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Rothamsted Meteorological Data

Monthly and Annual Summary 2010

DOI: [10.23637/rms-MonAnnSum-2010](https://doi.org/10.23637/rms-MonAnnSum-2010)

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

Published by: Rothamsted Research

DOI minted: February 2021

Description: Contains the monthly and annual summaries for daily weather data collected at Rothamsted Met Station 2010. 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 2010.

Page 13 Weather summary for year 2010.

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)

Cite as: Hall C. & Perryman S.A.M. (2017). *Rothamsted Meteorological Station Monthly and Annual Summary 2010*. Rothamsted Research. [10.23637/rms-MonAnnSum-2010](https://doi.org/10.23637/rms-MonAnnSum-2010)

Funding: Rothamsted Research receives strategic funding from the UK Biotechnology and Biological Sciences Research Council (BBSRC). The Rothamsted Long-term Experiments National Capability is supported by the BBSRC Grant BBS/E/C/000J0300 and the Lawes Agricultural Trust.

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Weather Summary for January 2010.

January was relatively cold, dry and sunny and with a snow period during the first half of the month. This snowfall amounted to approximately half the rainfall recorded and the low temperatures kept the snow covering for approximately 10 days.

Rainfall was well below the average with 47.3mm (-22.37). We had 13 days with 0.2mm or more of rain and 3 had more than 5.0mm. The most on one day was 8.8mm on the 5th. This fell as snow.

Sunshine was above average at 65.8hrs (+10.76); the most was 7.5 hours on the 30th. We had 13 days without any sun at all.

January was colder than average with mean maximum and minimum temperatures of 3.2°C (-3.1) and -0.9°C (-1.74) respectively. The highest day temperature was 8.04°C (-3.33) on the 17th, and the lowest minimum was -6.5°C (-0.45) on the 7th.

We had 19 air frosts and 19 ground frosts.

Weather Summary for February 2010.

February was a cloudy month with well above average precipitation and below average temperatures. Some of the precipitation fell as sleet and snow but not in large enough quantities to settle for very long.

“Rainfall” was above average at 77.2mm (+28.4). The most recorded was 11.14mm on day 27. We had 23 days with over 0.2mm, and 6 days exceeding 5.0mm.

Sunshine was below average at 55.6hrs (-15.08). We had 8 days without any sunshine; the most was 7.3hrs on the 1st.

The mean maximum and the mean minimum temperatures were both below average with 5.4°C (-1.27) and 0.3°C (-0.47) respectively. The lowest minimum was -3.1°C (+1.9) on the 20th, and the highest maximum was 10.2°C (-1.7) on the 5th.

We had 14 air frosts and 18 ground frosts.

Weather Summary for March 2010.

March was relatively dry and sunny with average maximum and minimum temperatures slightly higher than average. The absolute maximum was also above average, but the lowest minimum was below average.

Rainfall was 8.7mm below average, with 45.2mm. We had 13 days with 0.2mm or more of rain, and 4 days with more than 5mm. The most recorded was 7.36mm on the 30th.

Sunshine was above average at 145hrs (average for March is 107.2); the most recorded was 10.4 hours on the 7th. There was only one day when the sun didn't shine at all, the 20th.

The mean maximum and minimum temperatures were a slightly above average at 9.8°C (+0.34) and 2.5°C (+0.19) respectively; the highest maximum temperature was 16.8°C on the 24th and the lowest minimum was -5.1°C on the night of the 8th.

We had 9 air frosts and 20 ground frosts.

Weather Summary for April 2010.

April 2010 was a warmer, sunnier and drier than average April, similar to April 2009, but this year the sun hours and low rainfall were more pronounced. Most notably the Sunshine hours were very high making this the 10th sunniest April since 1891. Also it ranked as 13th driest April since 1890.

Rainfall was 18.7 mm, 34.8 mm below average. We had 8 days with 0.2 mm or more of rain, and only one had more than 5mm. The wettest day was the 30th with 5.2 mm.

Sunshine was 75.7 hours above average with 222.5 hours; the most was 13.1 hours on the 23rd. There was only one day when the sun didn't shine.

The average maximum and minimum temperatures were both above average with, 14.10°C (+2.17) and 3.77°C (+0.15) respectively. The warmest day reached 19.66°C on the 28th, and the coldest night on the 17th was a mild -1.04°C,

We had 1 air frosts and 14 ground frosts.

Weather Summary for May 2010.

May started wet but was generally a cool dry month with below average rainfall and average temperatures. There was a warm spell from the 19th for 6 days.

Rainfall this May was 38.4mm, which is 11.30mm below the mean. We had 8 days with 0.2mm or more of rain and only 1 day with more than 5.0mm. The most was 25.1mm on the 1st May.

Sunshine was also above average at 205.4hrs (average for May is 194.9); the most was 15.0 hours on the 23rd.

The average maximum temperature was below the mean for May at 15.4°C (-0.37°C). The minimum was also below the mean with 5.7°C (-0.62°C). The warmest day was 26.1°C on the 23rd; the lowest temperature was -1.2°C on the night of the 12th.

We had eleven ground frosts and two air frosts.

Weather Summary for June 2010.

Overall June was warm, sunny and dry with above average temperatures and sunshine, and below average rainfall.

Rainfall was 23.5mm, which is 36.7mm below the mean. We had 9 days with 0.2mm or more of rain, and 2 of these had more than 5.0mm. The most was 6.6mm on the 7th.

Sunshine was above average with 240.8hrs (average for June is 190.3); the most was 15.4 hours on the 3rd.

The mean maximum temperature was above average at 20.8°C (+2.2) and the mean minimum above average at 10.3°C (+1.1). The highest maximum was recorded on the 27th reaching 27.6°C with the lowest minimum being 6.5°C on the 3rd.

There were no frosts recorded.

Weather Summary for July 2010.

July was relatively warm and dry with below average sunshine.

Rainfall was below average, with 31.6 mm, which is 10.45 mm below the mean. We had 12 days with 0.2mm or more of rain, and 1 of these had more than 5 mm. The greatest rainfall was 14.93 mm recorded on the 14th.

Sunshine was 24 hours below average with 179.4hrs. The most was 12.5 hours on the 9th. The sunshine was recorded on every day except for the 13th.

The average maximum temperature was above average at 22.8°C (+1.4) and the average minimum was above average at 13.2°C (+1.9). The warmest day reached 29°C on the 9th. The lowest minimum temperature (coldest night) was 8.9°C on the 18th.

We had no air or ground frosts.

Weather Summary for August 2010.

August was cloudy and wet with low daytime temperatures. It was the 4th wettest August in our records and the maximum temperature was the 10th lowest. The rain was spread over 20 days with more than half of it falling in 4 days.

Rainfall was above average with 127.6mm, (+73.86mm). We had 20 days with 0.2mm or more of rain, 9 of which had more than 5.0 mm; the most was 35.2mm on the 25th.

The mean maximum temperature was below average with 19.8°C (-1.63) and the mean minimum was above average with 11.7°C (+0.39). The highest temperature was 23.5°C on the 9th, and the lowest (night) temperature was 5.7°C on the 31st.

Sunshine was below average at 140.3hrs which is 56.5 hrs below average. There was only 1 day where the sun didn't shine (the 26th), and the sunniest day was the 31st with 10.2 hours.

Weather Summary for September 2010.

September had less sunshine and slightly less rain than average. The mean day to day temperatures were close to average but the actual maximum and minimum temperatures were below and above average respectively.

Rainfall was 59.7 mm, which is 1.31 mm below average. We had 16 days with 0.2mm or more of rain and 4 with over 5 mm. The most was 14.97 mm on the 29th.

Sunshine was 133.2 hrs which is 9.16 hrs below average. We had 2 days with no sun and the most was 11.3 hours on the 1st.

The mean maximum was slightly below average at 17.7°C (-0.31) and the mean minimum was above the average, at 10.0°C (+0.51). The highest (daytime) temperature was 22.02°C on the 22nd and the lowest (night) temperature was 4.68°C on the 25th.

There were no ground frosts.

Weather Summary for October 2010.

October this year was wetter and cloudier than average and with fairly average temperatures.

Rainfall was 10.2 mm above average with 84.9 mm. We had 16 days with 0.2mm or more of rain and 7 with over 5.0 mm. The most was 18.3 mm which fell on the 1st.

Sunshine was below average with 99.6 hrs; (average for October is 112.1) the most was 9.4 hours on the 20th. There were 8 days without any sun at all.

October temperatures were close to the average. The mean maximum and minimums were, 13.7°C (-0.04) and 7.2°C (+0.6) respectively. The highest temperature was 19.7°C on the 8th and the lowest was -0.99°C on the 21st.

7 ground frosts were recorded.

Weather Summary for November 2010.

Overall November was relatively dry and overcast with below average temperatures. The warmest day however was notably warm as the coldest night was notably cold. The month did start fairly mild but temperatures dropped to below freezing by the last week. To accompany the cold spell at the end of the month there was some light snow which settled on the frozen ground.

Rainfall was below average with 54.8mm, which is 11.4mm below the mean. We had 21 days with 0.2mm or more of rain, and 4 days with over 5mm. The most was 13.6mm on the 5th.

Sunshine was below average with 60.5hrs (-9.62) the most was 7.2 hours on the 16th. We had 5 days with no sun at all.

Both the maximum and minimum mean temperatures were below average with 7.5°C (-1.84) and 2.7°C (-0.60) respectively. The warmest day reached 16.9°C on the 4th which is the 5th highest November maximum since records began. The lowest minimum was -5.9°C on the 28th; the the 11th lowest minimum recorded.

We had 10 air frosts and 13 ground frosts.

Weather Summary for December 2010.

December was relatively cloudy but dry with temperatures well below the December average. The month started with a covering of snow which, with the low temperatures and some extra snow falls, remained with us for most of the month.

Precipitation was below average with 35.3mm, which is 34.8 mm below average. We had 16 days where at least 0.2mm was recorded, 3 of these with at least 5mm. The most was 8.1 mm on the 18th which was a day of heavy snowfall. Much of the December precipitation will have been in the form of snow or sleet.

Sunshine was below average with 38.4hrs (average for December is 48.1), the most was 5.1 hours on the 26th. We had 12 days without any sun at all.

December had notably low temperatures this year. The average maximum was 2.0°C (-5.15) which is the coldest since 1890; the second coldest on record. The average minimum was -2.7°C (-4.61); the 3rd coldest on record. The highest maximum temperature was 7.35°C on the 11th; the 2nd coldest on record and the coldest since 1933. The coldest night temperature was -11.65°C in the early hours of the 20th; the 4th coldest on record.

We had 24 air frosts and 24 ground frosts.

Weather Summary for 2010.

Rainfall

The total for 2010 was 644.2mm, the average is 703.6mm. It rained (0.2mm or more) on 175 days (195 in 2009). The most on one day was 35.22 mm on 25th of August; the wettest month was August with 127.6 mm. The driest month was April with 18.7 mm. Of the twelve months, nine had below average rainfall.

Sunshine

Hours of sun figures were above average totalling 1587 hours. The average is 1537.7 hours. The 'sunniest' month was June with 240.8 hours.

Temperature

The year was slightly cooler than average with mean maximum and the mean minimum temperatures of 12.7°C (-0.6) and 5.3°C (-0.3) respectively. This is a deviation from the previous thirteen years when both sets of temperatures were above average. The hottest day was the 9th July reaching 28.98°C and the coldest night was the 20th of December dropping to -11.65°C; we had 126 ground frosts (105 in 2009).

Note: the average refers to the 30 year means 1971-2000.