

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

		Difference from long period mean
Mean air temperature (°C)	16.8	0.1
Absolute maximum air temperature (°C)	28.1 (7 th)	-0.2
Lowest maximum air temperature (°C)	15.2 (4 th)	
Mean maximum air temperature (°C)	21.2	-0.7
Absolute minimum air temperature (°C)	8.6 (5 th)	0.9
Mean minimum air temperature (°C)	13.0	0.7
Absolute minimum grass temperature (°C)	5.6 (5 th)	1.7
Mean minimum grass temperature (°C)	11.3	1.3
Absolute minimum concrete temperature (°C)	8.3 (5 th)	0.6
Mean minimum concrete temperature (°C)	13.0	0.3
Mean soil temperature at 30 cm (°C)	19.0	0.6
Mean soil temperature at 100 cm (°C)	17.7	
Highest daily rainfall (mm)	24.7 (14 th)	
Total rainfall (mm)	100.3	40.9
Total bright sunshine (hours)	175.0	-19.7
Mean daily bright sunshine (hours)	5.8	
Mean wind speed (knots)	11.6	3.7*
No. of rain days (0.2 mm or more rainfall)	20.0	7.5
No. of wet days (1.0 mm or more rainfall)	11.0	
No. of days with minimum temperature less than 0°C	0.0	0.0
No. of days with ground temperature less than 0°C	0.0	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	0.0

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

Notes

July 2023 was a particularly wet month at RMS Oxford, with 20 rainfall days and a total rainfall of 100.3 mm, exceeding the average total July rainfall by 40.9 mm. It was also a particularly windy month – the mean wind speed (11.6 kts) was two standard deviations above the mean, making it the windiest July on record at the RMS. Temperatures were close to average for the time of year, with the mean air temperature (16.8°C) only 0.1°C higher than the long term mean and the absolute maximum air temperature (28.1°C) just 0.2°C below average. This strongly contrasts to July 2022 at the RMS when the maximum air temperature reached 38.1°C and the total monthly rainfall was just 7.1 mm. The minimum grass temperature values for July 2023 were excessively high when compared to those at Reading and the minimum concrete temperatures from Oxford, which was also noted in July 2021 – please treat these with caution.

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

Kitty Attwood (09/08/23)

Radcliffe Meteorological Observer