

**Radcliffe Meteorological Station**  
 School of Geography - University of Oxford  
 Monthly Summary of Weather at Oxford for *September 2023*

		<b>Difference from long period mean</b>
Mean air temperature (°C)	17.4	<b>3.7**</b>
Absolute maximum air temperature (°C)	31.4 (9 <sup>th</sup> )	<b>6.9*</b>
Lowest maximum air temperature (°C)	16.9 (22 <sup>nd</sup> )	
Mean maximum air temperature (°C)	22.5	<b>3.8*</b>
Absolute minimum air temperature (°C)	7.0 (23 <sup>rd</sup> )	<b>3.1</b>
Mean minimum air temperature (°C)	13.2	<b>3.2*</b>
Absolute minimum grass temperature (°C)	5.3 (23 <sup>rd</sup> )	<b>5.3</b>
Mean minimum grass temperature (°C)	11.4	<b>4.3**</b>
Absolute minimum concrete temperature (°C)	6.1 (23 <sup>rd</sup> )	<b>2.8</b>
Mean minimum concrete temperature (°C)	12.7	<b>3.2*</b>
Mean soil temperature at 30 cm (°C)	18.5	<b>2.6*</b>
Mean soil temperature at 100 cm (°C)	18.1	
Highest daily rainfall (mm)	31.5 (17 <sup>th</sup> )	
Total rainfall (mm)	73.0	13.8
Total bright sunshine (hours)	178.9	<b>39.5</b>
Mean daily bright sunshine (hours)	6.0	
Mean wind speed (knots)	7.3	-0.5
No. of rain days (0.2 mm or more rainfall)	10	-2
No. of wet days (1.0 mm or more rainfall)	6	
No. of days with minimum temperature less than 0°C	0	0
No. of days with ground temperature less than 0°C	0	-1
No. of days with fog at 0900 GMT	0	-1
No. of days with snow lying at 0900 GMT	0	0

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**Bold** denotes anomalies in excess of **one** standard deviation above/below the long-term mean for September, while **bold** with an asterisk (\*) denotes two standard deviations above/below, and bold with two asterisks (\*\*) denotes three standard deviations above/below.

#### Notes

September was an exceptionally warm month in Oxford by every temperature statistic we record at the station. A mean air temperature of 17.4°C was 3.7°C and 3 standard deviations greater than the long term mean for the month, matching 2006 as the joint-warmest September in our records by mean air temperature. The start of the month was characterised by a prolonged heatwave across the country, and in this period we recorded a maximum temperature of 31.4°C on the 9<sup>th</sup> September 2023. This was the hottest September day in Oxford since 1911. Minimum temperatures were also well above average, with mean minimum grass temperatures 3 standard deviations above the long term mean and mean minimum air temperatures 2 standard deviations greater. Unsurprisingly given the abnormal temperatures, sunshine hours were 39.5 hours greater than expected for September and rainfall slightly less.

All available reports can be found on our website ([www.geog.ox.ac.uk/research/climate/rms](http://www.geog.ox.ac.uk/research/climate/rms)). Please contact [rms@ouce.ox.ac.uk](mailto:rms@ouce.ox.ac.uk) for further information or to request data from the weather station.

Charlie Knight (10.11.2023)

**Radcliffe Meteorological Observer**