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 2005

Temperature (°C / °F)			Anomaly	Rank in past **124** years			
Mean maximum	22.8	73.0	+0.6	29th highest			
Mean minimum	11.2	52.2	-0.8	59th highest			
Daily mean	17.0	62.6	-0.1	39th highest			
Highest maximum	30.2	86.4	on 31st	Lowest maximum	16.4	61.5	on 24th
Highest minimum	14.7	58.5	on 19th	Lowest minimum	7.4	45.3	on 8th
Mean grass minimum	7.8	46.0		Lowest grass minimum	2.9	37.2	on 8th
Mean earth @30 cm	18.0	64.4	-0.4	Earth @100 cm	17.0	62.6	-0.2
Frost duration (hrs)	0.0			Rain duration (hrs)	28.6		
Rainfall total (mm / in)	54.3	2.14	106 %	61st highest			
Highest daily fall	9.3	0.37	on 24th				

Number of: Dry days (<0.2mm)	22	Wet days (>0.9mm)	8	days ≥5mm	6			
Sunshine total (hrs)	230.6	Daily mean	7.44	128 %	Sunniest day	13.8	8th	
No days with: Air frost	0	Ground frost	0	Snow falling 0	Snow lying	0		
Thunder	2	Hail ≥5mm	2	Small hail/ice 0	Fog @09	0	Nil sun	2

Air pressure MSL : Mean @09 GMT (mbar/in)	1018.9	+1.8	30.09
Absolute highest	1027.2		30.33 on 4th
Absolute lowest	1002.6		29.61 on 25th

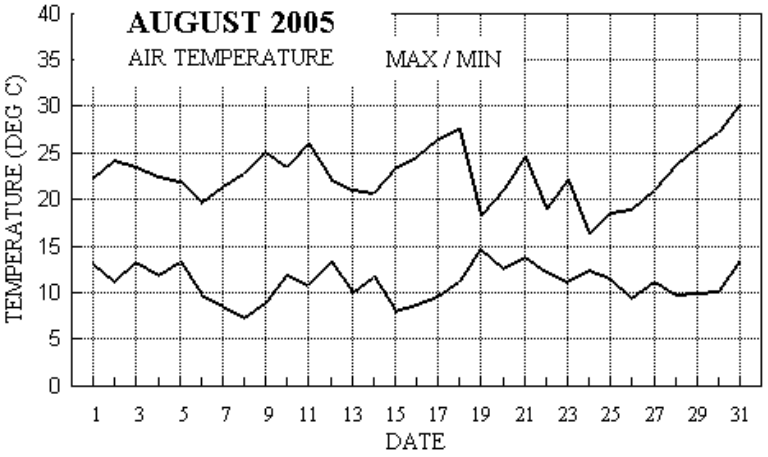
Anomaly = departure from 1971 to 2000 average (degrees C, percent and mbar).

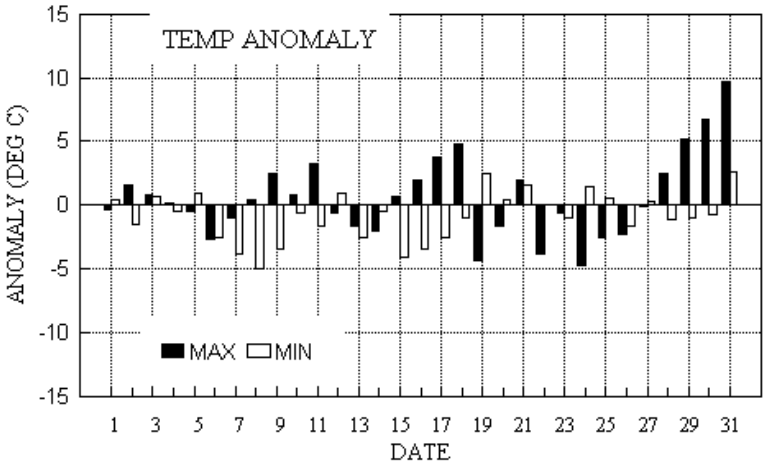
Notes: **Sunny with Above Normal Temperature and Near Normal Rainfall.**

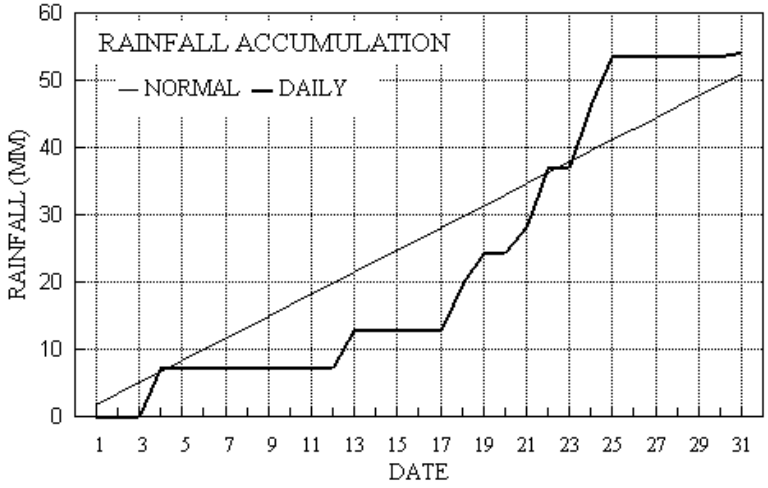
Temperature. Daily maxima were near normal for most of the month, but it became hot on the final two days. Daily minima were also generally near normal, but with 2 brief cool spells around the 8th and 16th. The mean maximum is 1.6° above the long-term median, but the mean minimum on the median, and is equal lowest with 1998 since 1993. The resulting daily mean is lowest since 1993, but is 0.8° above its median. We were treated to a 30° day on the 31st, a value reached in 9 out of the last 11 Augusts, and a reminder of the record breaking 36.9° on August 10th 2003. The lowest maximum, 16.4°, is 0.4° below the median, while the lowest minimum, 7.4°, is 1.2° above the median. The highest minimum, 14.7°, is low for August, 1.5° below the median, and lowest since 1976, also 6th lowest in 93 years. The mean grass minimum is lowest since 1993, as is the mean earth temperature at 30 cm depth, but the mean at 1 metre depth is lowest since before 1989. Also, the total temperature range at that depth is a new record at just 0.3°. During hailfall on the 25th, the air temperature fell from 15.2° to 9.7° in 3 minutes. **Rainfall.** The total this month is close to normal, although it was mainly dry until the 18th and again after the 25th, with an 8 day dry spell ending on the 12th and another of 5 days ending on the 30th. The 9.3 mm on the month's wettest day is 7.7 m below the median. Hail fell briefly overnight on the 19th, and there was a thunderstorm with notably large hail on the 25th, when stones up to 2.5 cm dia. fell for 2 minutes. The only other occasion with stones as large as this in the past 30 years was on 23rd July 1984, but on that occasion the hail was more intense and of longer duration and caused considerable damage locally. Thunder also occurred on the 31st together with a good lightning display. **Sunshine.** A reasonably sunny August with a fairly steady build up of surplus hours after the 7th. 12 days had >66 % of the maximum possible, and 9 days had <33 %. Overall 7 days had <3 hours, 20 had >6 hours, 14 had >9 hours and 5 had >12 hours. **Wind.** The mean speed this month was 4.7 mph, 1.0 mph below average. The 24th was the windiest day, 8.6 mph, with the month's highest gust of 32 mph also on that day. A mean of 2.1 mph on the 17th made that the least windy day. There were 62 hours with a mean speed of 0.5 mph or less, 2nd highest since 1988, but on the more accurate sonic anemometer the total was 24.35 hours. Daily mean direction/number of days: N,4 NE,1 E,1 SE,1 S,1 SW,7 W,7 NW,9. **Humidity.** The overall mean relative humidity was 72.8 %, and the lowest value recorded was 30 % on the 9th. The mean water vapour content per kg of air was 9.5 g at 0900 GMT and 8.5 g at 1500 GMT, both values lowest for August since 1988. **Commentary. From the 1st to the 10th:** Mean anomalies (max, min, rain, sun) +0.1°, -1.6°, 129 %, 44 %. Anomalies for daily max temp were generally close to normal, while min were near or below normal, with an anomaly of –5.0° on the 8th, the month's coldest night. Rain fell on the 4th only, giving a 10 day total of 7.3 mm. Quite sunny, with a 10 day mean of 7.5 hours per day, and 92 % of maximum possible on the 8th, the month's sunniest day. Light E'ly winds on the 1st became fresh W"ly by 3rd, decreasing moderate on 4th and light on 6th, veering N'ly on 7th. **From 11th to 20th :** Mean anomalies, +0.4, -1.2, 104 %, 122 %. Daily maxima were near or above normal with anomalies up to +4.8° on the 18th, but falling away to –4.4° on the 19th. Daily minima were mostly below normal, with an anomaly of –4.1° on the 15th, but up to +2.5° on the 19th, the month's mildest night. Rain fell on 13th, 18th and 19th, giving 17.1 mm in all. Sunshine still quite good, with daily mean of 7.1 hours. Winds were light or moderate between SW and NW up to the 15th, becoming very light and variable on 16th and 17th, then light N'ly until 20th. **From the 21st to the 31st :** Mean anomalies, +1.1°, +0.1°, 165 %, 133 %. Some cool days up to the 27th, with an anomaly for max on 24th of –4.8°, the month's coolest day, but turning hot at the end of the period, anomaly +9.7° on the 31st, the month's hottest day. Minima were close to normal throughout. This was the wettest period, 29.9 mm in total, although the 26th to 30th were dry days. Again reasonably sunny with a daily mean of 7.7 hours. Light W'ly winds backed SW'ly and increased fresh on 24th, becoming light or moderate on 25th, backing E'ly on 30th, veering S'ly on 31st.

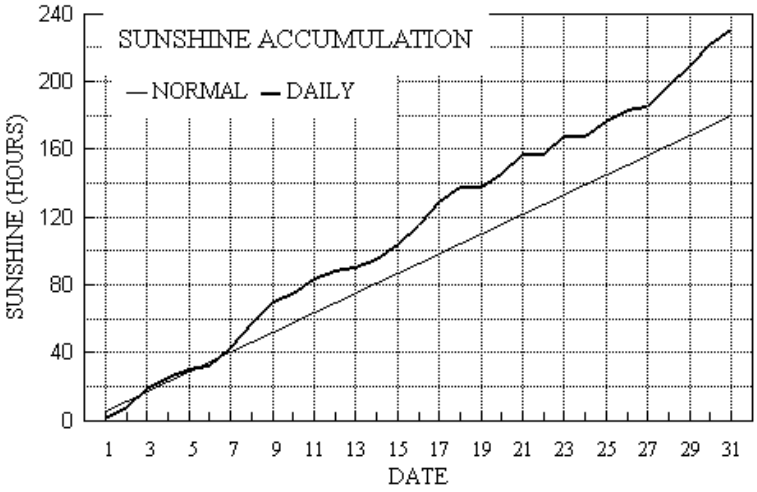
B.J.Burton. FRMetS. Hon. Met. Officer to Wokingham Town Council.

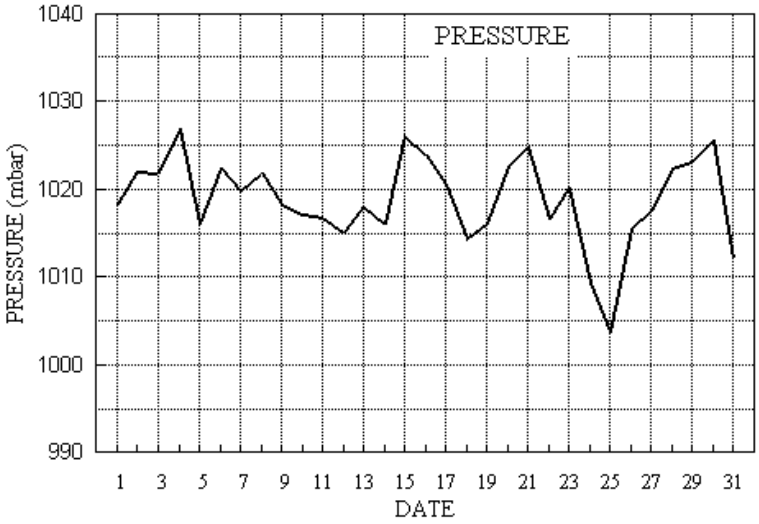
Wokingham Climatological Data

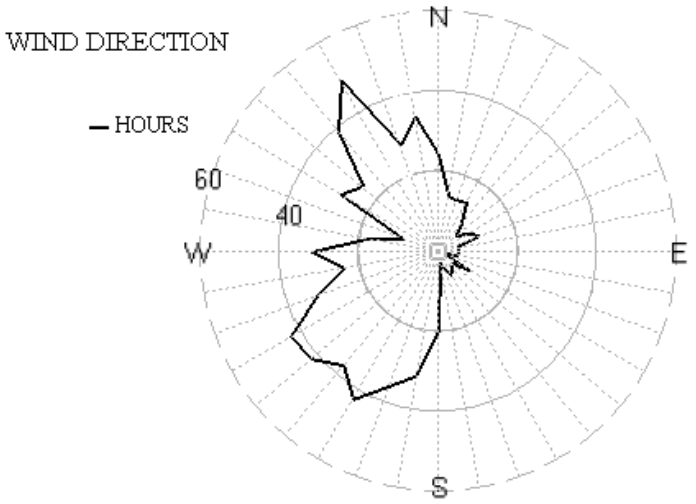


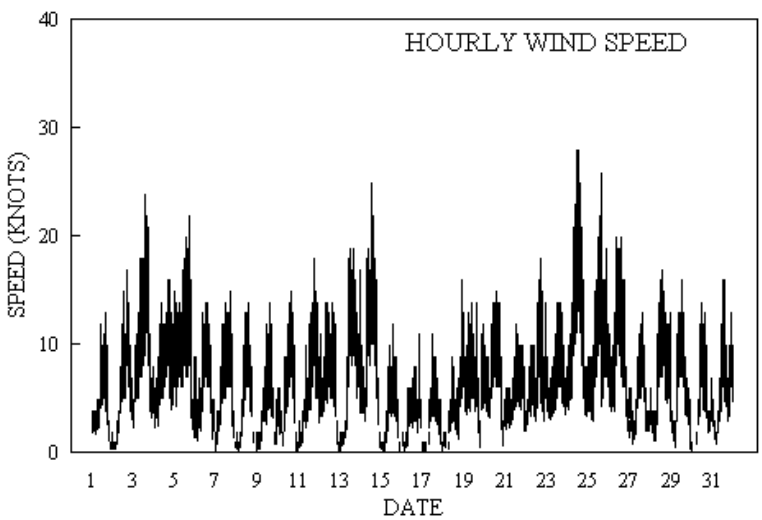


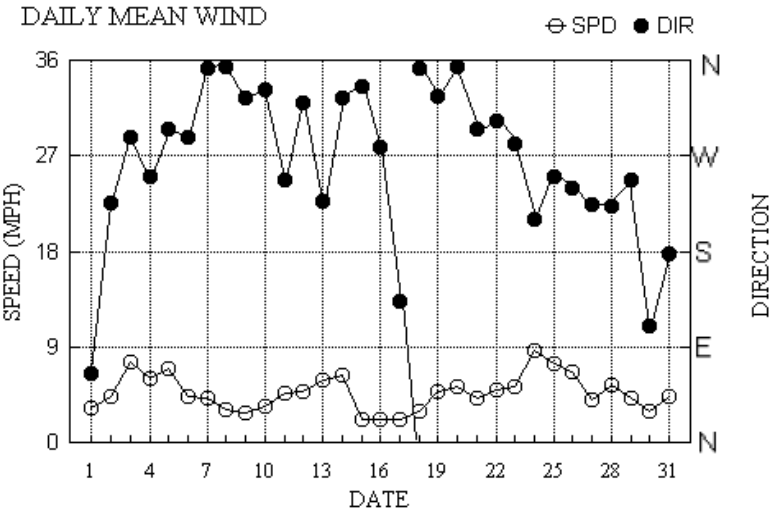












Daily meteorological data. Emmbrook, WOKINGHAM, Berkshire.

Month: AUGUST 2005

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	22.4	13.1	0.0	13.0	18.1	16.9	1.5	0.0	1018.3	0 0 0 0	0 0 0 0			65	2.4	2.8	90	13	1650	60	6	10	0.0
2	24.3	11.2	tr	8.1	18.4	16.9	7.3	0.0	1022.1	0 0 0 0	0 0 0 0			226	3.5	3.8	240	17	1633	220	8	17	0.0
3	23.6	13.4	0.0	10.0	18.8	17.0	10.3	0.0	1021.9	0 0 0 0	0 0 0 0			288	5.7	6.6	270	24	1452	280	12	14	0.0
4	22.5	11.9	7.3	8.2	18.6	17.0	6.8	0.0	1026.8	0 0 0 0	0 0 0 0			250	4.9	5.2	230	16	1512	240	8	15	4.5
5	21.9	13.3	tr	13.1	18.6	17.1	5.1	0.0	1016.1	0 0 0 0	0 0 0 0			295	3.1	6.0	330	22	1642	330	9	15	0.0
6	19.7	9.8	0.0	5.5	18.4	17.1	1.2	0.0	1022.3	0 0 0 0	0 0 0 0			288	3.3	3.7	300	14	1402	300	7	12	0.0
7	21.4	8.5	0.0	3.3	17.8	17.1	11.3	0.0	1019.8	0 0 0 0	0 0 0 0			353	3.5	3.6	350	15	1622	360	6	17	0.0
8	22.8	7.4	0.0	2.9	17.8	17.1	13.8	0.0	1021.9	0 0 0 0	0 0 0 0			355	2.2	2.7	340	14	1300	340	6	12	0.0
9	25.2	9.0	0.0	5.6	18.0	17.1	13.2	0.0	1018.3	0 0 0 0	0 0 0 0			324	1.9	2.4	320	14	1432	340	5	13	0.0
10	23.5	11.9	0.0	8.6	18.2	17.1	4.9	0.0	1017.1	0 0 0 0	0 0 0 0			333	2.8	3.0	320	15	1433	330	7	14	0.0
11	26.0	10.8	tr	7.3	18.2	17.1	8.6	0.0	1016.7	0 0 0 0	0 0 0 0			248	3.7	4.1	220	18	1827	220	9	18	0.0
12	22.1	13.4	0.0	11.5	18.2	17.1	4.7	0.0	1015.1	0 0 0 0	0 0 0 0			320	3.9	4.2	330	14	0811	330	7	08	0.0
13	21.1	9.9	5.5	6.1	17.9	17.1	1.8	0.0	1018.1	0 0 0 0	0 0 0 0			228	4.8	5.2	230	19	1128	230	10	11	3.4
14	20.7	11.7	tr	8.6	17.7	17.0	4.7	0.0	1016.1	0 0 0 0	0 0 0 0			324	4.6	5.6	330	25	1215	350	10	14	0.1
15	23.4	8.1	0.0	4.7	17.3	17.0	9.0	0.0	1026.2	0 0 0 0	0 0 0 0			335	1.7	1.9	350	12	1244	320	4	08	0.0
16	24.7	8.7	0.0	4.7	17.4	17.0	11.4	0.0	1023.8	0 0 0 0	0 0 0 0			278	0.0	1.9	200	11	1931	190	4	19	0.0
17	26.5	9.7	0.0	5.8	17.9	17.0	13.5	0.0	1020.5	0 0 0 0	0 0 0 0			133	1.4	1.8	100	11	1154	130	4	11	0.0
18	27.6	11.2	7.0	7.8	18.3	17.0	9.0	0.0	1014.4	0 0 0 0	0 0 0 0			352	0.4	2.6	290	16	2114	300	8	21	4.0
19	18.3	14.7	4.6	14.3	18.8	17.0	0.0	0.0	1016.0	0 0 0 0	0 1 0 0			327	4.1	4.1	320	14	0827	330	6	04	4.7
20	21.1	12.6	0.0	10.8	18.1	17.1	8.0	0.0	1022.6	0 0 0 0	0 0 0 0			355	4.0	4.5	10	15	1311	360	7	12	0.0
21	24.6	13.8	3.9	9.1	18.2	17.1	11.2	0.0	1024.8	0 0 0 0	0 0 0 0			295	3.0	3.6	300	12	1140	260	5	19	1.2
22	18.9	12.2	8.7	8.1	18.5	17.1	0.0	0.0	1016.6	0 0 0 0	0 0 0 0			303	1.9	4.3	350	18	1610	350	7	15	4.4
23	22.1	11.2	tr	8.4	18.1	17.2	10.4	0.0	1020.2	0 0 0 0	0 0 0 0			282	3.5	4.5	260	14	1346	280	7	16	0.0
24	16.4	12.4	9.3	8.1	18.1	17.2	0.3	0.0	1009.3	0 0 0 0	0 0 0 0			210	7.4	7.5	200	28	1154	200	13	11	5.6
25	18.6	11.5	7.4	7.8	17.4	17.2	9.2	0.0	1003.7	0 0 0 0	1 1 0 0			250	6.0	6.4	310	26	1446	230	11	12	0.4
26	18.9	9.4	tr	6.0	17.0	17.1	6.0	0.0	1015.5	0 0 0 0	0 0 0 0			239	5.5	5.8	260	20	1300	260	10	10	0.0
27	21.1	11.3	0.0	7.0	16.9	17.1	2.1	0.0	1017.6	0 0 0 0	0 0 0 0			224	3.3	3.5	250	13	1428	250	7	14	0.0
28	23.7	9.8	0.0	5.5	17.0	17.0	12.9	0.0	1022.3	0 0 0 0	0 0 0 0			222	4.5	4.7	250	17	1331	230	8	16	0.0
29	25.7	9.9	0.0	5.3	17.2	16.9	11.6	0.0	1023.1	0 0 0 0	0 0 0 0			247	3.0	3.7	250	16	1234	240	8	12	0.0
30	27.2	10.2	0.0	7.1	17.6	16.9	12.8	0.0	1025.5	0 0 0 0	0 0 0 0			110	2.1	2.5	100	14	1129	110	6	11	0.0
31	30.2	13.5	0.6	9.2	18.1	16.9	8.0	0.0	1012.2	0 0 0 0	1 0 0 0			178	2.1	3.8	220	16	1431	210	7	14	0.3
Total			54.3				230.6	0.0															28.6
Mean	22.8	11.2		7.8	18.0	17.0	7.44	0.0	1018.9					273	2.0	4.1							
Anom	+0.6	-0.8	106%		-0.4	-0.2	128%		+1.8														

Daily mean 17.0 Pressure, abs highest = 1027.2 on 4

Anom -0.1 Pressure, abs lowest = 1002.6 on 25

Number of days with:

Air frost = 0 Ground frost = 0 Nil sun = 2

Snow falling = 0 Snow lying = 0 Thunder = 2

Hail=>5mm = 2 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 2005

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cm	Ch	NChshs	NChshs	NChshs	Date	Remarks
1	56	7	06	03	05	16.1	14.9	93	10.5	1018.3	1	014	05	6	2	3	5	3	7	/	82708	83357	87362	1	2Sc25
2	50	7	22	04	07	16.6	14.5	88	10.3	1022.1	3	004	05	4	2	7	6	3	3	1	81706	87708		2	2Ac58 /Ci80
3	88	3	30	09	18	18.7	11.9	64	8.6	1021.9	3	012	03	1	1	3	8	5	0	0	83825			3	1Sc56 Cu med
4	83	7	26	05	11	18.3	12.2	68	8.8	1026.8	3	002	03	1	1	1	1	5	3	8	81825	87272		4	1Ac68 /Ci78 COTRA Cu hum Halo 22° part
5	60	8	25	05	13	17.9	16.9	94	12.1	1016.1	6	003	20	5	2	8	5	3	/	/	83708	87612	88618	5	jpN
6	86	8	28	04	09	16.6	11.5	72	8.4	1022.3	7	005	03	2	2	1	2	5	7	/	81820	83362	87366	6	2Ac59 2As63 Cu med
7	80	1	34	06	11	15.9	10.9	72	8.1	1019.8	1	004	03	0	0	1	1	5	3	0	81828			7	1Ac70 Cu hum
8	82	2	36	06	10	16.5	10.3	67	7.8	1021.9	0	002	02	0	0	1	1	5	0	1	81828			8	1Ci75 1Ci80 COTRA Cu fra
9	86	6	29	03	05	17.5	10.0	61	7.6	1018.3	0	000	01	1	1	1	0	9	8	1	81358	86080		9	1Ac60 COTRA Ac cas
10	68	7	33	04	09	18.8	14.7	77	10.4	1017.1	1	003	01	2	2	7	8	4	/	/	81818	87630		10	/Ci75 Cu hum
11	81	6	32	04	10	20.0	13.0	64	9.3	1016.7	7	004	02	1	1	0	0	9	0	1	86080			11	Absent 11th to 19th inc. Obs part est.
12	82	7	34	05	14	16.7	11.0	69	8.2	1015.1	1	006	03	1	1	7	8	5	/	/	85825	87635		12	
13	84	8	23	05	09	17.0	11.3	69	8.3	1018.1	7	003	02	2	2	1	1	6	0	7	81830	88275		13	Halo 22°
14	82	7	31	08	18	16.4	12.6	78	9.1	1016.1	2	016	02	6	1	7	8	4	/	/	86818	83635		14	
15	65	7	34	05	08	16.6	13.8	83	9.7	1026.2	2	004	02	2	2	3	1	4	0	1	83815	87080		15	
16	61	2	32	03	05	17.8	14.5	81	10.3	1023.8	2	001	02	1	1	2	5	6	0	0	82630			16	
17	58	0	07	02	05	19.0	14.6	75	10.3	1020.5	8	002	05	0	0	0	0	9	0	0				17	
18	50	0	05	03	05	20.7	16.3	76	11.6	1014.4	7	004	05	0	0	0	0	9	0	0				18	
19	58	8	33	05	14	15.0	14.3	96	10.2	1016.0	2	015	60	6	6	7	7	3	2	/	81708	85710	88550	19	3Sc20
20	75	5	36	07	12	17.0	12.5	75	9.0	1022.6	1	014	03	1	1	5	2	5	3	0	85820			20	1Ac63 Cu med
21	84	2	33	03	06	18.4	13.1	71	9.3	1024.8	0	002	01	1	1	2	0	9	3	1	82358			21	1Ci80
22	33	8	23	04	10	17.4	17.1	98	12.2	1016.6	6	004	64	6	5	7	7	2	2	/	83705	87708	88530	22	Hvy ra 0830-0905
23	84	3	35	03	08	16.5	9.9	65	7.5	1020.2	0	007	02	1	1	1	5	6	0	1	81635	83078		23	Elevated smoke layer
24	70	8	21	10	23	16.5	12.5	77	9.1	1009.3	7	025	60	6	2	7	8	5	7	/	83825	86630	88358	24	Cu hum Rain comm 0845
25	86	3	27	08	15	16.4	8.9	61	7.2	1003.7	2	007	14	0	0	1	8	5	8	3	81828			25	1Sc40 2Ac60 1Ci72 Cu med Cb topW Ac cas vir
26	86	3	25	08	15	15.6	7.9	60	6.6	1015.5	1	014	03	0	0	1	1	5	4	1	81828	83078		26	1Ac68 COTRA Cu hum
27	83	7	24	04	09	16.8	13.3	80	9.5	1017.6	1	006	03	2	2	1	8	4	7	/	81818	86656	87363	27	Cu fra
28	86	2	23	05	11	17.9	13.7	77	9.7	1022.3	1	009	03	1	1	1	1	5	7	1	81820			28	1Ac58 1Ac68 2Ci75 COTRA Cu fra
29	80	1	25	07	12	18.1	13.9	77	9.9	1023.1	3	008	03	0	0	1	8	5	0	1	81820			29	1Sc35 1Ci75 Cu fra
30	68	5	08	03	05	21.0	17.1	78	12.1	1025.5	0	002	02	2	2	0	0	9	0	1	85080			30	COTRA
31	56	2	10	03	07	23.5	18.1	72	13.1	1012.2	8	017	05	1	1	0	0	9	0	1	82080			31	COTRA

Mean vis = 31.7 km
Mean cloud = 4.8 60%
Mean wind speed = 5.0 kn
Mean gust = 10 kt
Mean TT = 17.7 C
Mean TdTd = 13.C1
Mean RH = 75.4 %
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
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 AUGUST 2005

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cm	Ch	NChshs	NChshs	NChshs	Date	Remarks
1	80	6	07	05	10	21.7	11.6	52	8.5	1018.7	3	001	15	2	2	3	8	6	6	0	82838	84358		1	2Sc50 Cu med jpSE
2	80	3	22	05	11	23.4	12.0	49	8.7	1020.5	8	011	03	0	0	2	8	6	0	1	82845			2	1Sc50 2Ci80 COTRA Cu med
3	86	2	27	13	24	22.9	9.0	41	7.1	1022.1	4	000	02	0	0	2	8	7	0	1	82850			3	1Sc56 1Ci75 Cu med
4	82	7	25	08	13	21.9	10.0	47	7.6	1025.1	6	014	03	1	1	1	2	7	7	1	81850	86366		4	2Ac62 3Ci75 COTRA Cu hum/medN L/A cont
5	84	6	33	08	18	21.0	11.3	54	8.3	1018.7	1	011	02	2	2	2	8	6	0	1	82840	85075		5	1Sc50 COTRA Cu med Halo 22°
6	84	7	30	07	14	18.9	8.6	51	6.9	1020.0	7	011	01	2	2	3	4	6	0	1	82845	87078		6	2Sc50 Cu hum Absent vv&cld est
7	83	5	01	05	13	20.0	6.6	42	6.0	1019.1	6	001	02	1	1	5	4	7	0	0	82850	83656		7	Cu hum
8	83	2	03	05	11	21.9	7.8	40	6.5	1020.1	6	008	02	0	0	2	4	7	0	1	81856			8	1Sc56 1Ci80 COTRA Cu hum Anthelion
9	84	6	33	05	14	24.7	7.6	34	6.5	1015.7	7	014	02	2	2	1	1	7	8	1	81856	86080		9	1Ac58 COTRA Cu hum Ac cas
10	78	6	33	06	15	23.4	13.5	54	9.6	1016.6	3	001	02	2	2	6	8	6	/	1	82840	85650		10	/Ci80 Cu hum
11	84	6	24	07	13	25.2	13.1	47	9.4	1014.5	7	015	02	2	2	6	4	7	0	1	83850	84656		11	3Ci80 Absent 11th to 19th inc. vv&cld est
12	86	6	33	05	14	19.8	10.4	55	7.9	1015.9	0	001	01	2	2	6	8	6	3	0	82845	85656		12	1Ac62
13	59	8	20	10	17	16.0	14.8	93	10.5	1015.0	8	020	63	6	2	3	7	4	2	/	83713	88550		13	
14	83	5	35	10	22	19.5	11.6	60	8.5	1019.7	2	021	01	2	2	5	8	5	0	0	83828	83650		14	
15	84	5	36	04	08	22.0	10.8	49	8.0	1024.5	7	009	02	1	1	5	1	6	0	1	85848			15	2Ci80
16	80	2	04	03	08	24.1	10.7	43	8.0	1021.3	7	015	02	0	0	2	4	7	0	0	82850			16	1Sc50
17	72	1	22	02	07	25.8	11.3	40	8.3	1017.2	7	017	02	0	0	1	1	7	0	0	81850			17	
18	68	6	23	02	05	26.0	12.9	44	9.3	1011.9	8	012	03	1	1	2	2	7	6	2	82856	83357	86075	18	
19	75	7	32	06	14	17.7	13.5	76	9.6	1016.6	2	005	21	6	2	1	2	5	7	8	81820	86360	87270	19	
20	81	4	02	07	13	20.7	8.4	45	6.8	1022.9	2	002	02	1	1	4	8	6	0	0	82840	83650		20	
21	88	1	33	04	11	24.2	9.4	39	7.3	1021.7	7	013	02	0	0	1	4	7	0	1	81856			21	1Sc56 1Ci81 COTRA Cu hum
22	50	8	34	07	14	16.6	16.1	97	11.4	1016.8	1	010	61	6	5	7	5	3	2	/	82706	83708	85615	22	8Ns30 vv 15kN
23	84	6	26	07	13	21.6	7.4	40	6.4	1018.8	7	005	03	1	1	1	1	7	0	1	81850	86080		23	1Ci75 COTRA Cu hum
24	45	8	20	09	25	15.2	14.3	95	10.3	1005.1	7	017	63	6	6	7	7	3	2	/	82707	84709	86712	24	8Ns20
25	30	7	27	07	26	10.7	9.7	94	7.6	1005.4	3	011	96	9	8	7	9	6	/	/	87930			25	t comm1434z, Hail 1.5 to 2.5cm 1451-53
26	84	7	25	06	13	16.9	8.8	59	7.0	1015.8	0	005	02	8	2	2	2	6	7	2	82840	83358	87075	26	Absent vv&cld est
27	82	6	25	07	13	19.8	11.7	60	8.6	1017.3	5	002	02	2	2	2	8	6	7	1	82838	83358		27	1Sc56 3Ac65 3Ci75 Cu med
28	86	2	22	07	14	23.1	12.1	50	8.7	1021.1	7	006	02	0	0	2	4	6	0	0	81845			28	1Sc50 Cu hum
29	86	6	26	06	12	25.0	14.7	53	10.4	1023.3	3	003	03	1	1	3	1	6	0	1	83842	85080		29	COTRA Cu hum
30	86	1	15	04	13	26.7	14.9	48	10.5	1022.1	7	017	02	0	0	1	1	6	0	1	81848			30	1Ci80 Cu hum
31	78	6	22	08	16	27.2	16.7	53	12.0	1009.1	6	010	03	1	1	5	0	9	8	2	81358	85363	86075	31	Ac cas

Mean vis = 38.8 km
Mean cloud = 5.1 64%
Mean wind speed = 6.3 kt
Mean gust = 14 kt
Mean TT = 21.4 C
Mean TdTd = 11.3 C
Mean RH = 55.0 %
Mean r = 8.5 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
TdTd = Dew point temperature at 1.2 m, deg Celsius
RH = Relative humidity at 1.2 m
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covers past 3 hours.
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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 2005

Date	Mean TT	Max TT	Time	Min TT	Time	Mean RH	Max RH	Time	Min RH	Time	Missing RH N >0	Number of minutes RH in given ranges 0-20	20-40	40-60	60-80	80-90	90-95	95-98	98-100
01	16.7	22.4	14:11	13.3	03:37	82.9	98.1	06:34	48.0	15:15		0	0	169	404	137	173	556	1
02	18.0	24.3	15:23	11.8	03:24	75.5	98.5	06:11	44.2	15:29		0	0	288	599	32	100	398	23
03	18.6	23.6	14:16	14.2	01:48	62.0	90.2	04:06	36.2	14:11		0	185	565	289	398	3	0	0
04	17.4	22.5	14:17	12.2	04:43	70.0	94.1	04:47	42.0	14:19		0	0	481	443	246	270	0	0
05	17.2	21.9	16:20	13.0	23:57	76.1	98.1	09:54	42.2	16:55		0	0	350	391	141	106	451	1
06	15.3	19.7	16:14	10.3	04:30	69.6	90.5	05:11	48.9	16:16		0	0	498	488	433	21	0	0
07	15.7	21.5	15:20	9.9	04:54	63.4	90.7	01:26	35.2	15:21		0	177	483	334	419	27	0	0
08	16.4	22.8	16:24	8.9	04:18	63.9	90.7	04:47	34.2	16:27		0	286	338	364	385	67	0	0
09	18.4	25.2	15:59	10.5	03:29	60.1	91.1	04:17	30.2	13:52		0	354	333	410	224	119	0	0
10	18.3	23.6	11:55	12.4	04:51	70.8	88.3	23:59	53.6	14:53		0	0	406	670	364	0	0	0
11	19.1	26.0	14:35	12.7	04:05	67.3	90.7	03:53	38.9	20:29		0	11	529	456	405	39	0	0
12	17.2	23.0	16:28	13.6	03:50	69.5	88.5	03:59	45.7	16:37		0	0	444	484	512	0	0	0
13	15.7	21.0	10:55	11.0	04:18	83.5	95.8	18:03	47.2	11:34		0	0	248	141	187	701	163	0
14	15.8	20.6	13:35	11.9	05:15	78.3	95.1	05:44	54.8	13:36		0	0	153	595	184	505	3	0
15	16.5	23.4	14:05	9.4	04:55	74.6	96.9	04:18	43.9	16:16		0	0	442	313	229	172	284	0
16	17.8	24.7	15:37	9.6	05:01	71.4	96.1	05:27	39.2	16:02		0	29	427	445	115	288	136	0
17	19.2	26.5	14:20	10.9	05:25	68.1	95.7	05:12	37.9	13:50		0	49	545	314	153	338	41	0
18	20.8	27.6	13:09	12.8	05:17	67.5	94.9	05:35	38.7	15:30		0	47	548	358	103	384	0	0
19	16.1	18.5	17:54	14.2	23:30	86.6	97.0	12:54	65.6	18:05		0	0	0	382	364	262	432	0
20	17.0	21.1	15:01	12.5	06:03	68.8	90.4	06:03	43.6	14:57		0	0	466	470	483	21	0	0
21	18.6	24.5	16:14	13.7	23:58	61.4	84.7	02:17	34.7	16:29		0	309	408	292	431	0	0	0
22	16.1	18.9	11:52	13.5	00:35	91.0	98.3	12:46	80.0	23:43		0	0	0	2	548	368	518	4
23	16.4	22.1	14:36	11.0	05:10	65.3	87.4	03:00	38.7	15:19		0	18	554	404	464	0	0	0
24	14.5	16.6	08:23	11.8	23:44	90.1	96.7	18:16	73.4	08:16		0	0	0	126	329	787	198	0
25	13.8	18.6	11:24	9.7	14:55	76.7	96.1	14:53	49.2	11:21		0	0	198	626	154	458	4	0
26	14.0	18.9	12:30	9.3	01:58	73.4	90.1	23:57	48.5	11:05		0	0	330	484	624	2	0	0
27	16.3	21.2	14:21	12.6	00:02	75.5	91.5	06:08	52.3	14:23		0	0	274	424	628	114	0	0
28	17.3	23.6	13:51	10.8	05:51	71.7	96.6	06:21	45.5	18:08		0	0	503	383	176	208	170	0
29	18.6	25.7	15:12	10.9	05:16	74.1	96.1	05:15	50.5	15:06		0	0	454	366	284	229	107	0
30	20.1	27.2	13:39	12.5	05:14	72.1	94.7	05:32	42.1	12:56		0	0	495	297	204	444	0	0
31	21.5	30.3	13:01	14.4	05:03	75.4	95.8	05:46	41.1	12:42		0	0	380	301	285	319	155	0
Mean	17.2	22.8		11.8		72.8	93.5		46.0			0.00	0.79	6.08	6.48	5.18	3.51	1.94	0.02
Hi	21.5	30.3		14.4		91.0	98.5		80.0	Tot	0	0	1465	11309	12055	9641	6525	3616	29
Lo	13.8	16.6		8.9		60.1	84.7		30.2										

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 2005

Temperature (°C)			Rank in the past **124** years
Mean maximum	22.4	(+0.9)	23rd highest
Mean minimum	11.8	(+0.3)	13th highest
Daily mean	17.1	(+0.6)	16th highest
Rainfall total (mm)	133.0	(90 %)	45th lowest
Sunshine total (hours)	614.6	(117 %)	

N° of:	Dry days	60 (0)	Wet days	23 (0)				
Days with: Air frost	0 (0)	Ground frost	1 (-1)	Snow falling	0 (0)	Snow lying	0 (0)	
Thunder	6 (-1)	Hail ≥5mm	2	Small hail/ice	0	Fog @09 GMT	0 (0)	Nil sun 5

Air pressure MSL : Mean @09 GMT (mbar) 1018.0 (+0.9)

Departure from 1971 to 2000 average shown in brackets.

Notes: **Warm with Rainfall Below Normal and Sunshine Above Normal.**

Temperature. This is the coolest summer in the past 3 years, although 2003 had the warmest summer in 124 years, and the mean for this summer ranks only 0.3° outside the very warm category, and is 1.1° above the long-term median. The mean maximum is 1.4° above the median, but is 2.5° below the record set in 1976, while the mean minimum is 0.8° above the median, but only 1.1° below the record set in 1997, attesting to the much greater variability of the maxima compared with minima in the summer season, the standard deviations for max/min being 1.4°/0.6° resp. July was the warmest month, mean 17.7° and June the coolest, mean 16.6°. However, the season's hottest day, 31.1°, was on the 19th June, and also the months warmest night, 18.8° on the 20th. June also hosted the season's coldest night, 2.2° on the 7th, and the coolest day, 15.8° on the 1st. The mean grass minimum, 8.7°, is 0.2° below average and lowest since 1996, and the lowest grass min, -1.8° on the 7th June, is equal lowest with 2001 since 1991. There have been 3 summers in the past 14 with a ground frost. The mean earth temperature at 30 cm depth, 17.6°, is lowest since 1998, and at 1 metre depth, 16.0°, is lowest since 1996. The highest value recorded at this depth, 17.2°, is lowest since before 1990. **Rainfall.** The total is highest since 2002 but is still well below average, 25.9 mm below the summer median. At the end of August the running deficit of rainfall stood at 150.1 mm. June was the driest month with 26.2 mm and August the wettest with 54.3 mm, although there were 22 dry days in August compared with 20 in June and 18 in July. The highest daily total, 17.9 mm on the 30th July, is quite low for a summer month, the median value being around 24 mm. Thunder was recorded on 6 days, 3 in June, 1 in July and 2 in August, with a notable fall of large, 2.5 cm dia. hailstones on the 25th August. There were 5 dry spells, 2 in June, 1 in July and 2 in August, the longest being 9 days ending on 17th July. **Sunshine.** 67 hours more sunshine than last summer, but 17 fewer than in 2003. August was the sunniest month, mean 7.44 hours per day, with July the dullest, 5.75 hours. Two periods were outstandingly sunny, 18th to 23rd June with a mean of 13.2 hours per day, and 10th to 17th July with 13.0 hours per day. The 22nd of June was the sunniest day, 15.8 hours. There were 5 days with nil sun, equal highest with 2001 and 1994 since 1992. Overall there were 28 days with <3 hours, 45 with =>6 hours, 33 with =>9 hours, 19 with =>12 hours and 4 with =>15 hours. **Wind.** The mean wind speed of 5.3 mph is 0.8 mph below average. June and July were joint windiest months with a mean of 5.6 mph. The 4th June was the windiest day, 11.2 mph, with the seasons highest gust of 35 mph also on that day. The least windy day was the 17th August, mean 2.1 mph, and there were 126 hours with a mean speed of 0.5 mph or less, a new 18 year seasonal high. Daily mean direction/number of days: N,10 NE,13 E,4 SE,2 S,6 SW,28 W,15 NW,14. **Humidity.** The mean relative humidity for this summer was 73.9 %. The lowest value recorded was 26 % on the 23rd June. The mean water vapour content per kg of air was 9.3 g at 0900 GMT and 8.8 g at 1500 GMT. **Pressure.** The mean pressure for the season is highest since 1996, and the highest value recorded, 1038.2 mbar on the 8th June is the highest summer value since before 1976. The lowest pressure was 999.1 mbar on 25th July, highest since 1998.

June. Dry and very warm with above normal sunshine. 8th warmest in 124 years. Highest minimum a new June record. Highest pressure a new record.

July. Warm with above normal rainfall and near normal sunshine.

August. Sunny with above normal temperature and near normal rainfall. Daily mean temperature lowest since 1993. Highest minimum lowest since 1976 and 6th lowest in 93 years. Mean grass min and 30 cm earth temp lowest since 1993, and at 1m depth, lowest since before 1990. Notable hailstorm on 25th.

Month	Mean Max	Anom	Mean Min	Anom	Rain mm	Anom	Sun hrs	Anom	Wind Mn mph	Max gust	Mean pressure	Anom
Jun	21.9	+2.1	11.4	+1.3	26.1	48 %	205.6	122 %	5.6	35	1019.3	+2.3
Jul	22.6	+0.1	12.9	+0.6	52.6	127 %	178.4	101 %	5.6	30	1015.9	-1.5
Aug	22.8	+0.6	11.2	-0.8	54.3	106 %	230.6	128 %	4.7	32	1018.9	+1.8

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