Radcliffe Meteorological Station

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

			Difference from
Temperature			1991-2020 average
Mean air temperature	$^{\circ}C$	14.8	-0.2
Mean daily maximum temperature	$^{\circ}C$	18.7	-0.7
Mean daily minimum temperature	$^{\circ}C$	10.9	+0.2
Highest maximum temperature	$^{\circ}C$	27.0	+2.1
Lowest maximum temperature	$^{\circ}C$	13.3	-1.3
Highest minimum temperature	$^{\circ}C$	16.6	+1.1
Lowest minimum temperature	$^{\circ}C$	3.0	-2.0
Air frosts (screen minimum < 0 °C)	days	0	0.0
Mean minimum grass temperature	$^{\circ}C$	8.7	+1.2
Lowest grass minimum temperature	$^{\circ}C$	-1.1	-2.1
Ground frosts (grass minimum < 0 °C)	days	1	+0.4
Mean concrete minimum temperature	$^{\circ}C$	10.5	+1.0
Lowest concrete minimum temperature	$^{\circ}C$	1.9	-1.5
Mean soil temperature at 30 cm at 0900 UTC	$^{\circ}C$	16.7	+0.3
Mean soil temperature at 100 cm at 0900 UTC	$^{\circ}C$	17.1	
Precipitation			
Total precipitation	mm	193.3	374 %***
Wettest day	mm	77.1	470 %
No. of rain days (0.2 mm or more rainfall)	days	19	+6.7
No. of wet days (1.0 mm or more rainfall)	days	14	+5.4
Sunshine duration			
Total bright sunshine	hours	109.8	76 %
Mean daily bright sunshine	hours	3.7	-1.1
Sunniest day	hours	11.2	
Mean wind speed at 0900 UTC (at 10 m)	knots	5.6	
No. of days with fog at 0900 UTC	days	0	-0.6
No. of days with snow lying at 0900 UTC	days	0	0.0

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

With 193.3 mm of rain, September 2024 was the wettest month of any name in Oxford in 250 years – only month to receive more rainfall since records began at the station was September 1774 (223.9 mm). This is particularly unusual given that September is typically not a very wet month, averaging just 52 mm of rain. The majority of the month's rain fell on raindays 22 September (77.1 mm 09-09h) and 23 September (41.8 mm 09-09h), which combined is the highest two-day total in the station's history. Remarkably, this two-day total alone also broke the record for the highest 3, 5 and 7-day accumulated rainfall totals. Unsurprisingly given the exceptional rainfall, sunshine hours were significantly below that expected and measurable rainfall fell on 6.7 days more than expected. Aside from an anomalously cold day on the 28th of September, temperature metrics were largely in line with those expected for the month.

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.

Charlie Knight (14.10.2024) Radcliffe Meteorological Observer