## **Radcliffe Meteorological Station**

## School of Geography - University of Oxford Monthly Summary of Weather at Oxford for *December 2024*.

			Difference from
Temperature			1991-2020 average
Mean air temperature	$^{\circ}C$	7.2	+1.8
Mean daily maximum temperature	$^{\circ}C$	9.3	+1.1
Mean daily minimum temperature	$^{\circ}C$	5.0	+2.4
Highest maximum temperature	$^{\circ}C$	14.3	+1.1
Lowest maximum temperature	$^{\circ}C$	5.3	+3.5
Highest minimum temperature	$^{\circ}C$	11.9	+2.2
Lowest minimum temperature	$^{\circ}C$	1.6	+5.8*
Air frosts (screen minimum $< 0$ °C)	days	0	-8.6
Mean minimum grass temperature	$^{\circ}C$	2.9	+3.2
Lowest grass minimum temperature	$^{\circ}C$	-1.9	+6.1*
Ground frosts (grass minimum < 0 °C)	days	5	-11.1
Mean concrete minimum temperature	$^{\circ}C$	3.9	+3.0
Lowest concrete minimum temperature	$^{\circ}C$	-0.7	+4.7*
Mean soil temperature at 30 cm at 0900 UTC	$^{\circ}C$	7.7	+1.7
Mean soil temperature at 100 cm at 0900 UTC	$^{\circ}C$	9.4	
Precipitation			
Total precipitation	mm	45.2	68%
Wettest day	mm	8.8	58%
No. of rain days (0.2 mm or more rainfall)	days	18	+1.5
No. of wet days (1.0 mm or more rainfall)	days	9	-2.4
Sunshine duration			
Total bright sunshine	hours	20.1	36%*
Mean daily bright sunshine	hours	0.65	-1.2
Sunniest day	hours	4.5	
Mean wind speed at 0900 UTC (at 10 m)	knots	6.4	
No. of days with fog at 0900 UTC	days	4	+0.7
No. of days with snow lying at 0900 UTC	days	0	-1.4

**Bold** denotes anomalies in excess of **one** standard deviation above/below the long-term mean, while **bold** with an asterisk (\*) denotes two standard deviations above/below, and bold with two asterisks (\*\*) denotes three standard deviations above/below. Standard deviations are not reported for counts (N. of days), lowest maximum/highest minimum temperature, wettest day and mean daily bright sunshine.

## Notes

December can be rather succinctly described as a gloomy end to 2024. A 10-day streak of days with no bright sunshine from the 23<sup>rd</sup> December to the 2<sup>nd</sup> January contributed to total bright sunshine hours of just 20.1 across the month, or 39 minutes a day. This is just 36% of that expected in an average December. These cloudy conditions were not associated with significant rainfall, which at 45.2mm was 68% of the expected total. Mean air temperature was however 1.8°C higher than the standard period average at 7.2°C. Remarkably, during the month not a single air frost was recorded, where 8.6 would be expected.

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

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