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Rothamsted Meteorological Data

Monthly and Annual Summary 2014

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Description: Contains the monthly and annual summaries for daily weather data collected at Rothamsted Met Station 2014. 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 2014.

Page 13 Weather summary for year 2014.

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 2014.

January was cloudy with above average temperatures and a Rothamsted record breaking high rainfall figure. This year contrasted to last January as none of the precipitation came as snow.

Rainfall was above average with 176.2 mm (+106.3 mm). We had 28 days with 0.2 mm or more of rain and 15 had more than 5.0 mm. The most on one day was 20.6 mm on the 31st.

Sunshine below average with 59.9 hours (-2.10); the most was 6.2 hours on the 11th. We had 10 days with no sunshine at all.

January mean temperatures were above average with mean maximum and minimums of 8.5°C (+1.8) and 2.9°C (+1.7) respectively. The highest day temperature was 11.97°C on the 5th. The lowest minimum was -3.11°C on the 12th.

We had 3 air frosts and 9 ground frosts.

N.B. 30 year averages now 1981-2010. (Previously 1971-2000)

Weather Summary for February 2014.

Following on from January's record breaking rainfall figure February also had record breaking high rainfall. The month was also mild and sunny with the air temperature staying above freezing with the sunshine figure above average. Once again for the second month running, and unlike the same period last year, we had no snow to report.

Rainfall was above average at 141.9 mm (+91.8). This is the highest February rainfall figure since our records began in 1854. The most recorded was 35 mm on the 6th. We had 23 days with over 0.2 mm, and 9 days exceeded 5.0 mm.

Sunshine was above average with 93.1 hrs. (+12.88). We had 3 days without any sunshine; the most was 8.4 hrs. on the 16th.

The mean maximum and the mean minimum temperatures were above average with 9.0°C (+2.07) and 3.2°C (+2.31) respectively. The lowest minimum was 0.7°C on the 16th, and the highest maximum was 13.1°C on the 24th.

We had 0 air frosts and 13 ground frosts.

Weather Summary for March 2014.

March 2014 was a relatively dry, sunny and warm month for the time of year.

Rainfall was below average with 28.2 mm recorded, (-22.57 mm). We had 16 days with 0.2 mm or more of rain, and 1 day with more than 5 mm. The most recorded was 9.9 mm on the 2nd. We had some of this precipitation fall as hail.

Sunshine was above average with 180.8 hrs (average for March is 114.9); the most recorded was 11 hours on the 16th. There were 0 days when the sun didn't shine at all.

The mean maximum and minimum temperatures were above average with 12.7°C (+2.84) and 3.4°C (+0.73) respectively. The mean maximum is the 7th highest recorded at Rothamsted (since 1878). The highest maximum temperature was 19.2°C on the 30th and the lowest minimum was -2.9°C on the 24th.

We had 4 air frosts and 12 ground frosts.

Weather Summary for April 2014.

April was drier and warmer than average along with above average Sunshine.

Rainfall was 31.5 mm, 23.54 mm below average. We had 14 days with 0.2 mm or more of rain, and 2 days with more than 5mm. The wettest day was the 7th with 6.8 mm.

Sunshine was above average with 162.7 hours (+1.51); the most was 13.0 hours on the 16th. There was sunshine recorded on all but 4 days.

The average maximum and minimum temperatures were both above average with 14.8 °C (+2.19) and 6.1 °C (+2.12) respectively. These figures rank as the 8th and 2nd highest since our records began in 1878. The warmest day was the 21st reaching 18.9 °C, and the coldest night was the 16th dropping to 0.3°C

We had no air frosts and 3 ground frosts.

Weather Summary for May 2014.

May was cloudy and wet but with above average temperatures.

Rainfall was 82.8 mm, which is 28.14 mm above the mean. We had 18 days with 0.2 mm or more of rain and 6 days with more than 5.0 mm. The most was 11.5 mm on the 27th May.

Sunshine was below average with 173.6 hrs. (-21.0 hrs.); the most was 12.9 hours on the 4th. Sunshine was recorded on 28 of the 31 days in May.

The average maximum and minimum temperatures for May were above average at 16.5°C (+0.41°C) and 8.3°C (+1.39°C). The highest temperature was 23.8°C on the 19th; the lowest temperature was 0.3°C on the night of the 3rd.

We had 2 ground frosts and no air frosts.

Weather Summary for June 2014.

June was a relatively dry month with plenty of sunshine and above average temperatures.

Rainfall was 30.5 mm, which is 22.77 mm below the mean. We had 14 days with 0.2 mm or more of rain, with two of these had more than 5.0 mm. The most was 6.4 mm on both the 3rd and also the 9th.

Sunshine was above average with 227.7 hours (average for June is 198.2 hours); the most was 13.8 hours on the 21st.

The mean maximum and minimum temperatures were above average with 20.2 °C (+1.01 °C) and 10.6°C (+0.88 °C) respectively. The highest maximum recorded was 24.2°C on the 9th and the lowest minimum was 6.2 °C on the 6th.

There were no ground frosts.

Weather Summary for July 2014.

July 2014 was another warm, dry and sunny month when compared to the average.

Rainfall was below average, with 36.9 mm, which is 13 mm below the mean. We had 14 days with 0.2mm or more of rain, and 3 of these had more than 5 mm. The greatest rainfall was 10.9 mm recorded on the 8th

Sunshine was above average with 233 hrs. 28.25 above the average. The most was 12.9 hours on the 3rd and there was sunshine recorded on every day.

The average maximum and minimum temperatures were above average with 23.9° C (+2.11) and 13.3°C (+1.40) respectively. The warmest day reached 30.1°C on the 18th. The lowest minimum temperature was 7.18°C on the 2nd. July's average minimum was notable as the 3rd highest since Rothamsted records began in 1878.

We had no air or ground frosts.

Weather Summary for August 2014.

August was relatively cool, cloudy and wet for the time of year.

Rainfall was above average with 113.3 mm (+49.59mm). We had 22 days with 0.2mm or more of rain, 5 of which had more than 5.0 mm; the most was 26.1 mm on the 25th.

The mean maximum and minimum temperatures were below average with 20.0°C (-1.59) and 11.4°C (-0.44) respectively. The highest temperature was 24.3°C on the 6th and the lowest temperature was 5.9°C on the 21st.

Sunshine was below average with 168.9 hours which is 27.38 hours below average. The sun shone on 30 days and the sunniest day was the 3rd with 10.1 hours.

There were no frosts.

Weather Summary for September 2014.

Although September was cloudier than average it was also warmer than normal and particularly dry.

Rainfall was 14.8 mm, which is 42.81 mm below average. We had 13 days with 0.2 mm or more of rain and 1 with over 5 mm. The most was 5.5 mm on the 22nd. It was the 10th driest September recorded at Rothamsted. (Records began in 1853)

Sunshine was 118.9 hrs which is 24.46 hrs below average. The sun shone everyday and the most recorded was 10.3 hours on the 8th.

The mean maximum and minimum temperatures were above average with 20.1°C (+1.85) and 11.6°C (+1.71) respectively. The highest (daytime) temperature was 23.9°C on the 21st and the lowest (night) temperature was 5.4°C on the 25th.

No ground frosts were recorded.

Weather Summary for October 2014.

October was cloudier, wetter and warmer than the average. The average daily air temperature for the month was the 5th warmest since we started records in 1878.

Rainfall was 95.7 mm which is 14.05 mm above average. We had 24 days with 0.2 mm or more of rain and 6 with over 5.0 mm. The greatest fall was 20.5 mm which fell on the 12th.

Sunshine was below average with 98.9 hrs; (average for October is 111.7) the most was 8.2 hours on the 5th. There were 3 days without any sun at all.

October temperatures were above average with the mean maximum and minimums being recorded as 16.0°C (+1.97) and 9.8°C (+2.63) respectively. These are the 9th and 4th warmest average maximum and minimums since records began in 1878. The highest temperature was 21.4°C on the 31st and the lowest was 2.3°C on the 5th.

There were 4 ground frosts.

Weather Summary for November 2014.

November was cloudier and wetter than average but with above average temperatures.

Rainfall was 108.2 mm, which is 31.57 mm above average. We had 27 days with 0.2 mm or more of rain, and 9 days with over 5 mm. The most was 12.7 mm on the 13th.

Sunshine was below average with 56.3 hours (-14.48); the most was 5.5 hours on the 9th. We had 7 days with no sun at all.

Both the maximum and minimum mean air temperatures were above average with 11.3°C (+1.53) and 5.9°C (+2.06) respectively. The warmest day reached 16.1°C on the 1st. The lowest minimum was -1.3°C on the 6th.

We had 2 air frosts and 9 ground frosts.

Weather Summary for December 2014.

December was relatively dry and especially warm and sunny for the time of year. There was some sleet mixed in with the rain that fell on the 27th.

Precipitation was below average with 64 mm, which is 5.57 mm below average. We had 24 days where at least 0.2 mm was recorded, 3 of these with at least 5 mm. The most was 17.0 mm on the 26th.

Sunshine was above average with 94.7 hrs. (Average for December is 53.8); this makes December 2014 the sunniest December in our records (records began in 1890). The most sunshine was 6.9 hours on the 6th. We had 4 days without any sun at all.

December had above average mean maximum and minimum temperatures. The mean maximum was 8.1°C (+1.20) and the mean minimum was 2.1°C (+0.41). The highest maximum temperature was 14.8°C on the 17th. These are the highest December average maximums and minimums in our records as well as the highest overall December maximum recorded (records began in 1878). The coldest night temperature was -2.8°C in the early hours of the 30th.

We had 13 air frosts and 17 ground frosts.

Weather Summary for 2014

Rainfall

2014 was especially wet and ranked as the 4th wettest in our records (records began in 1870; 2012 was the wettest on record). The total figure for 2014 was 924.1 mm; the annual average is 733.0 mm. It rained (0.2 mm or more) on 237 days. The most on one day was 35.0 mm on 6th of February and the wettest month was January with 176.2 mm. January and February 2014 each ranked as the wettest January and Februaries in our records. The driest month was September with 14.8 mm. Of the twelve months, six had below average rainfall.

Sunshine

Total Hours of Sunshine was above average with 1669.0 hours. The average is 1592.3 hours. The 'sunniest' month was July with 233.4 hours. December was the sunniest December in our records.

Temperature

The overall mean temperature for the year was above average at 11.23°C (The average is 9.80). This is the highest overall average temperatures in our records (records began in 1878) and so 2014 replaces 2006 as the warmest year on record for Rothamsted. The mean maximum and minimum temperatures were also the highest in our records with 15.1°C (+1.5) and 7.4°C (+1.4) respectively. The hottest day was the 18th of July reaching 30.12°C and the coldest night was the 12th of January dropping to -3.11°C; we had 69 ground frosts (100 in 2013).

Note: the average refers to the 30 year means 1981-2010.