

# 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

			Anomaly	Rank in past 126 years		
Temperature (°C / °F)						
Mean maximum	15.3	59.5	+0.5	33 <sup>rd</sup>	highest	
Mean minimum	6.6	43.9	-0.1	46 <sup>th</sup>	highest	
Daily mean	11.0	51.8	+0.2	38 <sup>th</sup>	highest	
Highest maximum	19.5	67.1	on 13 <sup>th</sup>	Lowest maximum	10.4	50.7 on 25 <sup>th</sup>
Highest minimum	13.3	55.9	on 13 <sup>th</sup>	Lowest minimum	-1.1	30.0 on 21 <sup>st</sup>
Mean grass minimum	3.8	38.8		Lowest grass minimum	-4.6	23.7 on 23 <sup>rd</sup>
Mean earth @30 cm	13.1	55.6	+0.3	Earth @100 cm	15.5	59.9
Frost duration (hrs)	4.9			Rain duration (hrs)	35.2	
Rainfall total (mm / in)	35.9	1.41	54 %	30 <sup>th</sup> lowest		
Highest daily fall	15.8	0.62	on 9 <sup>th</sup>			
Number of: Dry days (<0.2mm)	22	Wet days (>0.9mm)	6	days ≥5mm	2	
Sunshine total (hrs)	111.0	Daily mean	3.58	105 %	Sunniest day	10.7 on 5 <sup>th</sup>
Nº days with: Air frost	4	Ground frost	9	Snow falling	0	Snow lying 0
Thunder	0	Hail ≥5mm	0	Small hail/ice	0	Fog @09 1
Air pressure MSL : Mean @09 GMT (mbar/in)	1024.5		+9.3	30.25		
Absolute highest				30.65		on 20 <sup>th</sup>
Absolute lowest				29.82		on 17 <sup>th</sup>

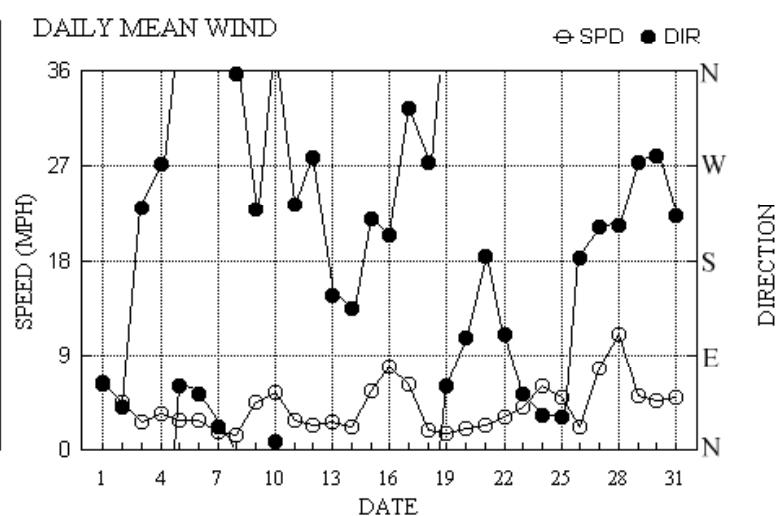
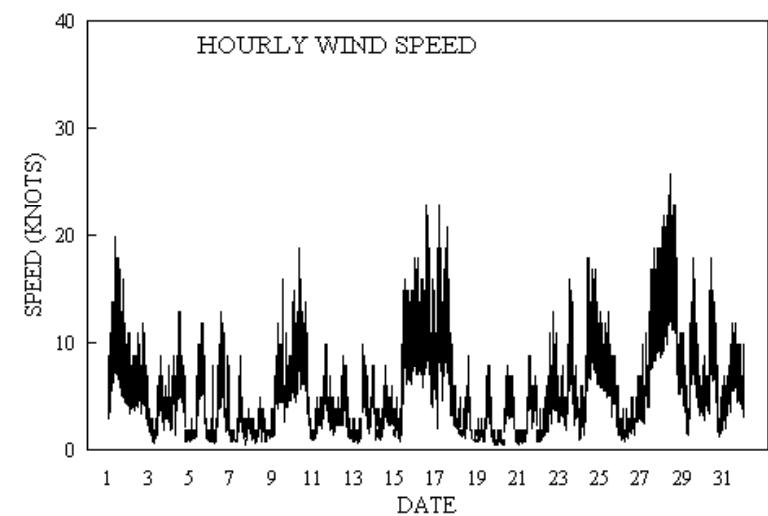
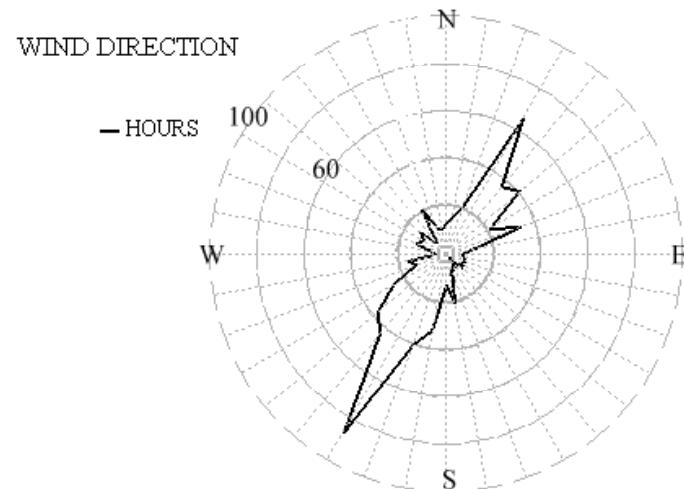
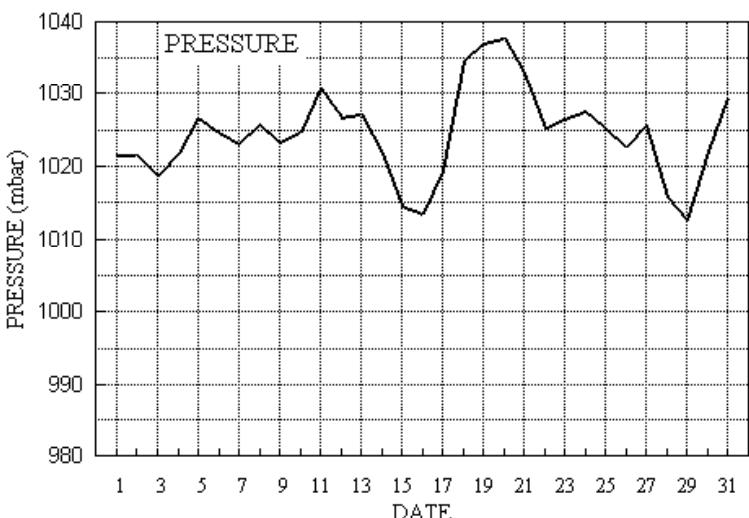
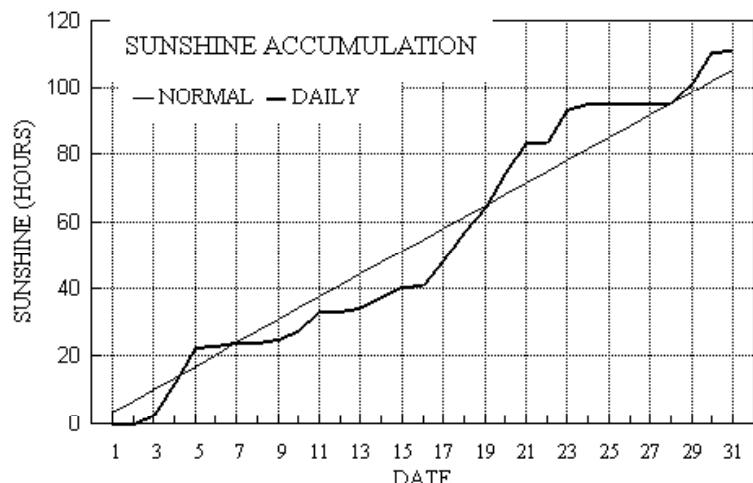
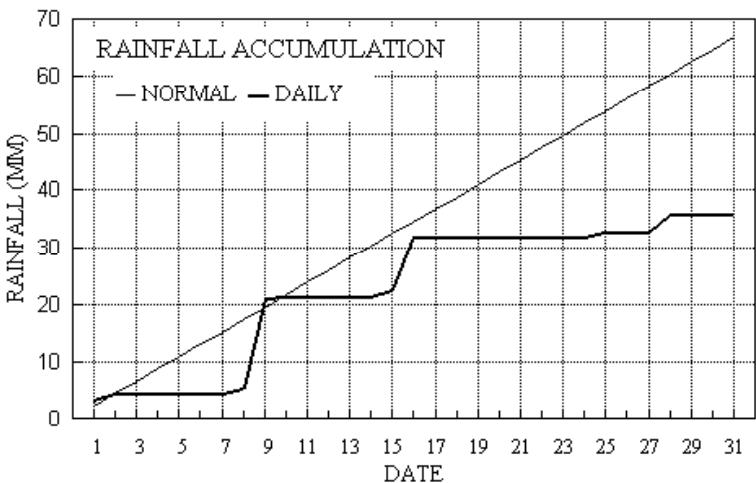
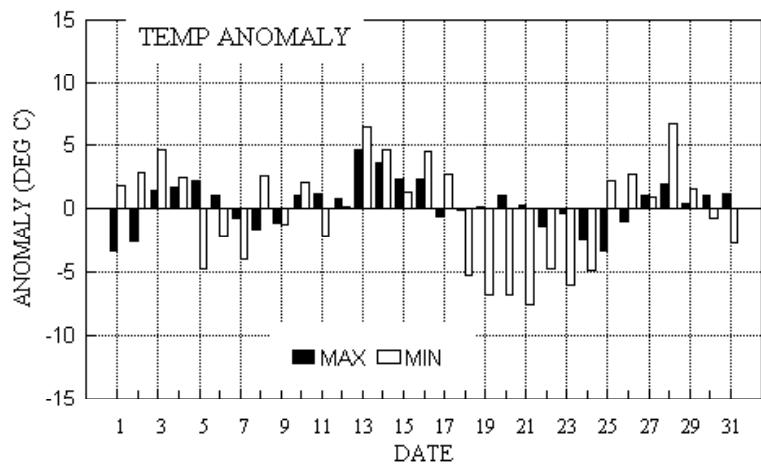
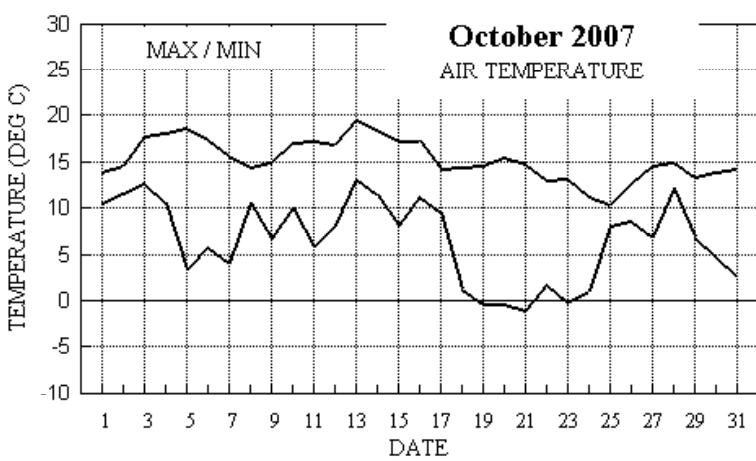
Anomaly = departure from 1971 to 2000 average (degrees C, percent and mbar).

Notes:

### Dry with Temperature Well Above Normal and Sunshine Above Normal.

**Temperature.** The mean, while above the current 30 year climatological average, is lowest since 2003, ending a short run of mild or very mild Octobers, and a sharp contrast to 2006 which is the mildest on record, and 2005, the second mildest. The mean maximum is 4.0° below the record set in 1921, and the mean minimum is also 4.0° below its record set in 2001. The highest max is 0.7° below the median and lowest since 2004, while the lowest max is 1.1° above the median, but also lowest since 2004. The lowest min is close to the median and is lowest since 2003, while the highest min is 0.2° above the median and also lowest since 2003. After 3 Octobers without an air frost, this year the first frost of the season was on the 19<sup>th</sup>, after a frost free period of 193 days. The first ground frost was a day earlier after a period of 141 days without a ground frost. Both the number of days with air and ground frost are 2 more than average. **Rainfall.** Quite a dry October, often one of the wettest months of the year. This October's total is lowest since 1995, although 2003 received a similar amount. Most of the rain fell on just 2 days, the 9<sup>th</sup> and 16<sup>th</sup>, whose combined total amounts to 70 % of the month's fall. The number of dry days is 6 above average. There were 3 dry spells, 2 of 5 days ending on the 7<sup>th</sup> and 14<sup>th</sup>, and one of 8 days ending on the 24<sup>th</sup>. **Sunshine.** A similar total to last October, and only a little above average. However, the number of sunless days is equal highest with 2000 and 1991 since 1982. Overall there were 19 days with <3 hours, 10 with =>6 hours and 6 with =>9 hours. The period 17<sup>th</sup> to 21<sup>st</sup> was especially sunny, the total for the 5 days being 91 % of the maximum possible. **Wind.** The mean wind speed of 4.0 mph is 2.3 mph below average and is lowest for October since before 1988, also lowest for any month since Sept 2003. The windiest day was the 28<sup>th</sup>, mean 11.1 mph, and the month's highest gust of 30 mph was on that day. That gust is also lowest for October since before 1988, and is 15 mph below average. The least windy day was the 8<sup>th</sup>, mean 1.4 mph, and there were 3306 minutes, (55.1 hours), with a mean speed of 0.5 mph or less. Daily mean direction/number of days: N,3 NE,8 E,2 SE,2 S,2 SW,8 W,5 NW,1. **Humidity.** The mean relative humidity was 87.4 % and the lowest value recorded was 43 % on the 4<sup>th</sup>. The mean water vapour content per kg of air was 7.4 g at 09 GMT and 7.0 g at 1500 GMT. **Pressure.** The mean pressure is equal highest with 1985 since before 1976. The absolute highest is highest since 1985. The absolute lowest is highest since before 1976. **Commentary.** 10/11 day anomalies (max, min, rain, sun): From 1<sup>st</sup> to the 10<sup>th</sup>, -0.2°, +0.4°, 98%, 82%. From 11<sup>th</sup> to the 20<sup>th</sup>, +1.6°, -0.1°, 49%, 138%. From 21<sup>st</sup> to the 31<sup>st</sup>, -0.2°, -1.2°, 17%, 97%. Temperatures showed little downward trend until after the 16<sup>th</sup>, and anomalies for daily max ranged from -3.3° on the 1<sup>st</sup> to +4.6° on the 13<sup>th</sup>. Minima were more variable, with anomalies of -4.7° on the 5<sup>th</sup> and +6.5° on the 13<sup>th</sup>. Nearly all the month's rain fell before the 17<sup>th</sup> although there were also 10 dry days. Sunshine was not outstanding, generally below normal, except on the 4<sup>th</sup> and 5<sup>th</sup>. Winds were mostly light or very light and were variable, but a moderate NE'ly blew on the 1<sup>st</sup>, and a moderate SW'ly on the 15<sup>th</sup> and 16<sup>th</sup>. A cool but sunny spell followed from the 17<sup>th</sup> to the 24<sup>th</sup>. Daily maxima were generally below normal, but anomalies for minima ranged from +2.7° on the 17<sup>th</sup> to -7.6° on the 21<sup>st</sup>. Sunshine was above normal except on the 22<sup>nd</sup> and 24<sup>th</sup>, and it was dry throughout. Winds were again mainly light and variable, but moderate NW'ly on the 17<sup>th</sup> and moderate NE'ly on the 24<sup>th</sup>. From the 25<sup>th</sup> to the 31<sup>st</sup>, daytime temperatures remained near normal, but overnight values recovered with daily anomalies up to +6.7° on the 28<sup>th</sup>. Some rain fell on 25<sup>th</sup>, 27<sup>th</sup> and 28<sup>th</sup>, otherwise it was dry. Apart from sunny days on the 29<sup>th</sup> and 20<sup>th</sup>, this period was dull. Light NE'ly winds on 25<sup>th</sup> became fresh SW'ly on 28<sup>th</sup>, decreasing moderate W'ly on 29<sup>th</sup>.

# Wokingham Climatological Graphs for October 2007



Daily meteorological data.

Emmbrook, WOKINGHAM, Berkshire.

Month: OCTOBER 2007

Date	Max	Min	Rain	Grass	30cm	100cm	Sun	Frost	pp09	Af	Sf	Th	Ic	Vec mean	Max gust			High hr			Rain		
	C	C	mm	Min	C	C	hrs	hrs	mbar	Gf	Sl	Ha	Fg	ddd	ff	sp	ddd	gg	HHhh	ddd	ff	HH	hrs
1	14.0	10.6	3.2	10.3	14.9	16.6	0.0	0.0	1021.6	0	0	0	0	62	5.3	5.5	80	20	0811	70	8	09	5.8
2	14.7	11.7	1.4	11.5	14.8	16.5	0.0	0.0	1021.6	0	0	0	0	40	3.8	3.8	40	12	1735	30	5	13	4.2
3	17.8	12.7	0.0	12.4	15.0	16.5	2.2	0.0	1018.6	0	0	0	0	231	1.3	2.3	280	9	1321	210	4	22	0.0
4	18.1	10.5	0.0	5.9	15.1	16.4	9.7	0.0	1021.7	0	0	0	0	272	2.0	2.9	310	13	1051	300	5	12	0.0
5	18.6	3.3	0.0	0.2	14.6	16.4	10.7	0.0	1026.7	0	0	0	0	60	1.8	2.4	80	12	1326	70	6	14	0.0
6	17.4	5.8	0.0	2.4	14.2	16.4	0.7	0.0	1024.6	0	0	0	0	52	1.9	2.4	60	13	1249	60	5	13	0.0
7	15.6	4.0	0.0	0.4	14.2	16.3	0.7	0.0	1023.2	0	0	0	0	21	1.1	1.4	20	9	1016	60	3	10	0.0
8	14.4	10.6	0.7	9.9	14.4	16.2	0.0	0.0	1025.8	0	0	0	0	358	0.3	1.2	20	5	1009	30	2	09	1.5
9	15.0	6.7	15.8	2.8	14.2	16.1	0.8	0.0	1023.3	0	0	0	0	229	2.7	3.9	320	16	1315	190	6	10	5.5
10	17.1	10.1	0.1	6.0	13.9	16.0	2.7	0.0	1024.8	0	0	0	0	7	3.7	4.7	30	19	0803	30	8	08	0.9
11	17.3	5.8	0.1	1.9	13.9	16.0	5.7	0.0	1030.7	0	0	0	0	234	2.2	2.4	260	10	1506	240	5	14	1.0
12	16.9	8.1	tr	5.8	14.0	15.9	0.0	0.0	1026.7	0	0	0	0	279	0.7	2.0	10	9	1138	350	4	11	0.0
13	19.5	13.3	0.0	9.7	14.5	15.8	1.0	0.0	1027.1	0	0	0	0	147	1.7	2.3	120	10	0946	170	4	22	0.0
14	18.5	11.4	tr	7.9	14.7	15.8	3.5	0.0	1021.7	0	0	0	0	135	1.2	1.9	140	8	1205	170	3	19	0.0
15	17.3	8.1	1.2	4.1	14.6	15.9	2.9	0.0	1014.7	0	0	0	0	219	4.7	4.9	210	18	2219	210	8	19	1.5
16	17.3	11.3	9.4	10.4	14.6	15.9	0.3	0.0	1013.4	0	0	0	0	204	6.7	6.8	220	23	1226	210	9	15	6.7
17	14.3	9.5	0.0	7.5	14.7	15.9	7.4	0.0	1019.2	0	0	0	0	324	4.4	5.4	360	23	0345	360	9	03	0.0
18	14.4	1.3	0.0	-2.5	13.6	15.9	8.8	0.0	1034.5	0	1	0	0	273	0.6	1.6	30	9	1353	10	4	14	0.0
19	14.7	-0.3	0.0	-3.2	12.6	15.8	7.3	0.7	1036.9	1	1	0	0	61	0.4	1.4	30	8	1337	50	3	12	0.0
20	15.5	-0.3	0.0	-3.0	11.9	15.6	9.8	0.3	1037.6	1	1	0	0	107	1.1	1.7	110	8	1222	110	4	12	0.0
21	14.8	-1.1	0.0	-4.4	11.4	15.3	9.2	3.5	1032.9	1	1	0	0	184	1.4	2.0	150	9	1138	170	5	19	0.0
22	13.1	1.8	0.0	-2.1	10.9	15.0	0.2	0.0	1025.2	0	1	0	0	109	1.7	2.6	110	13	1732	110	6	17	0.0
23	13.3	-0.2	0.0	-4.6	11.0	14.8	9.5	0.4	1026.4	1	1	0	0	53	3.4	3.4	70	16	1253	50	7	14	0.0
24	11.3	1.0	tr	-3.5	10.3	14.5	1.8	0.0	1027.5	0	1	0	0	33	5.2	5.2	60	18	0956	30	8	15	0.0
25	10.4	8.1	0.7	8.2	10.6	14.3	0.0	0.0	1025.3	0	0	0	0	31	4.2	4.3	20	13	0930	30	7	06	4.2
26	12.7	8.6	0.0	8.4	11.0	14.1	0.0	0.0	1022.7	0	0	0	0	182	0.8	1.9	180	7	2103	180	4	20	0.0
27	14.7	6.8	0.2	3.9	11.1	14.0	0.0	0.0	1025.6	0	0	0	0	212	6.7	6.7	200	21	2340	210	10	23	0.5
28	15.0	12.1	3.1	11.7	11.7	13.9	0.0	0.0	1015.8	0	0	0	0	214	9.5	9.6	210	26	0914	210	12	08	3.4
29	13.4	6.9	0.0	2.9	12.1	13.9	6.6	0.0	1012.6	0	0	0	0	274	3.1	4.4	300	18	1310	310	8	13	0.0
30	14.0	4.7	0.0	-1.0	11.4	14.0	9.0	0.0	1021.9	0	1	0	0	280	2.6	4.0	300	18	0905	310	8	09	0.0
31	14.2	2.7	tr	-1.3	10.8	13.9	0.5	0.0	1029.4	0	1	0	0	222	4.2	4.3	240	12	1408	220	6	13	0.0
Total			35.9			111.0	4.9																35.2
Mean	15.3	6.6		3.8	13.1	15.5	3.58	0.2	1024.5					230	0.4	3.5							
Anom	+0.5	-0.1	54%		+0.3	+1.1	105%		+9.3														
Daily mean	11.0				Pressure, abs highest =		1037.9	on 20															
Anom	+0.2				Pressure, abs lowest =		1009.7	on 17															

Number of days with:

Air frost = 4      Ground frost = 9      Nil sun = 8  
 Snow falling = 0      Snow lying = 0      Thunder = 0  
 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 October 2007

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	hCr	CtN	Chshs	NChshs	NChshs	Date	Remarks	
1	58	8	08	08	19	13.8	11.9	89	8.7	1021.6	2	004	60	6	2	4	5	4	7	/	81710	84650	85358	1	8As62
2	50	8	05	05	09	13.1	12.2	94	8.8	1021.6	1	006	50	5	2	8	6	3	/	/	85706	88709		2	
3	35	8	03	01	02	13.7	12.6	93	9.1	1018.6	0	000	10	5	2	8	6	2	/	/	81703	84705	88708	3	
4	62	7	26	05	09	15.6	12.5	82	9.0	1021.6	2	018	03	2	2	4	2	4	0	1	84812	87080		4	COTRA Cu med
5	70	1	06	03	06	10.8	8.8	87	7.0	1026.7	1	005	02	0	0	0	9	0	1		81080			5	
6	60	7	04	03	06	12.7	11.8	94	8.5	1024.6	2	006	05	2	2	7	5	5	/	/	81625	87635		6	
7	50	7	35	02	04	10.6	9.8	95	7.5	1023.2	8	001	10	2	2	7	5	5	/	/	81625	87630		7	
8	61	8	02	02	03	12.1	10.2	88	7.6	1025.8	2	012	02	2	2	8	5	6	/	/	88640			8	
9	20	8	18	04	10	13.1	12.3	95	8.8	1023.3	8	013	62	6	5	7	7	3	2	/	83707	87710	88520	9	
10	63	3	04	08	18	13.7	10.7	82	7.9	1024.8	2	028	03	5	1	3	8	4	0	0	83815			10	1Sc30 1Sc45
11	02	9	28	02	04	7.9	7.8	99	6.4	1030.7	3	009	43	4	4	9	/	/	/	/	11	vv 250m			
12	15	8	27	02	05	13.8	13.4	97	9.4	1026.7	2	005	51	5	2	8	6	2	/	/	86703	88705		12	
13	28	7	06	01	03	15.5	15.1	97	10.5	1027.1	0	010	10	2	2	7	5	4	/	/	83612	85630	87635	13	
14	56	7	03	01	03	13.3	10.8	84	7.9	1021.7	0	003	05	2	2	7	5	5	/	/	87625			14	Sc str un pe
15	20	7	21	03	10	11.3	11.1	99	8.2	1014.7	0	002	10	2	2	7	5	6	/	/	83630	87635		15	
16	40	8	20	05	12	14.8	14.1	95	9.9	1013.4	2	010	50	6	5	8	5	2	/	/	82705	85708	88615	16	vv 25k ex p
17	68	1	33	06	15	11.7	8.1	79	6.7	1019.2	2	044	03	1	1	1	1	4	0	0	81812			17	Cu fra
18	60	6	25	01	04	7.4	5.5	88	5.5	1034.5	2	024	05	1	1	0	0	9	0	1	86080			18	COTRA
19	59	3	21	01	02	5.7	4.6	93	5.1	1036.9	3	009	05	0	0	1	0	9	3	1	81361	83080		19	COTRA
20	63	1	03	02	04	6.6	5.7	93	5.5	1037.6	2	009	02	0	0	0	0	9	0	1	81081			20	COTRA
21	35	1	00	00	02	4.3	4.1	99	5.0	1032.9	8	004	40	4	0	0	0	9	0	1	81075			21	Hoar slt Fg NW VV 6k ex NW
22	32	7	05	02	03	6.0	5.4	96	5.5	1025.2	0	006	10	2	2	7	0	9	7	2	81368	86370	87072	22	
23	50	0	03	03	05	5.2	4.3	94	5.1	1026.4	1	009	05	0	0	0	0	9	0	0				23	Hoar slt in shade
24	68	6	03	05	11	8.1	4.7	79	5.2	1027.5	0	004	03	1	1	6	5	6	0	0	86635			24	
25	56	8	03	06	11	9.4	7.1	85	6.2	1025.3	0	003	20	5	2	8	5	4	/	/	84612	88618		25	
26	18	8	06	01	03	9.2	8.8	97	6.9	1022.7	0	003	10	5	2	8	5	2	/	/	83705	85615	88625	26	
27	58	7	21	05	08	12.6	10.9	89	8.0	1025.6	0	007	05	2	2	7	5	4	/	/	81710	83625	87635	27	Absent 27&28 vv,cld&wx est
28	62	8	21	12	23	14.6	12.8	89	9.1	1015.8	7	011	20	5	2	8	6	3	/	/	83707	88709		28	
29	59	3	30	04	06	10.4	9.6	95	7.4	1012.6	2	014	10	1	1	2	6	3	3	0	82706			29	1Sc56 2Ac58
30	82	3	30	07	14	10.5	6.2	75	5.8	1021.9	2	013	02	0	0	1	0	9	7	1	81358	83078		30	1Ac59 COTRA
31	62	7	23	04	10	10.4	9.5	94	7.3	1029.4	0	008	02	2	2	6	5	5	3	1	81625	86630	86075	31	1Ac62 COTRA Parhelion

Mean vis = 8.9 km

Mean cloud = 5.8 72%

Mean wind speed = 3.7 kn

Mean gust = 8 kn

Mean TT = 10.9 C

Mean TdTd = 9.4 C

Mean RH = 90.8 %

Mean r = 7.4 g/kg

Mean PPP = 1024.5 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.

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 1500 GMT for October 2007

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	hCr	Ct	NChshs	NChshs	NChshs	Date	Remarks			
1	58	8	06	07	16	13.5	11.8	90	8.5	1021.9	7	004	05	6	2	7	8	4	2	/	82812	84625	85645	1	8As58		
2	22	8	03	03	08	14.0	13.2	95	9.3	1020.5	6	007	51	5	2	8	6	2	/	/	82704	86705	88708	2			
3	60	7	24	04	09	17.1	11.4	69	8.3	1017.3	7	009	05	2	2	1	8	5	3	2	/	81822	86072		3	1Sc35 1Ac68 Cu hum	
4	86	6	35	05	09	17.1	6.7	51	6.1	1021.9	1	001	02	2	2	1	1	6	0	1	81840	86080		4	COTRA Cu hum		
5	70	1	07	06	11	17.5	8.5	55	6.8	1024.4	7	013	02	0	0	1	5	6	0	0	/	81638			5		
6	67	7	07	05	11	16.0	9.0	63	7.1	1022.9	6	008	02	2	2	7	8	5	1	/	/	81828	87632		6	Cu hum	
7	58	7	36	01	02	15.1	10.6	74	7.8	1021.8	7	010	05	2	2	7	8	5	1	/	/	82820	87635		7	Cu hum	
8	59	8	35	02	04	13.9	8.6	70	6.8	1026.6	0	000	05	2	2	8	5	6	1	/	/	82645	88650		8		
9	80	7	22	02	05	12.6	11.7	94	8.5	1020.8	7	004	61	6	6	1	8	5	2	1	/	81820	87558		9	1Sc45 Cu hum Cld edge W	
10	59	7	03	06	13	16.7	10.3	66	7.6	1026.9	0	005	05	2	2	2	8	5	0	1	/	/	81825	87078		10	2Sc45 COTRA Cu hum
11	59	7	24	06	10	16.4	10.7	69	7.9	1027.0	7	023	05	2	2	1	8	5	0	1	/	/	81823	87078		11	1Sc28 COTRA Cu hum
12	59	8	36	02	07	16.5	14.1	86	9.9	1026.9	2	001	05	2	2	8	5	4	1	/	/	82710	86612	88615	12		
13	61	7	18	03	06	17.3	13.3	77	9.3	1024.3	7	015	02	2	2	7	8	4	1	/	/	83818	87630		13	Cu hum	
14	60	3	11	03	06	17.1	10.5	65	7.8	1018.2	7	018	05	1	1	3	8	5	0	0	/	/	81828	83630		14	Cu hum
15	65	8	24	07	14	15.5	10.3	71	7.8	1013.5	6	005	02	2	2	8	8	5	1	/	/	81825	88650		15	2Sc35 Cu med	
16	68	7	21	08	21	16.5	11.8	74	8.6	1012.5	6	008	03	2	2	3	8	5	7	1	/	/	83820	87360		16	1Sc45
17	84	5	28	08	15	13.1	4.5	56	5.2	1022.7	2	014	02	1	1	5	8	6	0	1	/	/	81835	85650		17	1Ci78 Cu med
18	86	7	01	04	06	11.5	3.4	58	4.7	1034.7	5	002	02	2	2	1	1	6	0	1	/	/	81838	83272	87078	18	COTRA Cu hum
19	75	5	03	05	08	12.2	4.0	57	4.9	1035.2	7	009	03	1	1	4	4	6	0	1	/	/	82835	83640		19	2Ci80 COTRA Absent vv&cld est
20	80	1	06	03	06	14.0	4.9	54	5.3	1035.3	7	016	02	0	0	1	8	6	0	1	/	/	81838			20	1Sc40 1Ci81 Cu hum
21	70	6	22	04	07	13.4	4.0	53	5.0	1028.8	7	025	03	1	1	0	0	9	0	1	/	/	81275	86080		21	COTRA
22	63	8	16	02	08	12.4	6.7	68	6.0	1023.4	7	007	03	2	2	3	8	5	7	7	/	/	81823	83630	86368	22	2Ac64 8Cs72 Cu hum
23	61	1	06	06	14	11.8	4.4	60	5.1	1025.6	6	003	02	0	0	1	5	6	0	0	/	/	81630			23	
24	75	8	03	10	17	10.0	5.2	72	5.4	1026.1	6	011	02	2	2	8	5	5	1	/	/	/	88625			24	
25	23	8	03	05	07	9.4	8.6	95	6.9	1023.3	7	008	51	5	5	8	5	2	1	/	/	82705	86707	88612	25		
26	62	8	26	03	05	10.7	5.7	72	5.6	1022.1	7	002	02	2	2	8	5	5	1	/	/	88623			26	Absent 26th to 28th vv,cld&wx est	
27	65	8	22	09	15	13.9	10.1	77	7.5	1024.7	7	012	02	2	2	8	5	4	1	/	/	88615			27		
28	58	8	21	11	21	14.7	13.5	93	9.6	1012.2	7	022	50	6	5	8	5	4	1	/	/	83710	88612		28		
29	86	5	32	06	20	11.7	2.8	54	4.6	1014.7	3	008	03	1	1	1	2	6	4	2	/	/	81838	83068		29	1Ac65 1Ac68 Cu med
30	84	2	31	03	12	13.1	4.2	55	5.0	1024.4	2	010	02	0	0	1	1	6	0	1	/	/	81836			30	2Ci80 Cu hum
31	65	7	22	06	12	13.8	10.7	82	7.9	1028.8	7	005	02	2	2	7	8	4	1	/	/	81815	87620		31	Cu fra	

Mean vis = 20.7 km

Mean cloud = 6.2 78%

Mean wind speed = 5.0 kn

Mean gust = 10 kn

Mean TT = 14.1 C

Mean TdTd = 8.6 C

Mean RH = 70.2 %

Mean r = 7.0 g/kg

Mean PPP = 1023.5 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.

## Wokingham AWS Psychrometer, 1min readings Daily means and extremes, 00-24 GMT and RH statistics

October 2007

e Mean Ma

October 2007	T mn	Tx	Tn	RHmn	RH x	RH n	Tdmm	r mn	r x	r n	p mn	p x	p n	R tot	
1	12.57	13.9	924	11.5	2233	92.9	96.9	359	86.7	1007	11.46	8.31	1255	7.6	
2	12.82	14.6	1315	11.3	159	95.1	97.4	445	88.8	1046	12.05	8.66	1604	7.7	
3	13.45	17.6	1451	10.2	2207	90.8	97.9	2223	67.8	1453	11.89	8.59	1446	7.4	
4	12.72	17.8	1337	6.2	2349	81.2	98.2	716	42.7	1206	9.08	7.17	900	5.1	
5	9.71	17.9	1422	3.1	636	84.2	98.7	740	49.3	1432	6.78	6.09	1152	4.6	
6	11.83	17.4	1246	5.6	54	85.4	98.1	219	62.3	1458	9.28	7.21	944	5.4	
7	10.53	15.4	1238	4.0	502	89.3	98.2	655	67.4	1513	8.76	7.01	1624	4.9	
8	11.26	14.3	1429	6.3	2326	86.6	97.8	2346	60.3	1315	9.01	7.05	1636	5.7	
9	11.56	15.1	1217	6.7	10	92.9	97.9	33	79.7	528	10.44	7.82	1217	5.8	
10	12.66	16.8	1456	6.7	2359	85.2	97.7	2353	63.0	1502	10.15	7.61	1312	5.8	
11	10.31	16.8	1447	5.7	130	92.2	99.5	952	65.7	1600	8.98	7.07	1234	5.4	
12	13.93	16.9	1537	9.1	16	94.2	98.2	41	84.6	1314	12.99	9.18	10.3	1750	
13	14.87	18.9	1058	11.6	1948	89.6	98.5	456	63.8	1058	13.09	9.24	10.7	914	
14	13.04	17.9	1334	8.0	2353	85.2	97.8	2359	59.8	1437	10.46	7.80	8.9	1837	
15	12.26	16.9	1212	7.9	26	87.9	99.4	640	62.8	1237	10.17	7.72	9.8	1041	
16	15.00	17.3	1328	14.0	2150	87.3	96.7	2356	71.0	1449	12.87	9.22	10.4	1031	
17	10.91	14.7	35	4.4	2350	78.5	97.7	219	52.2	1219	7.03	6.31	10.0	35	
18	6.28	13.4	1326	1.2	650	84.8	98.4	707	45.5	1210	3.53	4.80	6.0	1036	
19	5.43	13.8	1424	-0.3	644	86.3	99.0	619	49.6	1426	3.00	4.64	6.3	1301	
20	5.93	14.6	1409	-0.2	628	84.5	98.8	648	46.5	1320	3.05	4.65	6.3	1059	
21	5.30	13.8	1350	-1.1	603	86.4	99.9	654	49.0	1426	2.81	4.61	6.4	1043	
22	7.12	12.8	1316	1.7	211	88.7	98.3	305	63.7	1318	5.25	5.51	6.9	1858	
23	5.37	12.5	1413	-0.2	705	85.6	99.2	722	53.2	1314	2.87	4.62	5.7	1054	
24	7.29	10.8	1007	1.0	18	82.0	98.2	242	65.6	1051	4.28	5.10	6.0	2346	
25	9.24	10.3	1059	8.3	2347	90.0	97.9	2355	81.5	12	7.67	6.44	7.0	1555	
26	8.98	10.8	1418	7.3	1918	92.8	98.3	702	69.6	1502	7.84	6.52	7.1	1108	
27	11.77	14.2	1129	6.8	336	88.3	97.8	421	76.4	1507	9.87	7.49	8.5	2353	
28	13.55	15.0	1247	10.5	2315	92.5	95.9	1820	88.0	1025	12.38	8.91	9.8	1231	
29	9.57	13.3	1304	4.5	2245	79.4	98.6	817	49.6	1352	5.87	5.83	7.6	11	
30	8.48	13.9	1342	3.8	2212	79.6	96.8	2337	50.6	1318	4.87	5.31	6.1	923	
31	9.53	13.9	1502	2.6	405	91.0	98.8	625	80.3	1038	8.09	6.69	8.0	923	
Tot														37.50	
Mean	10.43	14.94		5.75		87.43	98.15		64.41		8.25	6.88	8.27		1021.5
Hi	15.0	18.9		14.0		95.1	99.9		88.8		13.1	9.2	10.7		1035.0
Lo	5.3	10.3		-1.1		78.5	95.9		42.7		2.8	4.6	5.7		1009.7

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