

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

AUGUST 2004

Temperature (°C / °F)			Anomaly	Rank, in the past 123 years			
Mean maximum	23.7	74.7	+1.5	15 th highest			
Mean minimum	13.7	56.7	+1.7	2 nd highest			
Daily mean	18.7	65.7	+1.6	8 th highest			
Highest maximum	30.7	87.3	on 8 th	Lowest maximum	18.9	66.0	on 29 th
Highest minimum	19.3	66.7	on 9 th	Lowest minimum	8.1	46.6	on 28 th
Mean grass minimum	10.9	51.6		Lowest grass minimum	4.4	39.9	on 28 th
Mean earth @30 cm	19.3	66.7	+0.9	Earth @100 cm	17.8	64.0	+0.6
Frost duration (hrs)	0.0			Rain duration (hrs)	40.9		
Rainfall total (mm / in)	72.7	2.86	142 %	35 th highest			
Highest daily fall	22.3	0.88	on 9 th				
Number of: Dry days (<0.2mm)	13	Wet days (>0.9mm)	14	days ≥5mm	4		
Sunshine total (hrs)	174.2	Daily mean	5.62	Sunniest day	14.5	on 7 th	
N° days with: Air frost	0	Ground frost	0	Snow falling	0	Snow lying	0
Thunder	4	Hail ≥5mm	0	Small hail/ice	0	Fog @09	0
Air pressure MSL : Mean @09 GMT (mbar/in)	1010.9		-6.2	29.85			
Absolute highest	1021.3			30.16		on 1 st	
Absolute lowest	994.2			29.36		on 19 th	

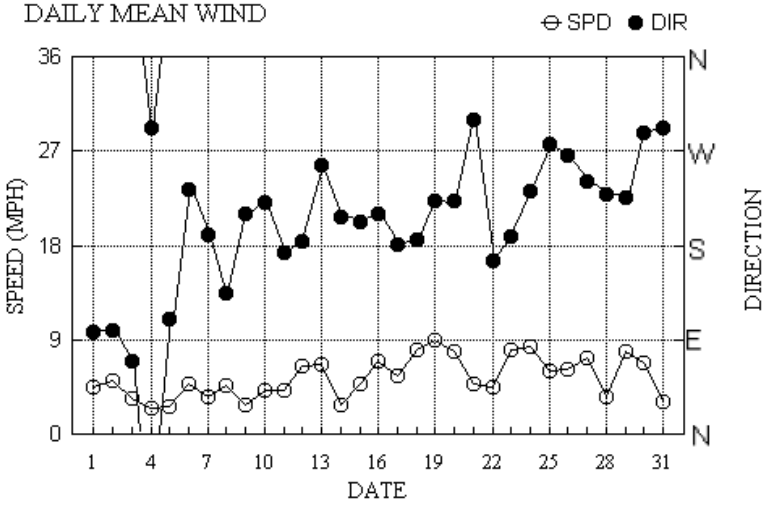
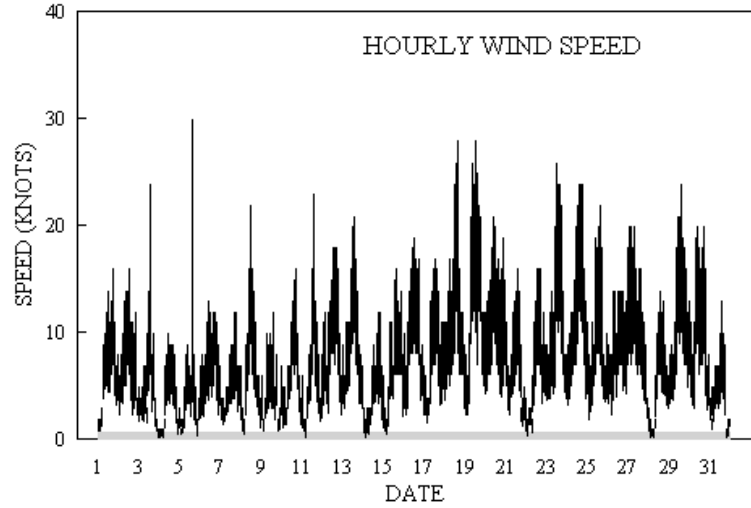
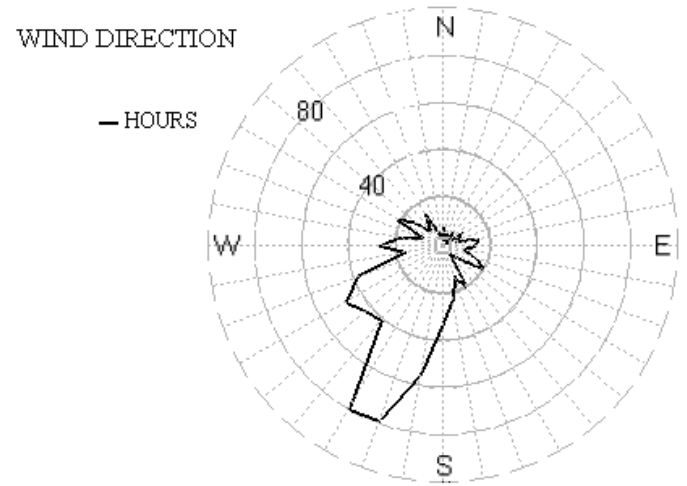
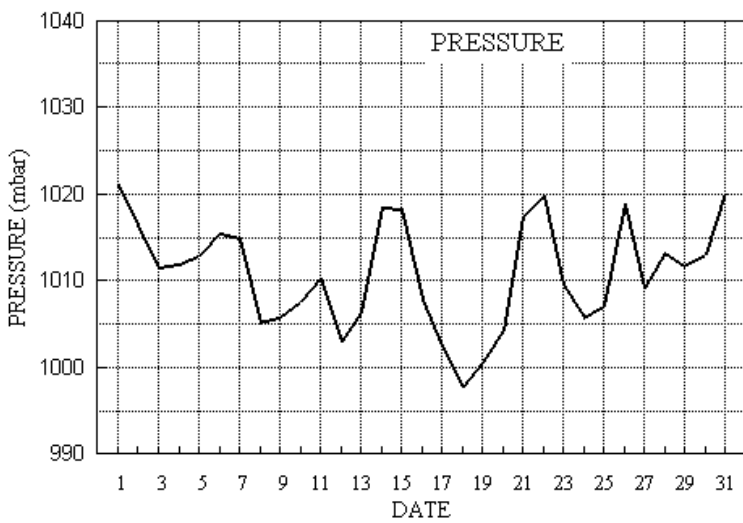
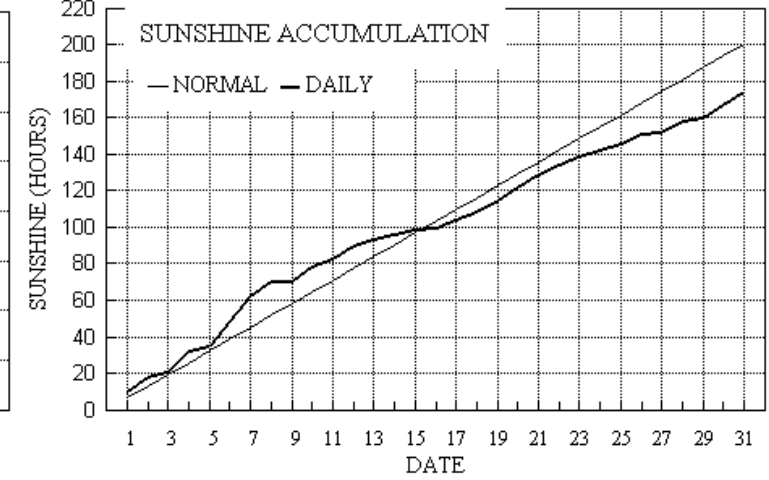
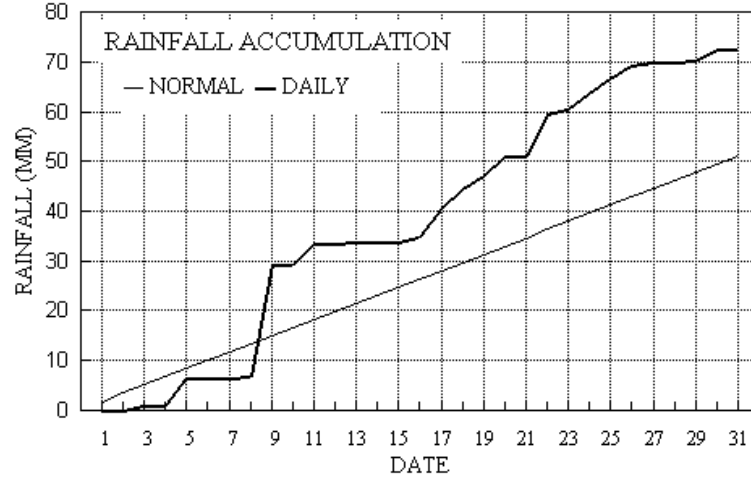
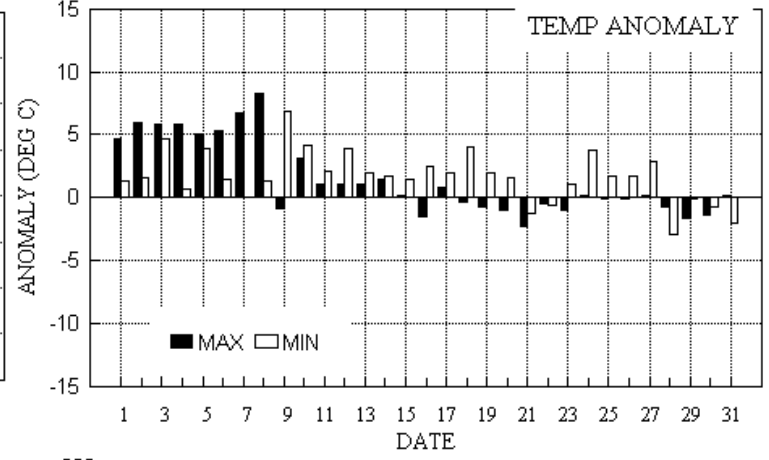
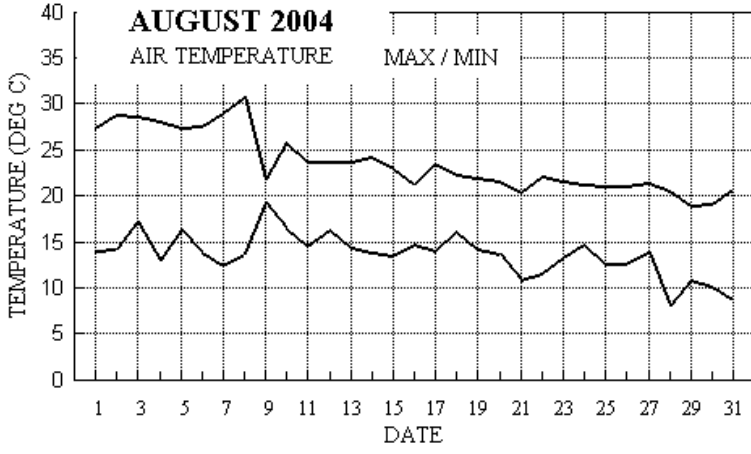
Anomaly = departure from 1971 to 2000 average.

Notes: **Very Warm.** **Wet.** **Sunshine Below Normal.**

Temperature. Another August with the mean temperature in the top 10 % of ranked values since 1882, together with 2003, 1997, and 1995 in the past 10 years. This year's mean is, however, 1.1° lower than that of August 2003. Although the mean minimum is similar to last year's, the mean maximum is 2.3° lower than the value of August 2003, and ranks 15th highest, compared with 2nd highest for the this year's mean minimum. The highest maximum, 30.7° is 2.9° above the long-term median, but 6.2° below the record set last year. The lowest minimum, 8.1°, is 2.0° above the median, and is 1.1° below the record set in 1997. The lowest maximum, 18.9°, is also 2.0° above the median, and ranks 4th highest in 92 years, while the highest minimum, 19.3°, is 3.1° above the median and is 2nd highest after 1997 since before 1913. **Rainfall.** While some places in the UK had record amounts of rainfall this August, it was not the case in Wokingham, where the total of 72.7 mm is highest only since 2001, and has been exceeded 7 times since 1976. In the long-term statistics, there have been 12 Augusts with over 100 mm since 1882, and the record stands at 140.7 mm in 1916. The number of dry days, 13, is lowest since 1992. Thunder was heard on 4 days, the 3rd, 5th, 18th and 20th, with the storm on the afternoon of the 5th very active for a time. **Sunshine.** In keeping with the generally unsettled nature of the month, sunshine was below normal, with the total of 174.3 hours lowest for August since 1997. The 7th, however, was an outstandingly sunny day, with 14.5 hours measured, amounting to 96 % of the time that the sun was above the horizon. Overall there were 8 days with <3 hours, 13 with =>6 hours, 4 with =>9 hours and 2 with =>12 hours. **Wind.** The mean wind speed this month was 5.4 mph, slightly below average. The windiest day was the 19th, mean 8.9 mph, but the month's highest gust of 35 mph was on the 5th. The 4th was the least windy day, mean 2.4 mph, and there were 24 hours with a mean speed of 0.5 mph or less, 13 fewer than average and least since 1994. Daily mean direction/number of days: N,0 NE,0 E,4 SE,1 S,7 SW,12 W,6 NW,1. **Humidity.** The mean relative humidity was 78.5 %, with a minimum value of 37 % reached on the 7th. The mean water vapour content per kg of air was 10.9 g at 0900 GMT and 10.3 g at 1500 GMT. **Pressure.** The mean of 1010.9 mbar at 0900 GMT is lowest for August since before 1976, and probably since 1963. The highest recorded value this month, 1021.3 mbar, is also lowest since before 1976. **Commentary.** **From the 1st to the 10th:** The month got off to a hot start, with anomalies for daily maxima over +5° from the 1st to the 8th, and an anomaly of +8.3° on the 8th, the month's hottest day. Maxima dropped to near normal on the 9th. Anomalies for minima ranged from +6.8° on the 9th, the month's warmest night, to 0.0° on the 7th, giving 10 day mean anomalies of +5.0° and +2.6° for max/min resp. Despite having 6 dry days, the 22.3 mm that fell on the 9th, the month's wettest day, made this the wettest period of the month with the 10 day total 176 % of normal. Despite the 9th having no sunshine, the 1st, 4th, 6th and 7th had >10 hours, lifting the 10 day total to 122 % of normal. Light or moderate winds were E'ly or variable up to the 5th, then mainly S'ly. **From the 11th to the 20th:** Daily maxima were unusually steady, mostly within 1° of normal, and minima similarly had anomalies between +1° and +4°, with the 10 day mean anomalies +0.2° and +2.3° for max/min resp. Only 3 dry days in this period, and a rainfall total 133 % of normal. Sunshine was poor, with no days reaching 7 hours, and a 10 day total just 67 % of normal. Mainly moderate winds were S'ly or SW'ly, and increased to fresh on the 18th and 19th. **From the 21st to the 31st:** Daily maxima again not far from, but mostly just below, normal, with an anomaly of -1.6° on the 29th the month's coolest day. Anomalies for minima had a greater range, from +4° on the 24th to -2.9° on the 28th, the month's coldest night. The resulting 11 day mean anomalies were -0.7° and +0.3° for max/min resp. 4 dry days in this period, and a rainfall total 119 % of normal. 2 days managed 7 hours sunshine, but the 11 day total was only 74 % of normal. A moderate NW'ly wind on the 21st backed S'ly on the 22nd, increased fresh on the 23rd, veered W'ly moderate on the 25th, and remained W'ly or SW'ly light or moderate until the end of the month.

B J Burton. F.R.Met.S. Hon. Met. Officer to Wokingham Town Council.

Wokingham Climatological Data



Daily meteorological data.

Emmbrook, WOKINGHAM, Berkshire.

Month: AUGUST 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	27.5	14.0	0.0	10.8	19.4	17.0	10.8	0.0	1021.1	0 0 0 0	0 0 0 0	0 0 0 0	97 3.5 3.9	80 16 1755	90 7 17	0.0	
2	28.8	14.2	tr	10.6	19.5	17.1	7.8	0.0	1016.5	0 0 0 0	0 0 0 0	0 0 0 0	99 3.9 4.4	100 16 1207	90 8 09	0.0	
3	28.6	17.3	0.8	14.7	19.9	17.2	2.3	0.0	1011.6	0 0 0 0	1 0 0 0	0 0 0 0	69 1.0 2.9	220 24 1420	210 9 14	0.9	
4	28.2	13.0	0.0	10.4	19.8	17.3	11.8	0.0	1011.9	0 0 0 0	0 0 0 0	0 0 0 0	292 1.5 2.1	230 10 1056	330 4 14	0.0	
5	27.5	16.3	5.5	13.5	20.1	17.4	2.3	0.0	1012.9	0 0 0 0	1 0 0 0	0 0 0 0	110 1.0 2.2	90 30 1507	120 8 15	2.0	
6	27.7	13.8	0.0	11.1	20.0	17.5	13.3	0.0	1015.5	0 0 0 0	0 0 0 0	0 0 0 0	233 4.0 4.2	260 13 1048	240 7 17	0.0	
7	29.1	12.4	0.0	8.3	20.1	17.6	14.5	0.0	1014.9	0 0 0 0	0 0 0 0	0 0 0 0	191 1.7 3.1	150 12 1639	170 6 18	0.0	
8	30.7	13.7	0.5	10.6	20.4	17.7	8.0	0.0	1005.3	0 0 0 0	0 0 0 0	0 0 0 0	135 3.5 4.0	170 22 1215	150 9 11	1.5	
9	21.8	19.3	22.3	17.2	20.7	17.8	0.0	0.0	1005.8	0 0 0 0	0 0 0 0	0 0 0 0	210 2.3 2.4	240 12 1451	220 4 13	10.8	
10	25.8	16.6	tr	16.6	20.1	17.9	7.8	0.0	1007.7	0 0 0 0	0 0 0 0	0 0 0 0	221 3.4 3.7	200 16 1606	210 8 16	0.1	
11	23.7	14.6	4.4	10.9	20.1	17.9	4.6	0.0	1010.2	0 0 0 0	0 0 0 0	0 0 0 0	173 3.0 3.6	180 23 1446	190 9 13	2.3	
12	23.8	16.4	tr	14.7	20.1	18.0	6.8	0.0	1002.9	0 0 0 0	0 0 0 0	0 0 0 0	184 5.3 5.6	180 18 1250	210 10 15	0.0	
13	23.7	14.4	0.2	10.6	20.0	18.0	4.0	0.0	1006.4	0 0 0 0	0 0 0 0	0 0 0 0	256 5.4 5.8	240 21 1328	240 11 13	0.2	
14	24.2	13.9	0.0	10.4	19.9	18.0	2.7	0.0	1018.4	0 0 0 0	0 0 0 0	0 0 0 0	207 2.0 2.4	210 12 1937	200 6 19	0.0	
15	23.0	13.6	0.1	10.5	19.9	18.1	2.0	0.0	1018.2	0 0 0 0	0 0 0 0	0 0 0 0	203 4.1 4.2	200 16 1422	200 8 13	0.4	
16	21.3	14.7	1.0	10.9	19.9	18.1	1.5	0.0	1007.9	0 0 0 0	0 0 0 0	0 0 0 0	211 6.0 6.1	210 19 1215	200 10 12	1.0	
17	23.6	14.1	5.7	9.9	19.5	18.1	4.5	0.0	1002.5	0 0 0 0	0 0 0 0	0 0 0 0	181 4.3 4.9	200 17 1343	200 9 14	1.4	
18	22.4	16.2	4.0	14.6	19.6	18.1	4.2	0.0	997.8	0 0 0 0	1 0 0 0	0 0 0 0	186 6.7 7.0	210 28 1528	200 12 14	2.2	
19	21.9	14.2	2.6	12.0	19.3	18.1	6.5	0.0	1000.5	0 0 0 0	0 0 0 0	0 0 0 0	223 7.0 7.7	270 28 1256	220 12 11	0.7	
20	21.7	13.7	4.0	11.1	18.9	18.1	6.3	0.0	1004.2	0 0 0 0	1 0 0 0	0 0 0 0	223 4.6 6.9	210 21 1006	200 11 10	2.5	
21	20.4	10.9	0.0	8.3	18.7	18.1	7.3	0.0	1017.4	0 0 0 0	0 0 0 0	0 0 0 0	300 3.5 4.1	310 16 1318	310 8 13	0.0	
22	22.2	11.6	8.6	10.3	18.6	18.0	5.4	0.0	1019.8	0 0 0 0	0 0 0 0	0 0 0 0	165 3.5 3.9	170 16 1502	180 8 16	6.3	
23	21.7	13.3	1.0	12.4	18.9	18.0	4.6	0.0	1009.5	0 0 0 0	0 0 0 0	0 0 0 0	189 5.8 6.9	210 26 1150	210 13 12	0.4	
24	21.3	14.8	3.2	12.0	18.9	18.0	3.5	0.0	1005.8	0 0 0 0	0 0 0 0	0 0 0 0	232 6.8 7.2	250 24 1717	250 13 17	0.5	
25	21.1	12.7	3.0	8.8	18.9	18.0	3.3	0.0	1007.1	0 0 0 0	0 0 0 0	0 0 0 0	277 4.5 5.2	290 22 1551	290 9 15	1.1	
26	21.1	12.7	2.5	10.1	18.5	18.0	5.3	0.0	1018.9	0 0 0 0	0 0 0 0	0 0 0 0	266 4.8 5.4	230 16 2353	260 8 16	3.9	
27	21.4	13.9	0.7	11.4	18.4	17.9	1.1	0.0	1009.1	0 0 0 0	0 0 0 0	0 0 0 0	241 5.7 6.3	230 20 0158	220 9 04	2.0	
28	20.5	8.1	tr	4.4	18.2	17.9	5.9	0.0	1013.2	0 0 0 0	0 0 0 0	0 0 0 0	229 2.9 3.1	250 14 1307	270 6 12	0.0	
29	18.9	10.8	0.1	8.0	18.0	17.8	2.2	0.0	1011.7	0 0 0 0	0 0 0 0	0 0 0 0	226 6.7 6.9	210 24 1446	240 11 10	0.1	
30	19.1	10.2	2.5	7.2	17.6	17.8	6.6	0.0	1013.1	0 0 0 0	0 0 0 0	0 0 0 0	288 4.9 6.0	290 20 0942	280 10 08	0.6	
31	20.7	8.8	0.0	5.1	17.2	17.7	7.3	0.0	1020.1	0 0 0 0	0 0 0 0	0 0 0 0	292 2.2 2.6	230 13 1335	270 6 13	0.0	
Total			72.7				174.2	0.0									40.9
Mean	23.7	13.7		10.9	19.3	17.8	5.62	0.0	1010.9					217 2.8 4.7			
Anom	+1.5	+1.7	142%		+0.9	+0.6	87%										
Daily mean		18.7															
Anom		+1.6															

Number of days with:

Air frost = 0 Ground frost = 0 Nil sun = 1
 Snow falling = 0 Snow lying = 0 Thunder = 4
 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 AUGUST 2004

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	hCr	Cf	NCh	shs	NCh	shs	NCh	shs	Date	Remarks
1	59	6	11	06	10	22.4	15.4	65	10.9	1021.1	1	001	05	1	1	1	1	5	0	1	81828	86080			1	COTRA Cu hum		
2	58	5	10	06	12	21.8	16.4	71	11.7	1016.5	7	007	05	1	1	4	0	9	8	1	81362	84365			2	2Ci80 COTRA Ac cas		
3	56	7	11	03	05	21.2	17.8	81	12.8	1011.6	4	000	05	8	2	7	0	9	8	1	82358	86363			3	/Ci80 COTRA Ac cas		
4	82	3	27	03	07	22.1	14.9	64	10.6	1011.9	1	004	02	0	0	1	1	5	3	1	81820	83080			4	1Ac68 COTRA Cu hum		
5	56	5	09	04	08	22.7	17.9	74	12.9	1012.9	8	001	05	1	1	5	0	9	3	0	85360				5	Sky turbid		
6	68	1	25	05	09	19.6	15.4	77	10.9	1015.5	1	008	03	0	0	1	1	5	0	1	81820				6	1Ci75 Cu hum		
7	75	3	26	03	05	21.2	16.1	73	11.4	1014.9	8	002	03	0	0	0	0	9	0	1	83080				7	COTRA		
8	60	3	12	05	10	25.5	18.5	65	13.5	1005.3	8	011	05	0	0	0	0	9	0	4	83080				8	COTRA		
9	50	8	19	03	06	21.2	20.0	93	14.7	1005.8	2	010	21	6	2	4	7	3	7	/	81709	84712	88465		9	3Ac57		
10	60	8	22	03	06	17.4	16.9	97	12.1	1007.7	3	005	60	6	6	7	7	2	2	/	86705	84620	88550		10			
11	65	7	18	03	07	19.3	16.8	86	12.1	1010.2	3	002	25	8	1	6	8	4	7	/	81712	83815	85359		11	2Sc35 3Sc45 Cu con S		
12	60	5	18	06	13	21.2	17.7	80	12.8	1002.9	7	002	15	8	2	3	9	4	6	3	81915	83818			12	1Ac62 1Ci70 2Ci75 jp NW vv40k ex p		
13	63	8	24	05	11	17.8	15.3	85	10.9	1006.4	2	010	02	2	2	7	5	4	/	7	82712	87615	88272		13			
14	58	8	23	02	03	18.0	15.6	86	11.1	1018.4	2	022	05	2	2	8	5	3	/	/	83708	85612	88625		14			
15	64	7	22	03	11	19.6	17.0	85	11.8	1018.2	6	003	03	2	2	7	5	4	7	/	84615	87656			15	/Ac60		
16	75	7	23	08	15	18.2	14.6	80	10.5	1007.9	7	008	02	1	1	7	5	4	/	/	87615				16			
17	77	3	21	07	11	19.5	15.1	76	10.9	1002.5	5	004	03	1	1	2	8	5	3	1	82820				17	1Sc35 1Ac65 1Ci75 Cu med		
18	40	7	16	06	14	17.5	16.8	96	12.2	997.8	8	001	81	8	1	7	9	3	/	/	83708	86915			18			
19	75	5	22	11	24	18.6	15.0	80	10.8	1000.5	1	024	03	1	1	3	8	4	3	1	83818	84080			19	1Sc40 1Ac60 Absent 19th to 24th vv&cld est		
20	78	4	23	08	18	17.3	14.0	81	10.1	1004.2	1	003	03	1	1	3	9	5	0	3	81920	83822			20	2Ci70		
21	78	6	34	04	12	15.1	11.3	77	8.3	1017.4	2	023	03	1	1	5	8	4	3	0	84818				21	2Sc50 2Ac60		
22	82	6	18	04	08	17.3	12.3	72	8.8	1019.8	0	001	02	2	2	1	1	5	3	1	81825	86364			22	/Ci75		
23	65	7	16	04	11	16.0	15.1	95	10.8	1009.5	6	010	21	6	2	7	5	4	/	/	81710	83712	87620		23			
24	65	7	22	08	15	17.4	14.8	85	10.6	1005.8	8	008	80	8	2	7	8	4	/	/	83815	85625	87650		24			
25	82	6	27	05	09	17.6	13.6	77	9.8	1007.1	3	011	03	1	1	5	2	5	3	1	85825	85078			25	1Sc50 1Ac63 COTRA Cu med		
26	80	7	32	07	14	17.6	13.2	75	9.4	1018.9	2	020	03	1	1	3	8	5	0	1	83820	87080			26	1Sc35 COTRA Cu med		
27	75	8	23	08	16	16.8	16.0	95	11.4	1009.1	6	009	61	6	5	8	5	3	/	/	84708	87712	88618		27			
28	82	4	20	03	06	17.3	12.1	71	8.8	1013.2	1	005	03	0	0	3	8	5	3	8	81825	83656			28	1Ac68 1Cs75 Cu hum		
29	82	7	22	06	11	15.2	12.1	82	8.8	1011.7	0	001	02	6	2	4	5	6	7	/	83640	86362	87465		29	2Sc56		
30	82	7	28	09	19	16.2	10.4	68	7.9	1013.1	3	018	03	1	1	7	8	5	/	/	81825	87656			30			
31	67	3	34	03	06	14.9	11.4	79	8.3	1020.1	1	003	01	1	1	3	8	4	0	0	81812				31	2Sc12 Cu hum		

Mean vis = 20.5 km
 Mean cloud = 5.7 72%
 Mean wind speed = 5.2 kn
 Mean gust = 11 kn
 Mean TT = 18.8 C
 Mean TdTd = 15.1 C
 Mean RH = 79.7 %
 Mean r = 10.9 g/kg
 Mean PPP = 1010.9 mbar

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 1500 GMT for AUGUST 2004

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Ci	NChs	shs	NChs	shs	Date	Remarks
1	65	7	09	05	10	26.3	15.4	51	10.9	1018.7	7	010	03	2	2	7	8	6	/	1	82845	87650			1	/Ci80
2	62	7	12	06	11	27.0	16.2	52	11.6	1013.8	6	013	03	1	1	7	0	9	8	1	82360	87365			2	/Ci80 Ac cas
3	58	7	19	04	24	21.2	18.2	83	13.2	1009.9	5	009	95	9	2	4	9	6	6	3	84940	83362			3	1Sc56 3Ci75 jt NW-E
4	80	3	28	05	09	27.6	15.6	48	11.1	1011.6	8	003	02	1	1	2	8	6	0	1	82845				4	1Sc50 2Ci80 COTRA Cu med
5	59	6	10	06	16	26.5	18.1	60	13.0	1011.3	5	012	17	9	9	6	9	6	/	/	83930	83835			5	jt E&NE
6	81	2	30	04	10	26.3	14.8	49	10.5	1014.6	7	004	03	0	0	2	1	7	0	2	82850				6	1Ci75 Cu hum
7	86	2	11	05	09	28.5	11.4	35	8.4	1011.4	7	023	02	0	0	1	1	7	0	1	81856				7	1Ci80 Cu hum Absent vv&cld est
8	75	7	17	07	12	27.9	16.8	51	12.1	1003.0	6	008	60	6	2	2	1	1	7	7	81850	87465			8	2Ac62 Cu hum
9	30	8	24	06	12	18.1	17.6	97	12.7	1008.4	2	011	63	6	2	7	7	2	2	/	82705	84708	88535		9	4Sc25
10	81	2	22	07	15	25.2	14.0	50	10.0	1008.2	0	001	02	0	0	2	1	6	3	1	82848				10	1Ac68 1Ci75 COTRA Cu hum
11	75	7	18	10	23	19.6	14.9	74	10.6	1009.0	5	000	80	8	2	4	8	6	7	/	82840	83650	87358		11	vv 40k ex p
12	62	6	18	06	16	21.8	16.0	70	11.6	1002.0	4	000	15	2	2	3	9	5	6	3	81928	82832	83070		12	1Ac60 2Ci75 jp SW-NW
13	81	7	23	09	20	21.0	15.7	72	11.2	1006.6	3	003	15	2	2	2	9	6	7	1	81930	81835	83362		13	2Sc50 6Ci75 COTRA jp NE
14	67	5	19	03	07	23.5	15.8	62	11.2	1018.5	0	000	01	2	2	5	8	6	0	0	81830	85640			14	
15	72	7	20	06	16	20.9	17.7	82	12.7	1015.1	7	012	80	8	2	5	8	5	3	6	82820	84650	87278		15	1Ac65 COTRA U/a cont
16	65	7	22	07	16	18.1	16.8	92	12.1	1005.9	8	011	25	8	2	2	8	6	3	1	81712	83818	85363		16	3Sc35 7Ac68 Cu con jpS
17	81	6	20	08	16	22.8	13.8	57	10.0	1000.9	7	009	02	2	2	2	2	6	3	1	82835	83360			17	4Ci78 COTRA Cu med
18	60	6	21	12	26	21.2	15.5	70	11.3	996.5	6	013	17	9	8	6	9	5	/	/	83920	84830			18	tl NW
19	30	7	25	07	14	18.3	16.3	86	11.7	1002.2	2	009	81	8	2	7	9	6	/	/	87930				19	Absent 19th to 24th vv&cld est
20	75	5	23	10	17	19.6	13.9	70	10.0	1004.1	2	002	15	8	2	4	9	5	6	3	81925	83830			20	1Sc50 1Ac62 2Ci70
21	84	3	29	07	16	20.1	4.8	37	5.3	1019.2	2	007	02	1	1	2	8	7	0	2	82850				21	1Sc56 2Ci75
22	82	6	18	08	16	20.9	11.0	53	8.1	1017.5	8	012	03	1	1	3	2	6	7	1	83848	83365			22	3Ci75
23	80	5	21	12	23	20.1	16.1	78	11.6	1008.7	2	001	01	8	1	3	9	4	6	3	81918	83822			23	1Ac60 2Ci70
24	80	7	25	12	24	20.4	12.9	62	9.3	1006.2	2	003	15	8	1	3	9	5	6	3	81925	83830	85075		24	1Ac62
25	65	7	29	08	17	19.3	12.0	63	8.8	1008.2	2	009	25	8	2	5	9	5	6	3	82930	83656	85080		25	1Cu40 2Ac59 1Ci70 COTRA jpS vv 40k ex p
26	84	7	25	08	14	20.4	11.2	56	8.3	1018.4	8	003	02	2	2	4	8	6	3	1	82838	83656	86080		26	1Ac62 COTRA Cu med
27	86	7	26	08	16	21.2	15.2	69	10.8	1009.0	4	000	03	6	2	3	8	5	7	8	83825	87275			27	1Sc35 1Ac62 1Ac67 COTRA Cu con Halo 22°
28	84	6	21	06	11	20.1	10.2	53	7.7	1012.8	8	004	01	2	2	2	8	6	3	1	81840	85080			28	1Sc50 2Sc56 1Ac65 COTRA Cu med U/a cont
29	82	7	23	12	24	18.1	12.2	68	8.9	1009.6	7	009	15	8	2	5	8	5	7	1	81825	83635	86078		29	2Sc56 3Ac62 COTRA jp S-NW
30	86	5	32	08	18	18.0	9.5	58	7.4	1015.1	1	010	01	8	2	5	8	6	0	1	81835	84656			30	1Sc45 2Ci80 COTRA Cu med
31	82	3	34	03	10	18.8	8.2	50	6.7	1018.5	6	009	02	1	1	3	4	7	0	0	81850				31	2Sc56 Cu hum

Mean vis = 28.9 km
 Mean cloud = 5.7 71%
 Mean wind speed = 7.3 kn
 Mean gust = 16 kn
 Mean TT = 21.9 C
 Mean TdTd = 14.1 C
 Mean RH = 63.2 %
 Mean r = 10.3 g/kg
 Mean PPP = 1010.2 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
 AUGUST 2004

Date	Mean			Max			Min			Missing RH	Number of minutes RH in given ranges								
	TT	TT	Time	TT	Time	RH	TT	Time	RH		Time	RH	Time	RH	Time	RH	Time	RH	
01	21.4	27.6	13:36	15.1	04:02	68.4	95.5	04:43	46.3	12:51	N >0	0	0	583	443	171	198	45	0
02	21.5	28.8	13:45	14.9	04:54	71.7	94.5	05:00	44.2	13:10		0	0	406	510	290	234	0	0
03	20.9	28.6	13:46	16.5	23:59	81.1	94.8	23:58	48.5	13:44		0	0	185	133	891	231	0	0
04	21.7	28.2	14:58	14.2	04:23	69.5	96.9	05:21	45.0	16:10		0	0	637	361	32	62	348	0
05	20.4	27.5	14:43	17.2	04:50	85.9	98.9	23:02	57.8	14:45		0	0	21	384	332	268	247	188
06	20.7	27.7	14:44	14.2	05:30	73.8	96.6	05:16	42.4	13:14		0	0	472	261	242	276	189	0
07	21.6	29.1	15:37	13.4	05:11	62.7	95.7	04:54	31.8	16:41		0	234	591	126	142	260	87	0
08	23.5	30.7	13:05	14.9	02:33	66.8	94.8	05:30	38.6	13:03		0	16	567	510	170	177	0	0
09	19.4	22.8	00:00	16.8	23:48	92.0	99.5	17:35	73.0	00:42		0	0	0	152	209	482	224	373
10	19.8	25.8	14:35	15.8	23:59	80.7	100.0	09:36	47.1	14:22		0	0	351	290	146	19	12	622
11	19.1	23.8	12:50	15.4	00:19	78.4	96.4	05:58	51.9	14:02		0	0	256	401	330	255	198	0
12	19.1	23.8	13:21	16.1	23:59	81.8	98.9	06:11	59.2	13:24		0	0	4	662	190	113	325	146
13	18.6	23.7	13:21	14.6	05:01	82.2	98.4	04:58	53.3	13:11		0	0	114	533	145	330	265	53
14	18.9	24.3	15:58	14.5	04:27	81.8	99.0	05:40	58.6	15:15	53	0	0	18	576	329	139	247	78
15	18.5	23.0	13:29	14.3	02:38	84.8	94.2	23:38	67.1	13:31		0	0	0	417	563	460	0	0
16	17.4	21.3	12:14	15.0	23:57	86.9	96.3	05:02	65.2	12:14		0	0	0	299	424	582	135	0
17	18.9	23.6	11:51	14.8	00:56	79.7	96.4	00:56	56.5	14:58		0	0	192	482	345	169	252	0
18	18.0	22.5	14:19	14.5	22:55	86.4	97.0	09:15	62.1	14:21		0	0	0	323	457	561	99	0
19	17.3	21.9	11:40	14.5	03:58	82.4	98.4	05:05	57.8	12:47		0	0	33	551	305	263	191	97
20	16.5	21.7	12:33	11.8	23:59	84.1	98.4	22:08	55.9	12:35		0	0	23	521	198	414	272	12
21	15.2	20.4	14:20	11.0	03:32	71.6	97.6	05:33	35.6	14:24		0	91	364	462	94	219	210	0
22	16.7	22.2	14:04	12.3	02:44	68.9	94.5	23:58	44.9	14:01		0	0	544	350	489	57	0	0
23	17.0	21.7	12:29	13.4	00:07	87.6	99.5	09:15	66.3	12:27		0	0	0	414	363	101	184	378
24	17.1	21.3	13:57	14.3	22:29	82.6	96.4	10:21	61.7	14:42		0	0	0	468	521	437	14	0
25	16.2	21.1	12:05	13.2	04:21	82.4	97.4	05:25	51.7	13:36		0	0	172	331	130	729	78	0
26	16.6	21.1	15:06	12.6	02:54	74.9	97.4	06:37	52.0	15:18		0	0	354	515	213	289	69	0
27	17.0	21.5	15:01	12.5	23:53	84.1	98.3	09:53	67.0	19:33	11	0	0	0	601	264	148	402	14
28	15.1	20.5	15:22	9.0	05:52	74.6	96.8	05:20	50.5	12:15		0	0	394	510	161	232	143	0
29	14.7	18.9	14:14	11.3	02:49	79.1	92.3	16:15	61.2	12:04		0	0	0	618	786	36	0	0
30	14.7	19.1	16:27	10.7	05:28	74.8	94.5	05:24	45.4	16:32		0	0	263	638	249	290	0	0
31	14.6	20.7	14:29	9.5	03:49	72.8	95.1	04:11	41.7	15:33		0	0	408	317	424	288	3	0
Mean	18.3	23.7		13.8		78.5	96.8		52.9			0.00	0.18	3.74	7.07	5.16	4.47	2.28	1.05
Hi	23.5	30.7		17.2		92.0	100.0		73.0	Tot	64	0	341	6952	13159	9605	8319	4239	1961
Lo	14.6	18.9		9.0		62.7	92.3		31.8										

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.

WOKINGHAM METEOROLOGICAL DATA

Wokingham Climatological Station, Emmbrook, Berkshire.

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

Seasonal Means and Totals

SUMMER 2004

Temperature (°C)		Rank in past 123 years	
Mean maximum	22.6	(+1.1)	19 th highest
Mean minimum	12.3	(+0.8)	4 th highest
Daily mean	17.4	(+0.9)	12 th highest
Rainfall total (mm)	131.3	(89 %)	44 th lowest
Sunshine total (hours)	548.2	(92 %)*	
N ^o of: Dry days	53 (-7)	Wet days	24 (+1)
Days with: Air frost	0 (0)	Ground frost	0 (-2)
Thunder	6 (-1)	Hail ≥5mm	0
		Small hail/ice	1
		Fog @09 GMT	0 (0)
		Nil sun	2
Air pressure MSL : Mean @09 GMT (mbar)	1015.1		(-2.0)

Departure from 1971 to 2000 average shown in brackets. * Sunshine anomaly approximate due to instrument change

Notes: **Very Warm. Rainfall and Sunshine Below Normal.**

Temperature. The mean temperature this summer is 1.0° lower than that of the record breaking 2003. Nevertheless, this is the 2nd warmest summer in the past 8 years. The mean maximum is 1.5° lower than last year's, while the mean minimum is only 0.5° lower than that of summer 2003, and ranks 4th highest in 123 years. The highest maximum, 30.7° on the 8th August is 0.4° above the long-term median, and a far cry from the record 36.9° recorded last August. The lowest minimum, 5.6° on the 21st June, is 1.3° above the median, while the lowest maximum, 16.1° on the 23rd June, is 1.8° above the median and is 2nd highest since 1993. The highest minimum, 19.3° on the 9th August is 2.3° above the median and ranks 3rd highest summer minimum in 92 years, after 1997 and 1968, and is just 0.3° below the record. The lowest grass minimum, 1.6° on the 19th June, is about 1.0° above average, but lowest since 2001. Mean earth temperatures at 30 cm and 1 metre depth were 18.0° and 16.3° resp., both equal to average. **Rainfall.** The rainfall total for this summer, 131.3 mm, is only 89 % of average. This figure confirms that Wokingham missed many of the heavy downpours that made the news during this summer. The overall total ranks 44th driest in 123 years, 27.5 mm below the long-term median. August with 72.7 mm (142 %) was the wettest month, and July with 28.8 mm (69 %) the driest. Unusually for the summer, there was just 1 dry spell, 16 days ending on the 16th June, and there were 7 fewer dry days than average. However the number of days with =>5 mm, 8, is 1 fewer than average. The duration of measurable rain was 74.1 hours, 8.1 fewer than average. Both the season's highest daily fall and longest duration occurred on the 9th Aug, 22.3 mm and 10.8 hours resp. There were 6 days with thunder, 4 in August and 1 each in June and July. **Sunshine.** The total of 548.2 hours is lowest since 2000. June the 13th was the sunniest day with 15.1 hours. June was the sunniest month with 206.6 hours and July the dullest with 167.4 hours. Overall there were 22 days with <3 hours, 41 with =>6 hours, 20 with =>9 hours, 9 with =>12 hours and 1 with =>15 hours. **Wind.** The mean wind speed this summer was 5.9 mph, close to the average yet highest since 1998. The windiest day was the 23rd June, mean 15.5 mph, and this was the windiest summer day since 1994. The highest gust of 40 mph was also on that day. The 27th July was the least windy day, mean 2.1 mph, and there were 72 hours with a mean speed of 0.5 mph or less, 11 fewer than average. Daily mean direction/number of days: N,5 NE,2 E,5 SE,2 S,15 SW,32 W,18 NW,13. **Pressure.** The mean pressure, 1015.1 mbar, is lowest since 1997. The pressure reached 1032.9 mbar on the 13th June, and fell to 990.9 mbar on the 23rd June, marking the extremes for this summer. **Humidity.** The overall mean relative humidity was 75.0 % with a minimum value of 29 % on the 14th June. The mean weight of water vapour per kg of air was 9.5 g at 0900 GMT and 9.2 g at 1500 GMT.

June. Warm, dry, sunshine near normal. Mean temperature 2nd highest since 1976. Only 0.5 mm rain 1st to 19th. The 23rd was the windiest June day since 1994.

July. Dry, dull, temperature near normal. Driest and dullest since 1998. Mean earth temperature at 30 cm depth lowest since 1988.

August. Very warm, wet, sunshine below normal. Mean minimum 2nd highest in 123 years. Lowest maximum 4th highest in 92 years and highest minimum 2nd highest in the same period. Fewest dry days since 1992. Dullest since 1997. Mean pressure lowest since 1963.

Month	Mean Max	Anom	Mean Min	Anom	Rain mm	Anom %	Sun hrs	Anom %	Wind Mn mph	Max gust	Mean pressure	Anom
Jun	21.8	+2.0	11.3	+1.2	29.8	55 %	206.6	108 %	6.6	40	1018.0	+1.0
Jul	22.3	-0.2	11.8	-0.5	28.8	69 %	167.4	81 %	5.9	39	1016.4	-1.0
Aug	23.7	+1.5	13.7	+1.7	72.7	142 %	174.2	87 %	5.4	35	1010.9	-6.2

B J Burton FRMetS.

Hon. Met. Officer to Wokingham Town Council.