

# WOKINGHAM METEOROLOGICAL DATA

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

Altitude 45 m ASL. Emmbrook, Wokingham, Berkshire.

## Annual Summary 2013

### Temperature

	°C	°F	Anom	Rank in 132 years
Mean maximum	14.6	58.3	(-0.3)	41st highest
Mean minimum	6.0	42.8	(-0.5)	34th highest
Daily mean	10.3	50.5	(-0.4)	34th highest
Highest maximum	32.9	91.2		on 1st August
Lowest maximum	-0.3	31.5		on 16th January
Highest minimum	18.1	64.6		on 23rd July
Lowest minimum	-6.8	19.8		on 22nd January
Mean grass minimum	2.8	37.0	(-0.6)	
Lowest grass minimum	-12.0	10.4		on 31st March
Mean 30cm earth temp.	11.6	52.9	(-0.2)	
Highest 30cm	21.3	70.3		on 23rd July
Lowest 30cm	3.9	39.0		on 26th January
Mean 100cm earth temp	11.7	53.1		
Highest 100cm	18.2	64.8		on 30th July
Lowest 100cm	5.8	42.4		on 1st March
Warmest month	July,		daily mean 19.6°C,	67.3°F
Coollest month	February,		daily mean 3.3°C,	37.9°F

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

Category	Month
1. Very cool	Mar
2. Cool	Feb, May
3. Normal	Jan, Apr, Jun, Sep, Nov
4. Warm	Dec
5. Very warm	Jul, Aug, 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	85	77
-10.0 to - 5.1	0	3	15.0 to 19.9	87	18
-5.0 to -0.1	3	63	20.0 to 24.9	54	0
0.0 to 4.9	27	94	25.0 to 29.9	28	0
5.0 to 9.9	76	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	14 (+4)	13 (+3)	17 (+10)	9 (+5)	0 (-1)	0 (0)	
Ground frost	21 (+4)	21 (+4)	23 (+7)	17 (+3)	9 (+4)	2 (+1)	
	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Air frost	0 (0)	0 (0)	0 (0)	0 (-2)	7 (+1)	6 (-5)	66 (+17)
Ground frost	0 (0)	0 (0)	1 (-1)	4 (-3)	15 (+2)	20 (+4)	133 (+25)

Date of: last spring air frost, 28th April ground frost, 10th June  
 first autumn air frost, 13th November ground frost, 15th September  
 Frost free period, air 197 days, ground 96 days.  
 Annual total of air frost duration: 444.7 hours (+49.8)  
 Frostiest month January, 151.1 hours

[Difference from 1981-2010 average in brackets]

Temperature anomaly in deg C

**Rainfall.**

Total **603.5** mm 23.76 inches (93 %) 47th lowest in 132 years

Number of : Rain days 155 (-5) Wet days 108 (-5) Days => 5mm 40 (-5)

A rain day has at least 0.2 mm

A wet day has at least 1.0 mm

Highest daily fall to 9am: 28.1 mm on 23rd December

Wettest month, December 104.8 mm 167 % of average  
Driest month, June 17.4 mm 35 % of average

Duration of measurable rainfall; 584.0 hours Longest in a day; 20.7 hours on 10th February  
Highest monthly duration; 86.4 hours in January Lowest ; 11.3 hours in July

Number of dry spells, (5 or more consecutive dry days): 17  
Longest dry spell; 20 days, 3rd to the 22nd July  
Total number of : Dry days, 210 (+5) Days in dry spells, 133

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

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

(See note 2, page 4)

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

Rate mm/hr	Days	Rate mm/hr	Days
<10	119	50 to 100	6
10 to 25	22	100 to 250	3
25 to 50	10	>250	0
		Missing *	9
Highest rate	133 mm/hr on the 22nd October		

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

Hours	Days	Hours	Days	Hours	Days
0	178	6.1 to 9.0	12	18.1 to 21.0	2
0.1 to 1.0	66	9.1 to 12.0	8	21.1 to 24.0	0
1.1 to 3.0	57	12.1 to 15.0	3	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	210	10.0 to 19.9	11
0.2 to 0.9	47	20.0 to 29.9	3
1.0 to 4.9	68	30.0 to 39.9	0
5.0 to 9.9	26	> 39.9	0

**Sunshine.**

(Recorded on an electronic sunshine detector)

Total **1523.5** hours Daily mean **4.17** hours (97 %)

Sunniest day 15.4 hours on the 4th June  
Number of days: Nil sun 66 (+9) =>12 hrs 29

**Weather.**

Number of days with:

Snow or sleet falling; 33 (+19)  
Snow lying at 0900 GMT; 11 (+5)  
Thunder heard; 9 (-7)  
Hail; 14 (+1) =>5mm; 0 (-3) <5mm, 14 (+5)  
Fog at 0900 GMT; 12 (0)

**Air Pressure,**

corrected to MSL.

Mean at 0900 GMT **1015.6** mabr (-0.4)  
Absolute highest 1040.8 mbar on 26th November  
Absolute lowest 974.0 mbar on 24th December

[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	7.6	15.4	30th	51	30/1506	6.2
February	7.7	13.8	5th	41	6/1243	9.1
March	7.5	16.6	11th	48	11/1303	8.3
April	8.6	15.7	18th	45	18/1249	6.2
May	7.0	13.9	9th	43	9/1325	9.4
June	6.9	12.3	22nd	40	13/1450	5.9
July	5.6	9.8	28th	31	29/1255	10.1
August	6.0	9.6	17th	32	17/1712	12.3
September	5.0	9.6	16th	37	16/1315	17.3
October	7.6	13.6	11th	64	28/0614	7.3
November	6.0	10.4	2nd	40	2/1912	12.3
December	7.9	16.5	23rd	56	23/2319	9.5
Year	6.9	16.6	11th March	64	28th October	113.9

**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	37	68	90	55	19	17	39	121	151	103	17	27
February	59	153	66	55	30	14	38	34	62	74	49	38
March	47	173	284	94	14	9	14	47	15	7	7	33
April	42	100	125	35	11	23	34	123	141	53	20	13
May	93	68	31	15	18	15	39	110	134	93	42	86
June	33	150	78	20	8	9	23	109	115	73	43	59
July	28	142	106	34	7	14	43	183	99	51	10	27
August	38	47	20	14	23	18	52	235	106	101	63	27
September	35	34	89	53	9	16	56	130	93	93	75	37
October	11	34	15	50	30	42	63	215	162	57	35	30
November	134	41	11	7	2	7	28	127	142	64	72	85
December	10	20	49	13	11	7	84	283	211	28	15	13
Year	567	1030	964	445	182	191	513	1717	1431	797	448	475

## Appendix 1.

**Monthly statistics from the electronic sunshine detector, 2013.**

Note:

Month	Total hours	Highest daily, hrs/date	Number of days with:					
			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	35.7	6.8 on 1st	16	9	5	1	0	0
February	72.2	9.7 on 18th	10	8	6	2	2	0
March	63.1	10.1 on 5th	13	9	4	3	2	0
April	162.3	13.5 on 20th	2	7	9	6	2	4
May	175.1	14.4 on 2nd	3	9	6	5	4	4
June	160.8	15.4 on 4th	1	12	7	2	2	6
July	285.7	15.3 on 9th&19th	0	4	4	6	6	11
August	195.0	13.7 on 1st	0	6	10	7	6	2
September	118.6	13.1 on 2nd	2	13	10	2	1	2
October	98.3	10.4 on 6th	3	12	10	5	1	0
November	89.4	8.0 on 10th	7	10	6	7	0	0
December	67.3	6.8 on 29th	9	0	12	6	4	0
Year	1523.5	15.4	66	99	89	52	30	29

## Appendix 2.

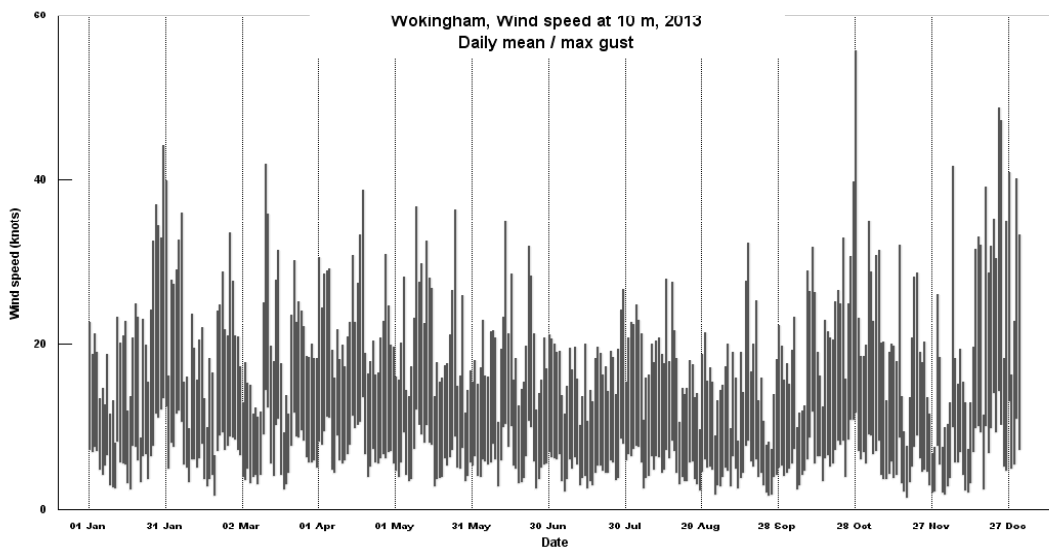
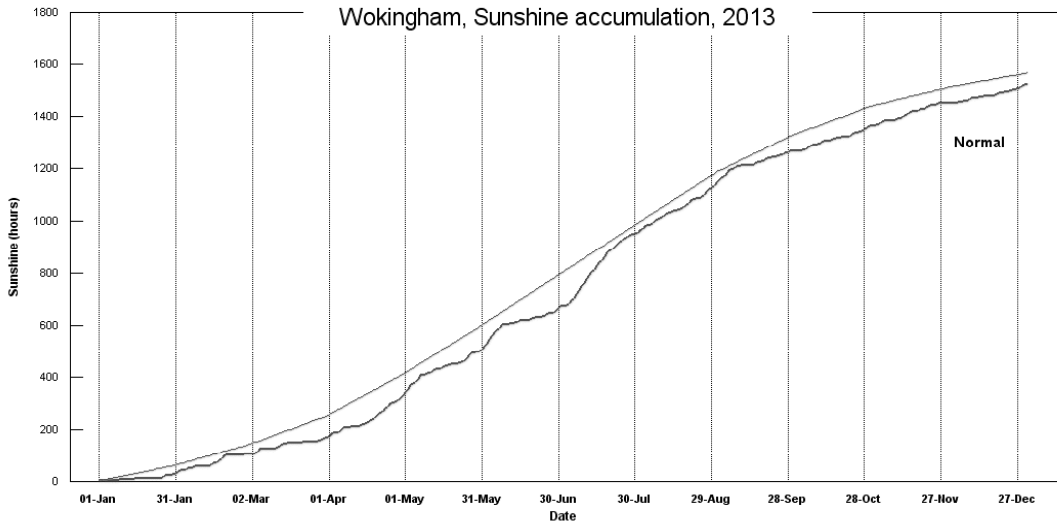
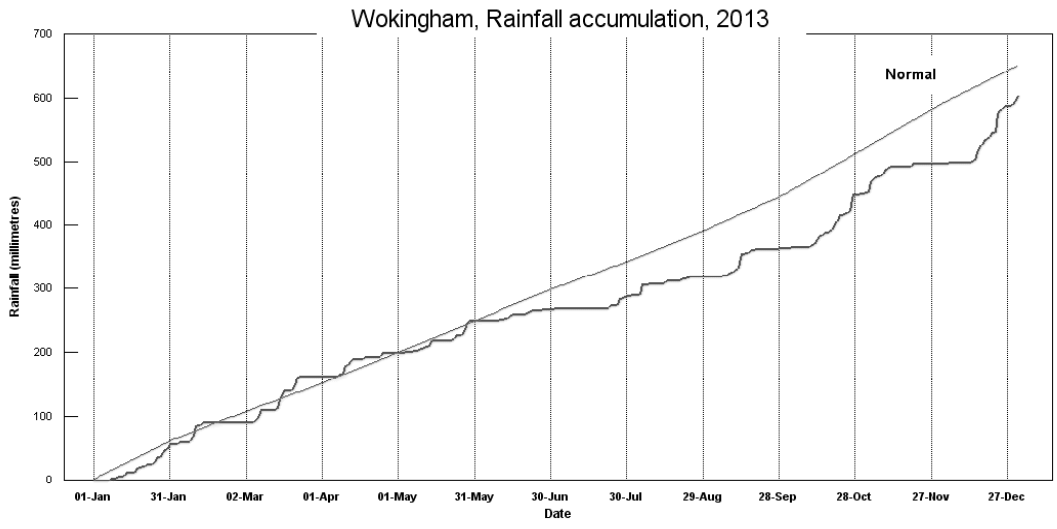
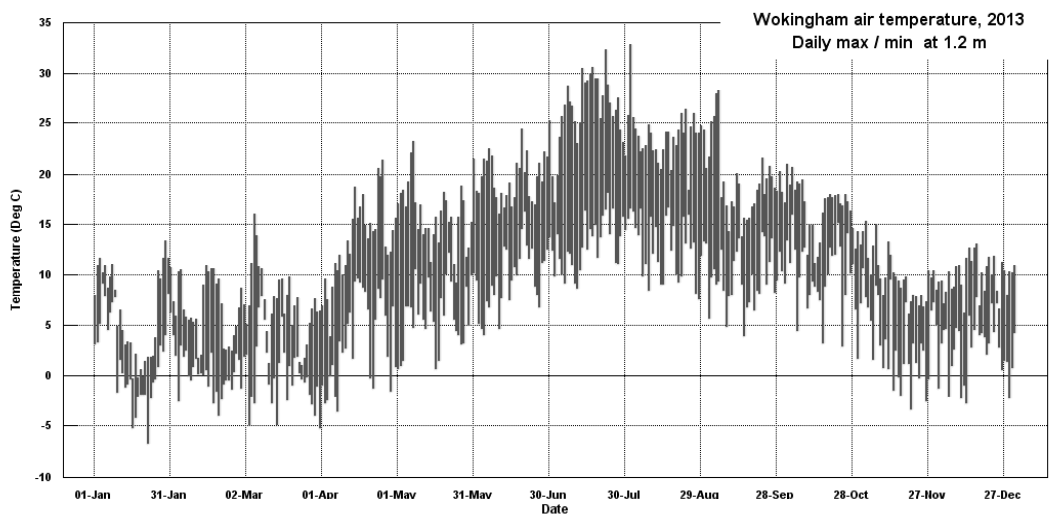
**Monthly categories, quick look table, 2013.**

Month	Temperature Category	Rainfall Category	Sunshine Category	Index	(see note 1)
January	3 Normal	3 Normal	1 Very dull	7	
February	2 Cool	3 Normal	3 Normal	8	
March	1 Very cool	2 Wet	1 Very dull	4	
April	3 Normal	3 Normal	3 Normal	9	
May	2 Cool	3 Normal	2 Dull	11	
June	3 Normal	4 Dry	2 Dull	9	
July	5 Very mild	4 Dry	5 Very sunny	14	
August	5 Very mild	4 Dry	3 Normal	12	
September	3 Normal	3 Normal	2 Dull	8	
October	5 Very mild	2 Wet	3 Normal	10	
November	3 Normal	3 Normal	4 Sunny	10	
December	4 Mild	1 Very 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.

<b>Annual Summary 2013</b>	
Appendix 3	Page 5
	Summary of notable features in 2013
<b>January</b>	Very dull with below average temperature and near normal rainfall, and a cold and snowy episode. Snow fell on 12 days between the 9 <sup>th</sup> and 26 <sup>th</sup> , reaching a depth of 12cm on the 19 <sup>th</sup> . Outside this cold episode, the month was mild. This is one of the 10 dullest Januarys in the past 106 years.
<b>February</b>	Cold with below average rainfall and sunshine. Coldest since 1996. The highest max is lowest since 1993. The highest min is lowest since 1986. Quite a dry month with only 1mm of rain after the 13 <sup>th</sup> . Snow fell on 9 days, 4 more than normal, but only lay on the 11 <sup>th</sup> .
<b>March</b>	Very cold, wet, very dull and with snow at times. Mean max 2 <sup>nd</sup> lowest in 132 years and lowest since 1916. Mean min the same as in February, and lowest for March since 1962. Mean temperature 7 <sup>th</sup> lowest in 132 years. The lowest max is lowest since 1979. 10 more days with air frost than average, and most since 1962. Snow, mostly slight, fell on 10 days, 7 more than average, but only gave a covering on the 23 <sup>rd</sup> , 2cm deep at 09 GMT. Probably one of the dullest Marches for over a century, with 8 hours less sun than in February.
<b>April</b>	Rather cool overall with rainfall below average and near normal sunshine. After a cold start, spring-like conditions finally arrived near mid-month. The lowest max is lowest since 1989 and 5 <sup>th</sup> lowest in 105 years. Earth temperature at 30cm depth is lowest since 1986. Dry for much of the month, with the majority of the total falling on just 4 days.
<b>May</b>	Mostly cold and often dull with rainfall near normal. Coldest since 1996, and 5 <sup>th</sup> coldest in the past 38 years. The highest max is lowest since 1994 and the lowest max is lowest since 1996, as are earth temperatures.
<b>June</b>	Cool, dry and dull overall. The 6 <sup>th</sup> consecutive month with below average temperature. The mean temperature is equal lowest since 1991. The highest max is lowest since 1991. Earth temperatures have not been lower since 1991. Plenty of dry weather. A sunny start with 97 hours in the first 8 days, then 63 hours over the next 21.
<b>July</b>	Dry, very sunny, very warm. The mean max and overall mean 3 <sup>rd</sup> highest in 132 years. A 20 day dry spell ended on the 23 <sup>rd</sup> in the driest July since 1994. Most dry days since 1990. Sunshine in the top 5 in the past century. 15 day period to 19 <sup>th</sup> had a mean of 13.25 hours per day.
<b>August</b>	Dry and very warm with near normal sunshine. The mean temperature highest since 2004. 32.9° recorded on the 1 <sup>st</sup> , highest for August since 2003. Mostly dry overall, with over half the month's total falling on just 1 day.
<b>September</b>	Temperature, rainfall and sunshine below average. Only 4 Septembers in the past 13 years have been colder. Dry at times, with over 50% of the month's total falling on 1 day. Dullest since 2001.
<b>October</b>	Very mild and wet with sunshine below average and quite windy. The mean min 4 <sup>th</sup> highest and overall mean temperature 8 <sup>th</sup> highest in the past 132 years. The highest min is 3 <sup>rd</sup> highest in 101 years. Rainfall on the 27 <sup>th</sup> highest for an October day since 2000. Windiest since 1998 with a 64 mph gust on 28 <sup>th</sup> , highest for October since 2000. Peak 10 minute mean of 35 mph only 4 mph short of a full gale.
<b>November</b>	Temperature and rainfall below normal, but sunny overall. Mean maximum 2 <sup>nd</sup> lowest since 1998. Rainfall 30% below average.
<b>December</b>	Mild and very wet with above average sunshine and windy at times. The mean max is 9 <sup>th</sup> highest in 132 years and highest since 1994. The lowest max is a new record high. The 12 <sup>th</sup> wettest December in 132 years, but not as wet as 2009. The highest daily rainfall ranks 4 <sup>th</sup> highest for the month since before 1904. Windy, especially in the second half, with strongest gusts on the 23 <sup>rd</sup> and 24 <sup>th</sup> .
<b>Year</b>	<p style="text-align: center;"><b>Temperature, Rainfall and Sunshine Below Average.</b></p> <p><b>Temperature:</b> This year's mean temperature, while 0.4° below the current climatological average, when looked at in the longer-term, is 0.4° above the 132 year median. In the past 20 years, though, only 2010 and 1996 have been colder. The first half of the year was predominantly cold, each of the months to June having below average temperature, with March notable in this respect, with the mean maximum lowest since 1916. Also, in the first 4 months there were 22 more air frosts than average. However, the subsequent air frost free period was 197 days, 8 more than average. Temperatures improved markedly in July and August, both months having above average mean maximum, and it was the 3<sup>rd</sup> hottest July since before 1882. The remaining 4 months were changeable, alternating between average in September and November, and above average in October and December. The year's highest max is 2.6° above the median, the lowest max 0.2° above the median. The highest min is 1.0° above the median and the lowest min is also 1.0° above its median. The mean daily temperature range of 8.6° is slightly lower than last year's, but is still 0.2° above average. This year there were 33 days with a max of 25° or more, compared with an average of 19. This is equal highest with 2006 since 1995. There were 5 days with 30° or more, 3 more than average. <b>Rainfall</b> was adequate during the early part of the year, with a wet March offsetting slightly below average January, February and April, but the summer months were very dry, with the 6<sup>th</sup> driest summer season in 132 years. Both October and December were wet, again offsetting a drier than average September and November, but not by enough to make up for the dry summer. The highest daily fall of 28.1 mm is 4.9 mm above average. The duration of measurable rain is, despite the below average total, actually 14% above average. With such a dry summer it is not surprising to see the estimated soil moisture deficit indicating severe stress for non-irrigated shallow rooted plants between the 4<sup>th</sup> July and 12<sup>th</sup> September, and an index of stress gives a summer value of 926, compared with an average of 652. Thunder was much less frequent than average, with 2 days in March, 1 in April, 3 in July, 2 in October and 1 in November. Hail with stones of 5 mm dia or more were not seen this year, but small hail was more frequent than the average 9 days. The highest rainfall rate was 133 mm/hr on the 22<sup>nd</sup> October, but there were only 2 other days with rates over 100 mm/hr, the 20<sup>th</sup> October and 27<sup>th</sup> July. January, February and March saw snow falling on around 30 % of days, but significant lying snow was only present between the 18<sup>th</sup> and 25<sup>th</sup> January, maximum depth 12 cm. <b>Sunshine</b> accumulation, after a very poor start to the year, failed to reach normal at any time. The best periods when daily sunshine was generally above average were mid April to early May, early June and most of July. At the other extreme, in the first 90 days of the year, 39, or 43%, had no sunshine. <b>Wind</b> The overall mean speed of 6.9 mph is close to average. The windiest day was the 11<sup>th</sup> March, mean 16.6 mph, 1.8 mph above average. The year's highest gust of 64 mph was on the 28<sup>th</sup> October, 5 mph above average and highest since 2007. April was the windiest month, mean speed 8.6 mph, and July the least windy, mean 5.6 mph. The distribution of wind direction shows that NE'ly winds were 7.5 % more frequent, at the expense of S'ly winds, 5.3 less frequent, all other directions being within 1 % of average. <b>Humidity.</b> The mean relative humidity is 77.4 %, and the lowest value was 13 % on the 2<sup>nd</sup> May. Mean water vapour content per kg of air was 6.4 g at 0900 GMT and 6.1 g at 1500 GMT. <b>Pressure.</b> The total span of pressure was 66.8 mbar, 2.9 mbar above average.</p> <p>© Bernard Burton. 6<sup>th</sup> January 2014</p>



Appendix 4.

Summary of observations at 0900 GMT

Month	Monthly means								Visibility statistics						
	Vis	Cl	TT	Td	RH	WS	WG	pp	TF	FO	VP	PO	MO	GO	EX
January	11.9	85	3.7	2.0	89	6.0	12	1014.0	0	2	8	6	10	5	0
February	18.8	81	2.6	0.2	85	6.4	13	1018.4	1	1	5	6	6	6	3
March	14.5	77	3.4	0.3	81	7.1	14	1008.9	0	0	3	6	14	5	3
April	19.0	74	8.6	3.2	70	8.3	17	1015.5	0	0	3	6	13	5	3
May	23.6	74	11.9	5.9	68	7.3	15	1012.7	0	0	1	4	9	16	1
June	31.8	71	15.2	9.4	69	7.0	14	1018.9	0	0	1	3	7	11	8
July	25.8	61	20.1	13.0	65	5.1	11	1020.3	0	0	1	6	10	9	5
August	33.3	67	18.4	12.7	71	5.7	11	1018.0	0	0	1	5	6	6	13
September	18.7	79	14.5	11.2	81	4.7	10	1016.4	1	0	1	11	9	5	3
October	17.7	71	12.9	10.8	88	6.8	14	1011.3	0	0	3	9	10	7	2
November	23.5	71	6.3	4.4	88	4.9	10	1018.1	0	0	1	11	7	6	5
December	18.5	77	6.1	4.0	87	6.5	14	1015.5	1	1	2	6	9	11	1
Year	21.4	74	10.4	6.5	78	6.3	13	1015.6	3	4	30	79	110	92	47

Summary of observations at 1500 GMT

Month	Monthly means								Visibility statistics						
	Vis	Cl	TT	Td	RH	WS	WG	pp	TF	FO	VP	PO	MO	GO	EX
January	16.3	86	5.4	2.3	81	7.5	15	1013.5	0	0	3	8	13	6	1
February	24.5	79	5.5	-0.6	66	8.5	18	1017.7	0	0	1	7	7	8	5
March	18.7	84	5.9	-0.4	66	7.8	16	1027.0	0	0	3	5	14	7	2
April	31.1	72	11.8	1.7	52	9.4	19	1014.5	0	0	0	4	9	9	8
May	34.4	73	14.6	4.9	56	8.5	17	1011.7	0	0	0	5	6	9	11
June	37.5	71	18.5	9.4	57	7.3	16	1018.1	0	0	0	5	1	12	12
July	35.6	52	25.0	11.8	45	6.8	15	1018.9	0	0	0	0	5	18	8
August	36.6	71	22.1	10.5	50	7.1	15	1017.0	0	0	1	1	4	14	11
September	29.2	74	17.9	10.7	65	5.8	13	1015.1	0	0	1	6	8	8	7
October	31.2	75	15.3	10.1	72	8.0	18	1011.0	0	0	0	3	6	16	6
November	27.0	70	9.0	4.5	74	6.0	14	1017.5	0	0	1	6	8	8	7
December	24.9	75	8.5	4.9	79	7.9	16	1014.3	1	0	1	5	9	11	4
Year	28.9	74	13.3	5.9	64	7.5	16	1014.7	1	0	11	55	90	126	82

Legend: Vis = visibility in km. Cl = 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 2013

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	Fg	ddd	ff	sp	hrs				
January	6.3	1.5	3.9	-0.9	57.5	-0.3	5.8	7.6	35.7	151.1	1014.0	14	21	12	9	0	0	2	2	233	2.1	6.6	86.4
February	6.6	0.1	3.3	-1.6	34.4	-2.7	4.8	6.5	72.2	57.4	1018.4	13	21	9	1	0	0	1	2	360	2.1	6.7	63.6
March	7.0	0.1	3.6	-3.6	71.4	-3.1	5.4	6.3	63.1	126.4	1008.9	17	23	10	1	2	0	5	0	51	4.2	6.5	86.1
April	13.4	3.5	8.5	-0.8	37.6	-0.7	8.2	7.5	162.3	38.5	1015.5	9	17	2	0	1	0	3	0	237	0.8	7.5	31.0
May	16.0	6.0	11.0	-1.5	50.4	2.3	12.3	10.9	175.1	0.0	1012.7	0	9	0	0	0	0	2	0	263	2.7	6.1	46.6
June	19.7	9.7	14.7	-0.8	17.4	6.8	15.9	13.6	160.8	0.0	1018.9	0	2	0	0	0	0	0	0	271	1.6	6.0	15.6
July	26.2	13.0	19.6	+1.9	21.1	9.5	19.7	16.8	285.7	0.0	1020.3	0	0	0	0	3	0	0	0	223	0.8	4.9	11.3
August	23.7	12.6	18.2	+0.7	29.8	9.4	19.1	17.8	195.0	0.0	1018.0	0	0	0	0	0	0	0	0	235	2.9	5.2	15.7
September	19.2	9.5	14.4	-0.3	44.4	6.2	16.4	16.5	118.6	0.0	1016.4	0	1	0	0	0	0	0	1	251	1.4	4.3	37.1
October	16.5	9.6	13.0	+1.8	86.4	6.8	14.4	15.0	98.3	0.0	1011.3	0	4	0	0	2	0	0	0	219	3.5	6.6	58.4
November	9.9	3.2	6.5	-1.0	48.3	-0.2	9.8	12.1	89.4	29.5	1018.1	7	15	0	0	1	0	1	0	279	2.5	5.2	51.6
December	9.9	2.6	6.2	+1.2	104.8	-0.6	7.2	9.2	67.3	41.8	1015.5	6	20	0	0	0	0	0	2	212	5.8	6.9	80.6
Year	14.6	6.0	10.3	-0.4	603.5	2.8	11.6	11.7	1523.5	444.7	1015.6	66	133	33	11	9	0	14	7	244	1.4	6.0	584.0

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 gm.  
 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 gm. 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					
2002	15.5	7.2	11.4	+1.1	31.0	-7.8	853	4.5	12.4	12.5	1484	166	1014.6	26	70	2	0	17	0	13	11	222	2.1	5.8
2003	16.1	6.3	11.2	+0.9	36.9	-6.5	534	3.2	12.0	12.3	1906	458	1017.2	58	121	10	4	8	1	4	7	219	1.3	5.2
2004	15.3	7.1	11.2	+0.9	30.7	-6.2	612	4.0	12.1	12.3	1475	280	1016.1	40	92	13	2	3	4	15	4	241	2.3	5.4
2005	15.4	6.7	11.1	+0.8	31.1	-6.9	492	3.5	12.0	12.2	1610	388	1018.0	55	115	23	4	14	2	12	10	246	1.8	5.2
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

Legend : See appendix 4.

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

Decade Ending	Mean max	Mean min	Mean Anom	Mean rain	Mean sun	Anom	Anom	Anom
1900	14.1	5.0	9.6	-1.1	600	-51	xx	
1910	13.7	5.1	9.4	-1.3	631	-20	xx	
1920	14.0	5.3	9.7	-1.0	700	+49	1588	+21
1930	14.2	5.3	9.8	-0.9	636	-15	1599	+32
1940	14.4	5.5	10.0	-0.7	641	-10	1527	-40
1950	14.6	5.7	10.2	-0.5	616	-35	1572	+5
1960	14.1	5.7	9.9	-0.8	678	+27	1500	-67
1970	13.7	5.7	9.7	-1.0	686	+35	1487	-80
1980	14.0	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	1887	8.4	1903	952	1921	337	2003	5.2	1958	3.5
2	2011	11.5	1888	8.5	1951	887	1990	459	1990	5.1	1932	3.7
3	2002	11.4	1892	8.5	2000	872	1902	477	1989	5.1	1968	3.7
4	1999	11.3	1891	8.7	1960	857	1887	487	1911	5.1	1981	3.7
5	1990	11.3	1963	8.7	2002	853	1947	491	1949	5.0	1912	3.8
6	1989	11.3	1885	8.8	1916	842	2005	492	1929	5.0	1931	3.8
7	2007	11.2	1919	8.8	1974	837	1996	508	1921	5.0	1936	3.8
8	2004	11.2	1886	8.9	1915	815	1933	509	1959	4.9	1960	3.8
9	2003	11.2	1917	8.9	1927	814	1898	510	1933	4.9	1966	3.8
10	1997	11.2	1962	8.9	2012	807	1938	511	1995	4.8	1993	3.8

© Bernard Burton

January 2014