

# WOKINGHAM

# METEOROLOGICAL

# DATA

## Wokingham Climatological Station, Emmbrook, Berkshire.

Lat/Long 51°25'N 00°51'W NGR (SU)798701 Altitude 46m ASL.

### Monthly Means and Totals

SEPTEMBER 2008

Temperature (°C / °F)			Anomaly	Rank in the past 127 years			
Mean maximum	18.5	65.3	-0.4	56 <sup>th</sup> lowest			
Mean minimum	9.2	48.6	-0.5	52 <sup>nd</sup> highest			
Daily mean	13.9	57.0	-0.4	55 <sup>th</sup> lowest			
Highest maximum	20.6	69.1	on 20 <sup>th</sup>	Lowest maximum	15.4	59.7	on 30 <sup>th</sup>
Highest minimum	14.3	57.7	on 11 <sup>th</sup>	Lowest minimum	3.4	38.1	on 28 <sup>th</sup>
Mean grass minimum	6.7	44.1	-0.1	Lowest grass minimum	-0.1	31.8	on 28 <sup>th</sup>
Mean earth @30 cm	16.5	61.7	+0.4	Earth @100 cm	16.8	62.2	0.0
Frost duration (hrs)	0.0			Rain duration (hrs)	33.9		
Rainfall total (mm / in)	56.9	2.24	91 %	47 <sup>th</sup> highest			
Highest daily fall	26.2	1.03	on 5 <sup>th</sup>				
Number of: Dry days (<0.2mm)	17	Wet days (>0.9mm)	8	days ≥5mm	3		
Sunshine total (hrs)	119.7	Daily mean	3.99	91 %	Sunniest day	11.2	on 26 <sup>th</sup>
N° days with: Air frost	0	Ground frost	1	Snow falling	0	Snow lying	0
Thunder	3	Hail ≥5mm	0	Small hail/ice	0	Fog @09	1 Nil sun 3
Air pressure MSL : Mean @09 GMT (mbar/in)	1017.9		+1.4	30.06			
Absolute highest	1037.1			30.63		on 26 <sup>th</sup>	
Absolute lowest	985.4			29.10		on 5 <sup>th</sup>	

Anomaly = departure from 1971 to 2000 average (degrees C, percent and mbar).

Notes:

### Dull with Temperature Above and Rainfall Below Normal.

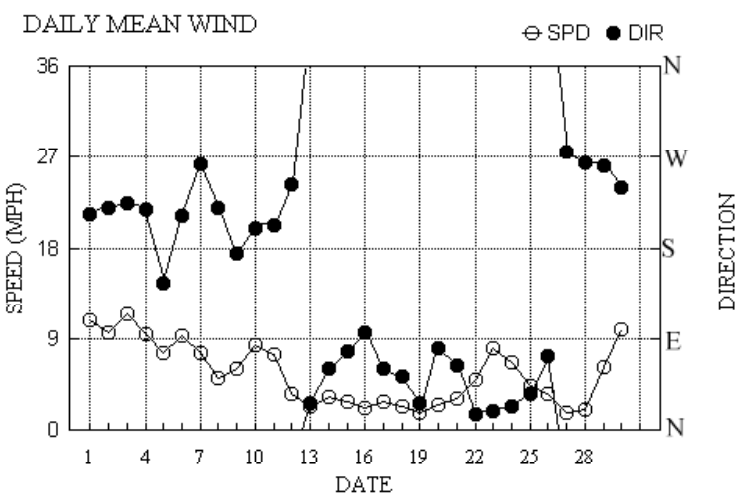
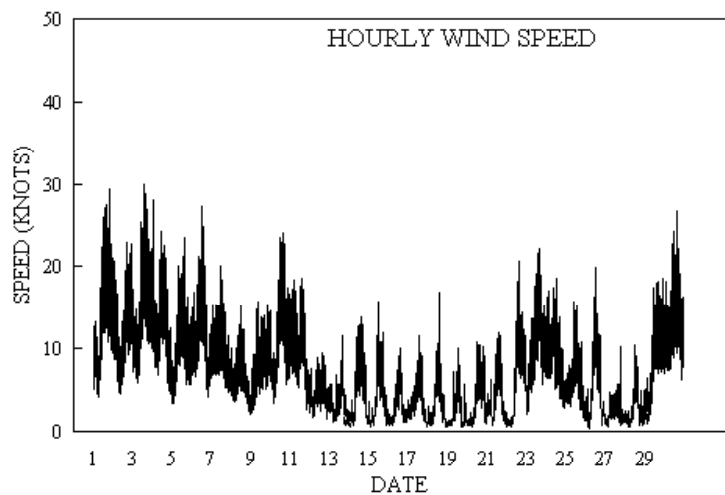
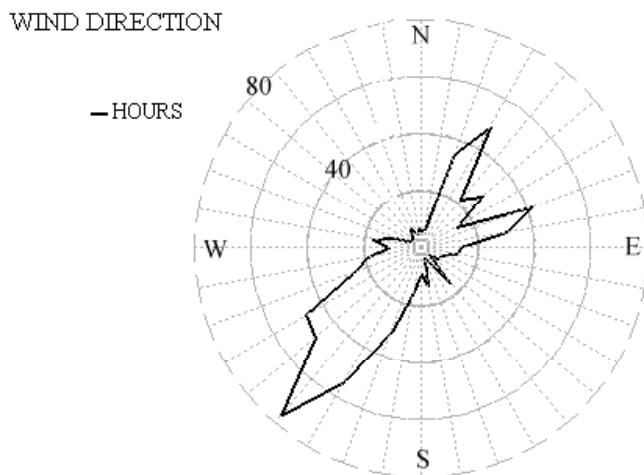
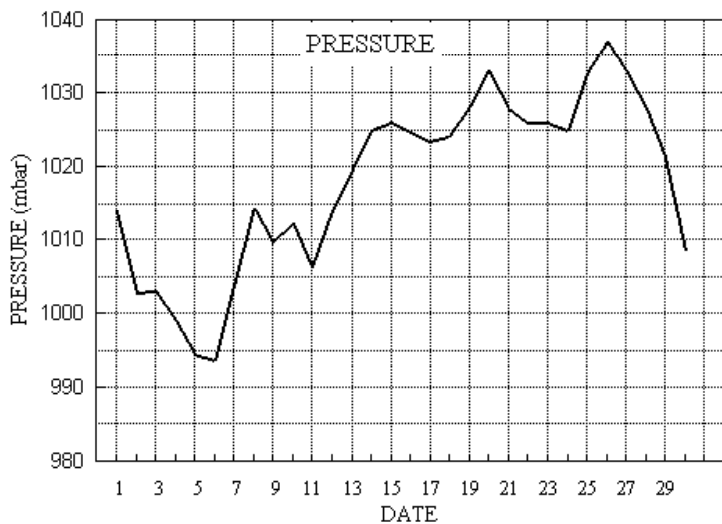
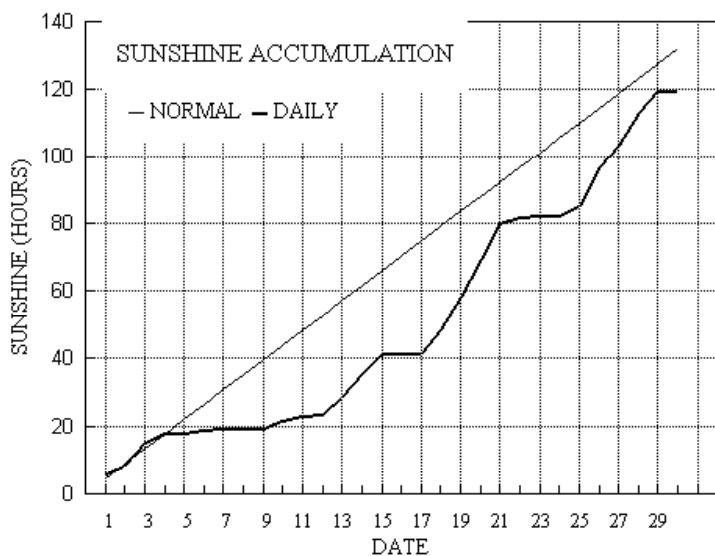
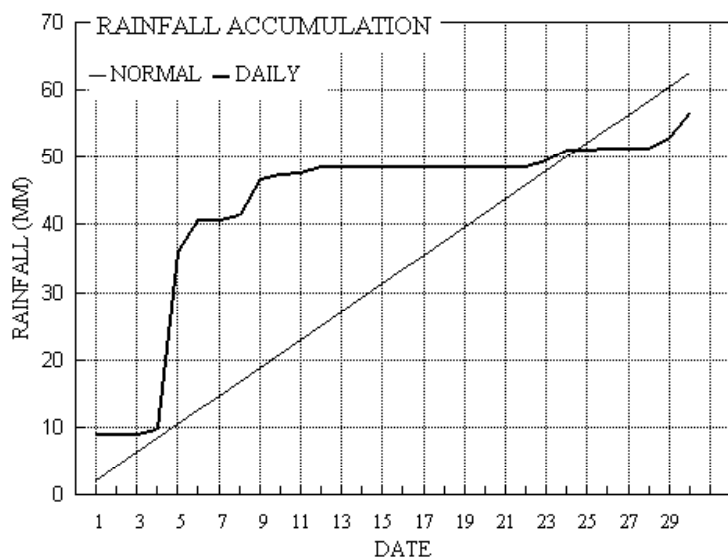
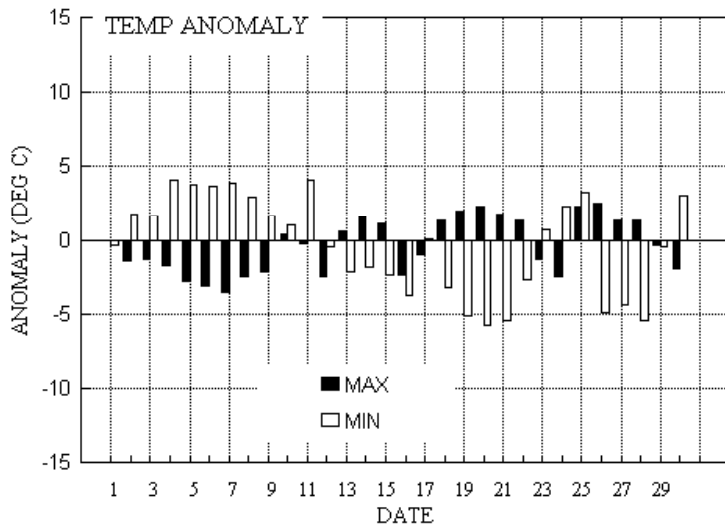
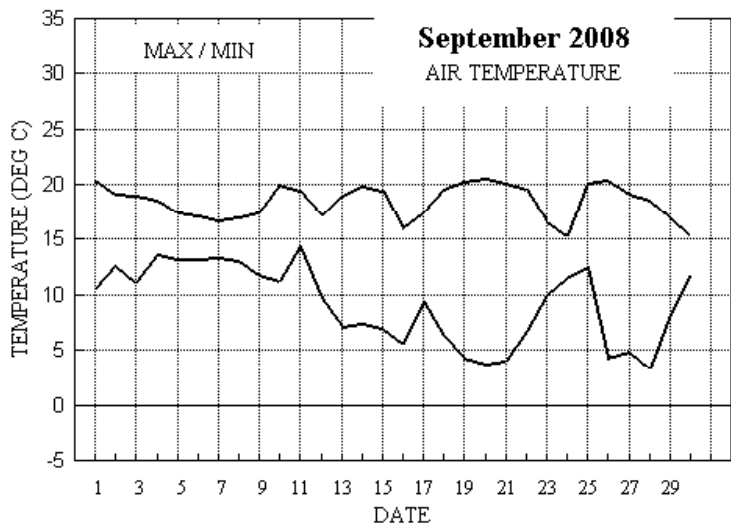
**Temperature :** In terms of the mean temperature, this is the coolest September since 1996, though the mean maximum is only lowest since 2001. The daily mean is not far from the long-term median, being just 0.1° below it. The highest maximum was only 20.6°, ranking 3<sup>rd</sup> lowest in 105 years after 1965 and 1912, only 0.9° above the record in that latter year, and 3.7° below the median. The lowest maximum is 1.5° above the median, and these two values taken together show a much reduced monthly range of maximum temperature, down 5.2° on normal. The highest minimum is 0.8° below the median, and the lowest minimum is 0.6° above its median. The mean and lowest grass minimum values are close to average, as are the earth temperatures at 30 cm and 1 metre depth. Ground frost is not unusual in September, in fact in 1986 there were 13, but this month's 1 day, after a frost free period of 129 days, is the first since 2005. **Rainfall :** This is the wettest September since 2001, despite the total being only 91 % of average. The first 12 days produced much of the month's total, then a 10 day dry spell ending on the 22<sup>nd</sup> dominated the mid-month. The 5<sup>th</sup> was the wettest September day since 1995, and there have been only 4 wetter September days in the past 33 years. The duration of measurable rain is also most since 2001, yet is 5.8 hours less than average. The number of dry days is 1 fewer than average. Thunder was heard on the 2<sup>nd</sup>, 5<sup>th</sup> and 12<sup>th</sup>. The highest rain rate this month was 95 mm/hr at 1742 GMT on the 5<sup>th</sup>. **Sunshine :** The number of sunshine hours this September is well below average, and fewest since 2001. The 11.2 hours on the sunniest day is also lowest since 2001. In the first 17 days of the month only 2 had >50% of the maximum possible, and 12 had <20 %. Overall there were 16 days with <3 hours, 10 with =>6 hours and 5 with =>9 hours. **Wind :** The mean speed was 5.5 mph, slightly below average. The 3<sup>rd</sup> was the windiest day, with mean 11.4 mph, and the month's highest gusts of 35 mph were on that day and the 1<sup>st</sup>. The 27<sup>th</sup> was the least windy day, mean 1.6 mph, and there were 2666 minutes, (44.4 hours), with a mean speed of 0.5 mph or less. Daily mean direction/number of days : N,2 NE,8 E,4 SE,1 S,2 SW,9 W,4 NW,0. **Humidity :** The overall mean relative humidity was 79.6 %, and the lowest value reached was 39 % on the 19<sup>th</sup>. The mean water vapour content per kg of air was 8.0 g at 0900 GMT and 7.4 g at 1500 GMT. **Pressure :** The month's maximum pressure is highest for September since 1986. The month's minimum is lowest since 1995. **Commentary :** From the 1<sup>st</sup> to the 9<sup>th</sup>, temperatures were below normal by day and above by night. There were only 3 dry days, but the rainfall total is dominated by the 26.2 mm that fell on the 5<sup>th</sup>. Rainfall accumulation showed an excess of 28 mm by the 9<sup>th</sup>. Sunshine was near normal for the first couple of days, then very poor, with a 20 hour deficit by the 9<sup>th</sup>. Mostly SW'ly winds were moderate or fresh, becoming light on the 8<sup>th</sup>. From the 10<sup>th</sup> to the 22<sup>nd</sup>, temperatures by day were generally near normal. By night, they were not far from normal until the 17<sup>th</sup>, then well below, with an anomaly of -5.7° for the min on the 20<sup>th</sup>. Apart from a little rain at first it became dry after the 12<sup>th</sup>. Sunshine was poor at first, but improved a little after the 12<sup>th</sup> and the 19<sup>th</sup> to 21<sup>st</sup> saw the first sunny days of the month. Moderate S'ly winds on the 10<sup>th</sup> gave way to light winds from between N and E by the 13<sup>th</sup>. From the 23<sup>rd</sup> to the 30<sup>th</sup>, daily maxima were generally around normal, so too were minima, except for the nights 26<sup>th</sup> to 28<sup>th</sup>, with anomalies down to -5.4°. There were 4 dry days and 4 with some rain, most on the 30<sup>th</sup>. Sunshine was variable, with just the 26<sup>th</sup> and 28<sup>th</sup> standing out with over 85 % of the maximum. Moderate N'ly winds on the 23<sup>rd</sup> dropped light on the 25<sup>th</sup>, backed W'ly by the 27<sup>th</sup> and increased moderate again on the 29<sup>th</sup>.

Table of mean anomalies for the periods specified, (max, min, rain, sun)

From the 1 <sup>st</sup> to the 10 <sup>th</sup>				From the 11 <sup>th</sup> to the 20 <sup>th</sup>				From the 21 <sup>st</sup> to the 30 <sup>th</sup>			
-1.8°	+2.4°	230 %	52 %	+0.3°	-2.0°	5 %	113 %	+0.5°	-1.4°	38 %	118 %

B J Burton. FRMetS. Hon. Met. Officer to Wokingham Town Council

# Wokingham Climatological Graphs for September 2008



Month: September 2008

Date	Max C	Min C	Rain mm	Grass Min	30cm C	100cm C	Sun hrs	Frost hrs	pp09 mbar	Af Gf	Sf Sl	Th Ha	Ic Fg	Vec mean ddd ff sp	Max gust ddd gg HHhh	High hr ddd ff HH	Rain hrs						
1	20.5	10.5	8.9	7.7	18.6	18.5	5.9	0.0	1013.8	0 0 0 0	0 0 0 0	0 0 0 0	214	9.2	9.3	214	30	1942	210	13	15	4.8	
2	19.1	12.7	tr	12.3	18.4	18.5	2.5	0.0	1002.9	0 0 0 0	1 0 0 0	1 0 0 0	219	8.0	8.3	209	23	1653	227	11	21	0.1	
3	19.0	11.1	tr	8.9	18.1	18.5	6.9	0.0	1003.0	0 0 0 0	0 0 0 0	0 0 0 0	225	9.8	9.9	217	30	1411	226	14	13	0.0	
4	18.6	13.6	0.7	11.4	17.9	18.4	2.6	0.0	999.1	0 0 0 0	0 0 0 0	0 0 0 0	218	8.1	8.2	219	28	0129	219	11	10	1.0	
5	17.5	13.3	26.2	12.1	17.9	18.4	0.2	0.0	994.5	0 0 0 0	1 0 0 0	0 0 0 0	146	6.2	6.6	193	24	1528	138	9	12	5.5	
6	17.2	13.2	4.9	11.8	17.4	18.3	1.0	0.0	993.8	0 0 0 0	0 0 0 0	0 0 0 0	212	7.8	8.0	203	27	1222	209	12	11	3.8	
7	16.8	13.4	tr	12.4	17.4	18.2	0.2	0.0	1003.7	0 0 0 0	0 0 0 0	0 0 0 0	263	6.4	6.5	259	20	1137	271	8	11	0.1	
8	17.1	13.1	0.8	12.3	17.3	18.1	0.1	0.0	1014.4	0 0 0 0	0 0 0 0	0 0 0 0	219	4.1	4.4	242	15	1143	240	7	09	1.7	
9	17.5	11.8	5.4	10.7	17.3	18.1	0.1	0.0	1009.7	0 0 0 0	0 0 0 0	0 0 0 0	175	3.8	5.3	147	16	0821	229	8	22	3.8	
10	20.0	11.2	0.6	7.5	17.0	18.0	2.2	0.0	1012.2	0 0 0 0	0 0 0 0	0 0 0 0	199	7.1	7.2	209	24	1455	206	11	14	1.3	
11	19.4	14.3	0.2	14.0	17.2	17.9	1.4	0.0	1006.3	0 0 0 0	0 0 0 0	0 0 0 0	203	6.3	6.4	204	19	1311	208	9	14	0.4	
12	17.2	9.7	1.0	6.4	17.2	17.8	0.2	0.0	1013.8	0 0 0 0	1 0 0 0	0 0 0 0	243	2.5	3.1	267	10	1556	278	5	16	0.6	
13	19.0	7.2	0.0	4.2	16.8	17.8	5.3	0.0	1019.7	0 0 0 0	0 0 0 0	0 0 0 0	27	0.4	2.0	29	12	1618	359	5	15	0.0	
14	19.9	7.5	0.0	4.4	16.7	17.7	7.2	0.0	1025.0	0 0 0 0	0 0 0 0	0 0 0 0	60	2.4	2.9	67	14	1415	70	6	14	0.0	
15	19.5	7.0	0.0	5.3	16.7	17.7	5.6	0.0	1025.9	0 0 0 0	0 0 0 0	0 0 0 0	77	2.2	2.4	85	16	1107	89	6	11	0.0	
16	16.1	5.6	0.0	2.5	16.5	17.6	0.0	0.0	1024.6	0 0 0 0	0 0 0 0	0 0 0 0	96	1.2	1.9	164	10	1417	137	5	14	0.0	
17	17.4	9.4	0.0	8.3	16.4	17.5	0.2	0.0	1023.5	0 0 0 0	0 0 0 0	0 0 0 0	61	2.3	2.5	66	12	1347	61	5	13	0.0	
18	19.6	6.3	0.0	2.5	16.2	17.4	7.2	0.0	1024.1	0 0 0 0	0 0 0 0	0 0 0 0	53	1.5	2.0	28	17	1446	90	5	11	0.0	
19	20.3	4.4	0.0	1.3	15.9	17.4	9.7	0.0	1028.1	0 0 0 0	0 0 0 0	0 0 0 0	27	0.3	1.5	19	10	1252	67	4	13	0.0	
20	20.6	3.8	0.0	0.5	15.7	17.3	11.1	0.0	1032.9	0 0 0 0	0 0 0 0	0 0 0 0	81	1.6	2.2	54	11	1130	67	4	14	0.0	
21	20.1	4.1	0.0	0.4	15.5	17.2	10.3	0.0	1027.8	0 0 0 0	0 0 0 0	0 0 0 0	63	2.5	2.7	64	12	1302	57	5	15	0.0	
22	19.6	6.8	tr	2.5	15.4	17.0	2.2	0.0	1026.0	0 0 0 0	0 0 0 0	0 0 0 0	15	3.9	4.3	18	21	1426	15	9	14	0.0	
23	16.6	10.0	0.9	4.4	15.6	16.9	0.1	0.0	1026.0	0 0 0 0	0 0 0 0	0 0 0 0	18	6.9	7.0	28	22	1533	23	11	16	0.3	
24	15.4	11.6	1.7	9.6	15.5	16.9	0.0	0.0	1024.8	0 0 0 0	0 0 0 0	0 0 0 0	23	5.7	5.7	21	19	1351	23	9	09	1.4	
25	20.2	12.5	0.0	11.6	15.5	16.8	3.2	0.0	1032.6	0 0 0 0	0 0 0 0	0 0 0 0	35	3.7	3.8	38	16	1044	45	6	12	0.0	
26	20.4	4.4	0.1	0.1	15.4	16.7	11.2	0.0	1037.0	0 0 0 0	0 0 0 0	0 0 0 0	73	2.7	3.1	68	20	1102	79	8	11	1.6	
27	19.2	4.9	0.0	1.2	15.0	16.7	6.5	0.0	1033.0	0 0 0 0	0 0 0 0	0 0 0 1	276	0.3	1.4	297	10	1955	258	3	16	0.0	
28	18.6	3.4	0.1	-0.1	14.9	16.6	10.1	0.0	1027.9	0 1 0 0	0 0 0 0	0 0 0 0	264	1.1	1.7	300	11	1256	330	4	14	0.3	
29	17.0	8.3	1.5	4.2	14.8	16.5	6.5	0.0	1021.3	0 0 0 0	0 0 0 0	0 0 0 0	262	4.8	5.4	249	19	2206	236	8	23	4.4	
30	15.4	11.8	3.9	9.8	14.8	16.4	0.0	0.0	1008.4	0 0 0 0	0 0 0 0	0 0 0 0	239	8.6	8.7	260	27	1430	254	11	14	2.8	
Total			56.9				119.7	0.0															33.9
Mean	18.5	9.2		6.7	16.5	17.6	3.99	0.0	1017.9					216	1.7	4.8							
Anom	-0.4	-0.5	91%		+0.4	+1.1	91%				+1.4												
Daily mean		13.9																					
Anom		-0.4																					

Number of days with:

Air frost = 0      Ground frost = 1      Nil sun = 3  
Snow falling = 0      Snow lying = 0      Thunder = 3  
Hail=>5mm = 0      Hail<5mm or ice = 0      Fog at 09GMT = 1

Abbreviations.

Max/min = highest and lowest air temperature at 1.2m in 24 hour period ending at 09 GMT

Rain = total rainfall and melted snowfall in 24 hour period ending at 09 GMT, millimetres. (Tr = trace, &lt;.05mm).

Grass min = Lowest overnight temperature at grass tip level.

Sun = hours of bright sunshine, measured electronically. Frost = Number of hours with air temp below 0 deg C.

pp09 = Air pressure corrected to mean sea level at 0900 GMT, millibars.

Af = Air frost. Gf = Ground frost. Sf = Snow falling. Sl = Snow lying at 09 GMT.

Th = Thunder. Ha = Hail =&gt;5mm. Ic = Hail &lt;5mm or ice. Fg = Fog at 09 GMT.

Vec mean = 24 hour mean wind vector, ddd = direction in degrees from true north, ff = speed in knots.

Sp = 24 hour mean wind speed in knots.

Max gust = Highest gust in 24 hours, gg = speed in knots, HHhh = Time, hours and minutes, GMT.

High hr = Highest hourly mean wind, HH = hour commencing. Rain Hrs = Duration of rain, 24 hours to 09 GMT. Excludes snow/hail.

30cm and 100 cm are earth temperatures at those depths, read at 09 GMT.

Anom = Departure from 1971-2000 climatological average.

All temperatures in degrees Celsius.

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 0900 GMT for September 2008

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	pppww	W1W2	NhCl	hCrCl	NChshs	NChshs	NChshs	Date	Remarks						
1	82	3	23	08	17	16.9	12.3	74	8.9	1013.8	4	000	03	0	0	3	8	4	3	1	82818	1	1Sc40 1Ac60 1Ci78 COTRA Cu med			
2	75	7	21	05	10	13.6	12.3	92	9.0	1002.9	7	006	15	6	2	3	8	3	7	8	81808	83656	85360	2	1Sc40 6As65 /Cs70 Cu fra/med COTRA jpS vv40k NW	
3	80	7	24	09	16	15.2	9.3	68	7.3	1003.0	8	005	03	2	2	1	8	5	7	/	81824	83465	85367	3	1Sc56 1Ac63 Cu fra/hum	
4	62	7	22	10	18	15.6	9.8	68	7.6	999.1	2	002	15	6	2	7	8	4	7	/	81815	85820	87362	4	3Sc050 Cu med/con jpNW&S	
5	68	8	13	07	18	14.6	12.7	88	9.2	994.5	8	023	61	6	2	7	5	4	2	/	81712	87616	88550	5		
6	84	4	22	11	21	15.7	10.7	72	8.1	993.8	2	021	03	1	1	3	2	5	3	1		83820			6	1Ac59 1Ci75 Cu hum-med
7	80	8	28	06	15	14.1	12.0	87	8.8	1003.7	2	029	21	6	2	7	5	3	7	/	81708	87612		7	/Ac60	
8	80	8	23	07	12	14.8	10.9	77	8.0	1014.4	2	011	03	2	2	7	8	4	/	8	81818	87640		8	/Cs75 Cu fra/hum	
9	62	8	18	05	16	15.4	13.1	86	9.4	1009.7	5	006	61	6	2	3	8	5	7	/	81825	86358	88462	9	1Cu40 2Sc50 Cu med	
10	65	7	19	07	14	16.2	13.9	86	9.9	1012.2	7	001	03	1	1	7	8	4	/	/	83712	86815	87656	10	Cu med	
11	60	8	21	05	12	14.3	12.2	87	8.9	1006.3	3	018	60	6	5	8	5	3	/	/	81706	88625		11		
12	60	7	30	03	09	12.4	10.8	90	8.1	1013.8	2	015	05	2	2	7	6	3	2	/	87707			12	/As65	
13	61	7	03	05	07	13.6	11.8	89	8.4	1019.7	2	024	03	1	1	7	8	3	/	/	81808	87620		13	Cu fra/med S	
14	61	6	04	05	09	15.4	12.2	81	8.6	1025.0	1	008	02	4	2	5	8	4	0	1	82815	84640		14	2Ci80 COTRA Cu med	
15	62	7	02	03	04	14.0	9.4	74	7.1	1025.9	1	006	02	2	2	1	0	9	3	8	81368	87275		15	COTRA Halo 22 part. Parhelion	
16	60	7	05	02	05	12.1	9.5	84	7.3	1024.6	1	003	05	2	2	7	5	7	/	/	87650			16		
17	58	7	06	03	07	14.0	9.7	75	7.4	1023.5	2	003	05	2	2	1	0	9	3	8	81368	87275		17	COTRA Halo 22 part Parhelion	
18	57	2	04	03	06	14.6	9.7	72	7.6	1024.1	1	006	05	1	1	2	0	8	3	0	82357			18		
19	59	5	29	01	03	12.7	8.3	75	6.8	1028.1	1	016	05	2	2	4	0	9	3	1	84360			19	2Ci75	
20	56	2	05	01	03	12.9	9.8	81	7.4	1032.9	1	004	05	0	0	0	0	9	0	1	82080			20	COTRA	
21	45	6	06	03	06	12.8	9.9	82	7.4	1027.8	1	002	05	1	1	0	0	9	0	1	86080			21	COTRA	
22	58	7	01	02	04	13.4	10.2	81	7.6	1026.0	1	003	05	2	2	1	5	6	7	/	81656	87357		22		
23	65	7	01	07	13	13.6	9.9	78	7.4	1026.0	1	007	03	2	2	3	8	4	7	/	81815	83620	87365	23	1Ac63 Cu fra Ac str vir	
24	62	7	02	10	16	14.8	11.1	78	8.0	1024.8	1	011	02	2	2	2	1	4	7	/	82815	87359		24	Cu fra	
25	63	7	03	05	09	15.0	11.9	82	8.4	1032.6	1	013	01	2	2	7	5	7	/	/	87650			25	Sc edge E	
26	58	2	03	05	08	13.2	10.6	84	7.5	1037.0	1	008	05	4	0	0	0	9	0	1	82080			26	COTRA	
27	02	9	26	01	03	9.9	9.4	97	7.2	1033.0	3	003	43	4	4	9	/	/	/	/				27		
28	40	0	18	02	03	11.2	9.5	89	7.4	1027.9	4	000	05	0	0	0	0	9	0	0				28		
29	82	2	27	04	08	12.6	5.6	63	5.8	1021.3	0	001	02	1	1	2	5	7	0	0	82656			29		
30	65	8	24	08	17	13.7	11.5	86	8.4	1008.4	6	014	61	6	6	2	5	4	7	/	81712	86360	88665	30	2Sc56	

Mean vis = 15.9 km  
 Mean cloud = 6.0 75%  
 Mean wind speed = 5.1 kn  
 Mean gust = 10 kn  
 Mean TT = 13.9 °C  
 Mean TdTd = 10.7 °C  
 Mean RH = 80.9 %  
 Mean r = 8.0 g/kg  
 Mean PPP = 1017.9 mbar

VV = Visibility code (Code FM12-4377)  
 N = Total cloud amount, oktas  
 dd = Direction from which wind is blowing, tens of degrees true  
 ff = 10 minute mean wind speed, knots  
 gg = Highest gust in past hour, knots  
 TT = Air temperature at 1.2 m, deg Celsius  
 TdTd = Dew point temperature at 1.2 m, deg Celsius  
 RH = Relative humidity at 1.2 m  
 r = Humidity mixing ratio at 1.2 m, g/kg  
 PPP = Air pressure reduced to sea level, mbar  
 a = Characteristic of pressure tendency (Code FM12-0200)  
 ppp = 3 hr pressure tendency, tenths of mbar  
 ww = Present weather code (Code FM12-4677)  
 W1, W2 = Past weather code (Code FM12-4561)-  
 covers past 3 hours.  
 Nh = Amount of low cloud present, oktas  
 Cl = Type of low cloud (Code Fm12-0513)  
 h = Height of low cloud (Code FM12-1600)  
 Cm = Type of medium cloud (Code FM12-0515)  
 Ch = Type of high cloud (Code FM12-0509)  
 8 groups. 8 = indicator for cloud detail  
 N = Amount of cloud, oktas  
 C = Type of cloud (FM12-0500)  
 hshs= Height of cloud (FM12-1677)  
 Remarks : COTRA = persistent condensation  
 trails present.

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 1500 GMT for September 2008

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	pppww	W1W2	NhCl	hCrCl	NChshs	NChshs	NChshs	Date	Remarks													
1	84	7	22	11	27	18.5	11.1	62	8.1	1012.0	6	006	15	8	2	4	8	6	3	1	83830	86075	1	2Sc50	2Ac65	COTRA	Cu	hum/med	jpW				
2	84	3	22	10	19	18.1	58.4	53	6.9	1000.8	7	015	02	1	1	2	8	6	0	8	82838		2	1Sc57	1Cs70	1Cs75	Cu	med	Cs	edge	E		
3	75	3	23	14	29	18.3	6.9	47	6.4	1000.2	8	009	15	1	1	3	9	6	0	1	81935	82845	3	1Sc56	1Ci75	jpW	vv	40k	ex	p			
4	80	6	21	10	22	18.0	9.6	58	7.5	998.9	7	002	15	8	1	3	9	5	3	3	81925	82832	84078	4	1Sc50	1Ac62	1Ci70	COTRA	jpW	&N	Halo	22°	part
5	65	7	15	08	23	16.8	13.7	82	9.9	989.0	7	024	25	8	6	7	8	4	/	/	82812	84818	85635	5	Cu	fra/con	jpS						
6	81	7	20	10	23	16.5	11.9	74	8.8	995.4	8	002	03	8	2	6	8	4	1	8	85818	85272	6	2Sc35	2As68	Cu	hum/med						
7	86	7	27	06	15	15.8	10.7	72	8.0	1007.3	2	013	02	6	2	7	8	5	3	/	82820	87630	7	/Ac60	Cu	hum/med							
8	86	7	23	05	10	16.4	8.5	59	6.7	1014.3	7	001	02	2	2	3	4	6	7	/	81832	83640	87365	8	4Ac63	Cu	hum/med	N					
9	56	8	18	05	13	16.3	14.9	91	10.6	1008.1	6	007	63	6	6	3	7	2	2	/	83705	88540	9										
10	82	7	21	12	24	18.8	12.3	66	8.8	1010.6	7	011	02	2	2	4	8	5	0	1	82825	83645	87078	10	COTRA	Cu	med	Halo	22				
11	70	6	21	09	17	18.2	10.4	60	7.9	1007.4	1	002	02	2	2	2	2	6	7	1	82832	86366	11	2Ci75	Cu	med							
12	58	6	23	03	07	14.8	11.6	81	8.5	1013.7	3	004	29	9	8	6	9	4	6	3	84915	81825	12	2Sc30	1Ac60	2Ci70	ts	1439	vv	40k	ex	p	rainbow
13	78	1	33	04	08	18.7	10.2	58	7.9	1019.6	7	002	02	1	1	1	8	6	0	1	81832		13	1Sc50	1Ci75	Cu	hum						
14	84	7	07	05	14	18.1	8.1	52	6.4	1023.9	5	004	03	1	1	1	4	6	0	6	81640	83275	86080	14	COTRA								
15	80	7	09	06	11	17.5	8.6	56	7.0	1024.0	5	006	03	2	2	7	8	6	3	1	82835	86650	15	2Ac65	/Ci75	Cu	med						
16	65	8	13	04	10	15.0	5.1	52	5.3	1023.3	7	006	01	2	2	6	8	6	/	7	81840	86650	88275	16	COTRA	Cu	hum	Parhelion					
17	63	8	07	05	10	15.4	8.6	63	6.7	1021.7	7	010	15	2	2	7	8	5	2	/	82828	86657	88466	17	2Sc50	Cu	med	jpSE					
18	62	7	02	05	13	16.2	7.5	56	6.5	1022.9	7	005	02	2	2	7	8	6	/	/	81835	87650	18										
19	65	1	06	02	07	19.3	5.6	41	5.5	1028.2	7	001	02	0	0	1	1	7	0	0	81850		19	Cu	hum								
20	65	7	06	04	10	18.9	8.2	50	6.7	1029.5	8	022	02	2	2	1	1	6	0	1	81845	87080	20	COTRA	Cu	hum	Parhelion	int					
21	68	7	04	06	12	17.6	6.9	49	6.4	1025.1	6	015	03	2	2	3	8	6	0	1	81845	83650	86080	21	COTRA	Cu	hum						
22	62	7	01	08	21	16.0	9.8	66	7.5	1023.9	7	007	80	8	1	3	8	5	7	/	81828	83656	87358	22	Cu	med							
23	75	8	02	10	20	13.7	10.9	83	8.0	1024.6	6	005	25	8	2	7	8	5	7	/	81715	83820	87640	23	/Ac58								
24	40	8	06	03	13	14.2	12.5	89	8.9	1025.4	4	000	58	6	5	8	5	4	/	/	82710	85618	88635	24									
25	72	7	04	05	11	17.1	10.1	64	7.7	1032.2	8	003	02	2	2	7	8	6	/	/	81832	87650	25	Absent	Cl	&vis	est						
26	73	6	06	04	14	18.7	6.7	45	5.7	1034.5	7	010	02	1	1	1	1	6	0	1	81845	86080	26	COTRA	Cu	hum							
27	64	5	10	01	05	18.1	8.8	54	6.9	1029.8	7	025	02	2	2	0	0	9	0	1	85080		27	COTRA									
28	65	3	35	04	09	16.6	7.9	57	6.5	1024.8	6	017	03	0	0	2	8	6	0	1	82835		28	1Sc45	2Ci80	COTRA	Cu	hum					
29	86	6	27	07	18	15.3	4.8	49	5.4	1018.2	7	017	03	1	1	6	8	6	/	1	82844	86650	29	/Ci75	Cu	hum							
30	62	7	25	11	23	13.3	9.7	79	7.5	1004.6	7	023	21	6	2	6	8	5	7	/	82820	85640	86360	30	7As65	Cu	med	jpSW					

Mean vis = 26.1 km

Mean cloud = 6.1 77%

Mean wind speed = 6.6 kn

Mean gust = 15 kn

Mean TT = 16.9 °C

Mean TdTd = 11.0 °C

Mean RH = 62.3 %

Mean r = 7.4 g/kg

Mean PPP = 1016.5 mbar

VV = Visibility code (Code FM12-4377)

N = Total cloud amount, oktas

dd = Direction from which wind is blowing, tens of degrees true

ff = 10 minute mean wind speed, knots

gg = Highest gust in past hour, knots

TT = Air temperature at 1.2 m, deg Celsius

TdTd = Dew point temperature at 1.2 m, deg Celsius

RH = Relative humidity at 1.2 m

r = Humidity mixing ratio at 1.2 m, g/kg

PPP = Air pressure reduced to sea level, mbar

a = Characteristic of pressure tendency (Code FM12-0200)

ppp = 3 hr pressure tendency, tenths of mbar

ww = Present weather code (Code FM12-4677)

W1, W2 = Past weather code (Code FM12-4561)-

covers past 3 hours.

Nh = Amount of low cloud present, oktas

Cl = Type of low cloud (Code Fm12-0513)

h = Height of low cloud (Code FM12-1600)

Cm = Type of medium cloud (Code FM12-0515)

Ch = Type of high cloud (Code FM12-0509)

8 groups. 8 = indicator for cloud detail

N = Amount of cloud, oktas

C = Type of cloud (FM12-0500)

hshs = Height of cloud (FM12-1677)

Remarks : COTRA = persistent condensation

trails present.



September 2008	T mn	Tx	Time	Tn	Time	RHmn	RH x	Time	RH n	Time	Tdmn	r mn	r x	Time	r n	Time	p mn	p x	Time	p n	Time	R tot
1	15.49	20.4	1155	10.4	529	75.40	92.2	533	53.0	1304	10.95	8.12	9.8	1155	7.2	529	1012.07	1014.1	630	1007.0	2359	0.2
2	14.97	19.1	1445	12.4	640	77.90	93.3	440	47.9	1446	10.94	8.23	10.2	414	6.5	1521	1002.58	1007.2	0	1000.3	1757	7.8
3	14.56	19.1	1329	10.9	447	67.02	88.9	505	39.4	1300	8.14	6.81	8.0	851	5.3	1300	1001.45	1003.5	712	999.3	1642	0.0
4	15.09	18.7	1434	13.4	216	70.50	87.5	2359	52.8	1433	9.69	7.56	8.7	1236	6.8	1548	999.53	1001.1	2021	998.5	435	0.2
5	14.67	17.4	1430	13.1	100	89.10	93.5	302	74.3	1552	12.88	9.41	10.8	1430	8.6	0	992.04	1000.1	0	985.4	1940	24.2
6	14.83	17.3	1542	13.0	421	83.80	93.4	2053	70.1	1545	12.06	8.90	9.7	2054	7.9	907	994.03	998.4	2359	987.8	2	2.0
7	14.47	16.8	1236	13.2	424	82.70	92.7	437	68.9	1513	11.53	8.49	9.4	1230	7.8	1655	1005.30	1011.7	2354	998.2	0	2.5
8	14.32	17.2	1137	12.2	2326	75.30	89.3	2359	52.9	1353	9.86	7.55	8.4	848	6.0	1353	1013.80	1015.1	1624	1011.4	37	0.1
9	14.75	17.5	1041	11.4	104	89.10	93.3	150	80.6	1044	12.98	9.34	10.9	1720	7.7	104	1010.01	1014.1	8	1007.7	1608	5.6
10	16.16	20.1	1259	11.0	446	80.60	94.7	453	62.1	1432	12.70	9.13	10.5	1028	7.6	446	1010.82	1012.7	618	1006.7	2359	0.2
11	16.15	19.5	1542	12.5	2359	78.10	90.7	651	54.4	1548	12.23	8.90	10.8	651	7.4	1556	1007.12	1010.7	2358	1004.2	535	0.9
12	12.42	17.2	1302	9.2	2347	88.20	95.5	548	66.2	1305	10.46	7.85	9.0	1537	6.8	2347	1013.45	1016.1	2347	1010.4	0	1.0
13	12.61	19.2	1529	7.3	606	84.10	96.1	657	54.1	1531	9.74	7.45	8.9	812	6.0	606	1019.59	1023.3	2223	1016.0	38	0.0
14	12.98	19.6	1337	7.4	311	76.30	96.0	658	41.7	1354	8.37	6.78	9.5	813	5.5	1354	1024.59	1026.3	2207	1023.0	0	0.0
15	11.65	19.0	1305	7.2	349	78.50	95.2	650	44.6	1301	7.62	6.41	7.7	925	5.7	1407	1025.03	1026.1	759	1023.8	1418	0.0
16	11.16	15.9	1233	5.7	337	79.10	95.4	403	47.7	1345	7.35	6.32	7.6	854	5.1	1510	1023.99	1025.0	941	1023.0	1541	0.0
17	12.35	17.0	1330	7.9	2354	78.00	93.8	2351	50.4	1241	8.37	6.76	7.9	1040	5.7	1243	1022.96	1024.0	2309	1021.6	1452	0.0
18	11.37	18.9	1434	5.4	2355	79.40	95.5	240	42.5	1413	7.50	6.38	8.0	841	5.2	2356	1023.85	1025.7	2247	1022.6	1433	0.0
19	11.34	19.9	1409	4.5	253	76.60	95.4	609	39.1	1412	6.60	5.99	7.6	1726	4.9	253	1028.10	1031.5	2358	1025.4	50	0.0
20	11.38	20.1	1431	3.9	609	76.50	96.0	714	39.9	1143	6.74	6.04	8.1	905	4.7	610	1030.92	1033.0	756	1028.6	1649	0.0
21	10.96	19.6	1449	4.5	405	77.30	96.0	715	39.7	1345	6.49	5.95	8.1	850	4.9	406	1026.83	1029.5	2	1024.8	1625	0.0
22	13.45	19.7	1211	8.8	8	78.50	94.7	645	47.3	1210	9.51	7.28	8.4	1059	6.4	1203	1025.17	1026.4	5	1023.5	1419	0.0
23	12.83	16.6	1221	9.7	36	78.20	94.1	240	63.2	1133	9.03	7.07	8.6	1444	5.8	1900	1025.09	1026.1	814	1023.9	2355	0.9
24	13.64	15.4	955	12.2	7	86.10	91.8	1159	75.3	1007	11.34	8.23	9.4	1343	6.9	7	1025.60	1029.9	2353	1022.7	316	1.7
25	13.86	19.7	1205	8.1	2359	78.40	91.8	2351	49.6	1206	9.98	7.48	9.0	929	5.9	2145	1032.36	1035.4	2220	1029.6	6	0.0
26	11.36	19.9	1319	4.6	553	77.40	96.0	736	39.4	1334	6.94	6.08	8.2	929	4.9	553	1035.39	1037.1	848	1034.1	1603	0.0
27	10.80	18.5	1508	5.0	133	87.50	96.9	951	52.5	1509	8.54	6.83	9.5	1214	5.0	133	1031.39	1034.6	4	1028.6	1713	0.2
28	10.46	18.3	1416	3.4	605	81.80	95.9	622	44.0	1313	7.05	6.21	7.8	943	4.5	605	1026.19	1029.1	131	1023.2	2354	0.0
29	12.44	17.0	1307	8.2	615	71.00	92.6	412	41.0	1308	6.93	6.18	7.4	32	4.6	1143	1019.41	1023.3	0	1014.2	2358	0.3
30	12.99	15.3	1015	11.6	26	84.60	92.1	710	72.5	1410	10.43	7.89	8.8	1157	7.0	0	1006.70	1014.4	0	1000.6	2358	4.6

Total	Mean	Max	Min	8.93	13.40	3.36	79.57	93.68	53.57	80.60	39.10	9.43	7.39	8.88	6.14	1017.18	1020.18	1014.20	1034.15	985.39	52.4
	13.18	18.32	10.46																		

Wokingham Automatic Weather Station  
 AWS samples taken every 0.5 seconds  
 x and n refer to maximum and minimum respectively

**Readings taken at Wokingham Climatological Station, Emmbrook, Berkshire**  
**Lat 51.425 N, Long 0.853 W, NGR (SU) 798701**  
**Altitude 45 m ASL.**

Tmn = 00 to 24 GMT mean air temperature at 1.2 m, deg C  
 RHmn = 00-24 GMT mean relative humidity at 1.2 m, percent  
 Tdmn = 00-24 GMT mean dew point at 1.2 m, deg C  
 rmn = 00-24 GMT mean humidity mixing ratio, g/kg  
 pmn = 00-24 GMT mean air pressure reduced to mean sea level, mbar  
 Rtot = 00-24 GMT rainfall total from AWS tipping bucket raingauge, mm  
 Time = hours and minutes in GMT of extreme values