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Rothamsted Meteorological Data

Monthly and Annual Summary 2012

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Prepared by: Sarah A M Perryman, CAS Department, Rothamsted Research, Harpenden, Herts, AL5 2JQ, UK.

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Description: Contains the monthly and annual summaries for daily weather data collected at Rothamsted Met Station 2012. 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 2012.

Page 13 Weather summary for year 2012.

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 2012.

January was mild and relatively sunny with below average rainfall.

Rainfall was below average with 58.0 mm (-11.97 mm). We had 16 days with 0.2 mm or more of rain and 3 had more than 5.0 mm. The most on one day was 12.02 mm on the 3rd.

Sunshine was above average with 82.2 hours (+20.18); the most was 7.2 hours on the 16th and 27th. We had 2 days with no sunshine at all.

January mean temperatures were above average with mean maximum and minimums of 8.5°C (+1.75) and 2.5°C (+1.26) respectively. The highest day temperature was 11.82°C on the 21st. The lowest minimum was -4.28°C on the 17th.

We had 8 air frosts and 13 ground frosts.

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

Weather Summary for February 2012.

February was another dry and sunny month with slightly cooler than average temperatures overall. Looking at the temperatures February can be divided into 2 halves. The first half was notably colder than the second half with a spell of freezing nights and cold days along with 2 instances of settling snow. In contrast to this the second half had mostly mild days and nights.

Rainfall was below average at 24.7mm (-25.44). The most recorded was 14.3 mm on day 4. We had 5 days with over 0.2mm, and 1 day exceeding 5.0mm.

Sunshine was above average with 109.3 hrs (+29.03). We had 5 days without any sunshine; the most was 8.6 hrs on the 11th. It was the 4th sunniest February on record.

The mean maximum and the mean minimum temperatures were slightly below average with 6.4°C (-0.50) and 0.1°C (-0.85) respectively. The lowest minimum was -12.2°C on the 11th, and the highest maximum was 15.7°C on the 23rd. The lowest minimum shares the 6th coldest February place since records began along with 1900 and 1919. The coldest recorded was -16.4°C in 1895. The highest maximum was significant as well and ranked 7th highest in our records. The highest recorded was 18.2 °C in 1891.

We had 15 air frosts and 15 ground frosts.

Weather Summary for March 2012.

March 2012 was sunny, warm and dry.

Rainfall was 16.1 mm below average, with 34.7 mm recorded. We had 5 days with 0.2 mm or more of rain, and 2 days with more than 5 mm. The most recorded was 17.5 mm on the 4th.

Sunshine was well above average at 193.5 hrs (average for March is 114.9); the most recorded was 11.8 hours on the 27th. There were 3 days when the sun didn't shine at all. March 2012 was the 5th sunniest March since Rothamsted sunshine records began in 1891.

The mean maximum and minimum temperatures were above average at 12.8°C (+2.94) and 3.1°C (+0.4) respectively; the mean maximum is the 6th highest in our records (started 1878). The highest maximum temperature was 19.9°C on the 28th and the lowest minimum was -0.4°C on the night of the 15th.

We had 2 air frosts and 22 ground frosts.

Weather Summary for April 2012.

April Showers!! We needed some rain and we got lots of it, especially during the last 2 weeks. This April became the wettest April on our records, by a considerable margin! Not surprisingly it was also cloudier and cooler than average.

Rainfall was 168.6 mm, 113.57 mm above average. We had 23 days with 0.2 mm or more of rain, and 11 days with more than 5mm. The wettest day was the 28th with 28.8 mm.

Sunshine was 11.14 hours below average with 150.1 hours; the most was 10.8 hours on the 1st. There were 2 days with no sunshine.

The average maximum and minimum temperatures were both below average with, 11.5 ° (-1.11) and 3.3 °C (-0.69) respectively. The warmest day reached 16.9 °C on the 30th, and the coldest night on the 6th was -3.9 °C. Cool for April.

We had 3 air frosts and 14 ground frosts.

Weather Summary for May 2012.

May was a month of two halves. It started off cool, cloudy and wet but the latter weeks became very warm, sunny and dry. Overall temperatures were above average and rainfall below average.

Rainfall this May was 52.6 mm, which is 2.08 mm below the mean. We had 12 days with 0.2mm or more of rain and only 3 days with more than 5.0mm. The most was 17.1 mm on the 2nd May.

Sunshine was below average at 175.6 hrs (-19.06 hrs); the most was 14.8 hours on the 26th.

The average maximum temperature was just above the mean for May at 16.1°C (+0.05°C). The minimum was also above the mean with 7.9°C (+1.02°C). The warmest day was 24.8°C on the 27th; the lowest temperature was 0.1°C on the night of the 7th.

We had four ground frosts and zero air frosts.

Weather Summary for June 2012.

So much for 'flaming June' it was a month of mostly cool wet days and warm nights with below average sunshine and above average rainfall.

Rainfall was 166.5 mm, which is 113.2 mm above the mean. This makes it the wettest June on record since records began in 1870. We had 18 days with 0.2 mm or more of rain, and 10 of these had more than 5.0 mm. The most was 35.1 mm on the 10th.

Sunshine was below average with 144.9 hours (average for June is 198.2 hours); the most was 10.4 hours on the 19th.

The mean maximum temperature was below average at 17.6 °C (-1.51 °C) and the mean minimum was above average at 10.0 °C (+0.27 °C). The highest maximum recorded was 26.2 °C on the 28th and the lowest minimum was 4.1 °C on the 13th.

3 ground frosts were recorded.

Weather Summary for July 2012.

July 2012 continued with the cool, wet and cloudy theme with below average temperatures and sunshine, and above average rainfall.

Rainfall was above average, with 128.4 mm, which is 78.57 mm above the mean. We had 19 days with 0.2mm or more of rain, and 12 of these had more than 5 mm. The greatest rainfall was 23.6 mm recorded on the 7th. July 2012 can be noted as the wettest July since 1950 and ranks as 7th wettest on our records. (Since 1870)

Sunshine was 32.9 hours below average with 172.3hrs. The most was 14.5 hours on the 23rd. There was sunshine recorded on every day.

The average maximum temperature was below average at 19.8°C (-1.96) and the average minimum was below average at 11.6°C (-0.25). The warmest day reached 28°C on the 25th. The lowest minimum temperature (coldest night) was 6.7°C on the 30th.

We had no air or ground frosts.

Weather Summary for August 2012.

August was drier and warmer than average but with below average sunshine.

Rainfall was below average with 54.9mm, (-8.82mm). We had 14 days with 0.2mm or more of rain, 4 of which had more than 5.0 mm; the most was 21.84 mm on the 25th.

The mean maximum and minimum temperatures were above average with 21.7°C (+0.18) and 12.8°C (+0.91) respectively. The highest temperature was 28.3°C on the 19th, and the lowest (night) temperature was 6.1°C on the 31st.

Sunshine was below average at 176.5hrs which is 19.8 hrs below average. The sun shone on all 31 days, the sunniest day being the 10th with 13.1 hours.

There were no frosts.

Weather Summary for September 2012.

September was relatively sunny and dry, with the vast majority of rain falling in the last 8 days. Temperatures were close to the average for this time of year.

Rainfall was 40.4 mm, which is 17.27 mm below average. We had 9 days with 0.2 mm or more of rain and 2 with over 5 mm. The most was 18.9 mm on the 23rd.

Sunshine was 179.6 hrs which is 36.2 hrs above average. We had only 1 day with zero sunshine and the most recorded was 11.8 hours on the 5th.

The mean maximum was above average at 18.3°C (+0.01) and the mean minimum was below average at 8.4°C (-1.53). The highest (daytime) temperature was 26.1°C on the 9th and the lowest (night) temperature was 4.0°C on the 22nd.

There was one ground frost recorded.

Weather Summary for October 2012.

October this year was cloudier, cooler and wetter than average. Snow fell and briefly settled on the morning of the 27th.

Rainfall was 34.1 mm above average with 115.8 mm. We had 24 days with 0.2mm or more of rain and 7 with over 5.0 mm. The most was 17.9 mm which fell on the 5th.

Sunshine was below average with 86.0 hrs; (average for October is 111.7) the most was 7.6 hours on the 6th. There were 5 days without any sun at all.

October temperatures were below average with the mean maximum and minimums being recorded as 12.7°C (-1.36) and 6.7°C (-0.47) respectively. The highest temperature was 17.0°C on the 2nd and the lowest was 0.03°C on the 28th.

There were 8 ground frosts.

Weather Summary for November 2012.

November was generally cold and wet with above average sunshine and rainfall.

Rainfall was above average with 100.4 mm, which is 23.79 mm above the mean. We had 16 days with 0.2 mm or more of rain, and 8 days with over 5 mm. The most was 15.2 mm on the 24th.

Sunshine was above average with 76.9 hours (+6.93) the most was 7.0 hours on the 11th. We had 7 days with no sun at all.

Both the maximum and minimum mean air temperatures were below average with 9.4°C (-0.32) and 3.6°C (-0.23) respectively. The warmest day reached 14.7°C on the 13th. The lowest minimum was -2.1°C on the 30th.

We had 2 air frosts and 13 ground frosts.

Weather Summary for December 2012.

Although December had more rain than average, with snow falling early hours of the 5th, it also managed more sunshine. December temperatures were very close to the average.

Precipitation was above average with 114.2 mm, which is 44.7 mm above average. We had 26 days where at least 0.2 mm was recorded, 9 of these with at least 5 mm. The most was 19.5 mm on the 19th.

Sunshine was above average with 68.2hrs (average for December is 53.8); the most was 5.8 hours on the 2nd. We had 5 days without any sun at all.

December had above and below average mean maximum and minimum temperatures respectively. The mean maximum was 7.5°C (+0.64) and the mean minimum was 1.4°C (-0.24). The highest maximum temperature was 12.5°C on the 22nd. The coldest night temperature was – 6.9°C in the early hours of the 12th.

We had 11 air frosts and 15 ground frosts.

Weather Summary for 2012

Rainfall

The year was the wettest on record for Rothamsted (records began in 1870), with 2000 being the previous wettest. The total for 2012 was 1059.2 mm; the annual average is 733.0 mm. It rained (0.2mm or more) on 233 days. The most on one day was 35.1 mm on 10th June; the wettest month was April with 168.6 mm. The driest month was February with 24.7 mm. Of the twelve months, six had below average rainfall.

Sunshine

Hours of sun figures were above average totalling 1615.0 hours. The average is 1592.3 hours. The 'sunniest' month was March with 193.5 hours.

Temperature

The mean temperature for the year was below average with 9.74°C. (The average is 9.80) The mean maximum and minimum temperatures were below average with 13.54°C (-0.10) and 5.94°C (-0.03) respectively. The hottest day was the 19th August reaching 28.28°C and the coldest night was the 11th of February dropping to -12.21°C; we had 108 ground frosts (67 in 2011).

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