with 0.2 mm or more of rain, of which 6 days had more than 5.0 mm. The wettest day was the 22^{nd} with 13.53 mm.

Sunshine was below average with 141.0 hours (average for June is 198.2 hours); the most was 13.9 hours on the 6^{th} and the sun shone on all but 2 days.

The mean maximum temperature was below average at $19.0 \,^{\circ}\text{C}$ (-0.11°C) and the mean minimum was above average at $11.2 \,^{\circ}\text{C}$ (+1.45 °C). The highest maximum recorded was $23.9 \,^{\circ}\text{C}$ on the 7^{th} and the lowest minimum was $8.0 \,^{\circ}\text{C}$ on the 28^{th} .

There were no ground frosts.

Weather Summary for July 2016.

July was a dry and sunny month with above average temperatures.

Rainfall was below average with 27.1 mm, which is 22.80 mm below the mean. We had 16 days with 0.2mm or more of rain with one of these days having more than 5 mm. The greatest rainfall was 16.0 mm recorded on the 12th.

Sunshine was above average with 210.3 hrs. 5.1 hours above the average. The most was 14.8 hours on the 19th and there was sunshine recorded all days.

The average maximum and minimum temperatures were above average with 22.2° C (± 0.43) and 12.8°C (± 0.89) respectively. The warmest day reached 31.0°C on the 19th. The lowest minimum temperature was 8.4°C on the 3rd.

We had no air or ground frosts.

Weather Summary for August 2016.

August was warm, sunny and mostly dry with above average sunshine and temperature and below average rainfall.

Rainfall was below average with 30.1 mm (-33.58 mm). We had 12 days with 0.2mm or more of rain, 2 of which had more than 5.0 mm; the most was 10.1 mm on the 1st.

The mean maximum temperature was above average at 22.7°C (+1.17°C) and the mean minimum temperature was above at 12.9°C (+1.02°C). The highest temperature was 31.2°C on the 24^{th} and the lowest was 8.6°C on the 10^{th} .

Sunshine was 21 hours above average with 217.6 hours. We had no days when the sun didn't shine. The sunniest day was the 15th with 13.1 hours.

There were no frosts.

Weather Summary for September 2016.

September was relatively cloudy and wet along with notably high temperatures for the time of year.

Rainfall was 70.3 mm, which is 12.68 mm above the average. We had 16 days with 0.2 mm or more of rain and 3 with over 5 mm. The most was 34.03 mm on the 15th.

Sunshine was 128 hrs which is 15.44 hrs below average. There was only 1 day without sunshine and the most recorded was 11.2 hours on the 11th.

The mean maximum and minimum temperatures were above average with 20.4°C (+2.10) and 12.2°C (+2.29) respectively. The highest (daytime) temperature was 30.8°C on the 13^{th} and the lowest (night) temperature was 6.4°C on the 23^{rd} . The overall average temperature was the 4^{th} highest on record. Temperature records began in 1878.

No ground frosts were recorded.

Weather Summary for October 2016.

October was cloudier, drier and warmer than average.

Rainfall was 30.1 mm which is 51.55 mm below average. We had 22 days with 0.2 mm or more of rain and 2 with over 5.0 mm. The greatest fall was 8.8 mm which fell on the 15th.

Sunshine was below average with 104.0 hrs (average for October is 111.7) the most was 9.8 hours on the 3rd. There was only 1 day without sunshine.

October temperatures were above average with the mean maximum and minimums being recorded as 14.2°C (+0.18) and 7.4°C (+0.30) respectively. The highest temperature was 17.7°C on the 31^{st} and the lowest was 3.3°C on the 3^{rd} .

There were 4 ground frosts.

Weather Summary for November 2016.

November was especially sunny for the time of year but was also colder and wetter than average.

Rainfall was 85.7mm, which is 9.04 mm above average. We had 21 days with 0.2 mm or more of rain, and 5 days with over 5 mm. The most was 19.06 mm on the 8th.

Sunshine was above average with 91.1 hours (+20.40); the most was 8.0 hours on the 2^{nd} . We had 6 days with no sun at all. November 2016 ranks as the 6^{th} Sunniest November since sunshine records began in 1890.

The maximum and minimum mean air temperatures were both below average with 8.8° C (-0.94) and 2.6° C (-1.24) respectively. The warmest day reached 14.28° C on the 15^{th} . The lowest minimum was -5.10°C on the 30^{th} .

We had 5 air frosts and 11 ground frosts.

Weather Summary for December 2016.

December was relatively dry and sunny for the time of year along with above average temperatures.

Rainfall was 26.2 mm, which is 43.28 mm below average. We had 24 days where at least 0.2 mm was recorded, 1 of these with at least 5 mm. The most was 9.4 mm on the 10^{th} .

Sunshine was above average with 68.7 hrs. (Average for December is 53.8). The most sunshine was 6.9 hours on the 5th. We had 7 days with no sunshine recorded.

December had above average mean maximum and minimum temperatures. The mean maximum was $8.7^{\circ}C$ (+1.77) and the mean minimum was $2.1^{\circ}C$ (+0.40). The highest maximum temperature was $13.2^{\circ}C$ on the 9^{th} and the lowest minimum was -3.9°C on the 28^{th}

We had 11 air frosts and 18 ground frosts.

Weather Summary for 2016

Rainfall

2016 had below average rainfall with 679.3 mm recorded; the annual average is 733.0 mm. It rained (0.2 mm or more) on 227 days. The most on one day was 34.0 mm on 15th of September and the wettest month was January with 92.3 mm. The driest month was December with 26.2mm. Of the twelve months, six had below average rainfall.

Sunshine

Total Hours of Sunshine was above average with 1634.6 hours. The average is 1592.3 hours. The 'sunniest' month was August with 217.6 hours.

Temperature

The overall mean temperature for the year was above average at 10.4°C (The average is 9.80). The mean maximum and minimum temperatures were above average with 14.2°C (+0.58) and 6.5°C (+0.50) respectively. The hottest day was the 24th of August reaching 31.2°C and the coldest night was the 19th of January dropping to -5.3°C. We had 104 ground frosts (91 in 2015).