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Rothamsted Meteorological Data

Monthly and Annual Summary 2013

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Description: Contains the monthly and annual summaries for daily weather data collected at Rothamsted Met Station 2011. 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 2013.

Page 13 Weather summary for year 2013.

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 2013.

January was cloudy with below average temperatures and above average precipitation. There was a snow period in the middle of the month giving us nearly 2 weeks of snow on the ground before it was washed away by heavy rain.

Rainfall was above average with 62.8 mm (+7.17 mm). We had 16 days with 0.2 mm or more of rain and 4 had more than 5.0 mm. The most on one day was 12.9 mm on the 26th. The snow period began on the 14th with further snow falls on 18th and 20th accumulating on top before being washed away by heavy rain on the weekend of the 26th /27th.

Sunshine below average with 44.8 hours (-17.23); the most was 6.3 hours on the 1st. We had 12 days with no sunshine at all.

January mean temperatures were below average with mean maximum and minimums of 4.9°C (-1.8) and 0.5°C (-0.7) respectively. The highest day temperature was 12.95°C on the 29th. The lowest minimum was -9.81°C on the 22nd.

We had 17 air frosts and 18 ground frosts.

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

Weather Summary for February 2013.

February was drier and sunnier than average but with below average temperatures. There was a snow period in the middle of the month with settling snow that lasted for about 4 days.

Rainfall was below average at 43.5mm (-6.64). The most recorded was 19.6 mm on day 10. We had 18 days with over 0.2mm, and 2 days exceeded 5.0mm.

Sunshine was above average with 86.1 hrs (+5.81). We had 7 days without any sunshine; the most was 9.2 hrs on the 19th.

The mean maximum and the mean minimum temperatures were below average with 5.2°C (-1.75) and 0.2°C (-0.74) respectively. The lowest minimum was -3.4°C on the 19th, and the highest maximum was 9.5°C on the 14th.

We had 15 air frosts and 16 ground frosts.

Weather Summary for March 2013.

Overall March 2013 was particularly cold, cloudy and wet for this time of year. The month did start off dry, and with temperatures rising above average, there was some hope spring was on its way. But after day 6 we had 3 rain days and temperatures dropped, remaining below average for the rest of the month. We had some light snow followed by a second wet spell mid-month and a slight rise in temperatures before they dropped back to freezing again. More snow then fell on days 22 to 24 and remained on the ground in the freezing conditions almost until the end of the month.

Rainfall was above average with 83.1 mm recorded, (+32.3 mm). We had 15 days with 0.2 mm or more of rain, and 5 days with more than 5 mm. The most recorded was 33 mm on the 24th, which was the result of a weekend of snowfall.

Sunshine was below average at 72.9 hrs (average for March is 114.9); the most recorded was 9.6 hours on the 5th. There were 7 days when the sun didn't shine at all.

The mean maximum and minimum temperatures were below average at 5.2°C (-4.7) and -0.2°C (-2.8) respectively. The mean maximum for March 2013 is the lowest ever recorded at Rothamsted (records began in 1878). The highest maximum temperature was 15.1°C on the 5th and the lowest minimum was -3.9°C on the 12th.

We had 18 air frosts and 19 ground frosts.

Weather Summary for April 2013.

In contrast to last April we have had a relatively dry and sunny month with average temperatures below the average for this time of year.

Rainfall was 32.8mm, 22.19 mm below average. We had 15 days with 0.2 mm or more of rain, and 3 days with more than 5mm. The wettest day was the 10th with 9.4 mm.

Sunshine was above average with 193.7 hours (+32.53); the most was 12.6 hours on the 20th. Sunshine was recorded on every day.

The average maximum and minimum temperatures were both below average with, 12.2 ° (-0.45) and 3.0 °C (-1.05) respectively. The warmest day reached 21.6 °C on the 25th, and the coldest night on the 7th was -3.4 °C.

We had 10 air frosts and 13 ground frosts.

Weather Summary for May 2013.

May was generally cooler, cloudier and wetter than average.

Rainfall was 55.9 mm, which is 1.21 mm above the mean. We had 15 days with 0.2 mm or more of rain and 5 days with more than 5.0 mm. The most was 14.8 mm on the 14th May.

Sunshine was below average with 183.2 hrs. (-11.44 hrs.); the most was 14.1 hours on the 26th. Sunshine was recorded on 30 of the 31 days in May.

The average maximum and minimum temperatures for May were below average at 14.8°C (-1.32°C) and 6.1°C (-0.72°C). The warmest day was 20.8°C on the 6th; the lowest temperature was 0.5°C on the night of the 1st.

We had 6 ground frosts and no air frosts.

Weather Summary for June 2013.

June was a dry month, but also relatively overcast and cool.

Rainfall was 24.6 mm, which is 28.7 mm below the mean. We had 9 days with 0.2 mm or more of rain, and none of these had more than 5.0 mm. The most was 4.1 mm on the 21st.

Sunshine was below average with 185.3 hours (average for June is 198.2 hours); the most was 14.6 hours on the 4th.

The mean maximum temperature was below average at 18.0 °C (-1.10 °C) as was the mean minimum at 9.3°C (-0.45 °C). The highest maximum recorded was 24.4°C on the 19th and the lowest minimum was 4.8 °C on the 3rd.

Only 1 ground frost was recorded.

Weather Summary for July 2013.

July 2013 was warm and sunny when compared to the average. It was also relatively dry with the first 3 weeks up to the 24th being particularly dry. After this we had some wet days to quickly bring the rainfall figure back up closer to the average.

Rainfall was below average, with 47.4 mm, which is 2.47 mm below the mean. We had 12 days with 0.2mm or more of rain, and 4 of these had more than 5 mm. The greatest rainfall was 11.7 mm recorded on the 24th

Sunshine was above average with 277.3 hrs. 72.09 Above the average. The most was 15.3 hours on the 9th and there was only one day without sunshine.

The average maximum and minimum temperatures were above average with 24.5°C (+2.71) and 12.8°C (+0.93) respectively. The warmest day reached 31.4°C on the 22nd. The lowest minimum temperature (coldest night) was 7.6°C on the 12th.

We had no air or ground frosts.

Weather Summary for August 2013.

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

Rainfall was below average with 57.5mm, (-6.23mm). We had 14 days with 0.2mm or more of rain, 3 of which had more than 5.0 mm; the most was 26.4 mm on the 26th.

The mean maximum and minimum temperatures were above average with 22.1°C (+0.49) and 12.7°C (+0.88) respectively. The highest temperature was 31.3°C on the 1st, and the lowest temperature was 7.8°C on the 8th.

Sunshine was below average at 191.2 hrs which is 5 hours below average. The sun shone on 30 days, the sunniest day being the 1st with 13.6 hours.

There were no frosts.

Weather Summary for September 2013.

September was relatively cool, cloudy and dry for the time of year.

Rainfall was 50.3 mm, which is 7.33 mm below average. We had 21 days with 0.2 mm or more of rain and 2 with over 5 mm. The most was 19.9 mm on the 13th.

Sunshine was 122.7 hrs which is 20.67 hrs below average. We had 2 days with zero sunshine and the most recorded was 12.6 hours on the 2nd.

The mean maximum and minimum temperatures were below average at 17.8°C (-0.53) and 9.7°C (-0.53) respectively. The highest (daytime) temperature was 27°C on the 5th and the lowest (night) temperature was 4.4°C on the 15th.

No ground frosts were recorded.

Weather Summary for October 2013.

Whilst this October had above average temperatures it was also wetter and cloudier than the average.

Rainfall was 27.07 mm above average with 108.8 mm. We had 26 days with 0.2 mm or more of rain and 9 with over 5.0 mm. The most was 19.9 mm which fell on the 20th.

Sunshine was below average with 84.7 hrs; (average for October is 111.7) the most was 8.5 hours on the 6th. There were 2 days without any sun at all.

October temperatures were above average with the mean maximum and minimums being recorded as 15.3°C (+1.21) and 9.3°C (+2.15) respectively. The highest temperature was 20.3°C on the 4th and the lowest was 2.4°C on the 30th.

There were 2 ground frosts.

Weather Summary for November 2013.

November was cooler, sunnier and drier than average with most of the rain falling in the first half of the month.

Rainfall was below average with 59.5 mm, which is 17.13 mm below the mean. We had 23 days with 0.2 mm or more of rain, and 4 days with over 5 mm. The most was 19.3 mm on the 3rd.

Sunshine was above average with 77.9 hours (+7.13) the most was 7.9 hours on the 10th. We had 6 days with no sun at all.

Both the maximum and minimum mean air temperatures were below average with 8.9°C (-0.85) and 3.6°C (-0.24) respectively. The warmest day reached 14.2°C on the 6th. The lowest minimum was -2.4°C on the 20th.

We had 2 air frosts and 9 ground frosts.

Weather Summary for December 2013.

December had above average sunshine, temperatures and rainfall figures. Most of the rain fell during the second half of the month with the 23rd being notable as it was the wettest day of the year!

Precipitation was above average with 123.1 mm, which is 53.6 mm above average. We had 24 days where at least 0.2 mm was recorded, 10 of these with at least 5 mm. The most was 38.6 mm on the 23rd.

Sunshine was above average with 62.1 hrs. (average for December is 53.8); the most was 6.6 hours on the 29th. We had 6 days without any sun at all.

December had above average mean maximum and minimum temperatures. The mean maximum was 9.1°C (+2.22) and the mean minimum was 2.6°C (+0.92). The highest maximum temperature was 12.8°C on the 16th. The coldest night temperature was – 1.4°C in the early hours of the 11th.

We had 3 air frosts and 16 ground frosts.

Weather Summary for 2013

Rainfall

Although most of 2013 was drier than average we had enough rain in the last 2 weeks to push this figure above average. The total for 2013 was 749.1 mm; the annual average is 733.0 mm. It rained (0.2mm or more) on 208 days. The most on one day was 38.6 mm on 23rd of December and the wettest month was also December with 123.1 mm. The driest month was June with 24.6 mm. Of the twelve months, eight had below average rainfall.

Sunshine

Total Hours of Sunshine were below average with 1581.9 hours. The average is 1592.3 hours. The 'sunniest' month was July with 277.3 hours.

Temperature

The mean temperature for the year was below average at 9.52°C. (The average is 9.80) The mean maximum and minimum temperatures were below average with 13.2°C (-0.5) and 5.8°C (-0.2) respectively. The hottest day was the 22nd of July reaching 31.39°C and the coldest night was the 22nd of January dropping to -9.81°C; we had 100 ground frosts (108 in 2012).

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