

WOKINGHAM METEOROLOGICAL DATA

Lat 51.425 N, Long 0.853 W, NGR (SU) 798701

Altitude 45 m ASL.

Emmbrook,

Wokingham,

Berkshire.

Annual

Summary

2021

Temperature

	°C	°F	Anom	Rank in 140 years
Mean maximum	15.3	59.5	(0.0)	22nd highest
Mean minimum	6.7	44.1	(0.0)	15th highest
Daily mean	11.0	51.8	(0.0)	21st highest
Highest maximum	31.3	88.3		on 20th July
Lowest maximum	-0.1	31.8		on 8th February
Highest minimum	16.8	62.2		on 20th July
Lowest minimum	-5.1	22.8		on 2nd November
Mean grass minimum	4.1	39.4	(+0.5)	
Lowest grass minimum	-10.5	13.1		on 11th February
Mean 30cm earth temp.	12.3	54.1	(+0.3)	
Highest 30cm	22.4	72.3		on 23rd July
Lowest 30cm	3.3	37.9		on 14th February
Mean 100cm earth temp	12.3	54.1	(+0.1)	
Highest 100cm	19.5	67.1		on 29th July
Lowest 100cm	5.6	42.1		on 16th February
Warmest month	July ,		daily mean 18.8°C,	65.8°F
Coollest month	January,		daily mean 4.0°C,	39.2°F

Table 1. Temperature category for each month. (See note 2, page 4)

Category	Month
1. Very cool	Apr
2. Cool	May
3. Normal	Jan, Feb, Aug, Nov
4. Warm	Mar
5. Very warm	Jun, Jul, Sep, Oct, Dec

Table 2. Number of days with max/min air temperature in given range.

Range, deg C	Number of days		Range, deg C	Number of days	
	Max	Min		Max	Min
-15.0 to -10.1	0	0	10.0 to 14.9	105	100
-10.0 to - 5.1	0	1	15.0 to 19.9	83	19
-5.0 to -0.1	1	57	20.0 to 24.9	78	0
0.0 to 4.9	17	84	25.0 to 29.9	18	0
5.0 to 9.9	60	104	30.0 to 34.9	3	0
			35.0 to 39.9	0	0

Table 3. Monthly totals of Air Frost and Ground Frost.

	Jan	Feb	Mar	Apr	May	Jun	
Air frost	16 (+6)	14 (+4)	4 (-3)	13 (+10)	0 (-1)	0 (0)	
Ground frost	18 (+1)	14 (-3)	17 (+1)	22 (+9)	10 (+5)	0 (-1)	
	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Air frost	0 (0)	0 (0)	0 (0)	0 (-2)	7 (+2)	4 (-6)	58 (+11)
Ground frost	0 (0)	0 (0)	0 (0)	0 (-7)	16 (+3)	10 (-6)	107 (+1)

Date of:	last spring air frost,	27th April	ground frost,	26th May
	first autumn air frost,	3rd November	ground frost,	2nd November
	Frost free period,	air 189 days, (0)	ground 159 days, (+36).	
	Annual total of air frost duration:	392.5 hours (+23)		
	Frostiest month	February.	133.7 hours	

[Difference from 1991-2020 average in brackets]

Temperature anomaly in deg C

Rainfall.

Total **666.4** mm 26.24 inches (100 %) 55th highest in 140 years

Number of : Rain days 153 (-9) Wet days 113 (-1) Days => 5mm 41 (-3)

A rain day has at least 0.2 mm

A wet day has at least 1.0 mm

Highest daily fall to 9am: 36.9 mm on 27th June.

Wettest month, June 114.3 mm 225 % of average
Driest month, November 14.6 mm 20 % of average

Duration of measurable rainfall; 508.4 hours (-11 hr) Longest in a day; 15.5 hours on 17th June
Highest monthly duration; 81.4 hours in January Lowest ; 16.6 hours in April

Number of dry spells, (5 or more consecutive dry days): 15
Longest dry spell; 19 days, 20th August to 7th September
Total number of : Dry days, 212 (+9) Days in dry spells, 146

Table 4. **Rainfall category for each month.**

Category	Month
1. Very wet	Jun
2. Wet	Jan, May, Oct
3. Normal	Feb, Mar, Jul, Sep, Dec
4. Dry	Apr, Aug
5. Very dry	Nov

(See note 2, page 4)

Table 4a **Rain rate, maximum daily, between given limits**

Rate mm/hr	Days	Rate mm/hr	Days
<10	111	50 to 100	6
10 to 25	17	100 to 250	7
25 to 50	17	>250	0
		Missing *	4
Highest rate	203 mm/hr on 6th July		

Table 5. **Distribution of measurable rainfall duration.**

Hours	Days	Hours	Days	Hours	Days
0	153	6.1 to 9.0	11	18.1 to 21.0	0
0.1 to 1.0	91	9.1 to 12.0	7	21.1 to 24.0	0
1.1 to 3.0	62	12.1 to 15.0	2	Missing *	0
3.1 to 6.0	38	15.1 to 18.0	1	*Not available due to snow/ice	

Table 6. **Number of days with rainfall between given limits.**

Fall, mm	Days	Fall, mm	Days
0.0 to 0.1	212	10.0 to 19.9	8
0.2 to 0.9	40	20.0 to 29.9	5
1.0 to 4.9	72	30.0 to 39.9	1
5.0 to 9.9	27	> 39.9	0

Sunshine.

(Recorded on an electronic sunshine detector)

Total **1503.7** hours Daily mean **4.12** hours (92 %)

Sunniest day 15.6 hours on the 13th June

Number of days: Nil sun 60 (+7) =>12 hrs 24 (+3)

Weather.

Number of days with:

Snow or sleet falling; 17 (+5)
Snow lying at 0900 GMT; 5 (+1)
Thunder heard; 8 (-6)
Hail; 15 (+3) =>5mm; 0 (-2) <5mm, 15 (+5)
Fog at 0900 GMT; 9 (0)

Air Pressure,

corrected to MSL.

Mean at 0900 GMT **1016.7** mbar (+0.9)
Absolute highest 1042.5 mbar on 27th February
Absolute lowest 973.4 mbar on 20th January
Span 69.1 mbar (-0.6)

[Difference from 1991-2020 average in brackets]

Wind**Table 7. Summary of monthly wind speed at 10 metres**

Month	Mean speed mph	Windiest day Mean mph	Date	Highest gust mph	Date/time (GMT)	Calm 0.5 mph or less hours
January	7.0	15.7	20th	41	20/ 2014	3.7
February	7.9	13.6	7th	39	23/ 2039	9.4
March	7.5	17.2	11th	55	11/ 0339	12.3
April	5.5	9.3	5th	35	11/ 1649	20.1
May	7.4	16.8	21st	51	3/ 1650	9.1
June	5.2	8.2	21st	26	1/ 1645	11.7
July	5.5	10.7	30th	39	6/ 1329	13.0
August	6.1	10.3	8th	31	6/ 1219	6.5
September	5.1	10.1	27th	39	27/ 0715	20.1
October	6.7	11.6	31st	43	31/ 0936	11.0
November	5.8	14.7	27th	40	27/ 0242	15.0
December	7.3	14.2	30th	45	29/1426	5.1
Year	6.4	17.2	11th March	55	11th March	137

Table 8. Summary of hourly mean wind direction. Number of hours with wind from given directions, in degrees from true north, summed over 30 degree segments.

	Direction											
	360 N	030 NNE	060 ENE	090 E	120 ESE	150 SSE	180 S	210 SSW	240 WSW	270 W	300 WNW	330 NNW
January	40	122	35	16	3	11	45	115	179	89	50	39
February	20	101	60	50	28	53	121	149	48	27	7	8
March	49	98	76	10	3	8	20	179	146	65	42	48
April	74	182	166	41	14	8	19	47	61	38	34	36
May	17	45	56	34	15	21	75	197	120	90	44	30
June	74	172	61	17	8	9	27	133	103	50	24	42
July	68	76	93	23	16	19	65	157	124	38	19	46
August	33	173	29	12	9	29	37	177	153	46	26	20
September	38	101	88	34	25	29	79	142	103	30	16	35
October	21	28	18	20	11	41	156	221	133	48	17	30
November	58	31	3	2	5	12	44	161	193	67	52	92
December	13	39	105	36	22	30	55	153	167	59	31	34
Year	505	1168	790	295	159	270	743	1831	1530	647	362	460

Appendix 1.

Monthly statistics from the electronic sunshine detector, 2021.

Note:

Month	Total hours	Highest daily, hrs/date	Number of days with:			Hours		
			Nil	0.1 to 2.9	3.0 to 5.9	6.0 to 8.9	9.0 to 11.9	=>12.0 hrs
January	42.3	7.3 on 25th	12	13	5	1	0	0
February	84.5	10.3 on 26th	6	11	5	3	3	0
March	109.8	11.9 on 30th	5	8	13	2	3	0
April	225.1	14.1 on 24th	1	4	5	10	3	7
May	142.5	10.0 on 30th	1	12	5	11	2	0
June	177.3	15.6 on 13th	4	9	6	1	2	8
July	206.5	15.4 on 17th	0	9	10	2	2	8
August	123.4	11.0 on 25th	4	10	9	5	3	0
September	143.6	12.6 on 7th	3	9	6	6	5	1
October	113.8	10.9 on 6th	4	9	12	5	1	0
November	91.3	8.0 on 22nd	8	10	4	8	0	0
December	43.6	7.4 on 2nd	12	13	3	3	0	0
Year	1503.7	15.6	60	117	83	57	24	24

Appendix 2.

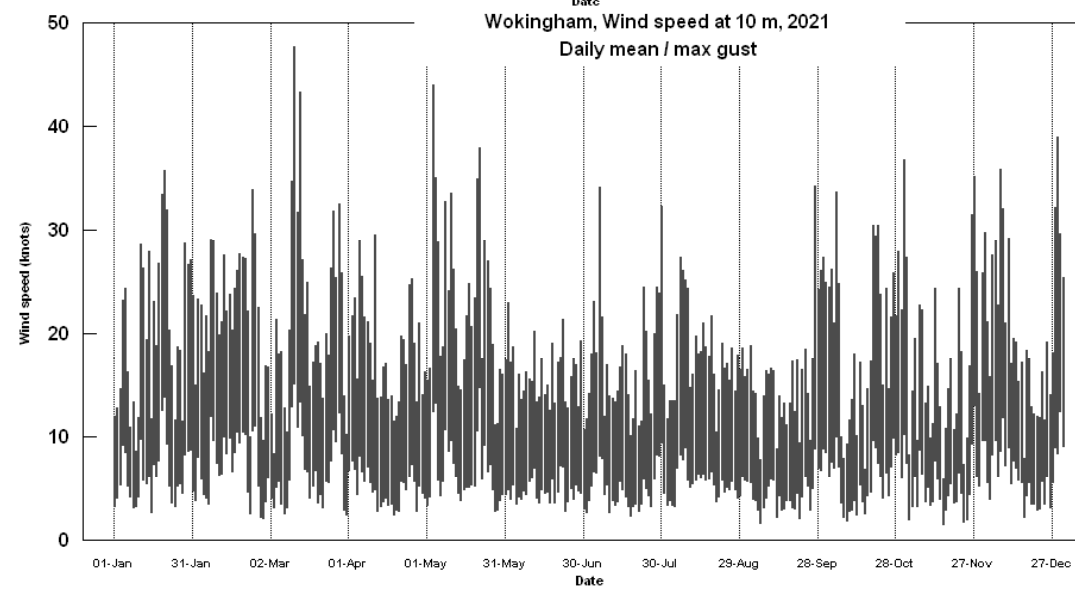
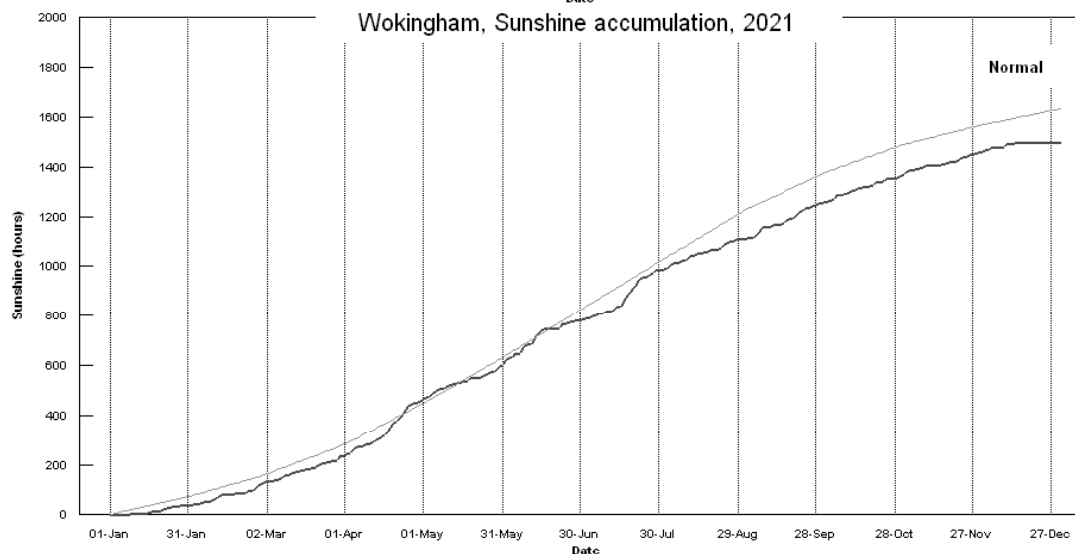
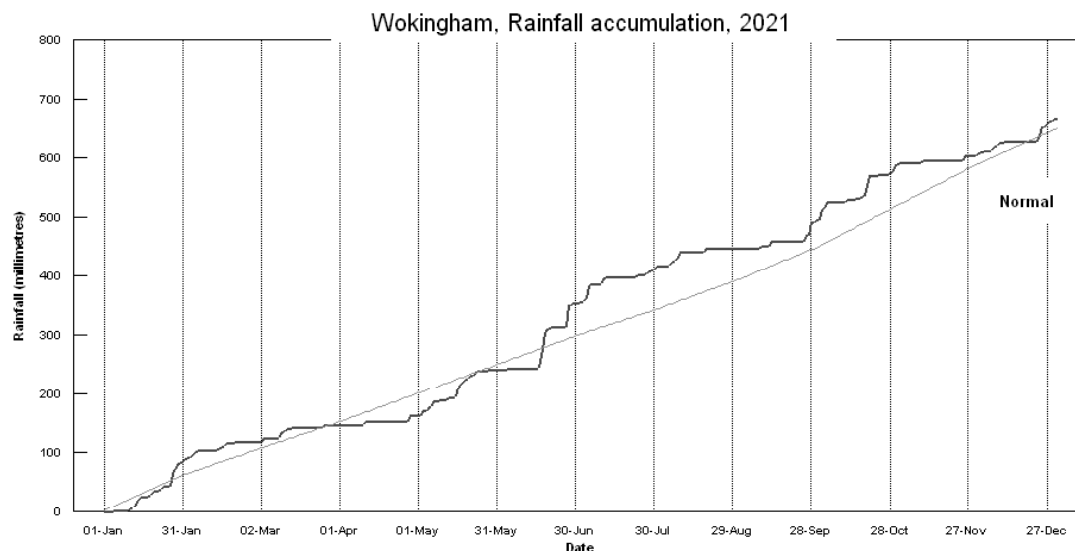
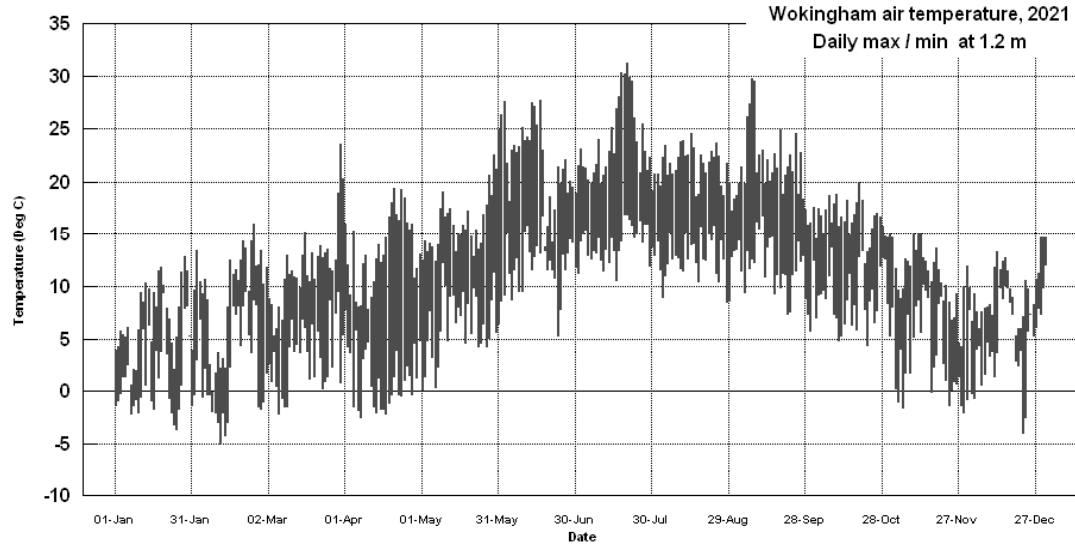
Monthly categories, quick look table, 2021.

Month	Temperature Category	Rainfall Category	Sunshine Category	Index	(see note 1)
January	3 Normal	2 Wet	2 Dull	7	
February	3 Normal	3 Normal	4 Sunny	10	
March	4 Mild	3 Normal	3 Normal	10	
April	1 Very cool	4 Dry	5 Very sunny	10	
May	2 Cool	2 Wet	1 Very dull	5	
June	5 Very warm	1 Very wet	2 Dull	8	
July	5 Very warm	3 Normal	3 Normal	11	
August	3 Normal	4 Dry	1 Very dull	8	
September	5 Very warm	3 Normal	3 Normal	11	
October	5 Very mild	2 Wet	3 Normal	10	
November	3 Normal	5 Very dry	4 Sunny	11	
December	5 Very mild	3 Normal	3 Normal	11	

Note 1). Index, on scale 3 to 15 between 'worst' and 'best' months.

Note 2). Definition of categories used in Tables 1 and 4 and in Appendix 2: Category 1; the value lies within the worst 10% of ranked values for all years available. Category 2; between 10% and 30% above the worst value. Category 3; within 20% of the median value. Category 4; between 10% and 30% below the best value. Category 5; within 10% of the best value. In this context, best (worst) refer to above (below) normal temperature and sunshine, but below (above) normal rainfall. For temperature and rainfall, data since 1882 are considered, and for sunshine since 1908.

Appendix 3	Annual Summary 2021	page5
	Summary of notable features during 2021.	
January	Wet and dull with below average temperature. Men maximum lowest since 2013. 3 rd wettest January this millennium The 27 th was the wettest January day since 2001.. Lying snow was recorded on 24 th to 25 th , depth around 2 cm. Dullest since 2013 and before that, 1996	
February	Temperature and sunshine near, and rainfall below, average. 8 th , first ice day in February since 2006. Air frost duration 152% of average. Snow fell every day from the 6 th to the 11 th , but amounts were generally small, and lying snow was only present on the 9 th . Highest gust equal lowest for February since 1998.	
March	Rainfall and sunshine below average. Temperature near average but with a notable warm spell. Maximum of 23.6° on 30 th is a new March record, also the temperature range of 22.9° on that day is highest for March in the past 46 years, and 3 rd highest for any month in that period.	
April	Cold but mainly dry and very sunny. Mean temperature lowest since 1989 and mean minimum lowest since 1917 and 3 rd lowest in 140 years. The mean grass min is lowest in the past 42 years. Highest number of days with air frost since 1956, and ground frost since 1954. Duration of air frost highest for April in the past 40 years. Significant rain fell on only 2 days and there were only 3 wet days in the 44 days ending the 27 th . 123.3 hours of sunshine in the 10 days to the 26 th . The mean air pressure is highest for any April in the past 46 years.	
May	Mostly cool, wet and very dull. Mean temperature lowest since 2013 and before that, 1996. Mean earth temperature at 30 cm depth lowest since 1996. Wettest May since 2007. Number of days with 5 mm or more of rain equal highest in past 46 years. Dullest May since 2006 with a daily mean 2.9 hours per day less than in April this year. The mean wind speed on the month's windiest day and the month's highest gust are new record highs for May in the past 34 years.	
June	Mild overall and very wet with below average sunshine. Mean temperature 9 th highest, and mean minimum 3 rd highest in the past 140 years. 5 th wettest June in the same period, but the 4 th in this millennium to exceed 100 mm. 2 day total of 58.1 mm on 17 th and 18 th caused local flooding, as did a further 36.9 mm on the 27 th . Mean wind speed on the month's windiest day and the month's highest gust are lowest for June in the past 34 years.	
July	Warm overall especially by night. Rainfall above average and sunshine near average. Heatwave from 16 th to 23 rd . The mean minimum ranks 4 th highest in 140 years but the mean maximum is only 29 th highest. The lowest min is 2 nd highest in 118 years. The mean and lowest grass min are highest in the past 42 years. Rainfall rates reached 203 mm/hr on the 6 th and 126 mm/hr on the 28 th . Notably sunny 8 days to the 23 rd produced 114.7 hours of sunshine.	
August	Temperature and rainfall below average, sunshine well below average. Highest max is lowest since 1986 and the lowest min is highest since 2002. Only 69% of average sunshine, giving the 3 rd dullest August in 115 years, and dullest since 2008. Air pressure reached the highest August value in the past 46 years on the 31 st . Mean relative humidity at 15 GMT highest in past 24 years.	
September	Very warm with rainfall and sunshine slightly below average. 3 rd warmest September in this millennium, and 5 th warmest in 140 years. Highest max 6 th highest in 119 years and lowest min 10 th highest in same period. The mean amount of water vapour at 15 GMT is highest for the past 25 years.	
October	Mild with above average rainfall and average sunshine. Mean minimum 9 th highest in 140 years and the lowest min is 4 th highest in 118 years. Only the 6 th October in the past 100 years to have no ground frost. More than half the month's rain fell on just 3 days, the 2 nd , 19 th and 20 th giving 51.1 mm.	
November	Cool, sunny and very dry. Exceptionally dry, 5 th driest in 140 years and driest since 1956. Number of wet days is equal lowest with 1988 in the past 46 years.	
December	Very mild and very dull with rainfall slightly below average. Mean minimum ranks 7 th highest in the past 140 years. The highest max is 9 th highest in 118 years, and the lowest max is 5 th highest in 109 years, also the highest min is 6 th highest in the same period. Air frost duration 71 hours below average and 3 rd lowest in 41 years. Daily mean sunshine 36% below average and lowest since 2010.	
Year	<p>Temperature: This year has seen a slight check in the recent trend for increasing warmth, with the mean temperature equal lowest with 2016 since 2013. However, the mean maximum, mean minimum and daily mean are all exactly equal to the current (1991 to 2020) climatological average. In the longer perspective, though, the mean temperature is 0.9° above the 140 year median, illustrating the current warming trend. This year's highest max is 0.9° above the median, but is lowest since 2014, while the lowest max is 0.2° above its median and is lowest since only 2018. The highest min is 0.3° below the median and is lowest since 2012 while the lowest min is 2.7° above its median, is 8th highest in 118 years, but is 1.4° below the value for 2020, which hold the current record. The mean grass min is 2nd highest after 2020 since 2006, and the lowest value, while 3° below that of 2020, is 2.4° above the 42 year average. Earth temperature at 30 cm and 1 m depth were slightly above average. The number and duration of air frosts the most since 2013, but for ground frost it is only 2019.</p> <p>Rainfall: As with temperature, this year's rainfall total is very close to average, and in this millennium 20 years have been wetter and 21 drier. Compared with the long-term, 2021 rainfall is 24 mm above its median, and comparison with the climatological average shows a trend towards wetter years than has been normal since 1882. This year's highest daily fall is 5.1 mm above the median but is still within the normal category, and it is also only 2.4 mm above the average for the past 46 years. The number of days with very high rainfall rates (100 mm/hr or more), is 7 this year, the highest annual value in the past 15 years, and about twice the average of 3.2. There were 8 more dry days than average, but 6 fewer than in 2018 or 2011. The duration of measurable rain is lowest since 2016. Estimated soil moisture deficit peaked at 115 mm in mid September, quite a low value, lowest since 2008. Stress for shallow rooted plants was low this year, the stress index for spring and summer 2021, 47 and 146, can be compared with the average 72 and 648 respectively, and is lowest since 2012 for the summer index. The number of days with thunder is lowest since 2015, and the last year to exceed the average was 2014. Hail =>5 mm was absent this year, but there were 6 more days than average with small hail (includes other ice meteors), equal highest since 2008. Snow fell on 17 days, the most since 2013, but there were no days with significant depths. Sunshine: This has been a rather poor year sun-wise with the lowest daily mean value since 2004. Also, the number of days with nil sun is highest since 2013 and before that, 2002. Conversely, perhaps we should celebrate the 24 days with 12 or more hours sunshine, which is about average and lowest only since 2016. Wind: The overall mean wind speed in 2021 is equal lowest with 2019 and 2016 since 2010. There were no exceptional speeds this year, and the highest gust is 4 mph below average. As is usual, the vector mean direction was SW'ly, (233°). Compared with average, winds from NE and N combined were 5.3% more frequent, at the expense of W, down 2.9, and SE and S combined, down 3.0%. The duration of calm is close to average. Humidity: The overall mean was 80.6%, 1.6 % above average, and the mean water vapour content per kg of air was and exactly average 6.8 g at both 0900 and 1500 GMT.</p>	
	B.J.Burton. F.R.Met.S.	5 th January 2022



Appendix 4.

Summary of observations at 0900 GMT

Month	Monthly means								Visibility statistics							
	Vis	Cld	TT	Td	RH	WS	WG	pp	TF	FO	VP	PO	MO	GO	EX	
January	17.6	86	3.6	2.3	91	6.3	12	1011.6	0	1	7	9	3	7	4	
February	13.7	80	5.0	2.6	85	6.6	14	1014.9	2	2	2	7	9	6	0	
March	20.3	83	7.3	3.8	79	7.2	14	1022.8	0	1	2	8	11	4	5	
April	27.9	55	8.3	1.7	64	6.0	13	1023.9	0	0	0	6	10	7	7	
May	28.5	79	12.0	6.9	72	7.3	15	1010.8	0	0	1	3	12	6	9	
June	26.6	72	17.3	12.1	74	4.9	11	1018.8	0	0	2	5	7	8	8	
July	24.6	65	19.1	14.3	74	5.1	11	1014.8	0	0	0	6	12	7	6	
August	26.0	84	16.7	13.0	79	6.1	12	1017.5	0	0	1	3	11	12	4	
September	17.7	74	15.7	13.4	85	4.8	10	1018.8	0	1	4	10	6	6	3	
October	25.2	75	12.2	10.2	88	6.5	13	1015.0	2	0	3	6	6	7	7	
November	22.0	70	6.6	5.0	90	4.8	10	1018.6	0	0	5	5	7	8	5	
December	22.3	75	10.9	7.5	81	6.0	12	1016.7	1	0	6	5	9	6	4	
Year	22.3	75	10.9	7.5	81	6.0	12	1016.7	5	5	33	73	103	84	62	

Summary of observations at 1500 GMT

Month	Monthly means								Visibility statistics							
	Vis	Cld	TT	Td	RH	WS	WG	pp	TF	FO	VP	PO	MO	GO	EX	
January	25.5	83	5.6	2.9	83	7.1	15	1011.0	0	0	5	7	2	12	5	
February	25.1	76	7.9	2.3	69	8.1	17	1014.8	0	0	1	6	7	9	5	
March	30.4	67	11.1	3.4	61	8.1	17	1021.8	0	1	0	3	9	8	10	
April	35.0	61	12.2	0.5	46	6.8	16	1022.3	0	0	0	1	10	11	8	
May	30.5	77	14.3	6.5	61	8.7	18	1010.1	0	0	1	2	9	11	8	
June	33.8	75	20.6	12.6	62	6.0	13	1017.9	0	0	0	3	6	13	8	
July	34.8	67	22.4	13.9	61	6.6	15	1014.2	0	0	1	2	2	16	10	
August	35.6	74	19.9	12.8	65	7.1	16	1016.8	0	0	1	2	3	13	12	
September	34.6	66	20.6	13.1	64	6.0	14	1017.4	0	0	1	3	6	9	11	
October	36.2	72	15.1	10.2	73	6.9	16	1014.5	0	0	1	2	7	9	12	
November	31.1	79	9.7	5.7	77	6.1	14	1017.8	0	0	1	1	9	12	7	
December	20.5	83	8.6	5.7	83	7.0	15	1012.5	0	2	0	11	6	8	4	
Year	31.1	74	14.0	7.5	67	7.0	15	1015.9	0	3	12	43	76	131	100	

Legend: Vis = visibility in km. Cld = cloud amount %. TT = air temperature, deg C. Td = Dew point, deg C.

RH = relative humidity %. WS = wind speed at 10 metres, knots. WG = Highest gust in past hour, knots.

pp = Air pressure at MSL, mbar. TF = thick fog, <210 m. FO = fog, 210 to 900 m. VP = very poor, 1 to 4 km

PO = poor, 4.1 to 10 km. MO = moderate, 11 to 20 km. GO = good, 21 to 40 km. EX = excellent, >40 km.

Summary of monthly climatic data.

Year 2021

Month	Max C	Min C	Mean C	Anom C	Rain mm	Grass min	30cm C	100cm C	Sun hrs	Frost hrs	pp09 mbar	Af Gf	Sf Sl	Th Ha	Ic Fg	ddd	ff	sp	Rain hrs				
January	6.9	1.1	4.0	-1.1	86.8	-0.5	5.8	7.2	42.3	125.1	1011.6	16	18	3	3	0	0	2	1	250	2.4	6.1	81.4
February	9.2	2.0	5.6	+0.2	31.5	-0.2	5.9	6.7	84.5	133.7	1014.9	14	14	6	1	0	0	2	4	163	2.4	6.9	49.0
March	12.0	3.1	7.5	+0.1	29.4	0.0	7.5	7.7	109.8	20.9	1022.8	4	17	0	0	0	0	1	1	244	3.1	6.5	22.5
April	13.5	1.2	7.3	-2.4	15.8	-2.5	9.4	9.2	225.1	55.5	1023.9	13	22	4	1	0	0	2	0	20	2.3	4.8	16.6
May	16.2	6.2	11.2	-1.7	77.4	2.8	12.0	11.1	142.5	0.0	1010.8	0	10	0	0	3	0	5	0	222	3.7	6.4	62.7
June	21.9	11.9	16.9	+1.1	114.3	9.4	17.9	15.6	177.3	0.0	1018.8	0	0	0	0	0	0	0	0	315	0.9	4.5	60.5
July	23.7	13.9	18.8	+0.9	61.3	11.7	20.0	18.1	206.5	0.0	1014.8	0	0	0	0	3	0	1	0	230	1.5	4.8	40.2
August	21.4	12.5	17.0	-0.7	29.8	9.8	19.1	18.5	123.4	0.0	1017.5	0	0	0	0	1	0	0	0	241	1.7	5.3	22.1
September	21.6	11.6	16.6	+1.7	48.4	8.5	17.8	17.6	143.6	0.0	1018.8	0	0	0	0	0	0	0	1	212	1.2	4.4	21.6
October	16.3	8.7	12.5	+1.0	96.0	6.1	14.2	15.1	113.8	0.0	1015.0	0	0	0	0	0	0	0	1	213	4.1	5.8	48.4
November	10.9	3.3	7.1	-0.7	14.6	0.8	10.0	11.9	91.3	39.8	1018.6	7	16	2	0	0	0	0	0	262	3.0	5.0	18.9
December	9.6	4.8	7.2	+1.8	61.1	2.6	7.8	9.0	43.6	17.5	1013.0	4	10	2	0	1	0	2	1	227	3.1	6.3	64.5
Year	15.3	6.7	11.0	0.0	666.4	4.1	12.3	12.3	1503.7	392.5	1016.7	58	107	17	5	8	0	15	9	233	1.8	5.6	508.4

Legend: Max/min/mean = Monthly mean of daily maximum/minimum/mean air temperature at 1.2 metres.

Anom = Departure of mean temperature from climatic mean. Rain = monthly rainfall total.

Grass min = Mean grass minimum temperature. 30cm/100cm = Mean earth temperature at 30 and 100 cm depth.

Sun hrs = Hours of bright sunshine. Frost hrs = hours with air temperature below zero C. pp09 = Air pressure msl at 09 gmt.

Days with: Af = air frost. Gf = ground frost. Sf = snow falling. Sl = snow lying. Th = thunder. Ha = hail >5mm. Ic = small hail or ice.

Fg = Fog at 09 gmt. ddd ff = mean wind vector, degrees from true north, speed in knots. sp = mean scalar wind speed knots.

Rain hrs = duration of measurable rain (excludes snowfall).

Appendix 5.

Wokingham annual climatic data for recent years.

Year	Mean	Mean	Mean	Anom	Hi	Lo	Rain	Grass	30 cm	100 cm	Sun	Frost	pp09	Af	Sf	Th	Ic	Fg	ddd	ff	sp			
	max	min			max	min					mm	min		hrs	hrs							Gf	Sl	Ha
2010	14.2	5.3	9.7	-0.6	30.0	-11.5	536	2.2	11.1	11.6	1557	821	1014.5	81	142	37	25	8	1	11	12	267	1.0	5.3
2011	15.9	7.0	11.5	+0.8	28.6	-5.6	589	3.9	12.3	12.6	1639	194	1016.6	36	96	5	0	10	0	3	8	229	2.7	5.8
2012	14.8	6.1	10.5	-0.2	29.6	-11.4	807	3.0	11.7	12.0	1564	475	1015.3	57	125	12	6	9	3	6	12	235	2.5	5.8
2013	14.6	6.0	10.3	-0.4	32.9	-6.8	604	2.8	11.6	11.7	1523	445	1015.6	66	133	33	11	9	0	14	7	244	1.4	6.0
2014	16.0	7.1	11.6	+0.9	29.2	-6.5	883	4.0	12.9	12.8	1666	195	1012.8	33	99	0	0	23	3	15	6	221	2.7	5.7
2015	15.5	6.7	11.1	+0.4	33.9	-7.2	547	3.5	12.3	12.2	1598	202	1017.4	38	107	12	2	6	3	8	4	230	3.2	6.3
2016	15.4	6.6	11.0	+0.3	33.0	-6.4	688	3.2	12.4	12.6	1552	351	1016.2	52	127	4	0	14	5	12	13	231	2.2	5.6
2017	15.6	7.1	11.4	+0.7	33.4	-6.7	642	3.9	12.5	12.5	1587	331	1016.9	45	108	13	1	9	1	6	6	232	3.1	5.8
2018	16.3	6.9	11.6	+0.9	34.1	-8.3	606	3.5	12.5	12.5	1916	322	1015.4	40	106	15	6	9	0	10	2	225	1.6	5.8
2019	15.9	6.6	11.2	+0.5	36.8	-6.5	783	3.3	12.2	12.3	1792	248	1014.6	43	128	6	4	10	2	11	7	226	2.6	5.6
2020	16.4	7.1	11.8	+1.1	36.9	-3.7	723	4.3	12.6	12.5	1940	192	1015.0	37	95	4	0	9	1	8	11	226	2.8	6.3
2021	15.3	6.7	11.0	0.0	31.3	-5.1	666	4.1	12.3	12.3	1504	393	1016.7	58	107	17	5	8	0	15	9	233	1.8	5.6

Legend : See appendix 4.

Note: Anom is difference from the current 30 year average, up to 2020, this is 1981 to 2010, after 2020, 1991 to 2020

Wokingham area decadal annual means for the last century

See note1 below

Decade Ending	Mean max	Mean min	Mean	Anom	Mean rain	Anom	Mean sun	Anom
1900	14.0	5.3	9.7	-1.0	600	-51	xx	
1910	13.7	5.4	9.5	-1.2	631	-20	xx	
1920	14.0	5.6	9.8	-0.9	700	+49	1588	-23
1930	14.2	5.4	9.8	-0.9	636	-15	1599	-12
1940	14.4	5.7	10.0	-0.7	641	-10	1527	-84
1950	14.6	5.8	10.2	-0.5	616	-35	1572	-39
1960	14.1	5.8	10.0	-0.7	678	+27	1500	-111
1970	13.8	5.8	9.8	-0.9	686	+35	1487	-124
1980	14.1	5.8	9.9	-0.8	655	+4	1538	-73
1990	14.4	6.1	10.3	-0.4	639	-12	1554	-57
2000	14.9	6.6	10.8	+0.1	660	+9	1569	-42
2010	15.3	6.7	11.0	+0.3	654	+3	1611	0
2020	15.6	6.7	11.2	+0.5	682	+31	1678	+67

Extreme values from the Wokingham climatological series.

Highest annual mean maximum	16.4	in 2020
Lowest annual mean maximum	12.4	in 1888
Highest annual mean minimum	7.6	in 2006
Lowest annual mean minimum	3.9	in 1887
Highest annual mean temperature	11.8	in 2020
Lowest annual mean temperature	8.4	in 1887
Highest recorded temperature	36.9	on 10th Aug 2003 & 31st Jul 2020
Lowest recorded temperature	-15.3	on 14th January 1982
Wettest year	952 mm	in 1903
Driest year	337 mm	in 1921
Highest daily rainfall	71.6 mm	on 20th September 1980
Sunniest year	2020	with 1940 hours
Dullest year	1958	with 1274 hours
Most days with snow falling	40	in 1917
Most days with snow lying	53	in 1963

Anom = difference from current 1981 to 2010 climatological average.

Temperatures in degrees C, Rainfall in mm, Sunshine in hours.

Sunshine recorder changed in 1999

Top ten since 1882

Warmest			Coldest		Wettest		Driest		Sunniest		Dullest	
	Year	Deg C	Year	Deg C	Year	mm	Year	mm	Year	Mean	Year	Mean
1	2020	11.8	1892	8.5	1903	952	1921	337	2020	5.3	1958	3.5
2	2006	11.7	1888	8.7	1951	887	1990	459	2018	5.2	1932	3.7
3	2018	11.6	1887	8.7	2014	883	1902	477	2003	5.2	1968	3.7
4	2014	11.6	1891	8.7	2000	872	1887	487	1990	5.1	1981	3.7
5	2011	11.5	1963	8.8	1960	857	1947	491	1989	5.1	1912	3.8
6	2017	11.4	1919	8.9	2002	853	2005	492	1911	5.1	1931	3.8
7	2002	11.4	1962	8.9	1916	842	1996	508	1949	5.0	1936	3.8
8	1999	11.3	1917	9.0	1974	837	1933	509	1929	5.0	1960	3.8
9	1990	11.3	1890	9.0	1915	815	1898	510	1921	5.0	1966	3.8
10	1989	11.3	1922	9.1	1927	814	1938	511	1959	4.9	1993	3.8

Note1. Decadal means for the past century. The original data prior to 1970 have been updated, resulting in some slight changes in the decadal temperature means from data published in Annual Summaries up to and including 2014.

© Bernard Burton

January 2022