

# WOKINGHAM METEOROLOGICAL DATA

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

Altitude 45 m ASL.

Emmbrook,

Wokingham,

Berkshire.

Annual

Summary

2017

## Temperature

	°C	°F	Anom	Rank in 136 years
Mean maximum	15.6	60.1	(+0.7)	10th highest
Mean minimum	7.1	44.8	(+0.6)	3rd highest
Daily mean	11.4	52.5	(+0.7)	4th highest
Highest maximum	33.4	92.1		on 21st June
Lowest maximum	0.9	33.6		on 26th January
Highest minimum	16.9	62.4		on 22nd June
Lowest minimum	-6.7	19.9		on 22nd January
Mean grass minimum	3.9	39.0	(+0.5)	
Lowest grass minimum	-10.4	13.3		on 21st January
Mean 30cm earth temp.	12.5	54.5	(+0.7)	
Highest 30cm	21.5	70.7		on 22nd June
Lowest 30cm	2.3	36.1		on 27th January
Mean 100cm earth temp	12.5	54.5		
Highest 100cm	18.5	65.3		on 23rd July
Lowest 100cm	5.6	42.1		on 30th January
Warmest month	July,		daily mean 18.4°C,	65.1°F
Coollest month	January,		daily mean 3.4°C,	38.1°F

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

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

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	93	111
-10.0 to -5.1	0	3	15.0 to 19.9	104	16
-5.0 to -0.1	0	42	20.0 to 24.9	80	0
0.0 to 4.9	15	83	25.0 to 29.9	14	0
5.0 to 9.9	54	110	30.0 to 34.9	5	0

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

	Jan	Feb	Mar	Apr	May	Jun	
Air frost	20 (+10)	6 (-4)	0 (-7)	1 (-3)	0 (-1)	0 (0)	
Ground frost	21 (+4)	14 (-3)	11 (-5)	20 (+6)	3 (-2)	0 (-1)	
	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Air frost	0 (0)	0 (0)	0 (0)	1 (-1)	5 (-1)	12 (+1)	45 (-5)
Ground frost	0 (0)	0 (0)	1 (0)	2 (-5)	18 (+5)	18 (+2)	108 (0)

Date of: last spring air frost, 27th April ground frost, 10th May  
 first autumn air frost, 30th October ground frost, 22nd September  
 Frost free period, air 185 days, (-4) ground 133 days, (+11).  
 Annual total of air frost duration: 330.7 hours (-49.0)  
 Frostiest month January. 208.8 hours

[Difference from 1981-2010 average in brackets]

Temperature anomaly in deg C

**Rainfall.**

Total **642.4** mm 25.29 inches ( 99 % ) 67th highest in 136 years

Number of : Rain days 168 (+7) Wet days 109 (-4) Days => 5mm 41 (-4)

A rain day has at least 0.2 mm

A wet day has at least 1.0 mm

Highest daily fall to 9am: 35.0 mm on 18th July

Wettest month, July 118.0 mm 262 % of average  
Driest month, April 6.4 mm 13 % of average

Duration of measurable rainfall; 520.9 hours Longest in a day; 14.5 hours on January 15th  
Highest monthly duration; 88.5 hours in January Lowest ; 6.9 hours in April

Number of dry spells, (5 or more consecutive dry days): 11  
Longest dry spell; 15 days, 11th to 25th June  
Total number of : Dry days, 197 (-8) Days in dry spells, 88

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

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

(See note 2, page 4)

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

Rate mm/hr	Days	Rate mm/hr	Days
<10	137	50 to 100	5
10 to 25	23	100 to 250	4
25 to 50	14	>250	0
		Missing *	0
Highest rate	227 mm/hr on 18th August		

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

Hours	Days	Hours	Days	Hours	Days
0	169	6.1 to 9.0	18	18.1 to 21.0	0
0.1 to 1.0	83	9.1 to 12.0	9	21.1 to 24.0	0
1.1 to 3.0	59	12.1 to 15.0	3	Missing *	0
3.1 to 6.0	24	15.1 to 18.0	0	*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	197	10.0 to 19.9	12
0.2 to 0.9	59	20.0 to 29.9	2
1.0 to 4.9	68	30.0 to 39.9	2
5.0 to 9.9	25	> 39.9	0

**Sunshine.**

(Recorded on an electronic sunshine detector)

Total **1586.5** hours Daily mean **4.35** hours ( 101 % )

Sunniest day 15.4 hours on the 26th May  
Number of days: Nil sun 54 (-3) =>12 hrs 24

**Weather.**

Number of days with:

Snow or sleet falling; 13 (-1)  
Snow lying at 0900 GMT; 1 (-5)  
Thunder heard; 9 (-7)  
Hail; 7 (-5) =>5mm; 1 (-2) <5mm, 6 (-3)  
Fog at 0900 GMT; 6 (-5)

**Air Pressure,**

corrected to MSL.

Mean at 0900 GMT **1016.9** mbar (+0.9)  
Absolute highest 1040.0 mbar on 18th January  
Absolute lowest 971.9 mbar on 10th December  
Span 68.1 mbar (-1.6)

[Difference from 1981-2010 average in brackets]

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

Month	Mean speed mph	Windiest day		Highest gust		Calm 0.5 mph or less hours
		mph	Date	mph	Date/time (GMT)	
January	5.1	11.2	13th	38	13/1319	27.9
February	8.2	18.2	23rd	63	23/1629	2.6
March	8.3	13.4	19th	40	19/1510	2.5
April	5.6	8.3	30th	31	26/1503	16.1
May	6.1	9.3	5th	32	5/1221	7.1
June	7.4	15.1	6th	51	6/1754	8.4
July	6.6	11.3	28th	32	28/1757	6.1
August	5.8	12.6	3rd	41	18/1332	14.5
September	6.0	13.8	13th	59	13/0248	9.9
October	7.4	14.2	21st	41	21/1307	9.1
November	6.3	15.9	22nd	50	22/2158	11.1
December	7.7	13.7	31st	45	27/0750	1.9
Year	6.7	18.2	23rd February	63	23rd February	117.2

**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	33	44	84	46	48	55	43	135	106	70	52	28
February	19	74	69	4	23	38	64	131	169	47	17	17
March	2	27	103	10	10	54	67	150	187	81	35	18
April	84	47	26	18	16	17	33	102	91	89	102	95
May	49	144	103	54	26	17	60	148	75	49	11	8
June	23	39	46	24	8	15	45	157	201	117	19	26
July	46	39	41	15	13	17	74	158	182	90	35	34
August	66	22	19	17	12	17	64	203	185	81	20	38
September	39	25	25	16	20	54	82	162	162	67	31	37
October	19	21	15	6	6	22	55	245	215	74	41	25
November	25	11	6	4	4	12	60	158	218	65	68	89
December	21	13	9	7	5	11	36	178	269	95	50	50
Year	426	506	546	221	191	329	683	1927	2060	925	481	465

## Appendix 1.

**Monthly statistics from the electronic sunshine detector, 2017.**

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	89.3	8.1 on 20th	12	5	5	9	0	0
February	55.3	8.8 on 13th	7	11	7	3	0	0
March	123.5	12.0 on 25th	4	9	8	7	2	1
April	183.2	12.8 on 8th	2	7	9	1	5	6
May	161.2	15.4 on 26th	4	7	10	2	4	4
June	207.8	14.2 on 14th	1	9	4	4	5	7
July	183.4	15.2 on 5th	1	7	10	4	6	3
August	188.2	12.9 on 28th	3	6	4	9	6	3
September	132.7	10.5 on 2nd	1	12	8	6	3	0
October	98.5	9.2 on 27th	5	11	7	7	1	0
November	98.9	8.6 on 6th	2	14	7	7	0	0
December	64.5	7.3 on 18th	12	7	10	2	0	0
Year	1586.5	15.4	54	105	89	61	32	24

## Appendix 2.

**Monthly categories, quick look table, 2017.**

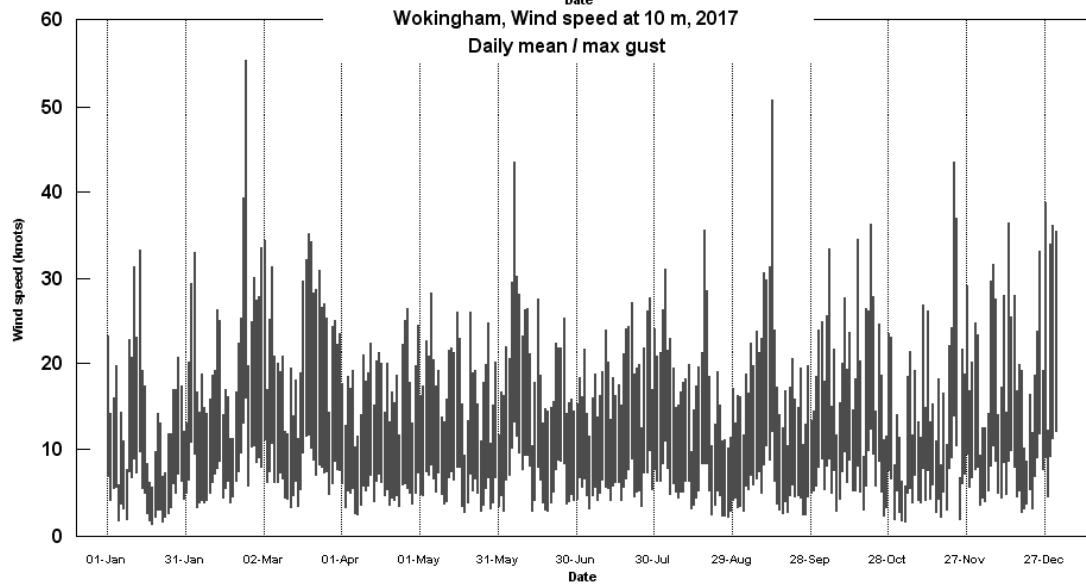
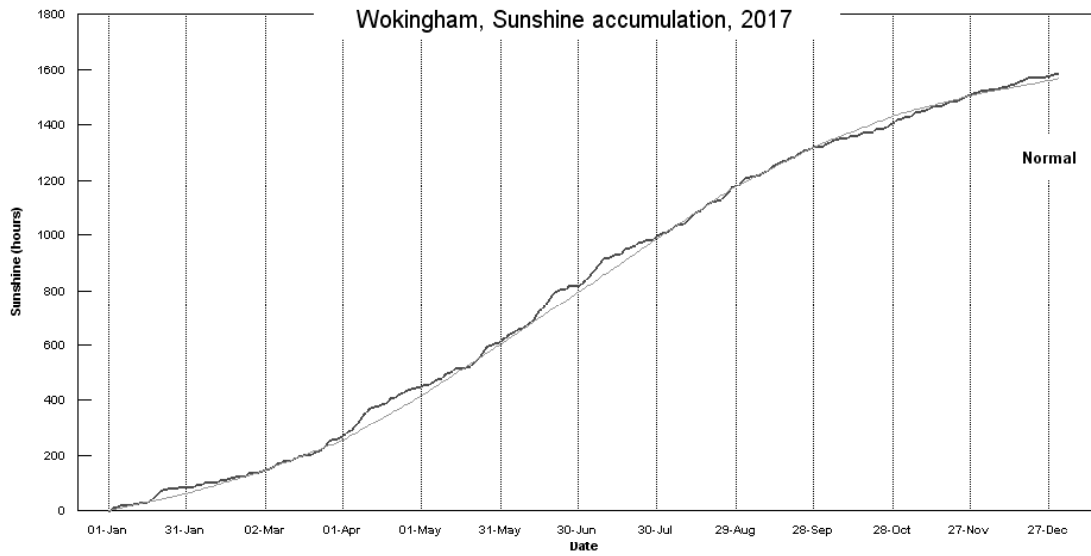
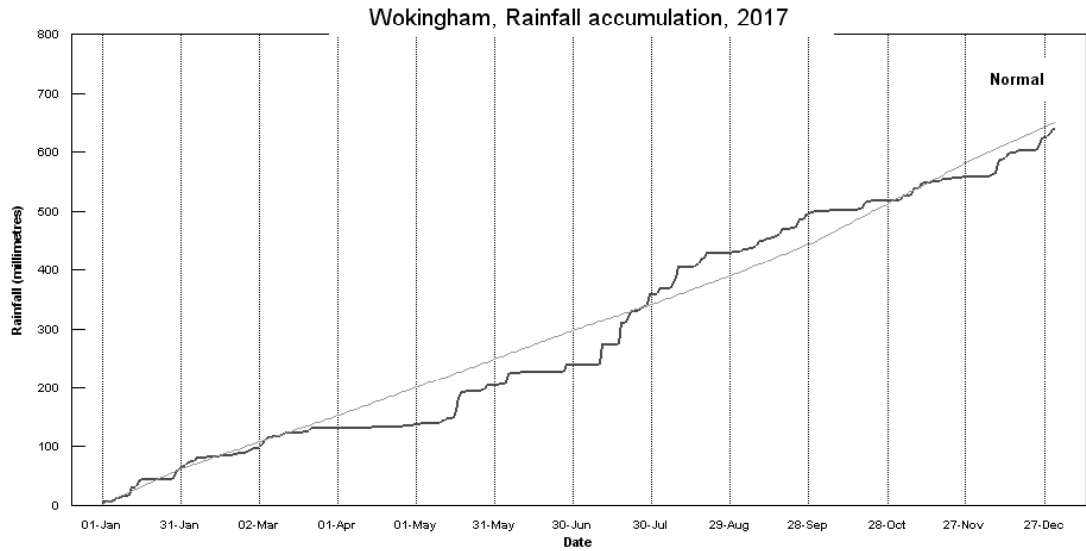
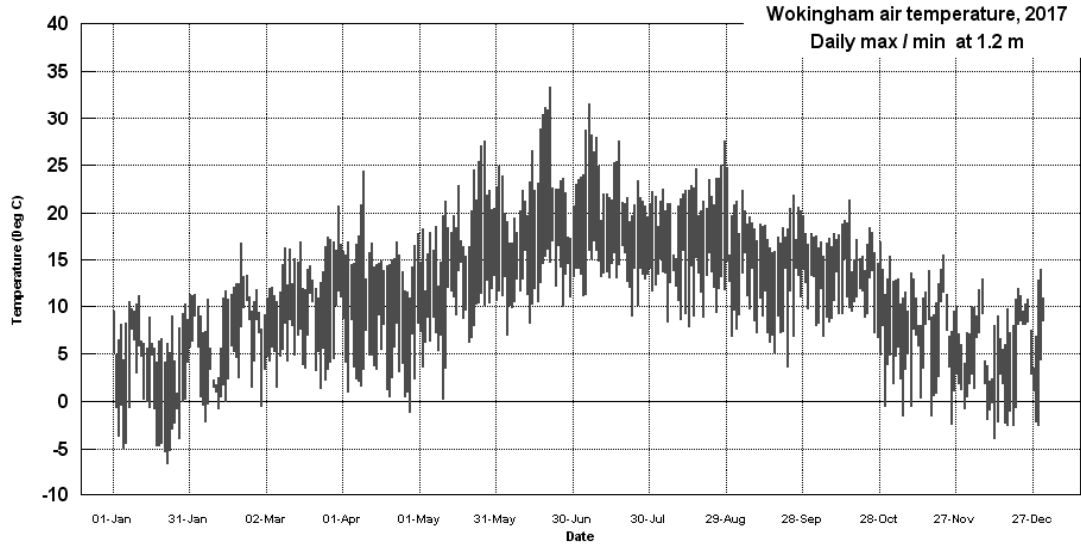
Month	Temperature Category	Rainfall Category	Sunshine Category	Index	(see note 1)
January	2 Cool	3 Normal	5 Very sunny	10	
February	4 Mild	3 Normal	2 Dull	9	
March	5 Very mild	3 Normal	3 Normal	11	
April	4 Mild	5 Very dry	4 Sunny	13	
May	5 Very mild	2 Wet	2 Dull	9	
June	5 Very mild	3 Normal	3 Normal	11	
July	4 Mild	1 Very wet	3 Normal	8	
August	3 Normal	2 Wet	3 Normal	8	
September	3 Normal	2 Wet	3 Normal	8	
October	5 Very mild	5 Very dry	3 Normal	13	
November	3 Normal	4 Dry	5 Very sunny	12	
December	3 Normal	2 Wet	4 Sunny	9	

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.

## Annual Summary 2017

Appendix 3	page5
	<b>Summary of notable features during 2017.</b>
<b>January</b>	Cold and sunny with rainfall above average. Coldest since 2010. Mean daily temp. range equal highest with 2010 in past 42 years. Mean grass min equal lowest with 2010 since 1997. 9 more air frosts than average, and equal highest with 1997 since 1985. Air frost duration most since 2010. Mean wind speed lowest for January since before 1988.
<b>February</b>	Mild and dull with below average rainfall and very windy at times. Highest max 6 <sup>th</sup> highest in 114 years. Highest min 5 <sup>th</sup> highest in 105 years and lowest min 7 <sup>th</sup> highest in 114 years. Despite only 75 % of average rainfall there were 3 fewer dry days than average. Dullest since 2011 and before that 1991. Very windy late in month with 63 mph gust on 23 <sup>rd</sup> .
<b>March</b>	Exceptionally mild with rainfall below and sunshine above average. Mean temp. a new record high. Lowest max 5 <sup>th</sup> highest and highest min 3 <sup>rd</sup> highest in 105 years. Lowest min a new record high for the past 114 years. Lowest grass min and 30 cm earth temp. highest since before 1980. First March since before 1956 to have no air frost. Windiest since 2008.
<b>April</b>	Mild, sunny and very dry. Highest max 7 <sup>th</sup> highest in 114 years. Lowest max 6 <sup>th</sup> highest in 105 years. Mean grass min lowest since 1990. The lowest earth temp. at both 30cm and 1 m depth are highest on record. Most ground frosts since 1984. Only 3 drier Aprils in the past 42 years. The month's highest daily rainfall is 6 <sup>th</sup> lowest in 114 years. Least windy since 2009.
<b>May</b>	Wet and dull but very mild with a hot spell. Only 3 milder Mays since 1976, and 5 <sup>th</sup> mildest in 136 years. Wettest since 2008. Dullest since 2006.
<b>June</b>	Near record warmth and a heatwave. Sunshine above and rainfall below average. The hottest June since 1976, mean temp. 2 <sup>nd</sup> highest in 136 years, and a new record highest mean min. Highest max is 2 <sup>nd</sup> highest in 114 years. Lowest max 8 <sup>th</sup> highest and highest min 6 <sup>th</sup> highest in 105 years. The lowest min is 9 <sup>th</sup> highest in 114 years. Mean grass min and 30 cm earth temp. highest since before 1980. Wind gust of 51 mph on 6 <sup>th</sup> strongest for any June day since before 1988.
<b>July</b>	Warm, especially by night and very wet with below average sunshine. Mean min 4 <sup>th</sup> highest in 136 years. Lowest min 7 <sup>th</sup> highest in 114 years. Mean earth temp. at 1 m depth a new record high. 9 <sup>th</sup> wettest in 136 years. Highest daily fall 8 <sup>th</sup> highest in 114 years. Heavy thunderstorm on 18 <sup>th</sup> gave 29.6 mm of rain in 2 hours.
<b>August</b>	Wet with below average temperature and near average sunshine. Rainfall rate of 227 mm/hr on 18 <sup>th</sup> in a thunderstorm with hail. Wind speed on the windiest day and the month's highest gust equal highest with 2016 since 1992.
<b>September</b>	Cooler, wetter and duller than average. 2 <sup>nd</sup> wettest after 2016 since 2000. Highest number of wet days since 1974. Both the month's highest gust and highest hourly mean speed are new record highs for the month.
<b>October</b>	Very mild and very dry with sunshine well below average. Mean temp. 10 <sup>th</sup> highest, and mean min 7 <sup>th</sup> highest in past 136 years. 9 <sup>th</sup> driest in 136 years, and driest since 1978. Mean wind speed 2 <sup>nd</sup> highest after 2013 since 1998.
<b>November</b>	Dry and very sunny. Cooler than average Driest since 2004. Sunshine 27 hours above average and most since 2007. Number of sunless days lowest since before 1979. 22 <sup>nd</sup> was the windiest November day since 1996.
<b>December</b>	Wet with near average temperature and above average sunshine. Wettest since 2013, 6 days with snowfall, the most for December since 2010. Pressure fell to 971.9 mbar on 10 <sup>th</sup> , the lowest for the month since 1989.
<b>Year</b>	<p><b>Temperature:</b> Yet another very mild year overall, the mean temperature ranking 4<sup>th</sup> highest in 136 years, exceeded only by 2014, 2011 and 2006, and mean minimum 3<sup>rd</sup> highest. The mean maximum though ranks only 10<sup>th</sup> highest, 0.5° below the record set in 2003. It is worth noting that before 1989 an annual mean of 11° or more only appears once in the data since 1882, but since 1989, this temperature has been reached 19 times, and the record currently stands at 11.7°. The highest max is 3.0° above the median and the lowest max is 1.3° above its median. The highest min is 0.2° below the median while the lowest min is 1.1° above its median. The mean grass min is 0.5° above average, but the lowest grass min is equal highest with 2 other years since 1998. Earth temp. at 30 cm depth is 0.7° above average and at 1 m depth depth the anomaly is +0.3°. The number of air frosts is 5 below average, but both 2014 and 2015 had fewer. The number of ground frosts is close to average. Air frost duration is 87% of average.</p> <p><b>Rainfall:</b> The total this year is 15 mm below the average for the past 42 years, and within 1 % of the climatological average. In this millennium there have been 10 wetter years and 7 drier. In the longer-term, 1903 holds the record with 952.6 mm, 309.2 mm more than this year's, and 1921 with 337.0 mm is the driest, 305.4 mm less than this year's. The wettest day was the 18<sup>th</sup> July, 35.0 mm, a value close to normal, and the number of days with =&gt;10 mm is also exactly average. There were 7 fewer dry days than average, but also 4 fewer wet days. The duration of measurable rain is 5.7 hours, or about 1 %, above average. There were 6 fewer days with thunder than average, and also 5 fewer with hail. Snow was observed on 13 days, 2 fewer than average, but most since 2013, when there were 33. Lying snow at 09 hours was only seen on 1 day, compared with 6 on average, although 9 years since 1976 have had none. Rainfall rate exceeded the violent shower category (50 mm/hr) on 9 occasions, and reached a maximum of 227 mm/hr on the 18<sup>th</sup> August. Estimated soil moisture deficit reached a maximum of 160 mm on the 9<sup>th</sup> July, and returned to field capacity in mid December. An index of severe stress in unirrigated shallow rooted plants was 112 in spring (average 66), and 384 in summer, (average 638).</p> <p><b>Sunshine:</b> The total this year is about 1 % above the climatological average. However, in 1999 there was a change of sunshine sensor which may have affected the statistics. The average daily mean for the period 1999 to 2017 is 4.36 hours, compared with the 30 year climatological average of 4.29 hours, and this year's 4.35 hours is very close to the former figure. The sunniest day was on the 26<sup>th</sup> May when 15.4 hours was recorded. While not unknown to have the sunniest day in May, a more usual month would be June, and in the past 37 years there have been only 7 in May and 21 in June. Outstandingly sunny periods were 10 days to the 11<sup>th</sup> April, daily mean 9.9 hours, despite one sunless day, also the 8 days to the 21<sup>st</sup> June, mean 12.8 hours per day, and the 6 days to the 10<sup>th</sup> July, mean 11.5 hours per day. At the other extreme, the 10 days to the 3<sup>rd</sup> February had only 5.8 hours, 4.3 of which were on one day, closely followed by 5 sunless days to the 12<sup>th</sup>. The 5 days to the 6<sup>th</sup> December had a total of only 0.3 hours, and the 6 days to the 25<sup>th</sup> were sunless.</p> <p><b>Wind:</b> The mean wind speed this year, 6.7 mph, is close to average. The windiest month was March, mean 8.3 mph, and the least windy was January, 5.1 mph. The windiest day was the 23<sup>rd</sup> February, mean speed 18.1 mph, and the year's highest gust of 63 mph was also on that day. The least windy day was the 18<sup>th</sup> January, 1.5 mph, and it was calm for 7023 minutes, the calmest month being January with 1674 minutes, and the least calm was December with 112 minutes. This has been a predominantly SW'ly year, with winds from SW and W combined being 11.5 % more frequent, at the expense of all other directions, but mainly those of N, NE and E combined, 9.5 % less frequent.</p> <p><b>Humidity:</b> The overall mean relative humidity this year was 80.6 % and the lowest value recorded was 25 % on the 25<sup>th</sup> March. The mean water vapour content per kg of air was 6.9 g at 0900 hours and 6.8 g at 1500 hours.</p> <p style="text-align: right;">B.J.Burton. F.R.Met.S. 6<sup>th</sup> January 2018.</p>



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	16.4	73	2.2	1.2	94	4.2	8	1023.9	1	2	10	5	4	6	3
February	12.2	83	6.1	4.6	91	6.3	13	1014.2	0	0	9	8	6	4	1
March	18.6	88	9.1	6.4	84	7.3	15	1015.1	0	0	5	9	5	11	1
April	31.2	67	10.6	4.3	66	5.7	12	1023.5	0	0	0	4	6	11	9
May	24.7	76	14.9	9.8	72	6.1	13	1016.9	0	0	0	6	11	9	5
June	37.1	69	18.5	11.9	63	7.1	14	1013.7	0	0	0	2	4	13	11
July	32.5	73	18.5	12.8	71	6.8	14	1014.5	0	0	0	6	4	14	7
August	30.8	72	17.4	12.7	75	5.6	11	1016.7	0	0	0	3	8	14	6
September	24.6	66	14.8	11.7	82	6.0	12	1014.0	0	0	3	3	12	6	6
October	25.3	77	13.2	10.3	83	7.1	15	1018.9	0	0	3	2	13	8	5
November	24.5	65	6.9	5.0	88	5.6	11	1016.8	1	1	4	3	7	8	6
December	20.6	76	4.8	3.2	90	6.7	14	1013.9	0	1	5	5	9	7	4
Year	24.9	74	11.4	7.8	80	6.2	13	1016.9	2	4	39	56	89	111	64

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	15.2	70	6.0	2.5	79	5.5	12	1022.6	0	0	4	10	8	9	0
February	18.7	83	8.3	4.6	78	8.6	18	1013.1	0	0	5	8	4	9	2
March	33.0	83	13.0	5.5	62	9.3	19	1014.3	0	0	0	4	7	11	9
April	37.8	65	14.3	4.1	51	6.8	15	1021.8	0	0	0	1	6	11	12
May	32.6	74	17.5	9.5	61	7.2	16	1016.2	0	0	0	3	9	10	9
June	40.8	75	21.7	11.7	55	8.7	18	1012.9	0	0	0	0	3	16	11
July	41.9	75	21.6	12.3	58	7.5	17	1013.7	0	0	0	1	4	11	15
August	41.0	73	20.0	12.0	62	6.5	15	1016.1	0	0	2	1	1	11	16
September	30.3	75	17.2	11.1	69	6.6	16	1013.0	0	0	1	5	5	11	8
October	32.7	78	15.2	9.9	72	7.5	16	1018.3	0	0	1	1	8	11	10
November	31.7	74	9.6	4.8	73	6.3	14	1016.4	0	0	3	3	2	14	8
December	32.4	81	7.0	3.8	81	7.7	17	1013.7	0	0	0	3	10	9	9
Year	32.4	75	14.3	7.7	67	7.3	16	1016.0	0	0	16	40	67	133	109

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 2017

Month	Max	Min	Mean	Anom	Rain	Grass	30cm	100cm	Sun	Frost	pp09	Af	Sf	Th	Ic	Rain							
	C	C	C	C	mm	min	C	C	hrs	hrs	mbar	Gf	Sl	Ha	Ic	Fg	ddd	ff	sp	hrs			
January	7.3	-0.4	3.4	-1.4	65.9	-3.3	4.3	7.1	89.3	208.8	1023.9	20	21	3	0	0	0	1	3	227	1.5	4.4	88.5
February	9.6	3.6	6.6	+1.7	32.3	0.7	6.3	6.8	55.3	10.7	1014.2	6	14	4	0	0	0	1	0	220	3.1	7.1	44.4
March	13.9	5.8	9.8	+2.6	35.3	2.3	9.0	8.6	123.5	0.0	1015.1	0	11	0	0	1	0	1	0	224	3.6	7.2	33.1
April	15.4	4.1	9.7	+0.5	6.4	-1.0	11.3	10.4	183.2	3.8	1023.5	1	20	0	0	0	0	1	0	282	2.1	4.9	6.9
May	19.3	8.9	14.1	+1.6	66.2	5.0	14.1	12.0	161.2	0.0	1016.9	0	3	0	0	3	0	0	0	155	0.5	5.3	49.8
June	22.8	12.4	17.6	+2.4	35.5	9.7	18.7	15.9	207.8	0.0	1013.7	0	0	0	0	0	0	0	0	231	4.3	6.4	26.1
July	23.2	13.6	18.4	+0.7	118.0	10.4	19.8	18.1	183.4	0.0	1014.5	0	0	0	0	2	0	0	0	232	3.2	5.7	45.2
August	21.4	12.0	16.7	-0.8	73.1	9.2	18.9	17.8	188.2	0.0	1016.7	0	0	0	0	2	1	0	0	232	3.2	5.0	43.1
September	18.6	9.8	14.2	-0.5	69.7	6.6	16.6	16.7	132.7	0.0	1014.0	0	1	0	0	1	0	1	0	221	3.3	5.2	53.0
October	16.5	9.5	13.0	+1.8	17.2	6.6	14.6	15.3	98.5	3.2	1018.9	1	2	0	0	0	0	0	0	228	5.0	6.4	17.2
November	10.6	3.4	7.0	-0.5	40.2	0.0	10.0	12.4	98.9	31.6	1016.8	5	18	0	0	0	0	0	2	245	3.7	5.5	41.0
December	8.4	2.2	5.3	+0.3	82.6	-0.4	6.5	9.1	64.5	72.6	1013.9	12	18	6	1	0	0	1	1	240	4.6	6.7	72.6
Year	15.6	7.1	11.4	+0.7	642.4	3.9	12.5	12.5	1586.5	330.7	1016.9	45	108	13	1	9	1	6	6	232	3.1	5.8	520.9

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 max	Mean min	Mean	Anom	Hi max	Lo min	Rain mm	Grass min	30 cm	100 cm	Sun hrs	Frost hrs	pp09	Af	Sf Gf	Th Sl	Ic Ha	Fg	ddd	ff	sp			
2006	15.9	7.6	11.7	+1.4	35.8	-6.7	665	4.7	12.2	12.3	1648	377	1016.0	45	82	17	1	20	4	12	10	232	2.2	5.8
2007	15.6	6.9	11.2	+0.9	28.4	-7.1	745	3.8	12.3	12.7	1684	295	1017.2	41	100	9	3	13	3	5	3	248	2.3	5.7
2008	15.1	6.5	10.8	+0.5	28.7	-7.0	717	3.5	11.9	12.2	1582	304	1014.8	46	114	12	2	22	5	18	7	236	2.6	6.1
2009	15.3	6.5	10.9	+0.6	31.0	-8.6	643	3.3	11.8	11.9	1677	455	1014.2	54	101	19	17	14	0	8	7	241	0.5	5.6
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

Legend : See appendix 4.

Note: Anom is difference from the current 30 year average, up to 2010, this is 1971 to 2000, after 2010, 1981 to 2010

**Wokingham area decadal annual means for the last century**

See note 1 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	+21
1930	14.2	5.4	9.8	-0.9	636	-15	1599	+32
1940	14.4	5.7	10.0	-0.7	641	-10	1527	-40
1950	14.6	5.8	10.2	-0.5	616	-35	1572	+5
1960	14.1	5.8	10.0	-0.7	678	+27	1500	-67
1970	13.8	5.8	9.8	-0.9	686	+35	1487	-80
1980	14.1	5.8	9.9	-0.8	655	+4	1538	-29
1990	14.4	6.1	10.3	-0.4	639	-12	1554	-13
2000	14.9	6.6	10.8	+0.1	660	+9	1569	+2
2010	15.3	6.7	11.0	+0.3	654	+3	1611	+44

Anom = difference from current 1981 to 2010 climatological average.

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

**Extreme values from the Wokingham climatological series.**

Highest annual mean maximum	16.1	in 2003
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	11.7	in 2006
Lowest annual mean temperature	8.4	in 1887
Highest recorded temperature	36.9	on 10th August 2003
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	2003	with 1906 hours
Dullest year	1958	with 1274 hours
Most days with snow falling	40	in 1917
Most days with snow lying	53	in 1963

**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	2006	11.7	1892	8.5	1903	952	1921	337	2003	5.2	1958	3.5
2	2014	11.6	1888	8.7	1951	887	1990	459	1990	5.1	1932	3.7
3	2011	11.5	1887	8.7	2014	883	1902	477	1989	5.1	1968	3.7
4	<b>2017</b>	<b>11.4</b>	1891	8.7	2000	872	1887	487	1911	5.1	1981	3.7
5	2002	11.4	1963	8.8	1960	857	1947	491	1949	5.0	1912	3.8
6	1999	11.3	1919	8.9	2002	853	2005	492	1929	5.0	1931	3.8
7	1990	11.3	1962	8.9	1916	842	1996	508	1921	5.0	1936	3.8
8	1989	11.3	1917	9.0	1974	837	1933	509	1959	4.9	1960	3.8
9	2007	11.2	1890	9.0	1915	815	1898	510	1933	4.9	1966	3.8
10	2004	11.2	1922	9.1	1927	814	1938	511	1995	4.8	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 2018