

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 2005

Temperature (°C / °F)			Anomaly	Rank in past 124 years			
Mean maximum	21.0	69.8	+2.1	10 th highest			
Mean minimum	11.4	52.5	+1.7	4 th highest			
Daily mean	16.2	61.2	+1.9	4 th highest			
Highest maximum	28.6	83.5	on 4 th	Lowest maximum	15.2	59.4	on 28 th
Highest minimum	17.8	64.0	on 5 th	Lowest minimum	3.3	37.9	on 17 th
Mean grass minimum	8.2	46.8		Lowest grass minimum	-1.3	29.7	on 17 th
Mean earth @30 cm	17.3	63.1	+1.2	Earth @100 cm	17.0	62.6	+0.5
Frost duration (hrs)	0.0			Rain duration (hrs)	20.4		
Rainfall total (mm / in)	38.6	1.52	62 %	45 th lowest			
Highest daily fall	10.1	0.40	on 4 th				
Number of: Dry days (<0.2mm)	19	Wet days (>0.9mm)	7	days ≥5mm	3		
Sunshine total (hrs) 155.3	Daily mean	5.18	118 %	Sunniest day	11.4	on 8 th	
N ^o 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 2
Air pressure MSL : Mean @09 GMT (mbar/in)	1018.9	+2.4	30.09				
Absolute highest	1028.9		30.38	on 3 rd			
Absolute lowest	1007.8		29.76	on 9 th			

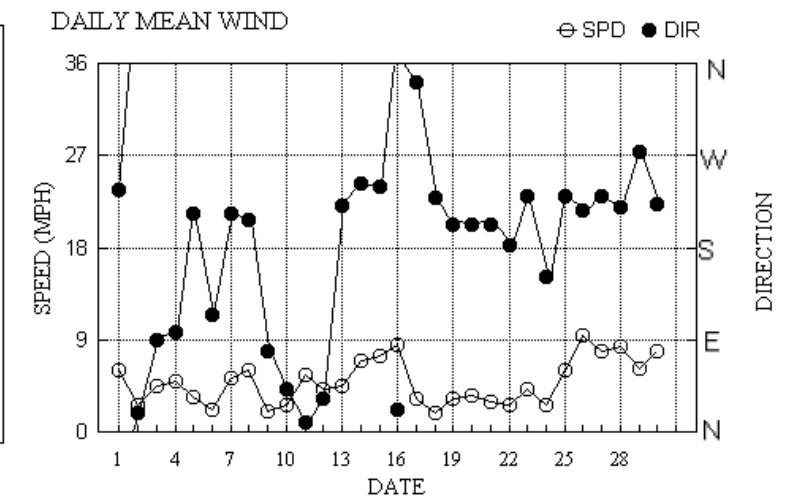
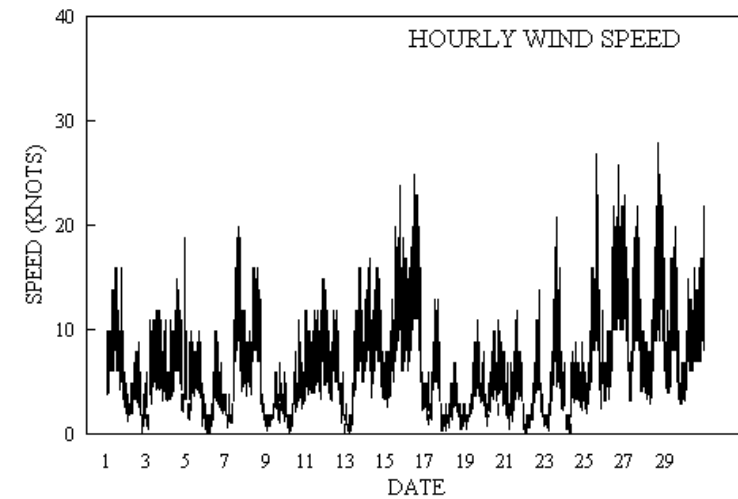
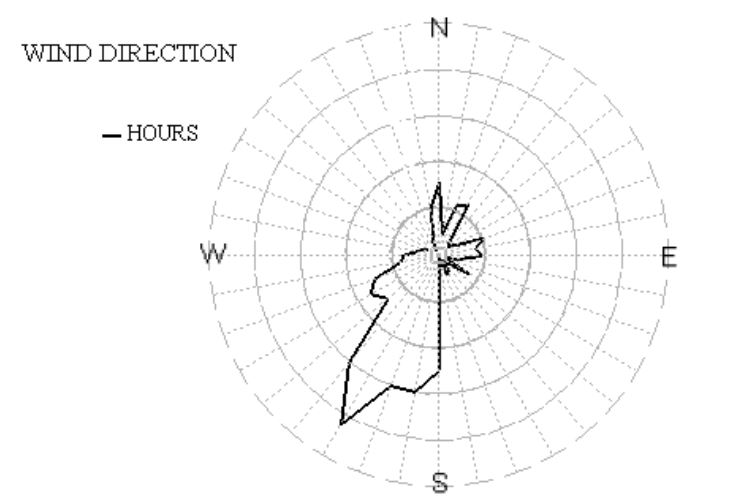
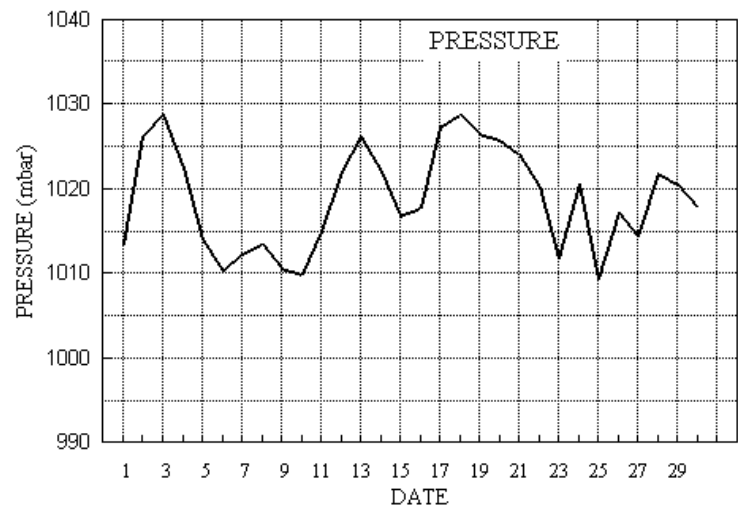
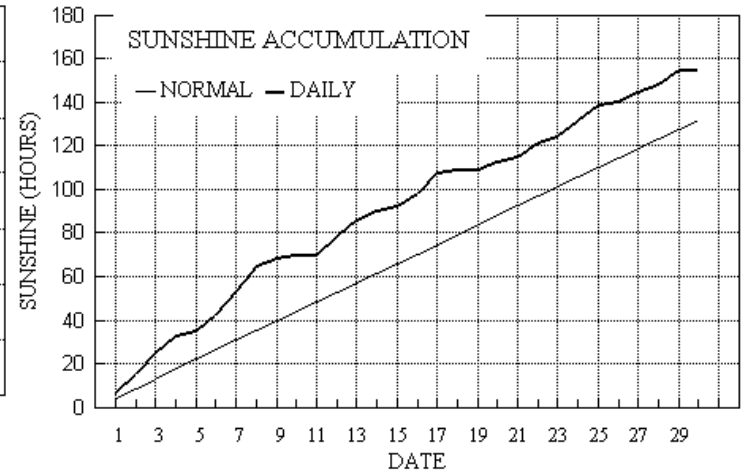
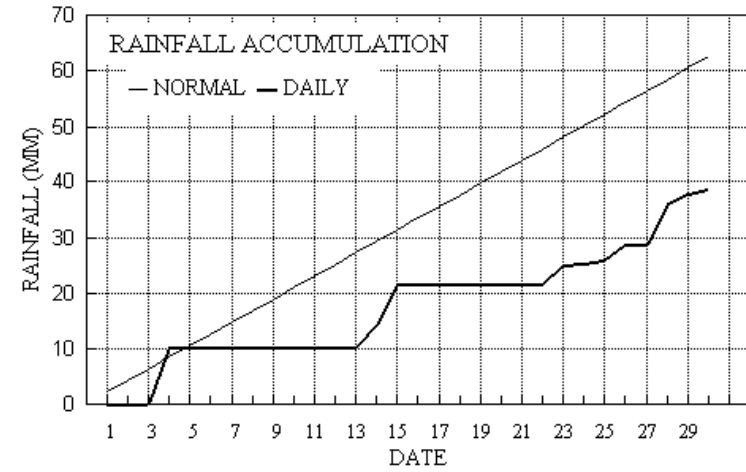
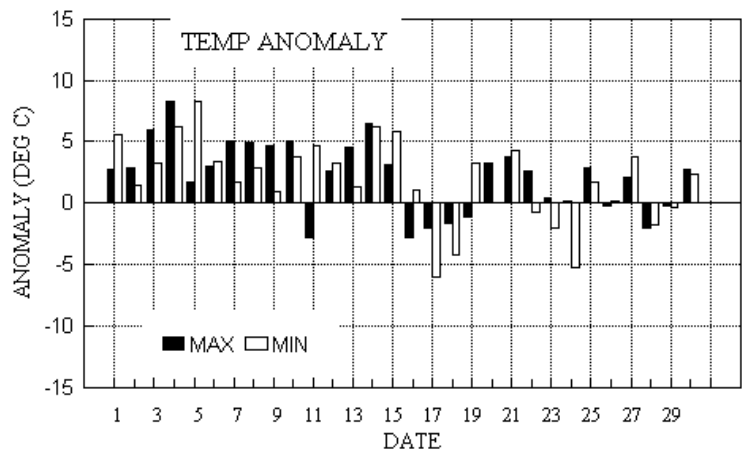
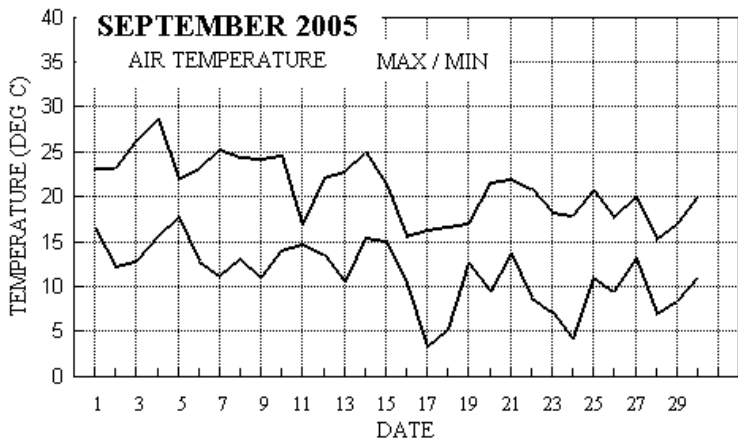
Anomaly = departure from 1971 to 2000 average (degrees C, percent and mbar).

Notes: **Very Warm. Rainfall Well Below Normal. Sunshine Above Normal.**

Temperature. This is the 4th warmest September since 1882, only 1929, 1949 and 1999 being warmer, and 0.8° below the record set in 1929. The mean minimum is just 0.5° below the record set in 1998, and also ranks 4th highest since 1882, the other two years being 1949 and 1999. The month's highest temperature is 4.1° above the median and is highest since 1973, but is 5.3° below the record 33.9° set in 1906, and 30° has been reached in only 4 Septembers since 1903, the last being 1929. The month's lowest temperature is 0.7° above the median, and 5.2° above the lowest September value on record. The lowest maximum is 1.3° above the median while the highest minimum, 17.8° on the 5th, is 2.7° above its median and highest since 1949, and 2nd highest in 93 years. The daily mean temperature of 22.2° on the 4th is highest since before 1976. Mean earth temperature at 30 cm depth is highest since 1999, with a daily value of 19.2° on the 5th, highest since 1984. However, at 1 m depth the mean is equal lowest since 2001. The first ground frost of the season was on the 17th after a frost free period of 101 days. Ground frost is not uncommon in September, and has occurred in 17 of the past 26 years at this site. **Rainfall.** Although the total this September is 38 % below average, it is nevertheless wettest since 2001. As the total suggests there was plenty of dry weather, at least up until the 22nd, with a dry spell of 5 days ending on the 9th and another of 7 days ending on the 22nd. Rainfall duration, while also most since 2001, is only 48 % of average. Thunder occurred on 3 days, the 4th, 9th and 10th. **Sunshine.** This month's total, while somewhat above average, is lowest since 2001. Only 6 days had >66 % of the maximum possible, while 13 had <33 %. Overall there were 10 days with <3 hours, 14 with =>6 hours and 6 with =>9 hours. **Wind.** The mean speed was 5.0 mph, 0.8 mph below average. The windiest day was the 26th, mean 9.4 mph, but the month's highest gust of 32 mph was on the 28th, and is equal lowest with 1997 and 2003 in the past 18 years. The 18th was the least windy day, mean 1.8 mph, and there were 34 hours with a mean speed of 0.5 mph or less. On the more accurate sonic anemometer there were 977 minutes (16.3 hours) in this speed range. Daily mean direction/number of days : N,4 NE,2 E,3 SE,2 S,4 SW,14 W,1 NW,0. **Humidity.** The mean relative humidity was 79.4 %, with a minimum value of 40 % on the 2nd. The mean water vapour content per kg of air was 9.5 g at 0900 GMT and 9.1 g at 1500 GMT. **Pressure.** The month's lowest pressure, 1007.8 mbar, is highest since 1979, and is 10.4 mbar above average. (SD = 7.8). **Commentary. From the 1st to the 10th:** Mean anomalies (max, min, rain, sun) +4.4°, +3.7°, 49 %, 159 %. This was by far the hottest part of the month, with no negative daily anomalies in either max or min. The daily anomaly of max on the 4th and also min on the 5th were +8.3°, the month's hottest day and warmest night resp. Almost all of this 10 day period's rain, 10.3 mm, fell on the 4th, with 8 dry days. Sunshine was well above normal, with the month's sunniest day on the 8th, but it was rather dull on the 5th, 9th and 10th. A moderate SW'ly wind on the 1st became light N'ly on 2nd, veering S'ly by 5th, increasing moderate for the 7th and 8th, backing light NE'ly by 10th. **From the 11th to the 20th:** Mean anomalies, +0.9°, +1.5°, 54 %, 98 %. Reasonably warm until the 15th, with anomalies of +6.5° and +6.2° for the max and min on the 14th, but falling to -2.8° for the max on the 16th, and -6.0° for the min on the 17th, the month's coldest night. Rain fell on the 14th and 15th only, giving a total of 11.2 mm. It was dull on several days, especially the 18th to 20th, and sunny on the 12th and 17th. Light N'ly wind in the 11th became moderate SW'ly on 13th, fresh N'ly on 16th before returning to SW'ly and dropping light. **From the 21st to the 30th:** Mean anomalies +1.2°, +0.2°, 82 %, 95%. Temperatures were generally near normal, with daily anomalies for max between +3.7° on the 21st to -2.1° on the 28th, the month's coldest day. Minima were similar except for an isolated anomaly of -5.2° on the 24th. This was the wettest part of the month with only 3 dry days, but the total of 17.1 mm is 18 % below normal. Sunshine was poor with 5 dull days and a 10 day total just below normal. Winds were generally between S'ly and W'ly, light on 21st, temporarily moderate on 23rd, then moderate or fresh from the 25th on.

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

Wokingham Climatological Data



Daily meteorological data.

Emmbrook, WOKINGHAM, Berkshire.

Month: SEPTEMBER 2005

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	23.2	16.5	0.0	13.8	18.6	17.0	6.9	0.0	1013.5	0 0 0 0	0 0 0 0	0 0 0 0	237	4.9	5.3	260 16 1046	250 8 09	0.0	
2	23.3	12.3	0.0	6.9	18.5	17.0	9.1	0.0	1026.1	0 0 0 0	0 0 0 0	0 0 0 0	19	1.2	2.3	120 9 1403	50 4 11	0.0	
3	26.2	12.8	0.0	6.8	18.4	17.1	9.2	0.0	1028.8	0 0 0 0	0 0 0 0	0 0 0 0	89	3.7	4.0	80 12 1114	100 5 11	0.0	
4	28.6	15.7	10.1	10.8	18.6	17.1	7.6	0.0	1022.3	0 0 0 0	1 0 0 0	0 0 0 0	97	4.0	4.3	200 19 2116	110 7 13	2.6	
5	22.0	17.8	tr	16.5	19.2	17.2	2.8	0.0	1014.0	0 0 0 0	0 0 0 0	0 0 0 0	214	2.4	2.9	240 10 0505	230 5 12	0.0	
6	23.3	12.9	0.0	10.5	19.0	17.3	7.0	0.0	1010.2	0 0 0 0	0 0 0 0	0 0 0 0	114	1.2	1.9	80 10 1128	90 4 11	0.0	
7	25.3	11.2	0.0	7.7	18.6	17.4	10.8	0.0	1012.3	0 0 0 0	0 0 0 0	0 0 0 0	213	4.5	4.5	220 20 1528	220 9 15	0.0	
8	24.5	13.1	tr	8.9	18.5	17.5	11.4	0.0	1013.4	0 0 0 0	0 0 0 0	0 0 0 0	208	5.1	5.2	200 16 1024	210 8 08	0.0	
9	24.3	11.1	0.0	7.9	18.3	17.4	3.6	0.0	1010.7	0 0 0 0	1 0 0 1	0 0 0 0	79	0.7	1.7	110 7 1742	120 3 17	0.0	
10	24.7	14.0	0.2	10.6	18.5	17.5	1.7	0.0	1009.8	0 0 0 0	1 0 0 0	0 0 0 0	42	1.4	2.3	20 12 2333	20 6 23	0.5	
11	16.8	14.8	tr	14.6	18.7	17.5	0.0	0.0	1014.9	0 0 0 0	0 0 0 0	0 0 0 0	9	4.7	4.9	30 15 2040	30 8 20	0.0	
12	22.2	13.5	0.0	12.2	18.2	17.5	9.0	0.0	1022.0	0 0 0 0	0 0 0 0	0 0 0 0	33	2.9	3.7	40 12 0953	30 6 09	0.0	
13	22.9	10.6	0.0	7.1	18.1	17.5	6.7	0.0	1026.2	0 0 0 0	0 0 0 0	0 0 0 0	221	3.8	3.9	240 16 1543	240 8 15	0.0	
14	24.9	15.5	3.8	11.4	18.1	17.5	4.5	0.0	1022.1	0 0 0 0	0 0 0 0	0 0 0 0	243	5.7	6.0	240 17 0413	240 9 04	2.1	
15	21.5	15.1	7.4	10.1	18.1	17.4	2.3	0.0	1016.8	0 0 0 0	0 0 0 0	0 0 0 0	239	4.3	6.5	230 24 1713	260 11 16	6.4	
16	15.6	10.3	0.0	9.2	17.9	17.4	5.5	0.0	1017.8	0 0 0 0	0 0 0 0	0 0 0 0	21	7.3	7.4	20 25 1022	30 12 14	0.0	
17	16.3	3.3	0.0	-1.3	16.7	17.3	9.7	0.0	1027.2	0 1 0 0	0 0 0 0	0 0 0 0	342	2.3	2.8	350 13 1113	350 6 11	0.0	
18	16.7	5.3	0.0	1.7	16.2	17.2	1.5	0.0	1028.8	0 0 0 0	0 0 0 0	0 0 0 0	229	0.2	1.6	310 7 1016	290 3 10	0.0	
19	17.1	12.7	0.0	12.7	16.5	17.1	0.0	0.0	1026.5	0 0 0 0	0 0 0 0	0 0 0 0	202	2.7	2.8	220 11 1543	200 5 14	0.0	
20	21.6	9.5	0.0	5.6	16.3	17.0	3.6	0.0	1025.8	0 0 0 0	0 0 0 0	0 0 0 0	202	2.9	3.1	200 11 1533	200 6 17	0.0	
21	22.0	13.7	0.0	8.4	16.6	16.9	2.4	0.0	1024.1	0 0 0 0	0 0 0 0	0 0 0 0	202	2.5	2.6	210 12 1402	200 6 13	0.0	
22	20.9	8.7	0.0	4.5	16.7	16.8	6.6	0.0	1020.2	0 0 0 0	0 0 0 0	0 0 0 0	182	1.7	2.3	200 14 1603	200 6 14	0.0	
23	18.3	7.2	3.4	4.5	16.5	16.7	2.8	0.0	1011.8	0 0 0 0	0 0 0 0	0 0 0 0	231	2.6	3.7	280 21 1328	200 8 12	1.0	
24	18.0	4.1	0.3	1.0	16.0	16.7	7.3	0.0	1020.5	0 0 0 0	0 0 0 0	0 0 0 0	151	1.6	2.3	130 9 2038	70 4 08	0.4	
25	20.8	11.0	0.7	7.8	15.7	16.6	6.8	0.0	1009.3	0 0 0 0	0 0 0 0	0 0 0 0	230	4.7	5.2	270 27 1359	240 10 13	0.2	
26	17.7	9.5	2.9	5.9	15.7	16.5	1.9	0.0	1017.2	0 0 0 0	0 0 0 0	0 0 0 0	217	8.1	8.2	210 26 1537	210 12 23	1.7	
27	20.0	13.1	tr	11.4	15.8	16.4	4.2	0.0	1014.3	0 0 0 0	0 0 0 0	0 0 0 0	231	6.4	6.9	210 23 0011	210 11 00	0.0	
28	15.2	7.0	7.4	3.4	15.5	16.4	3.5	0.0	1021.8	0 0 0 0	0 0 0 0	0 0 0 0	219	7.1	7.3	220 28 1519	220 12 15	1.8	
29	17.0	8.4	1.6	5.7	15.1	16.2	6.8	0.0	1020.5	0 0 0 0	0 0 0 0	0 0 0 0	273	4.6	5.3	300 20 1232	290 9 12	2.8	
30	20.0	11.1	0.8	8.5	15.0	16.2	0.1	0.0	1017.8	0 0 0 0	0 0 0 0	0 0 0 0	223	6.4	6.9	270 22 2230	210 10 20	0.9	
Total			38.6				155.3	0.0										20.4	
Mean	21.0	11.4		8.2	17.3	17.0	5.18	0.0	1018.9					224	1.8	4.3			
Anom	+2.1	+1.7	62%	+1.2	+0.5	118%				+2.4									
Daily mean		16.2																	
Anom		+1.9																	
Number of days with:																			
Air frost = 0																			
Ground frost = 1																			
Nil sun = 2																			
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, <.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 2005

Date	VV	N	dd	ff	gg	TT	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Cl	Nh	Ch	shs	NCh	shs	NCh	shs	Date	Remarks
1	78	7	25	08	14	19.7	14.8	73	10.5	1013.5	3	018	03	2	2	2	2	5	0	1	82822	86078					1	COTRA Cu med	
2	81	1	36	03	07	17.5	12.7	73	9.0	1026.1	1	021	01	1	1	1	8	6	0	1	81835						2	1Sc35 1Ci78 Cu hum Scgen Elevated hz lyr	
3	59	7	08	05	10	18.4	15.0	81	10.5	1028.8	1	003	01	2	2	2	6	4	0	1	82715	87080					3	1Cu35 COTRA	
4	20	7	08	04	07	20.0	17.2	84	12.2	1022.3	7	001	05	4	2	7	6	2	/	/	83705	87708					4	vv 900m @0600	
5	50	7	24	04	09	18.5	16.9	90	12.0	1014.0	0	004	21	6	2	2	6	3	7	/	82708	83362	87365				5	Pptn v slt	
6	65	5	07	03	05	18.0	15.6	86	11.2	1010.2	5	000	03	2	2	3	5	7	3	1	83656	83362					6	2Ci78 COTRA	
7	65	6	21	04	06	18.5	15.1	81	10.8	1012.3	1	010	03	1	1	0	0	9	0	1	86077						7	COTRA Halo 22 part	
8	78	1	21	08	16	18.9	14.1	74	9.8	1013.4	2	004	03	1	1	1	8	4	3	1	81818						8	1Sc40 1Ac60 1Ci75 Cu hum	
9	08	7	09	02	03	14.7	14.5	99	10.4	1010.7	3	005	41	4	4	7	6	0	/	1	82701	87702					9	/Ci80 2000mSW vv10km @0915	
10	40	7	04	03	04	19.3	17.2	88	12.3	1009.8	1	004	05	2	2	1	6	4	7	1	82712	85362					10	1Ac57 /Ci78 COTRA	
11	60	8	35	04	09	15.3	14.1	92	10.0	1014.9	2	011	50	5	2	8	6	3	/	/	83706	88707					11	Pptn v slt	
12	75	7	03	06	10	16.0	12.2	78	8.8	1022.0	2	018	01	2	2	2	6	4	0	1	82712	87078					12	1Sc40 COTRA Parhelia	
13	60	6	22	03	05	18.4	14.6	79	10.3	1026.2	2	005	05	2	2	1	5	6	3	1	81630	86080					13	2Ac65 COTRA Parhelia	
14	77	8	25	06	12	18.8	15.8	83	11.1	1022.1	2	005	02	2	2	8	5	4	/	/	88614						14		
15	50	8	22	06	13	17.7	17.2	97	12.3	1016.8	7	019	63	6	2	3	7	3	2	/	83706	88525					15	Hvy ra 0859-0902	
16	86	4	02	11	20	12.3	7.6	73	6.5	1017.8	2	024	03	1	1	4	8	5	0	0	84820						16	1Sc40 Cu hum	
17	86	2	34	04	09	12.0	6.3	68	5.9	1027.2	1	011	03	0	0	1	0	9	3	1	81368						17	2Ci80 COTRA	
18	84	7	28	03	05	12.8	9.1	78	7.1	1028.8	2	008	03	2	2	7	5	6	/	/	81630	85635	87645				18		
19	65	8	19	03	05	14.5	12.3	87	8.7	1026.5	1	002	02	2	2	8	5	6	/	/	81630	88635					19		
20	65	7	23	03	08	15.3	12.2	82	8.8	1025.8	2	009	02	2	2	7	5	6	/	/	81630	85635	87650				20		
21	58	7	36	01	02	16.0	14.1	88	9.9	1024.1	0	005	05	2	2	7	5	3	/	1	82708	87650					21	/Ci75	
22	30	7	02	01	03	13.6	12.7	94	9.1	1020.2	3	001	40	4	2	1	6	0	0	1	81701	87075					22	COTRA Adj fog NW	
23	28	7	20	04	08	15.5	14.6	95	10.4	1011.8	6	002	10	2	2	6	0	9	7	2	82362	85365	86072				23		
24	82	3	06	04	08	11.0	5.6	69	5.6	1020.5	5	000	02	0	0	0	0	9	0	1	83080						24	COTRA	
25	80	3	23	07	16	16.6	13.6	82	9.8	1009.3	3	011	01	6	1	1	1	4	7	2	81815						25	2Ac67 2Ci72 Cu hum/fra	
26	82	7	21	06	14	13.7	10.7	82	8.0	1017.2	0	007	03	1	1	1	1	4	7	2	81818	84365	86072				26	2Ac62 Cu fra iridescence	
27	65	7	22	06	13	15.3	13.9	91	9.9	1014.3	2	020	02	2	2	2	6	4	7	8	82712	87272					27	2Ac57 1Ac65 2As68 COTRA	
28	82	6	23	05	11	11.7	8.0	78	6.6	1021.8	0	009	03	1	1	2	0	9	7	1	82370	86080					28	COTRA Halo 22° part	
29	86	2	28	08	16	12.3	7.4	72	6.3	1020.5	2	028	03	0	0	1	8	4	0	1	81818						29	1Sc50 2Ci75 Cu fra	
30	77	8	23	06	13	17.0	16.2	95	11.5	1017.8	2	002	02	6	5	7	6	3	/	/	81707	87709	88711				30		

Mean vis = 22.8 km
 Mean cloud = 5.9 74%
 Mean wind speed = 4.7 kt
 Mean gust = 9 kt
 Mean TT = 16.0 C
 Mean TdDd = 13.0 C
 Mean RH = 83.1 %
 Mean r = 9.5 g/kg
 Mean PPP = 1018.9 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
 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.

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 1500 GMT for SEPTEMBER 2005

Date	VV	N	dd	ff	gg	TT	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Ch	Nh	Ch	Nh	Ch	Nh	Ch	Date	Remarks	
1	82	7	26	06	12	21.6	11.9	54	8.7	1015.7	2	007	15	2	2	4	8	6	6	1	82843	83656	86075	1	3Ac58	Cu med	jpS		
2	82	2	27	03	09	22.9	9.0	41	7.1	1026.3	0	001	02	0	0	2	1	7	0	1	82850			2	1Ci80	Cu hum			
3	68	7	13	04	10	25.8	14.5	50	10.2	1025.7	7	016	02	2	2	3	1	6	0	1	83840	87078		3	COTRA	Absent	vv&cld est		
4	67	5	12	07	14	28.4	16.3	48	11.5	1017.6	7	019	02	2	2	1	0	9	3	1	81365	85078		4	COTRA				
5	82	7	21	05	10	20.5	14.4	68	10.2	1012.7	7	007	21	6	2	1	8	6	7	/	81830	86463		5	1Sc40	2Ac62 /Ac65	Cu hum		
6	81	5	14	03	08	22.0	15.2	65	10.8	1008.7	7	009	03	2	2	5	8	5	3	0	83828	83650		6	1Ac58	Cu med			
7	83	6	22	08	20	24.8	14.9	54	10.6	1010.9	7	008	02	2	2	2	1	6	0	1	82848	86077		7	Cu	hum			
8	82	1	21	07	14	23.9	12.9	50	9.3	1011.5	7	012	01	0	0	1	1	6	4	0	81845			8	1Ac60	1Ac65	Cu hum		
9	77	8	08	01	05	24.1	15.0	57	10.7	1008.2	8	014	03	2	2	1	2	6	7	/	81835	88275		9	2Ac57	COTRA	Cu con SE		
10	60	7	21	03	08	23.6	15.7	61	11.2	1009.4	6	001	17	2	2	4	9	6	7	1	81925	83832		10	1Ac58	2Ac62 /Ci78	COTRA jtN		
11	65	8	36	05	12	16.4	14.0	85	9.9	1015.8	1	005	02	5	2	8	6	3	/	/	87707	88709		11					
12	83	6	03	06	10	21.5	11.3	52	8.3	1022.4	4	000	03	1	1	3	1	6	0	1	83838	85080		12	COTRA	Cu hum			
13	72	6	24	08	13	21.5	12.6	57	9.0	1023.7	7	015	02	2	2	6	8	6	0	1	82838	85650		13	/Ci80	Cu med			
14	84	7	26	08	17	24.3	15.8	59	11.2	1021.2	6	007	02	2	2	2	8	6	0	1	82835	86080		14	1Sc45	COTRA	Cu med		
15	88	6	23	08	16	21.0	19.1	89	14.0	1011.2	7	023	03	6	2	5	8	4	3	1	83815			15	1Sc35	1Ac68	1Ci75	COTRA	Cu med
16	84	4	03	12	22	14.5	5.7	56	5.7	1020.0	3	006	01	1	1	4	8	6	0	0	82840	83656		16	Cu	med			
17	84	3	36	05	13	15.4	4.5	48	5.2	1026.2	8	004	01	0	0	2	4	7	3	0	81850			17	2Sc50	1Ac65	Cu hum		
18	86	8	02	03	07	16.0	11.8	76	8.5	1027.7	7	008	03	2	2	8	8	4	/	/	82818	83625	88630	18	Absent	vv&cld est			
19	82	8	21	04	10	16.7	11.2	70	8.2	1025.1	6	012	02	2	2	8	8	5	/	/	81828	88635		19	Cu	hum			
20	83	6	26	02	05	20.1	13.5	66	9.6	1024.0	7	009	02	1	1	3	8	6	0	1	82830	85080		20	2Sc50	COTRA	Cu med		
21	83	6	16	02	12	21.2	10.5	50	7.8	1021.3	6	016	02	2	2	4	8	6	0	1	81838	83650	85078	21	1Sc56	COTRA	Cu hum		
22	61	7	20	06	11	20.3	11.5	57	8.4	1017.5	8	015	02	2	2	3	8	6	0	1	82838	87075		22	2Sc45	Cu hum	Cz arc faint, parhelia		
23	80	6	24	05	10	17.2	15.2	88	10.8	1011.3	1	005	01	6	2	1	8	4	3	8	81815	85075		23	1Sc50	1Ac65	2Cs70	COTRA	U/a cont CF 1325
24	86	7	19	03	07	17.0	8.0	55	6.7	1016.3	7	022	03	2	2	7	8	6	/	1	81840	87645		24	/Ci78				
25	84	2	25	08	23	18.9	11.3	61	8.4	1010.5	2	009	25	8	1	2	8	6	6	3	81840			25	1Sc50	1Ac58	1Ci70	Cu con Cb top N	
26	83	7	23	11	21	17.6	11.2	66	8.3	1015.4	7	012	01	2	2	3	8	5	7	1	83828	83364	85367	26	1Sc35	7Ci75	COTRA	Cu hum	
27	80	7	24	07	22	16.4	11.0	71	8.2	1015.1	0	006	25	8	1	7	8	5	/	/	81828	86650		27	2Cu35	Cu med/fra	jp E to SW		
28	80	7	21	11	22	15.1	7.7	61	6.5	1017.8	8	030	03	2	2	2	8	6	7	8	81830	87275		28	1Sc40	2Ac66	2As68		
29	84	5	28	09	16	15.7	5.0	49	5.4	1022.3	0	005	02	2	2	5	8	6	0	1	82842	83650		29	1Sc56	3Ci75	Cu hum/med		
30	82	7	23	07	14	19.7	17.6	88	12.6	1016.1	8	012	21	6	2	7	5	4	7	/	87615	87358		30					

Mean vis = 38.3 km
 Mean cloud = 5.9 74%
 Mean wind speed = 5.9 kn
 Mean gust = 13 kn
 Mean TT = 20.1 C
 Mean TdTd = 12.3 C
 Mean RH = 61.7 %
 Mean r = 9.1 g/kg
 Mean PPP = 1017.6 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 Psychrometer
 Daily means and extremes, 00-24 GMT
 SEPTEMBER 2005

Date	Mean		Max		Min		Mean		Max		Min		Missing RH N >0	Number of minutes RH in given ranges						
	TT	TT	Time	TT	Time	RH	RH	Time	RH	Time	RH	Time		RH	0-20	20-40	40-60	60-80	80-90	90-95
01	19.2	23.3	12:54	14.9	23:59	72.0	92.6	03:15	48.1	12:52			0	0	420	495	146	379	0	0
02	17.5	23.2	14:55	13.2	04:15	68.7	91.4	02:54	39.7	16:29			0	11	549	317	455	108	0	0
03	19.3	26.2	14:51	13.5	02:42	76.2	94.4	02:57	49.0	16:03			0	0	314	422	298	406	0	0
04	21.5	28.6	13:51	16.3	00:01	76.7	96.4	23:57	47.8	14:54			0	0	431	294	85	336	294	0
05	18.8	22.0	11:45	15.5	23:56	84.7	98.0	05:22	63.3	17:24			0	0	0	559	217	126	537	1
06	18.1	23.3	12:32	13.5	05:01	80.1	96.5	05:49	54.8	12:17			0	0	88	612	214	230	296	0
07	18.3	25.7	14:40	12.0	05:34	77.7	96.6	06:00	53.8	15:03			0	0	384	288	238	307	223	0
08	18.2	24.5	14:19	13.6	05:41	76.1	95.0	05:55	45.0	16:15	32		0	0	358	363	135	547	5	0
09	18.2	24.3	13:00	12.1	03:28	80.6	99.8	08:06	53.3	12:06			0	0	339	253	268	130	233	217
10	19.2	24.8	14:14	14.5	05:51	83.5	95.1	22:12	57.0	14:27			0	0	33	370	588	443	6	0
11	16.1	17.3	00:02	14.9	07:28	88.9	94.2	00:13	83.2	20:04			0	0	0	0	866	574	0	0
12	17.2	22.2	14:09	13.7	06:08	73.8	93.2	04:51	49.1	14:51			0	0	412	326	585	117	0	0
13	17.3	23.0	13:24	11.3	06:04	76.5	96.3	05:10	48.3	13:25			0	0	243	623	135	310	129	0
14	19.0	24.8	15:05	15.1	23:47	75.8	90.9	23:59	55.8	15:42			0	0	149	566	713	12	0	0
15	17.3	21.3	14:54	12.3	23:55	90.4	97.2	09:56	71.0	17:12			0	0	0	174	425	225	616	0
16	11.6	15.6	13:36	6.6	23:58	77.7	97.0	01:58	47.6	13:00			0	0	251	457	378	177	177	0
17	10.2	16.3	15:17	4.5	05:23	73.2	94.7	05:10	41.0	13:50			0	0	489	222	374	355	0	0
18	12.6	16.7	13:08	6.5	03:41	82.3	94.8	04:03	66.2	10:19			0	0	0	555	476	409	0	0
19	14.6	17.1	13:39	11.8	23:59	80.9	91.0	23:59	66.9	14:15			0	0	0	524	881	35	0	0
20	15.9	21.7	15:24	10.5	02:18	82.8	94.9	02:51	63.7	15:23			0	0	0	594	277	569	0	0
21	16.6	22.0	14:11	12.1	23:59	80.7	94.8	23:15	47.4	14:54	27		0	0	218	342	209	644	0	0
22	14.5	20.9	15:41	9.2	05:13	82.1	100.0	06:08	53.7	15:48			0	0	272	301	120	213	243	291
23	14.0	18.3	15:22	8.5	04:29	87.8	97.4	03:19	69.8	17:06			0	0	0	245	562	222	411	0
24	12.3	18.1	12:56	5.4	05:50	75.8	96.4	06:47	48.3	13:00			0	0	390	329	301	311	109	0
25	15.7	20.8	12:34	11.9	23:59	75.5	94.0	23:55	48.1	12:35			0	0	260	582	395	203	0	0
26	14.5	17.7	15:29	9.8	04:30	80.0	98.5	06:38	64.2	12:08			0	0	0	901	41	87	287	124
27	15.2	20.0	13:43	10.3	23:59	77.6	96.7	03:59	50.6	13:04			0	0	263	504	180	276	217	0
28	11.9	15.2	15:02	7.3	06:29	79.7	95.5	23:12	51.9	12:58			0	0	211	423	236	398	172	0
29	12.2	16.0	14:05	8.5	06:16	73.4	95.5	03:17	46.7	12:25			0	0	410	508	139	308	75	0
30	16.6	19.9	15:25	11.6	01:04	91.4	95.9	04:58	81.1	00:40	1		0	0	0	0	511	592	336	0
Mean	16.1	21.0		11.4		79.4	95.5		55.5				0.00	0.01	3.60	6.75	5.80	5.03	2.43	0.35
Hi	21.5	28.6		16.3		91.4	100.0		83.2	Tot	60		0	11	6484	12149	10448	9049	4366	633
Lo	10.2	15.2		4.5		68.7	90.9		39.7											

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.