Radcliffe Meteorological Station

Oxford University Centre for the Environment, University of Oxford

Annual Summary of Weather at Oxford for 2019

	January	Difference from long period mean	February	Difference from long period mean	March	Difference from long period mean	April	Difference from long period mean	May	Difference from long period mean	June	Difference from long period mean
Mean air temperature (°C)	3.9	0.1	6.8	2.6	8.5	2.7	9.2	0.8	12.3	0.7	15.4	0.5
Absolute maximum air temperature (°C)	11.9	-0.3	18.8	6.0	17.9	1.5	25.1	5.2	24.2	0.0	33.0	6.3
Lowest maximum air temperature (°C)	3.0		2.4		9.7		8.1		11.7		11.7	
Mean maximum air temperature (°C)	7.2	0.3	11.8	4.3	12.6	2.4	15.0	1.7	18.0	1.2	20.5	0.6
Absolute minimum air temperature (°C)	-5.7	-0.3	-4.7	-0.3	0.6	3.9	-2.0	-0.9	0.5	1.0	7.6	2.3
Mean minimum air temperature (°C)	1.0	-0.5	2.3	0.8	5.1	2.6	4.3	0.1	4.1	-0.1	10.7	0.4
Absolute minimum grass temperature (°C)	-9.9	-0.9	-11.2	-2.8	-4.2	3.1	-6.6	-1.3	-1.8	0.8	3.6	2.0
Mean minimum grass temperature (°C)	-2.1	-1.2	-1.2	-0.2	1.9	2.0	0.9	-0.7	4.1	-0.4	9.0	1.0
Absolute minimum concrete temperature (°C)	-5.9	-0.3	-5.6	-0.5	-0.5	3.7	-2.5	-0.5	-0.1	-1.7	6.4	1.0
Mean minimum concrete temperature (°C)	-0.3	-1.0	0.6	-0.4	4.3	2.0	3.6	-0.6	7.4	0.2	11.2	0.4
Mean soil temperature at 30 cm (°C)	5.1	0.9	5	0.8	8.2	2.2	10.3	1.0	Error	Error	16.6	0.0
Mean soil temperature at 100 cm (°C)	7.3		0.0		8.1		9.9		12.5		14.8	
Highest daily rainfall (mm)	6.0		6.8		7.1		8.2		10.1		24.2	
Total rainfall (mm)	28.6	-24.4	40.4	-1.0	35.5	-6.0	29.9	-13.6	21.3	-30.3	99.5	46.2
Total bright sunshine (hours)	50.0	-5.3	127.8	<u>56.2</u>	128.3	14.3	164.6	10.8	204.6	12.6	166.0	-31.2
Mean daily bright sunshine (hours)	1.6		4.6		3.3		5.5		6.6		5.5	
Mean wind speed (knots)	8	-2.0	7.9	-1.9	12.7	2.9	8.7	-0.6	7.4	-1.1	8.9	0.9
No. of rain days (0.2 mm or more rainfall)	13	3.9	13	-0.7	16	1.9	8	-5.5	8	-5.6	15	3.3
No. of wet days (1.0 mm or more rainfall)	7		10		8		8		7		11	
No. of days with minimum temperature less than 0°C	16	5.7	8	-1.6	0	-7.2	5	2.3	0	-0.3	0	0.0
No. of days with ground temperature less than 0°C	21	3.1	15	-1.6	11	-5.1	9	-1.4	2	-1.5	0	-0.3
No. of days with fog at 0900 GMT	0	-3.3	2	-0.9	0	-1.8	0	-0.4	0	-0.1	0	-0.1
No. of days with snow lying at 0900 GMT	2	-1.5	3	-2.9	0	-0.9	0	-0.1	0	0.0	0	0.0

		Difference		Difference		Difference		Difference		Difference		Difference
	July	from	August	from long period	September	from	October	from	November	from	December	from
		long period	August			long period		long period		long period	December	long period
		mean		mean		mean		mean		mean		mean
Mean air temperature (°C)	18.9	2.3	18.3	2.1	15.3	1.6	10.8	0.6	6.6	0.1	6.3	1.7
Absolute maximum air temperature (°C)	36.5	<u>8.3</u>	32.6	5.2	26.2	1.8	19.5	0.1	15.9	0.9	12.6	-0.2
Lowest maximum air temperature (°C)	18.5		18.4		15.1		8.6		6.1		5.4	
Mean maximum air temperature (°C)	24.4	2.5	23.9	2.6	20.6	1.9	14.6	0.3	9.5	-0.5	9.4	1.9
Absolute minimum air temperature (°C)	9.1	1.4	9.3	2.1	3.9	0.1	0.2	0.2	-1.7	1.1	-1.8	3.0
Mean minimum air temperature (°C)	13.7	1.4	13.2	1.2	10.4	0.5	7.5	0.6	4.1	0.2	3.6	1.4
Absolute minimum grass temperature (°C)	5.5	1.6	5.7	2.4	-1.2	-1.2	-3.8	0.0	-6.8	-0.4	-6.9	1.3
Mean minimum grass temperature (°C)	11.6	1.6	10.7	1.2	7.4	0.2	5.3	1.3	1.6	0.4	1.2	1.6
Absolute minimum concrete temperature (°C)	8.2		4.5	-2.4	Error	Error	Error	Error	Error	Error	Error	Error
Mean minimum concrete temperature (°C)	14.3		12.4	0.2	Error	Error	Error	Error	Error	Error	Error	Error
Mean soil temperature at 30 cm (°C)	20	1.6	19.2	1.0	16.6	8.0	12.4	0.5	7.9	-0.1	5.8	0.5
Mean soil temperature at 100 cm (°C)	17.8		18.1		16.9		14.1		10.3		7.9	
Highest daily rainfall (mm)	14.7		11.9		20.9		20.9		23.9		17.2	
Total rainfall (mm)	42.9	-16.5	46.9	-11.6	77.9	18.6	120.0	54.9	105.6	43.3	88.1	31.7
Total bright sunshine (hours)	221.1	26.6	201.0	21.0	161.2	22.3	79.1	-24.2	49.6	-15.7	72.7	23.0
Mean daily bright sunshine (hours)	7.2		6.5		5.4		2.6		1.7		2.3	
Mean wind speed (knots)	6.9	-1.0	9.2	1.4	8.2	0.4	6.4	-2.0	6.1	-2.9	8.7	-1.1
No. of rain days (0.2 mm or more rainfall)	8	-4.5	10	-3.3	11	-1.5	18	2.7	21	5.0	22	4.9
No. of wet days (1.0 mm or more rainfall)	5		10		8		15		14		17	
No. of days with minimum temperature less than 0°C	0	0.0	0	0.0	0	0.0	0	-1.4	3	-2.0	5	-3.7
No. of days with ground temperature less than 0°C	0	0.0	0	0.0	1	-0.2	1	-5.3	9	-3.2	11	-5.8
No. of days with fog at 0900 GMT	0	-0.1	0	-0.2	0	-0.7	0	-2.6	0	-3.7	1	-2.9
No. of days with snow lying at 0900 GMT	0	0.0	0	0.0	0	0.0	0	0.0	0	-0.2	0	-1.7

Year	Difference from long period mean	Notes Notable stats
11.0	1.3	2019 was the joint 11th warmest year on record in Oxford
36.5	<u>6.7</u>	36.5 degC on the 25th July is the highest ever recorded temperature at the
2.4		
15.6	1.6	
-5.7	1.9	0.6 degC is the 4th warmest March absolute minimum temperature on reco
6.7	0.5	
-11.2	-0.1	
4.2	0.5	
Error	Error	
Error	Error	Bubbles appeared repeatedly throughout the year in the concrete minimum thermometer. It k
11.6	0.7	Water was found in the 30cm soil depth thermometer partway through May, invalidating the
11.5		
24.2		
736.6	90.9	313.7 mm is the 6th wettest October-November-December period on record
1626.0	111.4	127.8 hours of sunshine is the highest total for February on record
4.4		
8.3	-0.5	
163.0	-7.2	
10.0		
37.0	-8.1	
80.0	-21.0	
3.0	-16.6	3 days of fog for the year is the joint lowest count since 1926
5.0	-4.4	

bold denotes anomalies more than 1 standard deviation away from the long-term monthly mean <u>underline</u> denotes anomalies more than 2 standard deviations away from the long-term monthly mean <u>italic</u> denotes anomalies more than 3 standard deviations from the long-term monthly mean 1-3 days missing data; please see monthly data reports for details

3 or more missing or adjusted days of data

RMS. 18.8 degC on the 26th of February was the highest recorded February temperature. 33.0 degC on the 29th of June was the 2nd highest recorded June temperature.

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oroke in September and was replaced in December data for the 1st to the 17th

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