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Rothamsted Meteorological Data

Monthly and Annual Summary 2018

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Description: Contains the monthly and annual summaries for daily weather data collected at Rothamsted Met Station 2018. 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 2018.

Page 13 Weather summary for year 2018.

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 2018.

January was relatively wet but was also warm and had above average sunshine. There was a morning of settling snow in the second half of the month.

Rainfall was above average with 76.1 mm (+6.15 mm). We had 23 days with 0.2 mm or more of rain and 7 had more than 5.0 mm. The most on one day was 16.6 mm on the 21st. Some of this precipitation fell as snow on the morning of the 21st which settled but was dissolved by rain during the afternoon.

Sunshine was above average with 64.9 hours (+2.83); the most was 7.2 hours on the 30th. We had 9 days with no sunshine.

January's mean maximum and minimum temperatures were above average at 8.2°C (+1.46) and 2.2°C (+0.96) respectively. The highest day temperature was 12.6°C on the 24th. The lowest minimum was -2.3°C on the 19th.

We had 7 air frosts and 15 ground frosts.

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

Weather Summary for February 2018.

February was relatively sunny but also cold. Rainfall was below average with some of this falling as snow.

Rainfall was below average with 48.4 mm (-1.74). We had 16 days with over 0.2 mm, and 5 days with more than 5.0 mm. The greatest rainfall was 9.7 mm on the 14th. Some of the month's precipitation fell as light snow on the 5th, 6th and enough to settle on the 7th. There was further snow and ice fall on the 11th and the month ended with periodic settling snow fall during the 26th, 27th and 28th of February.

Sunshine was above average with 116.6 hrs. (+36.29). We had 3 days without any sunshine and the most sunshine was 9.6 hrs on the 25th. February 2018 was the 3rd sunniest in our records (since 1891)

The mean maximum and the mean minimum temperatures were below average with 5.2°C (-1.72) and -0.6°C (-1.58) respectively. The lowest minimum was -5.8°C on the 28th, and the highest maximum was 10.1°C on the 19th.

We had 17 air frosts and 23 ground frosts.

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

Weather Summary for March 2018.

March was relatively cloudy, cold and wet for the time of year. The month started off with a 2-day period of settling snow that had started at the end of February. There was further snow fall around the middle of the month as well.

Rainfall was above average with 78.5 mm recorded, (+27.70 mm). We had 25 days with 0.2 mm or more of rain, and 7 days with more than 5 mm. The most recorded was 10.8mm on the 30th. Some of this rain fell as snow on the 1st, 2nd, 17th and 18th of March.

Sunshine was below average with 87.4 hrs (average for March is 114.9); the most recorded was 9.9 hours on the 21st. There were 7 days without sunshine.

The mean maximum and minimum temperatures were below average with 8.1°C (-1.76) and 1.7°C (-0.98) respectively. The highest maximum temperature was 13.0°C on the 27th and the lowest minimum was -6.8°C on the 1st.

We had 10 air frosts and 21 ground frosts.

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

Weather Summary for April 2018.

April was cloudy and wet but also notably warm for the time of year. The above average temperatures were partly due to a significantly warm spell from the 18th to the 22nd during which we recorded the warmest April day on record! There was also a thunderstorm late on the 21st around midnight.

Rainfall was 74.8 mm which is 19.77 mm above average. We had 17 days with 0.2 mm or more of rain, and 4 days with more than 5mm. The wettest day was the 27th with 20.4 mm.

Sunshine was below average with 128.2 hours (-33.05); the most was 13.2 hours on the 19th and there were 6 days with no sunshine.

The average maximum and min temperatures were both above average with 14.0 °C (+1.33) and 6.7 °C (+2.63) respectively. The warmest day was the 19th which reached a record breaking 26.7°C, and the coldest night was on the 2nd when it dropped to 1.9°C. April overall ranked as the 5th warmest in our records, which started in 1878.

We had no air frosts but 3 ground frosts.

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

Weather Summary for May 2018.

May was sunny, warm and wet for the time of year with sunshine and average temperatures being notably high. There were thunder storms in the area later in the month with one late on the 26th which continued into the early hours of the 27th. There was another shorter thunder storm on the afternoon of the 29th.

Rainfall was 61.9 mm, which is 7.24 mm above the mean. We had 13 days with 0.2 mm or more of rain and 5 days with more than 5.0 mm. The greatest fall of rain was 24.7 mm on the 29th of May.

Sunshine was well above average with 267.2 hrs. (+72.55 hrs.); the most was 14.3 hours on the 19th. There was only 1 day without sun. May 2018 was the 5th Sunniest May on record. (Since 1891)

Both the average maximum and minimum temperatures for May were above average with 18.7°C (+2.59°C) and 7.9°C (+1.00°C) respectively. The highest (max) temperature was 25.6°C on the 7th and the lowest (min) temperature was 1.2°C on the night of the 1st. The overall average for the month was the 4th highest on record. (Since 1878)

We had 8 ground frosts and zero air frosts.

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

Weather Summary for June 2018.

June 2018 was especially warm, sunny and dry. Another flaming June!

Rainfall was especially low with 3.7 mm, which is 49.61 mm below the mean. We had 7 days with 0.2 mm or more of rain, of which no days had more than 5.0 mm. The most rainfall in a single day was 1.29 mm collected on the 16th. This makes June 2018 the second driest at Rothamsted. (Since 1853)

Sunshine was well above average with 266.2 hours (average for June is 198.2 hours); the most recorded in one day was 15.5 hours on the 22nd and the sun shone on every day. June 2018 was the 6th Sunniest at Rothamsted. (Since 1891)

The mean maximum and minimum temperatures were both above average with 21.5°C (+2.40°C) and 10.9 °C (+1.11°C) respectively. The hottest day reached 27.3°C on the 25th and the coolest night dropped to 6.25°C on the 13th. The overall average temperature was the 4th highest in our records.

There were no ground or air frosts.

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

Weather Summary for July 2018.

July was a very warm, dry and sunny month.

Rainfall was below average with 15.1 mm, which is 34.82 mm below average. We had 6 days with 0.2mm or more of rain with 5 days having more than 1 mm. The greatest rainfall was 4.5 mm recorded on the 29th. We had 22 consecutive days with no significant rainfall (rainfall below 1.0 mm).

Sunshine was above average with 294.4 hrs (+89.18 hours). The most was 15.2 hours on the 3rd and there was sunshine recorded every day bar one.

The average maximum air temperature was 26.1 °C (+4.29 °C) and the average minimum air temperature was 13.8 °C (+1.92 °C). The warmest day reached 32.4 °C on the 26th. The joint 4th warmest on record with 3rd July 1976 (since 1878). The lowest minimum air temperature was 10.9 °C on the 4th.

We had no air or ground frosts.

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

Weather Summary for August 2018.

August was relatively cloudy, warm with just above average rainfall for the time of year.

Rainfall was above average with 64.0 mm (+0.27 mm). We had 13 days with 0.2 mm or more of rain, 5 of which had more than 5.0 mm; the most was 17.2 mm on the 9th.

The mean maximum and minimum temperatures were below average with 22.3 °C (+0.74 °C) and 12.5 °C (+0.69 °C) respectively. The highest temperature was 30.6 °C on the 3rd and the lowest was 7.0 °C on the 26th.

Sunshine was 23.35 hours below average with 172.9 hours. There was only one day without sun and the sunniest day was the 4th with 13.9 hours.

There were no frosts.

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

Weather Summary for September 2018.

September was sunny and mainly dry with oscillating periods of warm and cool temperatures. We experienced our first ground frosts of the Autumn as well.

Rainfall was 51.0 mm, which is 6.63 mm below the average. We had 12 days with 0.2 mm or more of rain and 4 with over 5 mm. The most was 16.4 mm on the 20th.

Sunshine was 188.2 hrs which is 44.77 hrs above average. There was only 1 day without sunshine and the most recorded was 11.6 hours on the 2nd.

The mean maximum temperature was warmer than average at 19.0 °C (+0.67°C) and minimum temperature cooler than average at 9.2 °C (-0.69 °C). The highest (daytime) temperature was 24.0 °C on the 17th and the lowest (night) temperature was 2.0 °C on the 25th.

There were 5 ground frost recorded.

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

Weather Summary for October 2018.

October was relatively sunny and dry for the time of year with fluctuating, close to average temperatures.

Rainfall was 71.0 mm which is 10.68 mm below average. We had 18 days with 0.2 mm or more of rain and 3 with over 5.0 mm. The greatest fall was 31.4 mm which fell on the 14th.

Sunshine was above average with 141.1 hrs (average for October is 111.7); the most was 9.7 hours on the 9th. There were 3 days without sunshine.

The October mean maximum temperature was above average at 14.9 °C (+0.83) and mean minimum was below average at 6.9°C (-0.21). The highest temperature was 22.8°C on the 13th and the lowest was -2.6°C on the 31st.

There were 8 ground frosts.

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

Weather Summary for November 2018.

November was relatively warm, dry and sunny for the time of year.

Rainfall was 63.8 mm which is 12.83 mm below average. We had 21 days with 0.2 mm or more of rain, and 6 days with over 5 mm. The most was 13 mm on the 10th.

Sunshine was above average with 80.9 hours (+10.11); the most was 8.6 hours on the 2nd. There were 8 days without sunshine.

The maximum and minimum mean air temperatures were both above average with 10.8°C (+1.06) and 4.9°C (+1.13) respectively. The warmest day reached 14.8°C on the 6th and the lowest minimum was -1.9°C on the 22nd.

We had 1 air frost and 7 ground frosts.

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

Weather Summary for December 2018.

December was very mild for the time of year as well as having above average sunshine and rainfall.

Rainfall was 75.0 mm, which is 5.48 mm above average. We had 21 days where at least 0.2 mm of rain was recorded, 7 of these with at least 5 mm. The most was 10.6 mm on the 18th.

Sunshine was above average with 57.0 hrs. (Average for December is 53.8). The most sunshine was 6.5 hours on the 13th. We had 9 days with no sunshine recorded.

December had above average mean maximum and minimum temperatures. The mean maximum was 9.3°C (+2.38) and the mean minimum was 3.7°C (+2.01). The highest maximum temperature was 13.7°C on the 2nd and the lowest minimum was -2.1°C on the 25th.

We had 5 air frosts and 12 ground frosts.

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

Weather Summary for 2018.

Rainfall

2018 had below average rainfall with 683.3 mm recorded; the annual average is 733.0 mm. It rained (0.2 mm or more) on 192 days. The most on one day was 31.4 mm on 14th of October and the wettest month was March with 78.5 mm. The driest month was June with 3.7 mm. Of the twelve months, six had below average rainfall.

Sunshine

Total Hours of Sunshine was above average with 1864.7 hours. The average is 1592.3 hours. The 'sunniest' month was July with 294.4 hours. 2018 was the second sunniest year recorded at Rothamsted (since 1891)

Temperature

The overall mean temperature for the year was above average at 10.7°C (The average is 9.80). 2018 ranks as the 4th warmest year on record with only 2002, 2006, 2011 and 2014 being warmer. The mean maximum and minimum temperatures were above average with 14.8°C (+1.19) and 6.6°C (+0.67) respectively. The hottest day was the 26th of July reaching 32.4 and the coldest night was the 1st of March which dropped to -6.8°C. We had 102 ground frosts (107 in 2017).

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