

WOKINGHAM

METEOROLOGICAL

DATA

Wokingham Climatological Station, Emmbrook, Berkshire.

Lat/Long 51°25'N 00°51'W NGR (SU)800699 Altitude 44m ASL.

Monthly Means and Totals

SEPTEMBER 2004

Temperature (°C / °F)			Anomaly	Rank in the past 123 years			
Mean maximum	20.6	69.1	+1.7	14 th highest			
Mean minimum	11.2	52.2	+1.5	4 th highest			
Daily mean	15.9	60.6	+1.6	4 th highest			
Highest maximum	27.7	81.9	on 5 th	Lowest maximum	15.2	59.4	on 25 th
Highest minimum	16.8	62.2	on 7 th	Lowest minimum	3.5	38.3	on 25 th
Mean grass minimum	8.5	47.3		Lowest grass minimum	-0.6	30.9	on 25 th
Mean earth @30 cm	16.7	62.1	+0.6	Earth @100 cm	17.0	62.6	+0.5
Frost duration (hrs)	0.0			Rain duration (hrs)	15.3		
Rainfall total (mm / in)	24.0	0.94	38 %	23 rd lowest			
Highest daily fall	8.4	0.33	on 12 th				
Number of: Dry days (<0.2mm)	19	Wet days (>0.9mm)	7	days ≥5mm	1		
Sunshine total (hrs)	179.4	Daily mean	5.98	Sunniest day	12.7	on 4 th	
N ^o days with: Air frost	0	Ground frost	1	Snow falling	0	Snow lying	0
Thunder	0	Hail ≥5mm	0	Small hail/ice	0	Fog @09	0
Air pressure MSL : Mean @09 GMT (mbar/in)		1018.9	+2.4	30.09			
Absolute highest		1034.1		30.54		on 7 th	
Absolute lowest		998.7		29.49		on 14 th	

Anomaly = departure from 1971 to 2000 average.

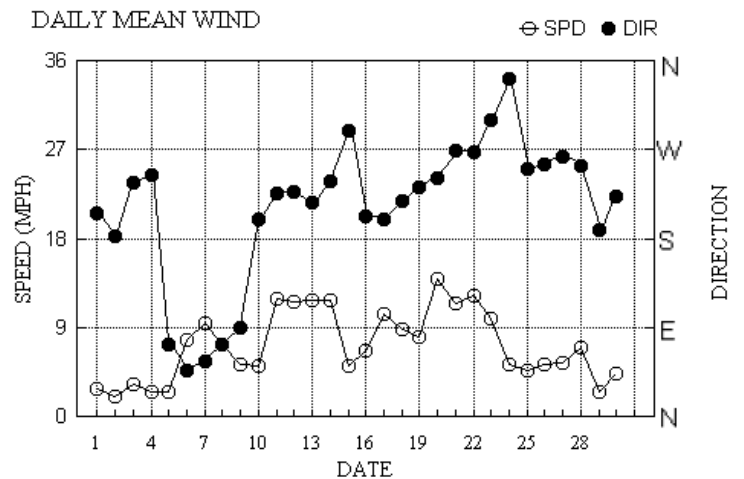
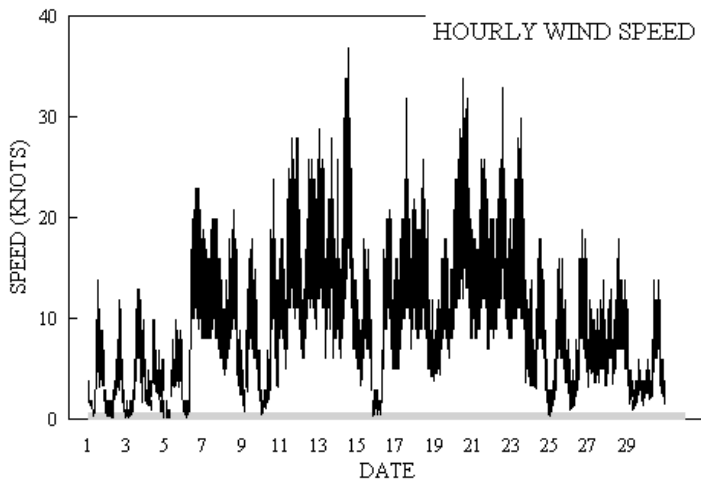
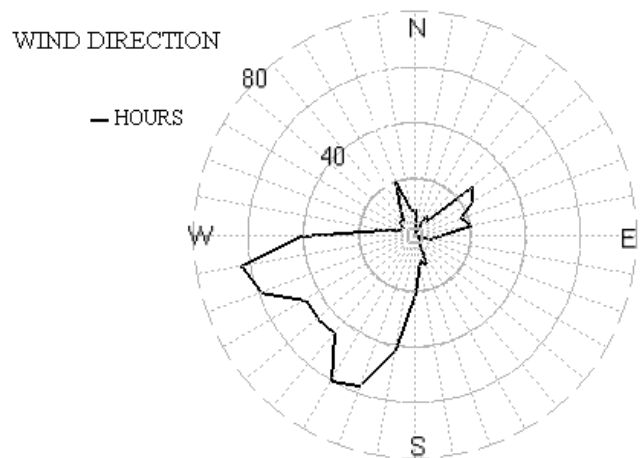
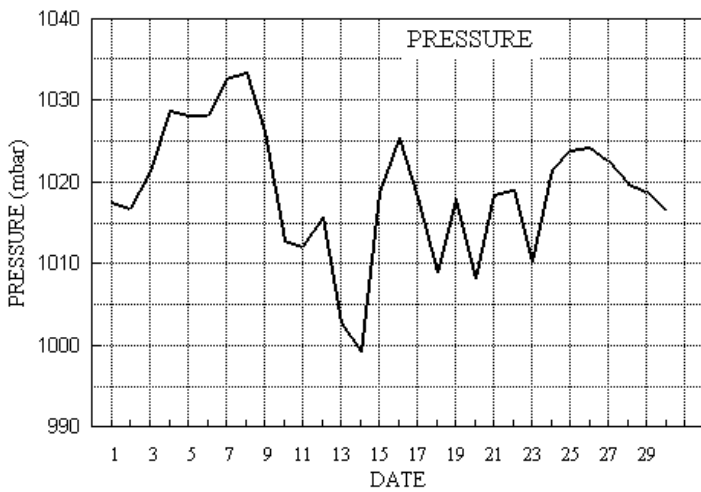
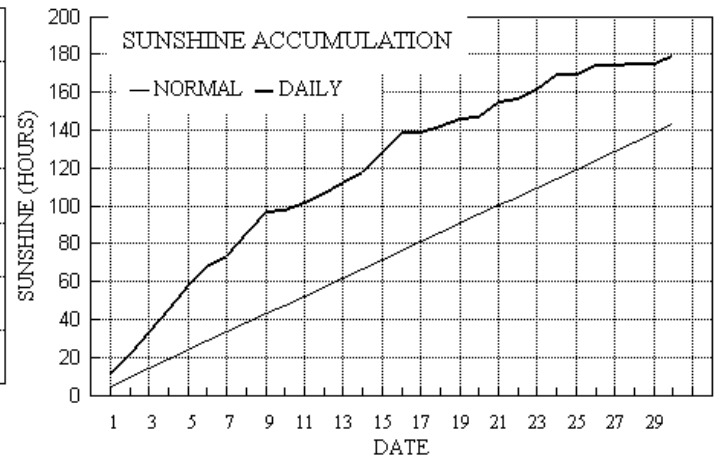
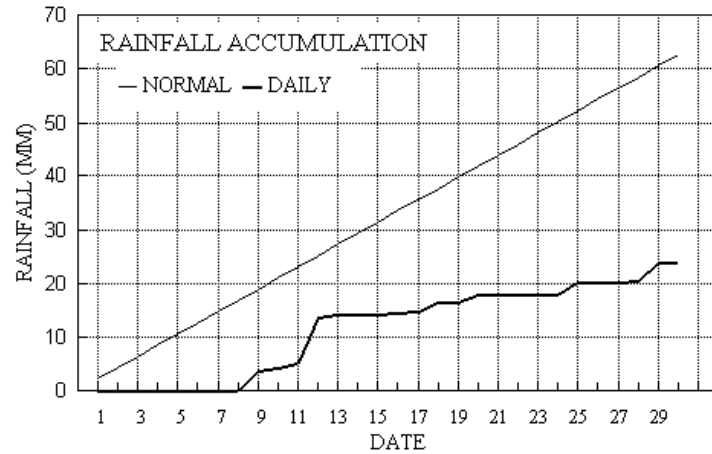
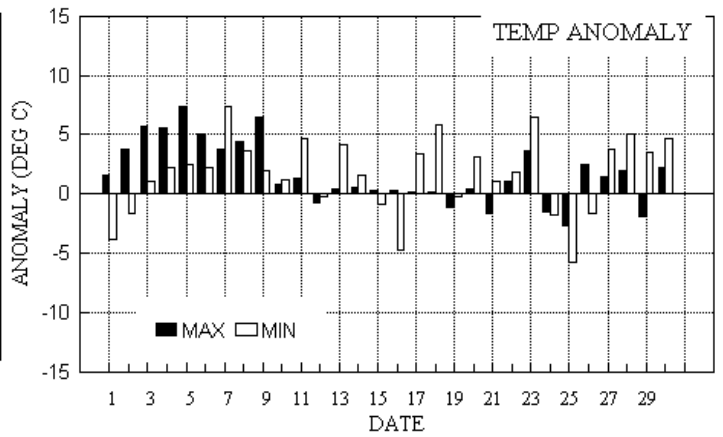
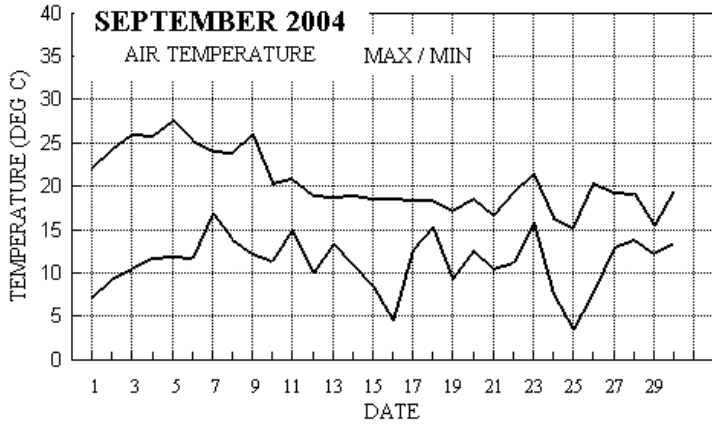
Notes: **Very Warm.** **Dry.** **Sunny.** **Windy.**

Temperature. The overall mean this September has only been exceeded 3 times in the past 123 years, in 1999, 1949 and 1929, this latter year holding the record of 17.0°, 1.1° above this year's. The mean minimum is also 4th highest after 1999, 1949 and 1998. The mean maximum, 20.6°, however, ranks only 14th highest, and is 3.1° below the record set in 1929, and 1.0° below September 2003's value. The highest maximum, 27.7°, is 3.4° above the long-term median, and 6.2° below the record set as long ago as 1906. The lowest minimum, 3.5°, is 0.9° above the median, and 5.4° above the lowest on record, -1.9° in 1919. The lowest maximum is 1.3° above, and the highest minimum 1.7° above their respective medians. The mean grass minimum is highest since 1998. The first ground frost of the season was on the 25th, giving a frost free period of 124 days, exactly equal to the average of the past 24 years, but fewest since 1996. **Rainfall.** A dry September, with only 38 % of the climatological average. It was, however, not as dry as September 2003, when only 6.6 mm fell. The month's highest 24 hour fall, 8.4 mm on the 12th, is 7.8 mm below the median. There was 1 more dry day than normal, and a dry spell of 9 days ended on the 8th. **Sunshine.** Well above normal sunshine, but the total is lowest since 2001. The period 1st to the 9th was outstanding with a mean of 10.9 hours per day, and by the 9th the surplus was 55 hours above normal. Overall there were 3 days with <3 hours, 12 with =>6 hours, 10 with =>9 hours and 4 with =>12 hours. **Wind.** The mean speed of 7.1 mph this month is 1.2 mph above average and makes this the windiest September since before 1988. The mean speed of 13.9 mph on the 20th, the month's windiest day, is also a new record for September. The highest gust of 43 mph on the 14th is highest only since 1994. The 2nd was the least windy day, 2.0 mph, and there were 30 hours with a mean speed of 0.5 mph or less, 17 below average. Daily mean direction/number of days: N,1 NE,2 E,3 SE,0 S,5 SW,11 W,7 NW,1. **Humidity.** The overall mean relative humidity was 76.8 %, and the lowest value recorded was 28 % on the 8th. The mean amount of water vapour per kg of air was 8.9 g at 0900 GMT and 8.3 g at 1500 GMT. **Commentary. From the 1st to the 10th:** Temperatures were well above normal and daily maxima reached 7° above normal on the 5th, the month's hottest day, although an anomaly of -3.8° for the minimum on the 1st was atypical. The 10 day mean anomalies were +4.5° and +1.7° for max/min resp. Dry until the 8th, then 4.1 mm over the last two days, just 20 % of the 10 day normal. Very sunny, with over 12 hours on 4 days, and dull only on the 10th, giving a 10 day mean 204 % of normal. Light S'ly winds until the 4th backed NE'ly and increased moderate on the 6th, veering S'ly on 10th. **From the 11th to the 20th:** Temperatures generally close to normal, with mean anomalies +0.2° and +1.6° for max/min resp. Only 4 dry days, and 8.4 mm on the 12th, the month's wettest day, though the 10 day total was only 66 % of normal. Not as sunny as the first period, but a mean of 5.0 hours per day is close to normal. Windy in this period, with fresh SW'ly winds becoming strong on the 14th, then moderate W'ly on 15th, backing SW'ly on 16th, increasing fresh on 17th, and strong again on 20th, the month's windiest day. **From the 21st to the 30th:** Temperature were more variable, with anomalies for maxima ranging from +3.6° on the 23rd to -2.7° on the 25th, the month's coolest day. For minima individual anomalies ranged from +6.5° on the 23rd to -5.8° on the 25th, the month's coldest night, with 10 day mean anomalies of +0.5° and +1.7° for max/min resp. There were 7 dry days, and a 10 day total just 30 % of normal. Rather dull generally, just 2 days with >6 hours, and the 10 day mean just 67 % of normal. Fresh or strong W'ly winds became moderate N'ly on 24th, backing light W'ly on 25th, then S'ly on 29th.

B J Burton. FRMetS.

Hon. Met. Officer to Wokingham Town Council.

Wokingham Climatological Data



Daily meteorological data.

Emmbrook, WOKINGHAM, Berkshire.

Month: SEPTEMBER 2004

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	22.1	7.1	0.0	4.3	17.2	17.6	12.0	0.0	1017.5	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	205 2.3 2.5	220 14 1102	220 6 12	0.0	
2	24.2	9.2	0.0	6.0	17.4	17.5	10.4	0.0	1016.7	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	182 1.3 1.7	160 12 1553	190 5 16	0.0	
3	26.0	10.6	0.0	7.2	17.7	17.5	10.9	0.0	1021.2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	237 2.2 2.8	230 13 1514	250 7 16	0.0	
4	25.9	11.7	0.0	8.8	18.0	17.5	12.7	0.0	1028.8	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	245 1.5 2.1	270 10 0953	280 4 09	0.0	
5	27.7	12.0	0.0	8.8	18.5	17.5	12.6	0.0	1028.2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	72 2.0 2.2	70 10 1354	90 4 18	0.0	
6	25.3	11.7	0.0	7.8	18.6	17.5	9.8	0.0	1028.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	47 6.6 6.8	50 23 1403	30 11 17	0.0	
7	24.1	16.8	0.0	16.3	18.6	17.5	5.9	0.0	1032.7	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	56 8.0 8.1	60 20 1555	60 10 12	0.0	
8	24.0	13.8	0.0	11.7	18.4	17.5	12.1	0.0	1033.4	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	73 6.1 6.3	70 21 1412	80 10 14	0.0	
9	26.1	12.2	3.7	7.0	18.1	17.6	11.3	0.0	1026.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	90 4.4 4.6	100 18 1348	80 8 09	2.3	
10	20.4	11.4	0.4	7.5	18.1	17.5	0.1	0.0	1012.9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	199 3.6 4.4	200 24 1458	210 10 15	0.2	
11	20.9	14.9	1.0	11.9	18.1	17.5	4.6	0.0	1012.2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	226 10.2 10.3	210 28 1328	240 15 20	0.1	
12	18.9	9.9	8.4	6.8	17.7	17.5	4.7	0.0	1015.6	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	228 9.7 10.0	230 26 1431	230 14 14	3.4	
13	18.8	13.4	0.7	12.5	17.3	17.5	5.8	0.0	1002.7	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	217 9.8 10.2	210 29 0051	210 13 00	0.8	
14	18.9	10.9	tr	7.2	17.0	17.4	5.5	0.0	999.2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	238 9.3 10.3	260 37 1317	250 19 13	0.0	
15	18.7	8.4	0.0	3.8	16.5	17.3	10.2	0.0	1018.6	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	289 3.2 4.4	310 18 0859	310 8 09	0.0	
16	18.7	4.5	0.1	0.3	16.1	17.2	10.6	0.0	1025.4	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	202 5.6 5.7	220 21 1550	210 11 14	0.1	
17	18.5	12.7	0.5	9.8	16.0	17.1	0.1	0.0	1018.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	200 9.0 9.0	210 32 1220	210 12 12	1.7	
18	18.5	15.3	1.6	14.5	16.3	16.9	3.5	0.0	1008.9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	218 7.4 7.6	240 26 0958	230 12 09	1.0	
19	17.2	9.2	tr	6.5	16.0	16.9	3.7	0.0	1018.0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	232 6.8 6.9	220 20 2342	240 9 12	0.0	
20	18.7	12.6	1.4	11.5	15.9	16.8	1.0	0.0	1008.2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	242 11.4 12.1	260 34 1214	270 16 14	0.4	
21	16.7	10.5	0.0	7.9	15.6	16.7	7.6	0.0	1018.4	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	269 9.6 10.0	280 26 0925	280 13 10	0.0	
22	19.4	11.3	tr	9.4	15.1	16.6	1.5	0.0	1019.0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	267 10.6 10.7	270 33 1253	260 16 12	0.0	
23	21.5	15.8	tr	14.3	15.5	16.5	4.9	0.0	1010.2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	300 7.2 8.6	340 30 1127	300 13 10	0.1	
24	16.4	7.5	0.0	3.5	15.4	16.4	8.3	0.0	1021.4	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	342 4.4 4.5	330 18 1337	350 8 10	0.0	
25	15.2	3.5	2.3	-0.6	14.8	16.3	0.3	0.0	1023.8	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	250 3.8 4.0	270 16 1510	260 7 11	1.4	
26	20.4	7.7	0.0	4.0	14.5	16.2	4.6	0.0	1024.2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	255 4.2 4.5	250 19 1511	260 9 15	0.0	
27	19.3	13.0	tr	10.8	15.0	16.1	0.1	0.0	1022.6	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	263 4.6 4.7	250 14 1801	250 6 03	0.0	
28	19.2	13.8	0.2	12.9	15.4	16.0	0.7	0.0	1019.7	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	253 6.0 6.1	270 18 1352	260 8 12	0.6	
29	15.4	12.3	3.6	12.0	15.5	15.9	0.0	0.0	1018.8	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	188 1.1 2.1	260 11 0012	270 4 00	3.0	
30	19.5	13.5	0.1	11.4	15.6	15.9	3.9	0.0	1016.4	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	223 3.2 3.8	260 14 1448	250 8 14	0.2	
Total			24.0				179.4	0.0										15.3
Mean	20.6	11.2		8.5	16.7	17.0	5.98	0.0	1018.9					238 3.4 6.2				
Anom	+1.7	+1.5	38%		+0.6	+0.5	125%											+2.4
Daily mean		15.9																
Anom		+1.6																
Number of days with:																		
Air frost = 0																		
Ground frost = 1																		
Nil sun = 1																		
Snow falling = 0																		
Snow lying = 0																		
Thunder = 0																		
Hail=>5mm = 0																		
Hail<5mm or ice = 0																		
Fog at 09GMT = 0																		

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, <.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 =>5mm. Ic = Hail <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 2004

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	pppww	W1	W2	Nh	Cl	hCr	Cl	NCh	shs	NCh	shs	NCh	shs	Date	Remarks
1	70	0	20	02	03	15.8	10.8	72	8.0	1017.5	0	001	02	0	0	0	0	0	0	0	0	0	0	0	1		
2	67	4	07	02	04	16.7	12.8	78	9.2	1016.7	1	006	01	1	1	1	0	9	8	1	81363	84078			2	COTRA Ac flo vir	
3	61	1	12	02	03	19.5	13.6	69	9.7	1021.2	2	013	01	1	1	1	5	7	0	2	81656				3	1Ci75	
4	63	2	27	04	07	18.9	14.8	77	10.4	1028.8	1	013	02	0	0	1	5	4	3	1	81615				4	1Ac62 2Ci80 COTRA	
5	59	3	06	03	05	21.0	16.8	77	11.8	1028.2	2	002	05	0	0	0	0	9	0	1	83080				5	COTRA	
6	77	2	05	08	16	20.7	13.4	63	9.5	1028.1	1	005	02	0	0	0	0	9	0	1	82080				6	COTRA	
7	62	8	05	08	19	17.2	13.9	81	9.7	1032.7	1	010	02	2	2	8	5	4	/	/	88617				7		
8	75	1	08	08	18	17.7	12.5	72	8.9	1033.4	1	001	01	1	1	1	1	5	0	1	81820				8	1Ci80 COTRA	
9	62	1	08	08	15	19.6	13.5	68	9.6	1026.1	8	011	02	0	0	0	0	9	0	1	81080				9	COTRA	
10	20	8	02	02	03	15.5	15.2	98	10.8	1012.9	5	002	61	6	2	2	7	2	8	/	81703	87358	88462		10	2St06 1Ac57 1Ac cas	
11	77	7	23	13	22	18.0	13.3	74	9.5	1012.2	0	008	03	2	2	5	2	5	0	1	85820	86075			11	1Cc72 COTRA Cu med	
12	82	2	24	10	20	14.8	9.4	70	7.3	1015.6	1	011	03	0	0	1	8	5	3	1	81825				12	1Sc40 1Ac68 2Ci72 Cu hum	
13	84	6	24	10	16	15.1	12.2	83	9.0	1002.7	1	018	01	6	2	2	1	4	8	2	82815	85072			13	1Ac63 1Ac66 Cu fra	
14	60	7	22	20	34	15.3	10.8	75	8.2	999.2	5	004	80	8	1	6	9	5	7	/	82920	84825			14	4Ac58 vv 30k ex p	
15	82	1	31	07	18	14.3	8.4	67	6.8	1018.6	2	027	03	0	0	1	8	5	0	0	81822				15	1Sc56 Cu hum	
16	82	2	21	05	09	13.1	8.3	73	6.7	1025.4	1	004	02	0	0	1	0	9	3	1	81363				16	2Ci78 COTRA	
17	65	7	21	09	20	16.7	13.7	83	9.8	1018.1	5	006	02	6	2	6	8	4	7	/	84815	83625	87362		17	2Ac58	
18	84	2	21	10	22	18.1	12.8	71	9.3	1008.9	4	000	03	1	1	1	8	5	0	1	81820				18	1Sc50 2Ci80 COTRA Cu hum	
19	75	6	24	08	13	13.8	10.2	79	7.7	1018.0	2	013	15	1	1	6	8	5	0	1	81815	85656			19	2Sc35 2Ci80 COTRA jpW	
20	82	8	23	13	29	16.0	12.4	79	9.0	1008.2	6	007	02	6	2	7	5	5	/	7	84620	87645	88275		20	COTRA Halo 22 °	
21	73	6	28	11	21	14.0	7.1	63	6.2	1018.4	1	024	03	1	1	1	8	5	3	2	81825	86075			21	1Sc50 1Ac65 Cu hum COTRA Halo 22 ° part	
22	70	7	27	12	25	16.2	12.2	77	8.8	1019.0	6	010	03	2	2	7	5	4	7	/	82715	85656	87362		22	2Sc20	
23	82	6	28	11	24	19.2	15.3	78	10.9	1010.2	8	004	01	2	2	5	5	4	8	1	85618	83080			23	1Ac68 COTRA Ac cas	
24	86	1	34	08	16	11.5	3.9	60	5.0	1021.4	1	015	03	0	0	1	8	5	0	0	81828				24	1Sc40 Cu med	
25	75	8	26	05	10	10.9	7.6	80	6.4	1023.8	6	009	02	2	2	2	5	7	7	/	82656	87358	88468		25		
26	59	7	21	03	06	13.6	13.4	99	9.5	1024.2	3	008	10	2	2	7	5	5	/	/	81625	87630			26		
27	62	8	29	04	07	16.8	14.6	87	10.3	1022.6	1	009	02	2	2	8	5	4	/	/	82710	86712	88615		27		
28	56	8	23	05	09	14.4	13.1	92	9.4	1019.7	7	001	51	6	5	8	5	2	/	/	82705	87708	88615		28		
29	65	8	10	01	03	13.5	12.2	92	8.8	1018.8	0	014	60	6	2	8	5	3	/	/	83708	88620			29		
30	25	8	20	04	08	15.4	15.1	98	10.4	1016.4	3	002	63	6	6	7	5	2	2	/	83705	87640	88550		30	2Sc15 Hvy ra 0837-39	

Mean vis = 23.3 km
 Mean cloud = 4.8 60%
 Mean wind speed = 7.2 kn
 Mean gust = 14 kn
 Mean TT = 16.1 C
 Mean TdTd = 12.1 C
 Mean RH = 77.8 %
 Mean r = 8.9 g/kg
 Mean PPP = 1018.9 mbar

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 1500 GMT for SEPTEMBER 2004

Date	VV	N	dd	ff	gg	TT	TdDd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Ch	NCh	shs	NCh	shs	Date	Remarks
1	81	3	18	03	08	21.2	9.1	46	7.2	1015.6	7	009	02	0	0	3	4	7	0	0	83650			1		
2	81	7	20	03	08	23.0	12.4	51	9.0	1016.1	4	000	03	2	2	4	8	6	0	1	83845	86078		2	1Sc56 COTRA	
3	72	3	25	07	12	25.3	14.1	50	10.0	1021.6	1	003	02	0	0	1	1	6	0	2	81847	83075		3	COTRA Ci flo	
4	78	4	33	03	05	25.1	15.6	56	11.0	1027.9	7	003	03	0	0	1	1	6	3	1	81840	83080		4	2Ac64 COTRA	
5	75	4	06	05	09	27.3	10.6	35	7.9	1026.0	8	013	02	0	0	1	1	6	0	1	81845	84080		5	COTRA	
6	73	6	07	10	23	24.6	13.4	50	9.5	1027.2	6	005	03	1	1	2	1	6	0	2	82845	86080		6	COTRA Halo 22° part	
7	70	3	06	10	19	23.8	13.4	52	9.4	1030.9	7	012	02	1	1	3	5	6	0	0	83638			7		
8	81	1	08	10	21	23.6	5.5	31	5.5	1030.8	6	015	02	0	0	0	0	9	0	1	81080			8		
9	80	6	11	07	14	25.8	10.3	38	7.8	1012.9	7	028	03	1	1	0	0	9	0	1	86080			9	COTRA	
10	62	8	20	13	24	19.7	16.4	81	11.7	1012.3	2	003	02	2	2	8	8	4	/	/	84816	88625		10		
11	81	3	21	13	28	20.6	11.9	57	8.7	1010.1	8	012	02	1	1	2	2	6	3	1	82840			11	1Ac62 2Ci75 COTRA Cu med	
12	86	7	23	13	26	17.7	9.8	60	7.5	1013.5	8	017	02	2	2	3	8	6	7	/	81835	83650	87365	12	3Ac62 Cu med	
13	83	2	22	11	20	18.4	7.7	50	6.6	1002.1	7	003	01	8	1	2	2	6	3	3	82845			13	1Ac65 1Ci72 Cu med Cb top W&E	
14	80	6	26	14	30	17.0	7.3	53	6.4	1003.5	3	029	15	1	1	6	8	6	0	0	83840	85650		14	Cu med jp NW&E	
15	84	2	29	08	14	18.4	4.2	39	5.1	1021.4	1	010	02	0	0	2	8	7	0	1	81850			15	2Sc56 1Ci80 Cu med	
16	84	7	21	11	20	18.2	7.4	49	6.3	1022.7	7	012	03	2	2	1	1	6	3	1	81845	87080		16	1Ac68 COTRA	
17	72	8	20	11	22	17.1	13.6	80	9.7	1016.5	7	011	02	6	2	8	5	4	/	/	83615	86625	88635	17		
18	60	8	24	07	16	17.2	14.6	85	10.4	1010.0	2	004	21	6	2	8	8	5	/	/	82820	86645	88656	18	Cu med jp NW Front NW CF 1502	
19	82	6	24	08	18	16.5	8.8	60	7.0	1017.1	8	005	25	8	2	5	8	6	0	1	81830	84650	85075	19	2Sc45 COTRA	
20	82	6	26	15	31	16.6	10.0	65	7.7	1008.2	0	001	25	8	2	2	8	6	3	2	81830	86075		20	2Sc40 1Ac68 COTRA Halo 22° part Parhelia	
21	75	7	30	13	26	15.8	4.6	47	5.2	1020.3	3	004	02	2	2	3	8	6	0	1	81848	83650	87075	21	COTRA Cu hum	
22	80	8	28	14	24	17.4	13.2	76	9.4	1015.4	6	019	02	6	2	8	5	5	/	/	87620	88625		22		
23	84	2	34	10	24	18.1	7.0	48	6.2	1013.1	1	012	01	6	1	1	8	6	7	1	81845			23	1Sc56 1Ac65 1Ac68 1Ci75 Cu med Ac edge S	
24	86	7	35	07	15	15.1	3.5	46	4.8	1022.2	3	003	03	1	1	7	8	6	/	/	81845	87650		24	1Ci80 COTRA Cu hum	
25	70	8	26	06	12	14.3	13.7	96	9.7	1021.9	6	008	21	6	2	8	5	4	/	/	82710	87615	88620	25		
26	83	5	27	09	15	20.0	12.8	63	9.2	1022.2	6	012	01	2	2	2	5	6	8	1	82630	83368		26	2Ci75 COTRA Ac flo vir	
27	75	7	28	05	12	19.0	15.3	79	10.8	1021.8	8	007	01	5	2	7	8	4	/	/	82816	87625		27		
28	82	7	25	07	15	18.0	11.7	66	8.5	1017.1	6	019	03	1	1	7	8	5	/	/	81828	87635		28	Cu hum	
29	60	8	16	03	06	14.5	13.6	94	9.7	1018.5	8	006	61	6	2	8	5	4	/	/	82713	83625	88650	29		
30	78	3	27	08	14	18.7	14.2	75	10.1	1016.5	7	001	01	1	1	2	8	5	3	1	82822			30	1Sc35 1Ac60 1Ci75 Cu med	

Mean vis = 32.7 km
 Mean cloud = 5.4 68%
 Mean wind speed = 8.8 kn
 Mean gust = 18 kn
 Mean TT = 19.6 C
 Mean TdDd = 10.9 C
 Mean RH = 59.3 %
 Mean r = 8.3 g/kg
 Mean PPP = 1017.8 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
 TdDd = 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 Psychrometer
 Daily means and extremes, 00-24 GMT
 SEPTEMBER 2004

Date	Mean			Max			Min			Missing RH N >0	Number of minutes RH in given ranges									
	TT	TT	Time	TT	Time	RH	RH	Time	RH		Time	0-20	20-40	40-60	60-80	80-90	90-95	95-98	98-100	
01	15.1	22.1	15:12	8.5	05:45	73.3	97.0	05:38	43.8	15:13	0	0	531	187	287	223	212	0		
02	16.8	24.2	15:57	10.0	04:45	73.7	96.4	05:36	43.0	16:02	0	0	461	336	172	270	201	0		
03	18.6	26.0	13:19	11.6	03:57	71.2	94.3	04:25	44.3	15:32	0	0	550	300	199	391	0	0		
04	19.2	25.9	15:33	12.6	05:49	76.2	94.8	05:44	51.6	15:36	0	0	372	451	209	408	0	0		
05	20.5	27.7	15:58	13.1	05:30	70.1	97.0	05:46	30.8	15:59	0	240	273	277	183	204	263	0		
06	19.2	25.4	13:26	12.9	05:37	74.5	94.2	05:52	48.7	13:19	0	0	396	430	235	379	0	0		
07	19.0	24.1	14:06	14.0	23:49	71.4	88.6	23:56	51.6	14:43	0	0	336	504	600	0	0	0		
08	17.9	24.0	13:32	13.9	02:04	65.1	90.6	23:41	27.8	14:35	0	342	263	222	588	25	0	0		
09	19.1	26.1	14:02	13.4	03:45	71.6	98.0	06:17	36.7	15:17	0	193	289	342	181	160	275	0		
10	16.9	20.5	13:44	12.8	03:16	90.2	99.2	09:53	80.0	14:38	0	0	0	3	639	517	247	34		
11	17.1	20.9	10:48	12.4	23:58	74.4	88.5	06:30	51.9	13:26	0	0	346	395	699	0	0	0		
12	14.5	18.9	13:14	10.0	05:06	74.5	89.6	04:32	52.6	12:38	0	0	333	463	644	0	0	0		
13	15.2	18.8	15:34	11.7	23:54	74.0	96.9	06:41	44.2	15:38	0	0	296	641	232	208	63	0		
14	14.5	18.9	13:18	11.2	03:39	70.4	91.4	03:41	43.6	13:23	0	0	400	643	371	26	0	0		
15	13.0	18.7	13:11	8.5	23:26	68.5	89.5	06:20	35.6	15:03	0	100	370	387	583	0	0	0		
16	12.7	18.7	12:44	5.3	05:53	73.2	95.9	04:32	46.9	12:36	0	0	452	492	69	291	136	0		
17	16.0	18.5	12:59	14.6	00:02	83.0	95.3	20:19	69.6	13:01	0	0	0	525	641	154	120	0		
18	15.6	18.5	09:23	10.4	23:59	86.6	96.7	04:11	63.0	08:42	0	0	0	300	430	543	167	0		
19	13.1	17.2	16:09	9.2	03:18	78.9	94.4	03:46	55.5	16:44	0	0	108	609	271	452	0	0		
20	15.0	18.7	13:12	12.2	22:05	72.6	94.2	11:23	54.5	13:24	0	0	112	1243	45	40	0	0		
21	13.1	16.7	13:37	10.5	04:57	63.5	77.7	22:04	42.2	13:40	0	0	575	865	0	0	0	0		
22	15.4	18.1	16:20	11.2	02:44	78.0	87.8	22:20	67.5	12:48	0	0	0	1008	432	0	0	0		
23	16.4	21.5	11:10	10.7	23:46	74.0	88.0	05:31	47.2	15:38	0	0	233	646	561	0	0	0		
24	11.5	16.4	13:33	7.3	23:33	68.2	92.1	05:12	41.6	13:42	0	0	581	304	432	123	0	0		
25	11.0	14.9	16:22	4.8	04:41	90.2	97.6	23:22	72.1	11:43	0	0	0	194	252	626	368	0		
26	14.2	20.4	15:00	9.1	04:43	87.1	99.9	05:45	62.3	14:56	0	0	0	386	372	89	190	403		
27	16.3	19.3	14:14	13.5	00:00	87.2	92.2	23:19	77.2	14:16	0	0	0	113	636	691	0	0		
28	15.5	19.1	13:31	13.9	05:33	80.6	93.9	09:19	61.6	13:43	0	0	0	454	809	177	0	0		
29	13.8	15.3	11:19	12.7	04:54	91.9	97.8	21:52	78.7	12:29	0	0	0	22	421	521	476	0		
30	15.1	19.5	14:44	11.0	23:39	89.6	98.2	09:10	64.8	16:19	0	0	0	271	262	176	724	7		
Mean	15.7	20.5		11.1		76.8	93.6		53.0				0.00	0.49	4.04	7.23	6.36	3.72	1.91	0.25
Hi	20.5	27.7		14.6		91.9	99.9		80.0	Tot	0	0	875	7277	13013	11455	6694	3442	444	
Lo	11.0	14.9		4.8		63.5	77.7		27.8											

Note. Aspirated Psychrometer exposed near house. Winds with a component from 030 deg can produce a distorted diurnal temperature profile. Compensation for this is made in post processing, and maxima are constrained to be within 0.2C of screen values about 500m away. Minima on radiation nights can also be about 1C higher than screen values, due partly to topography. No compensation is made for this. Humidity readings are similar to screen derived values under most conditions and in most instances can be considered more accurate due to controlled aspiration. The psychrometer is of experimental design, and logs one minute average values of temp and RH.