

Rothamsted Meteorological Data

Monthly and Annual Summary 2020

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Description: Contains the monthly and annual summaries for daily weather data collected at Rothamsted Met Station 2020. 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 2020.

Page 13 Weather summary for year 2020.

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 2020:

The year 2020 was warm, wet and sunny.

Rainfall

2020 was the second wettest year since records began in 1853. It had above average rainfall with 1032.8 mm recorded; the annual average is 733.0 mm. It rained (0.2 mm or more) on 205 days. The most on one day was 61.0 mm on 2nd October. The wettest month was October with 198.4 mm and the driest month was May with 3.2 mm. Of the twelve months, five had below average rainfall.

Sunshine

2020 was the 'sunniest' year since records began in 1891. Total Hours of Sunshine was above average with 1800.9 hours. The average is 1592.3 hours. The 'sunniest' month was May with 308.6 hours.

Temperature

The overall mean temperature for the year was above average at 11.1°C (The average is 9.80°C). The mean maximum (highest since records began in 1878) and minimum temperatures were above average with 15.1°C (+1.50) and 7.0°C (+1.04) respectively. The hottest day was the 31st July reaching 34.6 and the coldest night was the 24th January which dropped to -4.0°C. We had 84 ground frosts (112 in 2019.

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

Monthly summaries for 2020:

December 2020: December was mild for the time of year with above average rainfall and just below average sunshine.

Rainfall was 98.4 mm, which is 28.88 mm above average. We had 22 days where at least 0.2 mm of rain was recorded, 9 of these with at least 5 mm. The most was 18.0 mm on the 26th.

Sunshine was below average with 50.0 hrs which is -3.84 hrs below average. The most sunshine was 6.0 hours on the 1st. We had 9 days with no sunshine recorded.

December had above average mean maximum and minimum temperatures. The mean maximum was 7.2°C (+0.36) and the mean minimum was 2.6°C (+0.94). The highest maximum temperature was 13.1°C on the 21st and the lowest minimum was -2.8°C on the 8th.

We had 10 air frosts and 12 ground frosts.

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

November 2020: November was relatively dry, warm and cloudy.

Rainfall was 57.4 mm which is 19.23 mm below average. We had 24 days with 0.2 mm or more of rain, and 3 days with over 5 mm. The most was 18.0 mm on the 14th.

Sunshine was below average with 63.9 hours (-6.88 hours); the most was 7.0 hours on the 4th. There were 4 days without sunshine.

The maximum and minimum mean air temperatures were both above average with 11.5°C (+1.80°C) and 5.4°C (+1.58°C) respectively. The warmest day reached 16.5°C on the 1st and the lowest minimum was -1.5°C on the 27th.

We had 1 air frost and 11 ground frosts.

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

October 2020: October was cloudy and very wet with below average sunshine, cool days and warm nights.

Rainfall was 198.4 mm which is 116.72 mm above average. We had 27 days with 0.2 mm or more of rain and 9 with over 5.0 mm. The greatest fall was 61.0 mm which fell on the 2nd.

Sunshine was below average with 70.9 hrs (average for October is 111.7); the most was 6.6 hours on the 11th. There were 5 days without sunshine.

The October mean maximum temperature was below average at 13.8 °C (-0.26) and mean minimum was above average at 7.9 °C (+0.82). The highest temperature was 17.7 °C on the 8th and the lowest was 3.9 °C on the 27th.

There were 6 ground frosts.

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

September 2020: September was sunny and warm with below average rainfall.

Rainfall was 32.8 mm, which is 24.83 mm below average. We had 10 days with 0.2 mm or more of rain and 1 with over 5 mm. The most was 14.2 mm on the 23rd. We had a dry period, starting on 7th, of 15 continuous days without rain.

Sunshine was 185.2 hrs which is 41.81 hrs above average. There were no days without sunshine and the most recorded was 10.5 hours on the 19th.

The mean maximum and minimum temperatures were above average at 19.5 °C (+1.23°C) and 9.8°C (-0.13°C) respectively. The highest (daytime) temperature was 28.5°C on the 15th and is the highest recorded maximum temperature for September since records began in 1878. The lowest (night) temperature was 4.9°C on the 1st.

There were 2 ground frost recorded.

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

August 2020: August was warm and very wet with below average sunshine.

Rainfall was above average with 172 mm (+108.27 mm). We had 15 days with 0.2 mm or more of rain, 9 of which had more than 5.0 mm; the most was 42.8 mm on the 13th, highest recorded daily rainfall in August, followed closely by the second highest daily rainfall for August of 41.2 mm on 15th. This August is the wettest recorded since rainfall records began in 1853.

The mean maximum and minimum temperatures were above average with 23.0 °C (+1.39 °C) and 14.1 °C (+2.31 °C) respectively. The highest temperature was 33.8 °C on the 7th. The lowest temperature was 7.8 °C on the 4th.

Sunshine was below average with 169.2 hours (-27.01 hours). There was three days without sun and the sunniest day was the 11th with 12.0 hours.

There were no frosts. Note: The average refers to the 30 year means 1981-2010.

July 2020: July was mainly a cool, wet and dull month.

Rainfall was above average with 81.2 mm, which is 31.33 mm above average. We had 15 days with 0.2 mm or more of rain with 5 days having more than 5 mm. The greatest rainfall was 23.0 mm recorded on the 25th.

Sunshine was below average with 192.2 hrs (-12.96 hours). The most was 13.6 hours on the 30th and there was one day where no sunshine was recorded.

The average maximum air temperature was 21.5 °C (-0.30 °C) and the average minimum air temperature was 11.9 °C (+0.01 °C). The warmest day reached 34.6 °C on the 31st. The lowest minimum air temperature was 7.1 °C on the 7th.

We had no air or ground frosts.

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

June 2020: June 2020 was warm, wet and sunny.

Rainfall was 87.4 mm, which is 34.14 mm above average. We had 18 days with 0.2 mm or more of rain, of which 2 days had more than 5.0 mm. The most rainfall in a single day was 41.6 mm collected on the 17th.

Sunshine was 199.6 hours, which is 1.45 above average.

The mean maximum and minimum temperatures were both above average with 20.5° C (+1.32°C) and 10.9 °C (+1.18°C) respectively. The hottest day reached 29.6° C on the 25th. The coolest night dropped to 5.7° C on the 9th.

There were 0 ground or air frosts.

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

May 2020: May was very sunny, warm and dry for the time of year.

Rainfall was 3.2 mm, which is 51.49 mm below the mean. We had 2 days with 0.2 mm or more of rain, of which 1 day had more than 1.0 mm. The greatest fall of rain was 2.6 mm on the 1st of May. May rainfall was the 2nd lowest since records began in 1853.

Sunshine was above average with 308.6 hrs. (+113.97 hrs.); the most was 14.6 hours on the 29th. There was sunshine recorded on every day. May was the sunniest since records began in 1891.

The average maximum and minimum temperatures were above average at 18.9°C (+2.77°C) and 7.0°C (+0.12°C) respectively. The highest (max) temperature was 26.1°C on the 20th and the lowest (min) temperature was -0.6°C on the night of the 12th.

We had 1 air frost and 8 ground frosts.

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

April 2020: April was sunny, mostly dry with majority of rain falling within the last week, and warm for the time of year.

Rainfall was 54.1 mm which is 3.66 mm below average. We had 8 days with 0.2 mm or more of rain, and 3 days with more than 5 mm. The wettest day was the 28th with 14.8 mm.

Sunshine was above average with 243.1 hours (+81.93 hours); the most was 12.9 hours on the 22nd and there was only 1 day without sunshine. This April was the second sunniest on record.

The average maximum and minimum temperatures were above average at $16.6 \,^{\circ}\text{C}$ (+3.94 $^{\circ}\text{C}$) and $4.7 \,^{\circ}\text{C}$ (+0.71 $^{\circ}\text{C}$). The warmest day was the 12th which reached 23.7 $^{\circ}\text{C}$, and the coldest night was on the 1st when it dropped to -2.9 $^{\circ}\text{C}$.

We had 2 air frosts and 9 ground frosts.

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

March 2020: March was mainly warm and sunny with below average rainfall.

Rainfall was below average with 43.8 mm recorded, (-7.00 mm). We had 17 days with 0.2 mm or more of rain, and 3 days with more than 5 mm. The most recorded was 11.0 mm on the 9th.

Sunshine was above average with 166.4 hrs (+51.55); the most recorded was 11.1 hours on the 25th. There were 2 days without sunshine.

The mean maximum and minimum temperatures were above average with 10.6°C (+0.74) and 2.7°C (+0.06) respectively. The highest maximum temperature was 15.1°C on the 24th and the lowest minimum was -1.4°C on the 25th.

We had 4 air frost and 15 ground frosts.

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

February 2020: February was warm, sunny and very wet with some snow.

Rainfall was above average with 127.0 mm (+76.86). We had 23 days with over 0.2 mm, and 8 days with more than 5.0 mm. The greatest rainfall was 21.6 mm on the 15th. Precipitation fell as snow on the morning of the 27th. This February was the 2nd wettest on record (since 1853).

Sunshine was above average with 92.3 hrs. (+12.07). We had 5 days without any sunshine and the most was 7.8 hrs on the 6th.

The mean maximum and the mean minimum temperatures were above average with 9.7 °C (+2.80) and 3.2 °C (+2.31) respectively. The lowest minimum was -2.4 °C on the 6th, and the highest maximum was 13.2 °C on the 23rd.

We had 3 air frosts and 10 ground frosts.

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

January 2020: January was warm and wet, with below average sunshine.

Rainfall was above average with 79.8 mm (+9.83 mm). We had 24 days with 0.2 mm or more of rain and 6 had more than 5.0 mm. The most on one day was 20.2 mm on the 14th.

Sunshine was below average with 59.4 hours (-2.65 hours); the most was 6.7 hours on the 19th. We had 9 days with no sunshine.

January's mean maximum and minimum temperatures were above average at 8.9 °C (+2.20 °C) and 3.8 °C (+2.61 °C) respectively. The highest day temperature was 12.7 °C on the 14th and the lowest minimum was -1.7 °C on the 21st.

We had 3 air frosts and 11 ground frosts.

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