

Radcliffe Meteorological Station
 School of Geography - University of Oxford
 Monthly Summary of Weather at Oxford for *December 2020*

		Difference from long period mean
Mean air temperature (°C)	5.5	0.9
Absolute maximum air temperature (°C)	13.7 (21 st)	0.9
Lowest maximum air temperature (°C)	0.2 (31 st)	
Mean maximum air temperature (°C)	7.9	0.4
Absolute minimum air temperature (°C)	-2.2 (31 st)	2.6
Mean minimum air temperature (°C)	3.2	1.0
Absolute minimum grass temperature (°C)	-6.8 (31 st)	1.4
Mean minimum grass temperature (°C)	0.0	0.4
Absolute minimum concrete temperature (°C)	-3.9 (31 st)	1.5
Mean minimum concrete temperature (°C)	1.5	0.5
Mean soil temperature at 30 cm (°C)	6.4	1.1
Mean soil temperature at 100 cm (°C)	8.8	
Highest daily rainfall (mm)	26.1 (23 rd)	
Total rainfall (mm)	99.4	43.0
Total bright sunshine (hours)	59.7	10.0
Mean daily bright sunshine (hours)	1.9	
Mean wind speed (knots)	8.2	-1.6
No. of rain days (0.2 mm or more rainfall)	19.0	1.9
No. of wet days (1.0 mm or more rainfall)	14.0	
No. of days with minimum temperature less than 0°C	6.0	-2.7
No. of days with ground temperature less than 0°C	14.0	-2.8
No. of days with fog at 0900 GMT	3.0	-0.9
No. of days with snow lying at 0900 GMT	0.0	-1.7

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

December 2020 was defined by average temperature, sunshine and wind metrics and higher than average rainfall. Notably, there was 26 mm of rainfall on the 23rd, and 17 mm of rainfall on the 26th associated with Storm Bella. These two events fully account for the +43 mm rainfall anomaly. As the soil was still in a saturated state due to the exceptional rainfall in October, the addition of 43 mm of rainfall in a short time period caused widespread flooding impacts across Oxfordshire.

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.

David Crowhurst (06/01/2021)

Radcliffe Meteorological Observer