

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

NOVEMBER 2005

Temperature (°C / °F)			Anomaly	Rank in past 124 years			
Mean maximum	10.3	50.5	-0.2	54 th highest			
Mean minimum	2.2	36.0	-1.5	25 th lowest			
Daily mean	6.2	43.2	-0.9	40 th lowest			
Highest maximum	17.5	63.5	on 2 nd	Lowest maximum	3.4	38.1	on 25 th
Highest minimum	12.8	55.0	on 11 th	Lowest minimum	-5.8	21.6	on 18 th
Mean grass minimum	-0.6	30.9		Lowest grass minimum	-9.1	15.6	on 18 th
Mean earth @30 cm	9.7	49.5	+0.7	Earth @100 cm	12.8	55.0	+1.3
Frost duration (hrs)	118.2			Rain duration (hrs)	26.5		
Rainfall total (mm / in)	41.1	1.62	67 %	36 th lowest			
Highest daily fall	15.8	0.62	on 2 nd				
Number of: Dry days (<0.2mm)	19	Wet days (>0.9mm)	8	days ≥5mm	3		
Sunshine total (hrs)	105.9	Daily mean	3.53	147 %	Sunniest day	8.2	on 17 th
N ^o days with: Air frost	12	Ground frost	17	Snow falling	0	Snow lying	0
Thunder	0	Hail ≥5mm	0	Small hail/ice	1	Fog @09	2
						Nil sun	4
Air pressure MSL : Mean @09 GMT (mbar/in)		1016.8	+1.6	30.03			
Absolute highest		1040.1		30.71		on 23 rd	
Absolute lowest		989.8		29.23		on 26 th	

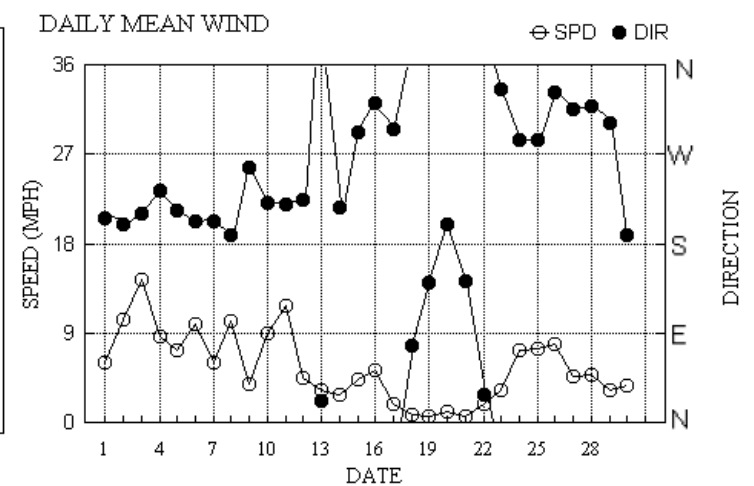
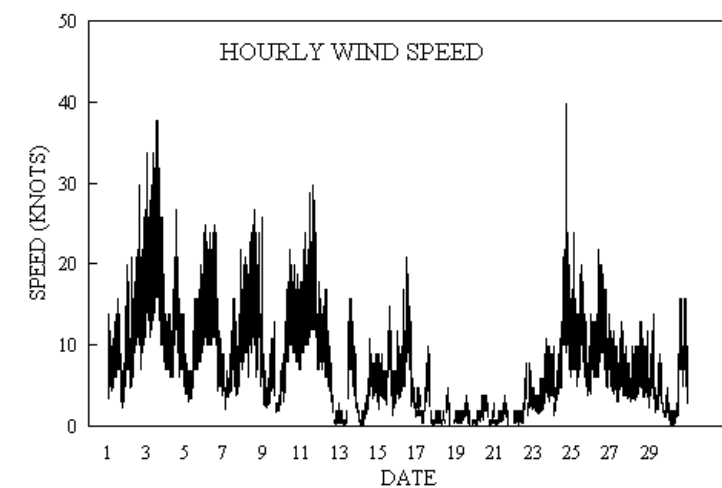
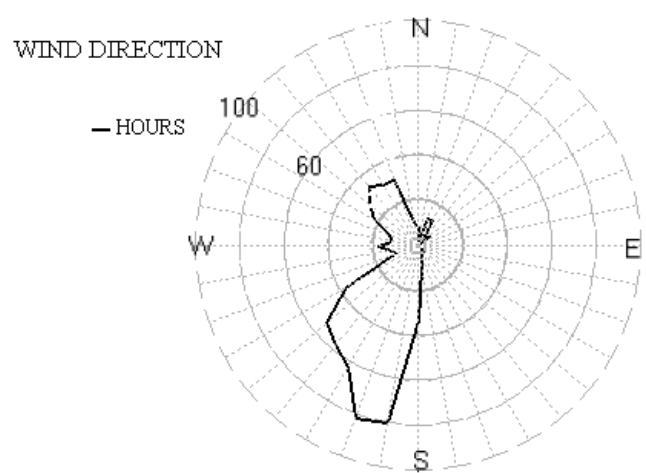
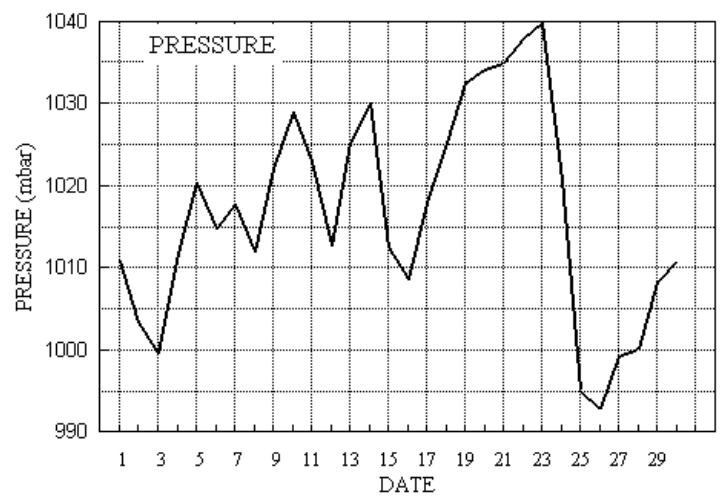
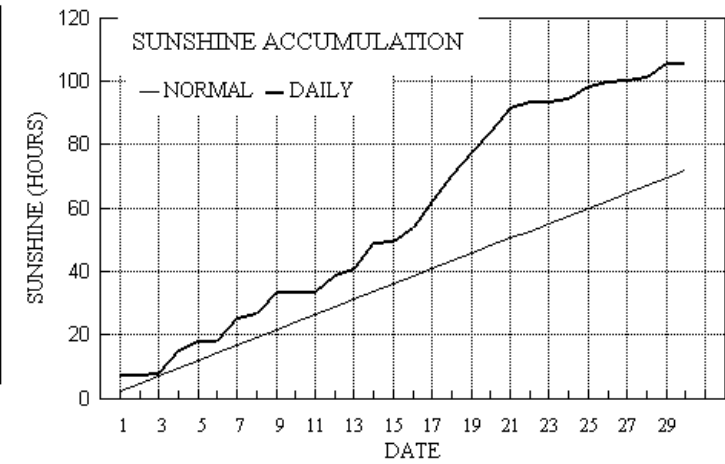
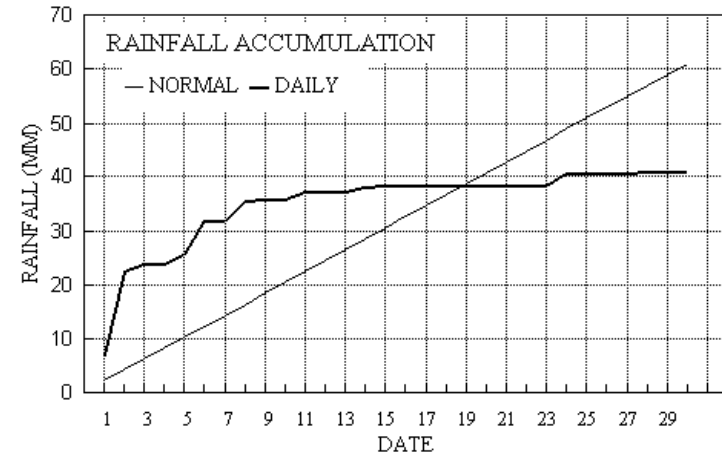
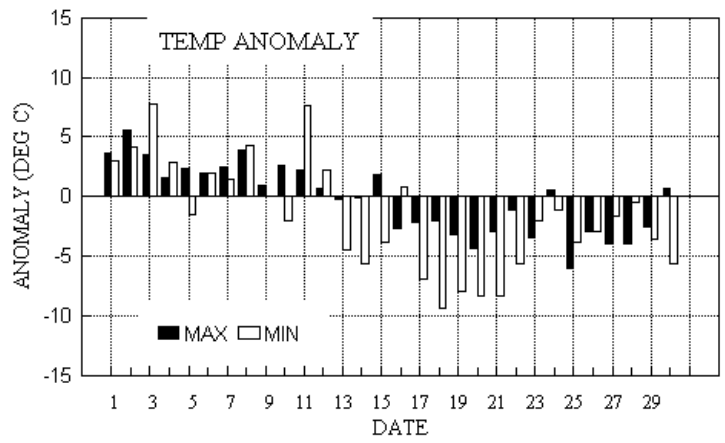
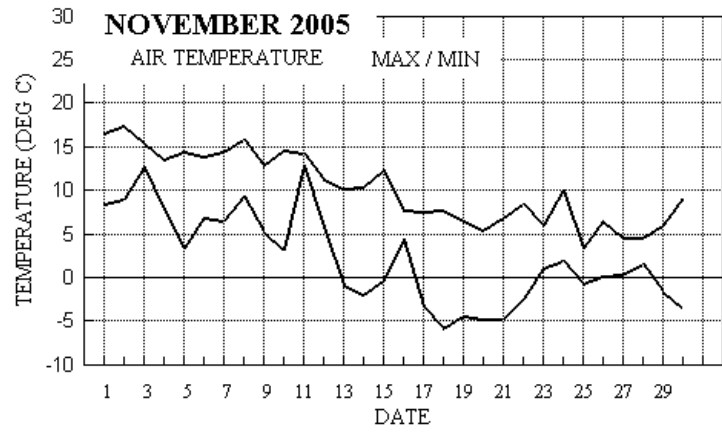
Anomaly = departure from 1971 to 2000 average (degrees C, percent and mbar).

Notes: **Dry with Record Sunshine but Below Normal Temperatures.**

Temperature. Both daily maxima and minima were mostly above normal until the 11th, then mainly below, with a cold spell between the 17th and 22nd. This resulted in a colder than average month overall, coldest since 1992 for the mean min, but only since 1998 for the max. The highest maximum is 1.8° above the median and ranks 7th highest in the past 102 years, in sharp contrast to the lowest minimum, 2.2° below the median and lowest since 1989. Also the highest minimum is 2.4° above the median, while the lowest maximum is 1.1° below the median and lowest since 1993. The mean daily temperature range, 8.1°, is highest since 1988, and the total range of air temperature, 23.3°, is highest since 1989. The lowest grass minimum is lowest since 1993. The highest earth temperature at 30 cm is highest since before 1979, and at 1 m depth, since before 1989, yet by the end of the month at both depths temperatures were below their normal lowest, though not preventing their overall means from being above normal. The number of hours with air frost is most since 1993 and 2nd highest in 25 years. **Rainfall.** A dry month overall after a wet start. Most of the month's rain fell before the 8th, and the total had reached 35 mm by that date, in fact over half the month's total fell on the first 2 days. The rest of the month was mainly dry, with an 8 day dry spell ending on the 23rd and another of 5 days ending on the 29th. The duration of rain is lowest since before 1993, and the number of dry days is 4 more than average. Small hail fell on the 24th, but this was the only wintry precipitation this month. **Sunshine.** An outstandingly sunny November, sunniest in our records since before 1908, although the change to electronic measurement in recent years makes direct comparison difficult. Nevertheless, by the 15th the accumulated surplus had reached 12 hours, then after a notably sunny spell from the 17th to the 21st, mean 7.5 hours per day, 87 % of the maximum, this had reached 40 hours. Overall there were 16 days with <3 hours, and 10 with =>6 hours. **Wind.** The mean speed this month was 5.5 mph, a little below average. The 3rd was the windiest day, mean 14.4 mph, but the month's highest gust of 46 mph was on the 24th. The least windy day was the 21st, 0.6 mph, during a period of notably light winds from the 17th to the 22nd, when the highest gust on 2 days was under 5 mph. There were 90 hours with a mean speed of 0.5 mph or less, but on the more precise sonic anemometer there was a total of 25.7 hours with <0.5 knots. Daily mean direction/number of days: N,2 NE,0 E,0 SE,0 S,9 SW,10 W,4 NW,5. **Humidity.** The overall mean relative humidity was 86.6 % and the lowest value recorded was 52 % on the 17th. The mean amount of water vapour per kg of air was 5.4 g at 0900 and 5.7 g at 1500 GMT. **Commentary. From the 1st to the 10th:** Mean anomalies (max, min, rain, sun), +2.8°, +2.2°, 176 %, 142 %. Daily anomalies for maximum were all positive, up to +5.5° on the 2nd, the month's warmest day, and for minima between +7.7° on the 3rd and -2.0° on the 10th. This was by far the wettest period, with 87 % of the month's total, and only 4 dry days, and the month's wettest day on the 2nd. 6 days had less than 50 % of the maximum possible sunshine of which 3 were sunless. Moderate SW'ly wind on the 1st increased to strong by the 3rd, then became mainly moderate or fresh up to the 10th. **From the 11th to the 20th:** Mean anomalies -1.0°, -3.6°, 13 %, 208 %. Much cooler in this period with anomalies in daily max of -4.3° on the 20th, and from +7.6° for the min on the 11th, the month's mildest night, to -9.4° on the 18th, the month's coldest. A little rain on just 3 days otherwise dry. Sunny, with 6 days over 50 % of maximum, and 4 over 80 % including 94 % on 12th, the month's sunniest day. A fresh SW'ly wind on the 10th fell light by the 12th, became moderate NW'ly on the 16th, but became variable and very light by the 18th. **From the 21st to the 30th:** Anomalies -2.6°, -3.5°, 13 %, 92 %. Daily anomalies for max were mostly negative, and down to -6.1° on the 25th, the month's coldest day. Daily min had anomalies between -0.5° on the 28th to -8.4° on the 21st. 8 dry days, and significant rain only on the 24th. Less sunny, just 2 days with over 50 % of maximum, and 6 with less than 20 %. Variable and very light winds until 22nd, becoming fresh NW'ly on 24th, then light or moderate, backing S'ly on 30th.

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

Wokingham Climatological Data



Month: NOVEMBER 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	16.6	8.4	6.6	4.5	14.1	14.7	7.7	0.0	1010.9	0 0 0 0	0 0 0 0	0 0 0 0	205	4.3	5.2	240	16	1157	240	8	11	5.6	
2	17.5	9.0	15.8	3.3	13.7	14.6	0.0	0.0	1003.3	0 0 0 0	0 0 0 0	0 0 0 0	199	8.6	8.9	220	30	1552	200	13	23	5.6	
3	15.5	12.6	1.4	11.1	14.0	14.6	0.6	0.0	999.6	0 0 0 0	0 0 0 0	0 0 0 0	211	12.4	12.5	210	38	1257	210	17	12	0.7	
4	13.6	7.8	tr	4.7	13.8	14.5	7.0	0.0	1011.8	0 0 0 0	0 0 0 0	0 0 0 0	233	7.2	7.5	250	27	1210	270	12	13	0.0	
5	14.4	3.4	1.8	0.0	12.9	14.5	2.7	0.0	1020.4	0 0 0 0	0 0 0 0	0 0 0 0	214	6.3	6.3	210	24	2323	210	10	23	2.2	
6	13.9	6.8	6.4	11.3	12.8	14.4	0.0	0.0	1014.8	0 0 0 0	0 0 0 0	0 0 0 0	202	8.5	8.6	210	25	0123	200	12	01	4.8	
7	14.5	6.6	0.0	2.8	12.7	14.3	7.6	0.0	1017.8	0 0 0 0	0 0 0 0	0 0 0 0	202	5.0	5.2	190	22	2028	190	8	20	0.0	
8	15.9	9.4	3.7	5.3	12.4	14.2	1.4	0.0	1011.9	0 0 0 0	0 0 0 0	0 0 0 0	188	7.4	8.8	190	27	1330	190	11	13	4.1	
9	12.9	5.2	0.1	2.0	12.4	14.1	6.8	0.0	1022.1	0 0 0 0	0 0 0 0	0 0 0 0	256	2.6	3.3	290	13	1404	290	5	11	0.3	
10	14.6	3.2	tr	-0.8	11.5	14.0	0.0	0.0	1029.0	0 1 0 0	0 0 0 0	0 0 0 0	221	7.7	7.8	220	22	1001	230	10	10	0.0	
11	14.2	12.8	1.4	12.2	12.0	13.9	0.1	0.0	1023.0	0 0 0 0	0 0 0 0	0 0 0 0	220	10.1	10.2	220	30	1316	210	14	16	1.0	
12	11.2	5.8	0.0	2.1	12.1	13.7	5.1	0.0	1012.7	0 0 0 0	0 0 0 0	0 0 0 0	224	3.8	3.9	230	17	0630	230	8	06	0.0	
13	10.3	-0.9	0.0	-3.9	11.1	13.6	2.0	4.4	1025.2	1 1 0 0	0 0 0 0	0 0 0 0	22	2.5	2.9	30	16	1402	30	8	13	0.0	
14	10.4	-2.0	0.9	-5.7	10.5	13.5	8.0	8.0	1030.0	1 1 0 0	0 0 0 0	0 0 0 0	217	2.3	2.4	250	11	1359	240	5	14	0.5	
15	12.3	-0.3	0.3	-0.1	9.9	13.3	0.9	0.0	1012.4	1 1 0 0	0 0 0 0	0 0 0 0	292	2.6	3.8	350	15	1242	350	7	12	0.5	
16	7.8	4.4	0.0	-1.0	10.1	13.1	4.3	2.0	1008.6	0 1 0 0	0 0 0 0	0 0 0 0	321	3.6	4.5	330	21	1031	350	9	11	0.0	
17	7.6	-3.3	0.0	-7.6	9.4	12.9	8.2	15.2	1017.9	1 1 0 0	0 0 0 0	0 0 0 0	295	1.2	1.7	350	10	1215	320	5	12	0.0	
18	7.7	-5.8	0.0	-9.1	8.3	12.7	8.0	16.2	1025.2	1 1 0 0	0 0 0 0	0 0 0 0	77	0.2	0.6	50	5	1338	70	2	13	0.0	
19	6.6	-4.4	0.0	-7.7	7.4	12.5	7.5	16.8	1032.4	1 1 0 0	0 0 0 0	0 0 0 0	141	0.0	0.6	40	4	1335	40	2	13	0.0	
20	5.5	-4.8	0.0	-8.1	6.7	12.1	6.2	17.9	1034.1	1 1 0 0	0 0 0 1	0 0 0 0	200	0.9	0.9	200	5	1225	260	2	10	0.0	
21	6.8	-4.8	0.0	-7.4	6.2	11.8	7.6	15.7	1034.9	1 1 0 0	0 0 0 0	0 0 0 0	142	0.1	0.5	340	4	1155	360	2	12	0.0	
22	8.4	-2.5	tr	-6.0	5.9	11.5	2.0	3.4	1037.9	1 1 0 0	0 0 0 0	0 0 0 0	28	1.2	1.6	30	8	1437	20	4	14	0.0	
23	6.0	1.0	0.0	-3.0	6.3	11.1	0.0	0.0	1039.7	0 1 0 0	0 0 0 1	0 0 0 0	336	2.5	2.9	320	11	1615	320	4	15	0.0	
24	10.0	2.0	2.3	1.9	6.8	10.9	0.8	0.0	1020.7	0 0 0 0	0 0 1 0	0 0 0 0	285	5.1	6.3	360	40	1527	320	11	18	0.3	
25	3.4	-0.8	0.1	-3.7	6.8	10.7	4.0	6.2	995.2	1 1 0 0	0 0 0 0	0 0 0 0	284	6.2	6.5	300	24	0124	300	10	11	0.3	
26	6.5	0.1	tr	-3.0	6.2	10.5	1.7	0.0	992.9	0 1 0 0	0 0 0 0	0 0 0 0	333	6.7	6.8	300	22	0944	340	9	12	0.1	
27	4.6	0.4	tr	-2.0	6.2	10.4	0.1	0.0	999.3	0 1 0 0	0 0 0 0	0 0 0 0	315	3.9	4.1	320	13	1257	320	6	12	0.0	
28	4.6	1.5	0.1	1.8	6.4	10.3	1.0	0.0	1000.2	0 0 0 0	0 0 0 0	0 0 0 0	319	4.0	4.2	310	13	1342	320	7	12	0.2	
29	6.0	-1.6	tr	-5.6	6.4	10.1	4.5	3.5	1008.2	1 1 0 0	0 0 0 0	0 0 0 0	301	2.0	2.8	350	14	0444	340	6	04	0.0	
30	9.2	-3.6	0.2	-7.5	6.1	10.0	0.1	8.9	1010.9	1 1 0 0	0 0 0 0	0 0 0 0	188	2.8	3.2	180	16	1955	200	8	14	0.3	
Total			41.1				105.9	118.2															26.5
Mean	10.3	2.2		-0.6	9.7	12.8	3.53	3.9	1016.8					236	2.9	4.8							
Anom	-0.2	-1.5	67%		+0.7	+1.3	147%																+1.6
Daily mean		6.2							Pressure, abs highest =														1040.1 on 23
Anom		-0.9							Pressure, abs lowest =														989.8 on 26

Number of days with:

Air frost = 12 Ground frost = 17 Nil sun = 4
Snow falling = 0 Snow lying = 0 Thunder = 0
Hail=>5mm = 0 Hail<5mm or ice = 1 Fog at 09GMT = 2

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 NOVEMBER 2005

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	pppwwW1W2	NhCl	hCrCl	NChshs	NChshs	NChshs	Date	Remarks														
1	82	6	24	05	12	9.5	8.3	92	6.8	1010.9	2	042	03	1	1	1	8	4	6	3	81812	85070	1	1Sc56	1Ac65	Cu	fra	Cb	top	W&SW			
2	58	7	20	08	18	16.6	15.1	91	10.8	1003.3	1	012	20	6	5	7	5	4	/	/	82712	83615	86625	2	7Sc40	VV20	kmE						
3	60	7	21	16	32	14.9	11.4	79	8.5	999.6	2	002	80	8	2	3	9	4	7	/	82815	86359		3	2Cb20	2Sc50							
4	80	1	24	07	12	9.3	6.3	81	5.9	1011.8	2	025	02	0	0	0	0	9	0	1	81075			4									
5	70	7	20	04	07	6.8	6.4	97	5.9	1020.4	1	012	03	1	1	7	5	4	/	1	81710	83625	87635	5	/	Ci78							
6	62	8	20	12	22	13.7	12.2	91	8.9	1014.8	5	008	62	6	2	7	5	4	2	/	83618	87630	88460	6									
7	82	1	22	05	09	9.6	8.2	91	6.7	1017.8	2	019	02	0	0	1	5	6	0	1	81640			7	1	Ci80							
8	77	7	18	10	22	14.5	10.9	79	8.2	1011.9	7	010	03	2	2	7	8	6	/	1	81825	87656		8	2Sc45	/	Ci80						
9	80	2	24	04	06	6.5	5.8	95	5.7	1022.1	2	045	01	1	1	1	5	7	2		81650			9	1Ac66	2Ci75							
10	70	8	22	10	18	12.9	10.8	87	8.0	1029.0	2	002	21	6	2	7	5	4	7	/	83615	87622		10	/	Ac100	/	As150					
11	75	8	22	10	20	13.6	9.9	79	7.6	1023.0	7	016	80	8	2	8	8	5	/	/	83820	88635		11									
12	81	7	22	06	12	8.0	4.6	79	5.3	1012.7	3	009	02	2	2	1	0	9	3	3	81362	87075		12	1Ci70	COTRA	Cb	top	W	Parhelion			
13	50	7	31	01	02	4.8	4.6	98	5.2	1025.2	2	034	10	1	1	7	5	3	/	/	86708	87640		13									
14	40	4	19	01	04	-0.3	-0.9	96	3.5	1030.0	7	003	10	4	1	0	0	9	0	1	84080			14	COTRA	Hoar	mod						
15	30	8	26	03	05	10.4	10.0	97	7.7	1012.4	6	007	20	5	6	7	5	3	7	/	83706	83640	86362	15	8	Cs75							
16	84	7	28	04	10	6.6	4.5	87	5.3	1008.6	3	013	02	8	2	7	8	5	/	/	81820	87645		16	2Sc35	Cu	med						
17	60	1	28	02	04	-0.6	-1.0	97	3.5	1017.9	1	017	10	0	0	0	0	9	0	1	81078			17	COTRA	Hoar	thick	Gnd	sfc	frzn			
18	58	2	20	01	02	-3.2	-3.6	97	2.9	1025.2	2	020	10	0	0	0	0	9	0	1	82080			18	COTRA	Hoar	thk	Gnd	sfc	frzn			
19	15	5	20	01	02	-2.5	-2.8	98	3.0	1032.4	2	014	28	4	1	5	6	1	0	0	85702			19	jfSW	Hoar	thk	Gnd	sfc	frzn			
20	08	6	20	01	02	-3.7	-3.9	99	2.8	1034.1	3	007	41	4	0	4	6	0	1		84701	85080		20	COTRA	Hoar	thk	Gnd	sfc	frzn			
21	30	2	21	01	02	-2.5	-2.8	98	3.0	1034.9	3	004	10	0	0	0	0	9	0	1	81075			21	2Ci80	COTRA	Hoar	thk	Gnd	sfc	frzn		
22	25	8	33	01	02	3.4	3.4	100	4.7	1037.9	3	011	10	2	2	8	5	3	/	/	85709	88612		22	Gnd	sfc	part	frzn					
23	03	8	32	03	06	2.8	2.8	100	4.5	1039.7	0	002	42	4	4	8	6	0	/	/	88701			23									
24	58	8	24	04	10	6.0	4.4	89	5.2	1020.7	7	045	05	2	2	6	5	6	7	/	86630	88468		24	/	Ac64							
25	88	1	28	06	14	0.4	-2.2	83	3.3	995.2	7	018	03	0	0	1	1	4	3	2	81818			25	1Ac62	1Ci70	Cu	fra	Hoar	slt	Gnd	sfc	frzn
26	63	7	33	06	12	3.4	1.9	90	4.4	992.9	3	015	03	2	2	6	5	4	0	1	85615	86075		26	2Sc30	COTRA							
27	59	7	29	03	06	1.6	0.8	94	4.1	999.3	1	005	05	2	2	3	6	4	7	1	82712	86358	85072	27	1Sc40	COTRA							
28	62	7	31	05	10	2.9	0.5	84	4.0	1000.2	1	008	01	2	2	2	5	6	7	1	82630	83358	85362	28	/	Ci75							
29	64	7	24	02	04	-0.4	-1.0	96	3.5	1008.2	3	017	03	1	1	4	5	5	0	1	84625	86075		29	COTRA	Hoar	slt.	lce.					
30	50	7	02	01	02	0.0	-0.3	98	3.7	1010.9	2	001	10	1	1	7	5	6	/	/	87630			30	Hoar	slt	Gnd	sfc	frzn				

Mean vis = 17.2 km
 Mean cloud = 5.7 71%
 Mean wind speed = 4.8 kn
 Mean gust = 10 kn
 Mean TT = 5.5 C
 Mean TdTd = 4.1 C
 Mean RH = 91.4 %
 Mean r = 5.4 g/kg
 Mean PPP = 1016.8 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
 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 NOVEMBER 2005

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	pppww	W1W2	NhCl	hCrCl	NChshs	NChshs	NChshs	Date	Remarks																	
1	86	3	21	06	14	13.8	6.1	60	5.8	1012.3	1	005	03	0	0	1	8	6	0	4	81835	83080	1	1SC40	COTRA	Cu	hum	Cz	arc	bri	U/a	cont					
2	59	8	21	11	24	16.5	15.3	93	11.0	1003.3	5	000	58	6	5	7	8	3	2	/	82707	85812	85635	2	8As58	Cu	med										
3	75	7	22	15	34	14.2	10.8	80	8.2	1000.8	3	016	15	8	2	7	8	5	/	/	81825	87630		3	jpN												
4	82	3	23	08	21	11.6	6.3	70	5.9	1013.5	2	012	25	8	1	3	8	6	0	1	81835	83650		4	1Ci80	Cu	med										
5	70	7	21	07	17	12.8	10.7	87	8.0	1019.9	5	004	61	6	2	3	8	4	7	/	81815	83645	87462	5	1Sc30	2Ac58	Cu	fra									
6	57	8	23	10	24	13.5	12.6	94	9.1	1012.7	5	002	63	6	2	4	8	4	2	/	83810	88550		6	2Sc40												
7	82	7	19	06	12	12.8	7.7	71	6.5	1018.3	8	005	03	1	1	1	8	5	4	8	81828	86280		7	1Sc40	1Ac68	2Ci75	COTRA	Halo	22	part						
8	83	6	18	08	26	15.3	10.1	71	7.7	1008.1	7	026	02	2	2	3	8	5	0	1	81825	83656	85078	8	1Sc40	3Sc	cas										
9	84	1	30	05	13	11.3	6.0	70	5.7	1026.8	2	022	02	0	0	1	8	5	0	1	81828			9	1Sc50	1Ci80	COTRA	Cu	med								
10	65	7	22	09	20	14.6	12.6	88	9.0	1028.8	8	001	50	5	2	7	5	4	3	1	83712	87615		10	/Ac57	/Ci75	COTRA										
11	80	7	21	13	28	14.0	9.5	75	7.4	1015.4	6	048	03	2	2	4	8	5	7	2	82825	83638	86075	11	3Ac65	Cu	hum										
12	82	5	25	02	06	10.8	6.0	72	5.8	1013.4	2	006	01	2	2	1	2	5	3	3	81825	85078		12	1Ac68	1Ci70	COTRA	Cb	topW								
13	81	5	02	06	16	9.5	5.8	78	5.7	1027.5	3	013	02	1	1	5	8	5	0	0	82820	84630		13	Cu	hum											
14	81	7	24	04	09	9.6	4.4	70	5.1	1024.9	7	030	03	2	2	0	0	9	0	1	82075	87080		14	COTRA	Parhelion											
15	68	5	34	05	12	11.3	5.5	67	5.6	1011.3	6	010	02	2	2	5	8	5	0	1	81825	85635		15	1Ci80	COTRA											
16	84	6	36	07	14	7.5	1.0	64	4.1	1011.0	2	012	03	1	1	1	1	5	7	1	81828	85075		16	1Ac65	1Ac68	1Ci72	COTRA	Parhelion								
17	80	1	32	04	09	6.6	-0.4	61	3.6	1018.5	2	002	02	0	0	0	0	9	0	1	81080			17	COTRA												
18	62	2	06	02	04	7.6	1.9	67	4.3	1025.7	3	005	02	0	0	1	4	5	0	1	81625			18	2Ci80	COTRA	Hoar	slt	in	shade							
19	62	6	03	01	05	6.3	2.0	74	4.3	1031.9	5	003	03	1	1	0	0	9	0	1	86080			19	COTRA	Parhelia	Hoar	slt	in	shade							
20	65	6	22	03	05	5.2	1.8	79	4.2	1032.5	6	012	02	2	2	0	0	9	0	1	86080			20	COTRA	Hoar	mod	in	shade								
21	56	5	09	01	02	6.7	3.0	77	4.6	1034.6	6	002	05	2	2	0	0	9	0	1	85075			21	COTRA	Slt	hoar	in	shade	U/a	cont						
22	50	6	02	04	08	7.8	6.0	89	5.7	1037.6	6	004	05	2	2	6	5	4	0	0	82712	85625		22													
23	20	8	30	05	10	3.2	3.2	100	4.7	1036.0	6	024	10	4	2	8	6	1	/	/	82702	87703	88705	23													
24	75	7	28	10	22	9.0	4.0	71	5.1	1008.5	7	064	80	8	2	3	8	5	3	2	81825	83640	86072	24	1Ac65	COTRA											
25	86	7	28	07	14	2.5	-2.9	67	3.1	991.7	7	017	02	2	2	1	8	5	7	2	81828	83464	87070	25	1Sc50	1Ac62	COTRA	Parhelion									
26	81	6	34	08	18	6.2	1.2	70	4.2	994.0	2	006	02	2	2	6	8	5	0	1	82825	85650		26	2Sc40	1Ci75											
27	63	8	31	04	12	4.5	1.7	82	4.4	998.2	6	004	02	2	2	8	5	4	/	/	83618	86625	88635	27													
28	70	3	32	04	11	3.7	-1.3	70	3.5	1000.1	3	001	01	1	1	2	8	5	3	1	82825			28	1Sc30	1Ac66	2Ci70	Cu	med								
29	75	6	31	04	08	4.5	-0.3	71	3.7	1009.0	1	002	03	1	1	1	1	5	7	0	81822	83357	85362	29	Cu	hum	Ac	du	len								
30	80	7	20	06	16	9.0	5.5	79	5.6	1007.6	6	019	02	2	2	2	8	4	7	/	81818	84358	87362	30	1Sc22	2Sc45	Cu	hum									

Mean vis = 27.0 km
 Mean cloud = 5.7 71%
 Mean wind speed = 6.2 kn
 Mean gust = 14 kn
 Mean TT = 9.4 C
 Mean TdTd = 5.2 C
 Mean RH = 75.6 %
 Mean r = 5.7 g/kg
 Mean PPP = 1015.8 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
 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)
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 covers past 3 hours.
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 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
 NOVEMBER 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	Time	RH	Time	RH	Time		RH	0-20	20-40	40-60	60-80	80-90	90-95	95-98
01	11.2	14.6	12:47	8.3	07:52	84.4	96.4	06:43	58.7	15:15	19	0	0	5	570	186	412	248	0								
02	15.2	17.5	10:48	11.4	00:01	92.5	96.5	03:25	81.0	23:58		0	0	0	0	220	876	344	0								
03	13.9	15.9	00:11	10.5	23:59	82.6	92.6	07:01	73.2	16:19		0	0	0	365	953	122	0	0								
04	9.6	13.6	12:48	6.9	23:58	79.9	91.0	06:34	59.1	12:50		0	0	19	610	723	88	0	0								
05	9.9	14.4	23:43	4.0	06:19	87.1	97.4	07:26	74.1	13:20		0	0	0	183	751	222	284	0								
06	12.7	14.4	01:21	9.1	23:47	91.3	95.7	22:36	81.6	00:20		0	0	0	0	352	981	107	0								
07	10.8	13.6	13:25	7.9	06:09	84.3	96.4	01:46	63.1	13:27		0	0	0	415	490	121	414	0								
08	13.5	15.9	13:07	7.4	23:59	80.4	97.8	22:09	68.1	15:07		0	0	0	715	486	158	81	0								
09	7.4	11.8	12:01	4.7	23:59	86.8	96.9	08:08	65.6	14:01		0	0	0	342	489	249	360	0								
10	12.2	14.6	15:05	4.7	00:00	87.8	91.2	07:29	84.8	10:52		0	0	0	0	1286	154	0	0								
11	12.7	14.3	12:24	8.9	23:50	83.2	95.3	19:26	73.1	10:13		0	0	0	520	650	240	30	0								
12	7.2	11.0	14:22	2.2	23:59	82.6	97.2	23:38	71.0	14:03		0	0	0	926	88	167	259	0								
13	5.0	10.3	13:01	0.2	06:26	90.8	99.1	08:43	71.1	12:57		0	0	0	221	235	300	651	33								
14	4.1	10.6	14:10	-1.1	07:08	88.4	99.1	08:17	64.4	14:08	60	0	0	0	324	204	237	546	69								
15	9.0	12.3	13:35	5.6	21:13	87.9	97.6	09:18	66.5	15:02		0	0	0	305	330	472	333	0								
16	5.7	7.9	00:00	0.2	23:52	79.7	91.3	23:57	60.4	11:43		0	0	0	511	810	119	0	0								
17	1.3	7.4	13:32	-2.1	23:51	84.0	96.4	07:59	52.0	12:50	83	0	0	164	204	206	675	108	0								
18	0.1	7.8	14:25	-4.7	07:16	88.7	97.9	19:47	66.1	13:28		0	0	0	286	172	812	170	0								
19	-0.0	6.6	14:27	-3.8	07:37	92.3	100.0	19:22	69.6	13:45		0	0	0	173	126	194	902	45								
20	-0.9	5.5	14:39	-4.4	07:33	94.0	99.2	11:01	77.1	14:39	24	0	0	0	32	213	175	944	52								
21	0.4	6.8	14:32	-3.7	07:25	92.6	99.5	20:25	75.9	14:57	24	0	0	0	113	200	295	770	38								
22	3.7	8.4	14:22	-0.9	00:02	97.0	99.7	09:26	87.1	14:27		0	0	0	0	64	220	361	795								
23	2.8	4.3	11:24	0.9	06:35	96.8	100.0	11:24	87.7	22:30		0	0	0	0	338	39	51	1012								
24	4.8	10.1	13:26	0.7	23:56	83.5	95.6	10:22	63.9	14:30		0	0	0	553	293	562	32	0								
25	0.9	2.9	11:59	-0.7	06:53	75.8	83.6	23:01	61.7	11:56		0	0	0	882	558	0	0	0								
26	3.8	6.5	14:23	2.0	00:00	83.1	91.6	03:03	67.7	14:23		0	0	0	387	984	69	0	0								
27	3.3	4.8	17:26	0.6	07:58	86.4	93.5	08:12	76.7	18:36		0	0	0	154	1021	265	0	0								
28	3.1	4.6	12:24	1.7	18:08	81.0	93.3	23:25	68.8	13:12		0	0	0	461	887	92	0	0								
29	2.3	5.7	13:30	-1.1	07:24	83.1	94.3	01:54	65.6	12:50	56	0	0	0	430	524	430	0	0								
30	4.0	9.2	14:28	-2.5	04:40	90.9	96.7	23:10	77.7	15:22	11	0	0	0	128	327	778	196	0								
Mean	6.3	10.1		2.4		86.6	95.8		70.4			0.00	0.00	0.10	5.45	7.87	5.29	4.00	1.14								
Hi	15.2	17.5		11.4		97.0	100.0		87.7	Tot	277	0	0	188	9810	14166	9524	7191	2044								
Lo	-0.9	2.9		-4.7		75.8	83.6		52.0																		

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

AUTUMN 2005

Seasonal Means and Totals		AUTUMN 2005		Rank in the past 124 years	
Temperature (°C)				Rank in the past 124 years	
Mean maximum	16.2	(+1.5)	4 th highest		
Mean minimum	7.9	(+1.2)	6 th highest		
Daily mean	12.1	(+1.4)	*New highest*		
Rainfall total (mm)	147.7	(77 %)	37 th lowest		
Sunshine total (hours)	360.1	(116 %)			
N° of: Dry days	53	Wet days	28		
Days with: Air frost	12	Ground frost	18	Snow falling	0
Thunder	5	Hail ≥5mm	0	Fog @09 GMT	5
		Small hail/ice	1	Nil sun	10
Air pressure MSL : Mean @09 GMT (mbar)	1016.9		(+1.3)		

Departure from 1971 to 2000 average shown in brackets.

Notes: **Very Mild. Dry. Sunny.**

Temperature. Once again there is a new record to report this autumn, the mean temperature is highest in 124 years, despite a cold spell in November. All the autumn seasons in the past 8 years have been mild or very mild, with 5 of them in the top 10% of ranked values since 1882. The mean maximum is 0.5° below the record set in 1959, and the mean minimum is 0.2° below the record set last year. The highest maximum, 28.6° on the 4th September, is 4.1° above the median and is highest since 1973. The highest minimum, 17.8° on the 5th September, is 2nd highest after 1949 in 93 years. The lowest minimum, -5.8° on the 18th November, is 1.9° below the median, and is lowest since 1989. The lowest maximum, 3.4° on the 25th November, is 1.1° below the median, and is lowest since 1993. The highest daily mean, 22.2° on the 4th September, is highest since before 1976. The mean grass minimum, 4.8°, is 0.9° above average, while the lowest grass minimum, -9.1° on the 18th November, is lowest since 1997. Mean earth temperatures at 30 cm depth, 13.8°, and at 1 metre depth, 15.0°, are 0.9° and 0.5° above average resp. The seasons highest 30 cm temperature, 19.2° on the 5th September, is highest since 1984. September was the warmest month, mean 16.2°, and November the coolest, mean 6.2°, but compared with average, October had the largest positive anomaly at +2.9°. The duration of air frost, 118.2 hours, is highest since 1993. The first ground frost of the season was on 17th September after a frost free period of 101 days, but the first air frost was not until the 13th November after a period of 185 days free of air frost. **Rainfall.** A relatively dry autumn, 23 % below average, and driest since 1997. October was the wettest month with 102 % of average, and September the driest with 62 %. The duration of rain, 102.8 hours, is lowest since before 1993. The wettest day was the 24th October when 17.0 mm fell. There were 3 more dry days than average, and there were 5 dry spells with the following end dates and (duration): 9 Sept (5), 22 Sept (7), 7 Oct (6), 23 Nov (8), 29 Nov (5). Thunder occurred on the 4th, 9th and 10th of September and the 16th and 19th of October. Hail, small, was recorded on the 24th November. The 12 month accumulated deficit of rainfall stood at 167 mm at the end of autumn. Total soil moisture deficit reached a maximum of 206 mm on the 22nd September, compared with a 30 year average of 224 mm. **Sunshine.** While the daily mean sunshine is in the sunny category, it is highest only since 2003, the year that holds the record for sunniest autumn. While September was the sunniest month with 155 hours, unusually October was the least sunny with 99 hours, with an exceptionally sunny November producing 106 hours. The sunniest day was the 8th September, 11.4 hours. Overall there were 43 days with <3 hours, 31 with =>6 hours and 7 with =>9 hours. **Wind.** The mean wind speed of 5.2 mph is 0.9 mph below average. November was the windiest month, mean 5.5 mph, and September the least windy with 5.0 mph. The windiest day was the 3rd November, 14.4 mph, and the seasons highest gust of 46 mph was on the 24th November. The least windy day was the 21st November, mean 0.6 mph, and there were 151 hours with a mean speed of 0.5 mph or less, but only 53.7 hours on the sonic anemometer, more accurate at low speeds. Daily mean direction/number of days: N,7 NE,6 E,9 SE,5 S,21 SW,29 W,6 NW,8. **Humidity.** The overall mean relative humidity was 83.8 %. The lowest value recorded was 40 % on the 2nd September. The mean water vapour content per kg of air was 7.9 g at 0900 GMT, and 7.7 g at 1500 GMT. **Pressure.** The highest recorded was 1040.1 mbar on the 23rd November and the lowest was 989.8 mbar on the 28th November. This latter is the highest since 1979.

September. Very warm with rainfall well below and sunshine above normal. 4th warmest in 124 years. Highest maximum highest since 1973. Highest minimum highest since 1949, and 2nd highest in 93 years. Month's lowest pressure highest since 1979.

October. Very mild with rainfall near and sunshine below normal. 2nd warmest in 124 years after 2001. Lowest maximum is equal 2nd highest in 93 years. Lowest minimum is 4th highest in 102 years. Highest minimum equal highest in 93 years. 21.0° on 27th remarkable for so late in the month. Month's highest gust lowest in past 18 years.

November. Dry with record sunshine but below normal temperature. Coldest since 1992. Highest maximum 7th highest in 102 years. Lowest minimum lowest since 1989. Most air frost since 1993. Duration of rain lowest since before 1993. Outstandingly sunny, probably sunniest since before 1908.

Month	Mean Max	Anom	Mean Min	Anom	Rain mm	Anom %	Sun hrs	Anom %	Wind Mn mph	Max gust	Mean pressure	Anom
Sep	21.0	+2.1	11.4	+1.7	38.6	62 %	155.3	118 %	5.0	32	1018.9	+2.4
Oct	17.4	+2.6	10.1	+3.4	68.0	102 %	98.9	94 %	5.2	35	1015.1	-0.1
Nov	10.3	-0.2	2.2	-1.5	41.1	67 %	105.9	147 %	5.5	46	1016.8	+1.6

B J Burton FRMetS.

Hon. Met. Officer to Wokingham Town Council.