

**Radcliffe Meteorological Station**  
 School of Geography - University of Oxford  
 Monthly Summary of Weather at Oxford for *July 2019*

		<b>Difference from long period mean</b>
Mean air temperature (°C)	18.9	<b>2.3</b>
Absolute maximum air temperature (°C)	36.5 (25 <sup>th</sup> )	<b><u>8.3</u></b>
Lowest maximum air temperature (°C)	18.5 (27 <sup>th</sup> )	
Mean maximum air temperature (°C)	24.4	<b>2.5</b>
Absolute minimum air temperature (°C)	9.1 (4 <sup>th</sup> )	<b>1.4</b>
Mean minimum air temperature (°C)	13.7	<b>1.4</b>
Absolute minimum grass temperature (°C)	5.5 (3 <sup>rd</sup> )	<b>1.6</b>
Mean minimum grass temperature (°C)	11.6	<b>1.6</b>
Absolute minimum concrete temperature (°C)		
Mean minimum concrete temperature (°C)		
Mean soil temperature at 30 cm (°C)	20.0	<b>1.6</b>
Mean soil temperature at 100 cm (°C)	17.8	
Highest daily rainfall (mm)	14.7 (19 <sup>th</sup> )	
Total rainfall (mm)	42.9	-16.5
Total bright sunshine (hours)	221.1	26.6
Mean daily bright sunshine (hours)	7.2	
Mean wind speed (knots)	4.8	<b><u>-3.1</u></b>
No. of rain days (0.2 mm or more rainfall)	8.0	-4.5
No. of wet days (1.0 mm or more rainfall)	5.0	
No. of days with minimum temperature less than 0°C	0.0	0
No. of days with ground temperature less than 0°C	0.0	0
No. of days with fog at 0900 GMT	0.0	-0.1
No. of days with snow lying at 0900 GMT	0.0	0

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**Bold** denotes anomalies in excess of **one** standard deviation above/below the long-term mean for July.

**Bold underlines** denote anomalies in excess of **two** standard deviations above/below the long-term mean for July.

### Notes

The main story of July 2019 was a maximum temperature of 36.5 on the 25<sup>th</sup>, which is the highest temperature reading in over 200 years of daily observations at the RMS. Occurring during a brief but intense heat wave, this event received considerable media interest and data from the station was used in a rapid attribution study available from <https://www.worldweatherattribution.org/>. Although the heat was not as persistent as July 2018 (11 days over 25 degrees, compared with 26 days last July), mean, maximum and minimum air temperatures all exceeded long-term means. High temperatures did not translate to an anomalously sunny month, nor did rain totals fall far short of the average for July. Please note that concrete minimum temperatures have been excluded from this analysis due to a high incidence of missing values (bubbles in the thermometer alcohol).

Thomas Caton Harrison (02/08/19)  
**Radcliffe Meteorological Observer**