

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

JANUARY 2005

Temperature (°C / °F)			Anomaly	Rank, in the past 124 years			
Mean maximum	9.4	48.9	+1.9	8 th highest			
Mean minimum	3.3	37.9	+1.8	10 th highest			
Daily mean	6.3	43.3	+1.8	9 th highest			
Highest maximum	13.9	57.0	on 7 th	Lowest maximum	5.1	41.2	on 24 th
Highest minimum	7.7	45.7	on 8 th & 10 th	Lowest minimum	-2.6	27.3	on 14 th
Mean grass minimum	0.1	32.2		Lowest grass minimum	-7.7	18.1	on 14 th
Mean earth @30 cm	6.5	43.7	+1.3	Earth @100 cm	8.3	46.9	+1.0
Frost duration (hrs)	21.0			Rain duration (hrs)	28.7		
Rainfall total (mm / in)	20.5	0.81	34 %	18 th lowest			
Highest daily fall	4.2	0.17	on 10 th				
Number of: Dry days (<0.2mm)	17	Wet days (>0.9mm)	9	days ≥5mm	0		
Sunshine total (hrs) 72.7	Daily mean 2.35	124 %		Sunniest day 7.8	23 rd		
N° days with: Air frost 5	Ground frost 17	Snow falling 3	Snow lying 0				
Thunder 0	Hail ≥5mm 0	Small hail/ice 0	Fog @09 0	Nil sun	8		
Air pressure MSL : Mean @09 GMT (mbar/in)	1022.6	+6.6	30.20				
Absolute highest	1034.7		30.55	on 26 th			
Absolute lowest	995.7		29.40	on 18 th			

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

Notes:

Very Mild.

Dry.

Very Sunny.

Windy at times.

Temperature. The mean temperature this January is highest since 1993, as is the mean maximum, while the mean minimum is equal highest with 1999 since 1993. The highest maximum is 1.5° above the median and is 6th highest since 1903. The lowest minimum is 3.3° above the median and is highest since 1994. The lowest maximum is 4.3° above the median and is highest since 1990, while the highest minimum is 0.4° below the median and is lowest since 1997. The mean daily temperature range, 6.1°, is exactly average. The mean grass minimum is 1.4° above the average for the past 26 years, while the lowest grass minimum is 3.3° above normal. Earth temperatures at 30 cm and 1m depth are both well above average. The number of air frosts is 6 below average and lowest since 1996, but the number of ground frosts is just 1 below average. The total duration of air frost, 21.0 hours, is 76 hours below average and lowest since 1990.

Rainfall. Unusually dry for a winter month, with only 20.5 mm total, just over one third of average, and lowest since 2000. The highest 24 hour total, 4.2 mm, is unusually small, and is 4th lowest in the past 102 years. The number of dry days is 2 more than average and there was a dry spell of 5 days ending on the 16th. Snow fell on 3 days, 22nd, 24th and 26th, but was generally accompanied with rain. However, a few flakes lay on cars and the grass on the morning of the 24th.

Sunshine. A high sunshine total for January, and about 124 % of the estimated average. Although in the very sunny category, 3 recent Januarys have been sunnier, namely 2000, 2001 and 2003. Overall there were 20 days with <3 hours and 5 with =>6 hours.

Wind. This is the windiest January since 1995, with a mean speed of 9.1 mph, 0.8 mph above average. The 7th was the windiest day, mean 19.2 mph, and this is the windiest January day since 24th in 1993. The highest gust, 56 mph on the 8th, is highest for the month only since 1998. The 22nd was the least windy day, 3.6 mph, and this is a new high for the past 18 years. There were 13 hours with a mean speed of 0.5 mph or less. Daily mean direction/number of days: N,7 NE,0 E,1 SE,0 S,2 SW,14 W,4 NW,3.

Humidity. The overall mean relative humidity was 81.6 %, and the lowest recorded value was 49 % on the 26th. The mean quantity of water vapour per kg of air was 5.0 g at 0900 and 5.3 g at 1500 hours.

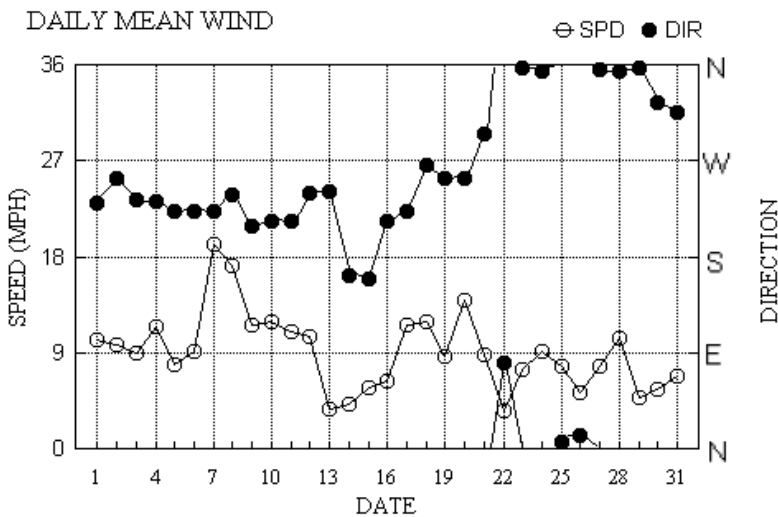
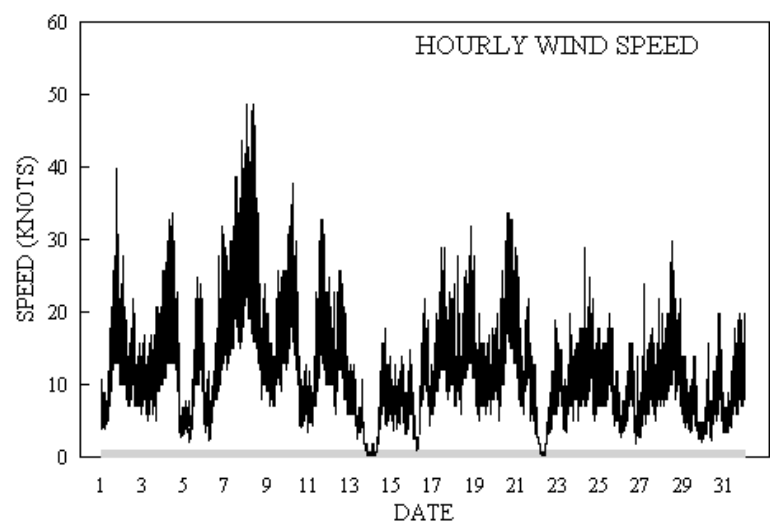
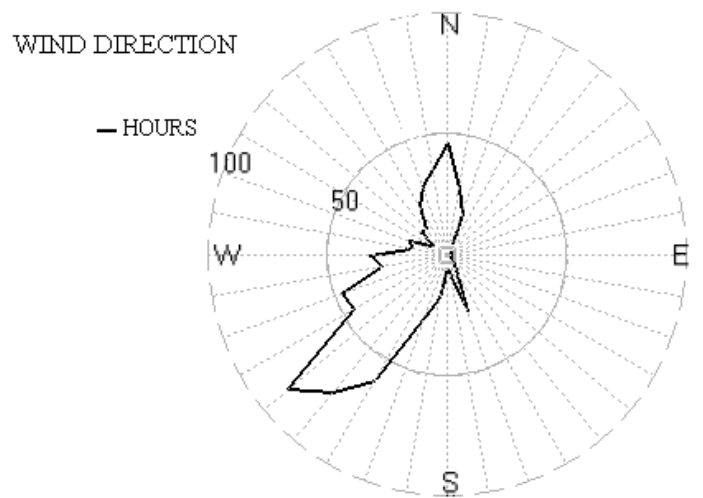
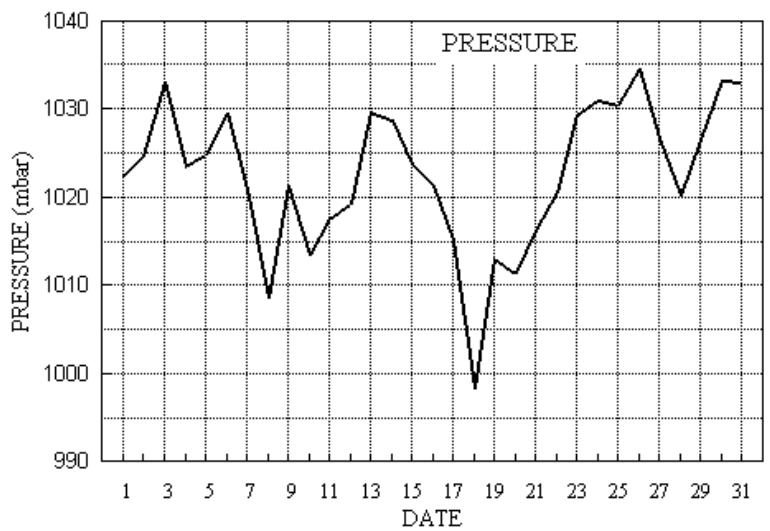
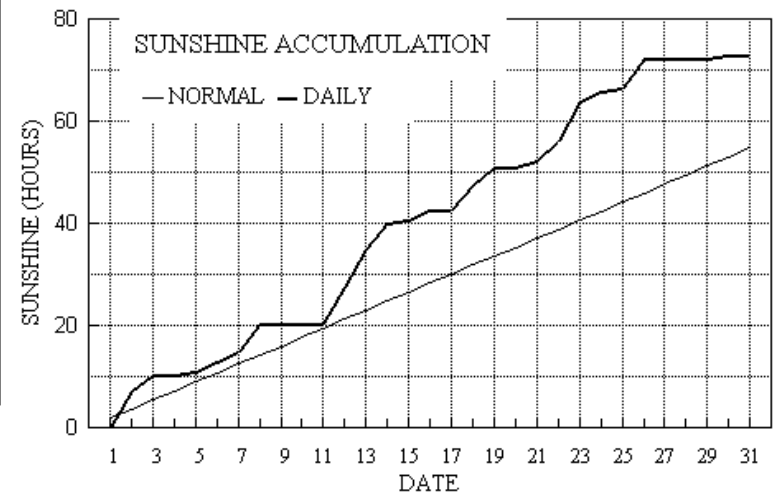
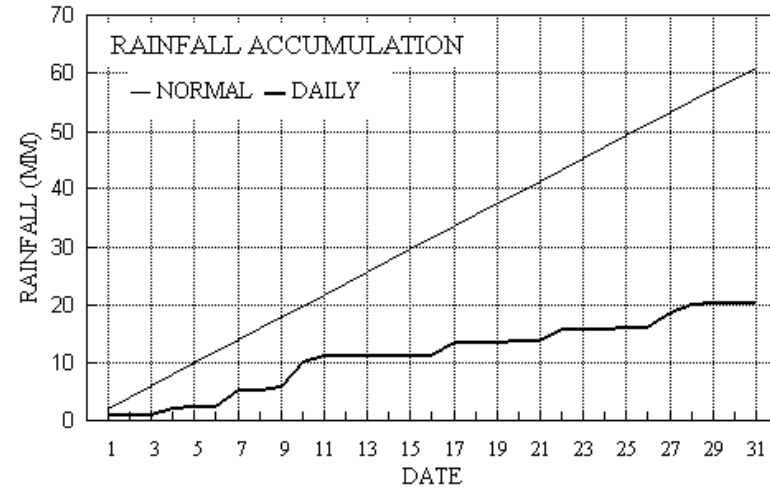
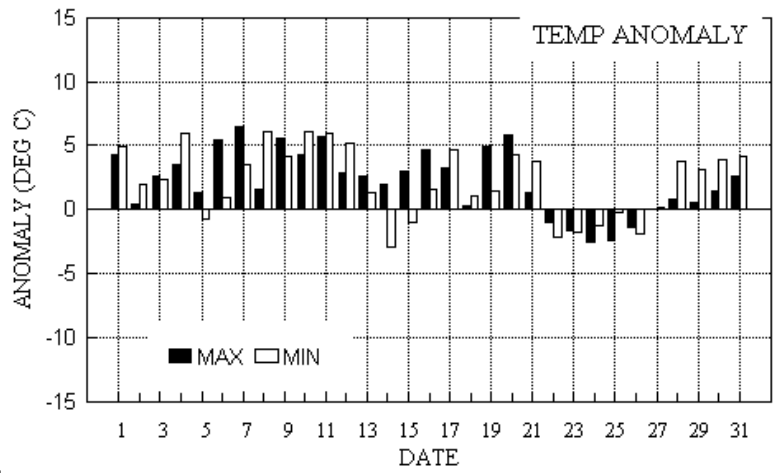
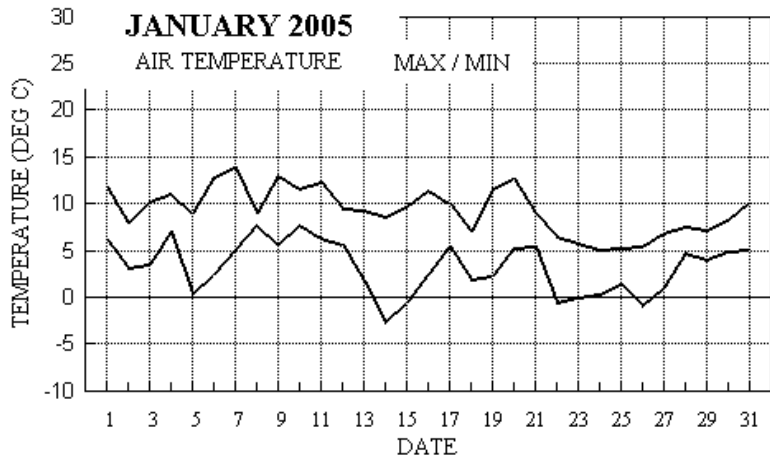
Commentary. From the 1st to the 10th: In this period temperatures were at their highest, with 10 day mean anomalies of +3.5° for both max and min. Daily anomalies reached +6.5° for the max on the 7th, the month's mildest day, and +6.1° for the min on the 8th and 10th, the mildest nights of the month. This was the wettest period, with 4 dry days, but the total of only 10.1 mm is just 51 % of normal, and 4.2 mm of the total fell on the 10th, the month's wettest day. 3 days had nil sun, but the 2nd and 8th were reasonably sunny, lifting the 10 day mean to just above normal. This was a very windy period, SW'ly throughout, strong on the 1st falling moderate by 3rd, then fresh or strong, increasing very strong on the 7th and 8th.

From the 11th to the 20th: Again quite mild, but with a couple of cool nights. Daily anomalies for max ranged from +0.3° on the 18th to +5.8° on the 20th, while for min, +5.9° on the 11th to -3.0° on the 14th, the month's coldest night, giving 10 day mean anomalies of +3.5° and +2.1° for max and min resp. 7 dry days, including a 5 day dry spell, and a total of just 3.7 mm, 19 % of normal. Several sunny days, including over 7 hours on the 12th and 13th, made this the sunniest period of the month, with 163 % of normal. Strong SW'ly winds on 11th fell light by 13th, backed S'ly on 14th, increased to moderate or fresh as it veered W'ly by 18th, becoming strong on 20th.

From the 21st to the 31st: This was the coolest period, with 11 day mean anomalies of -0.2° and +1.0° for max and min resp. Anomalies for daily max ranged from +2.6° on the 31st to -2.5° on the 24th, the month's coolest day, with min ranging from +4.1° on 31st to -2.2° on the 22nd. 6 dry days in this period and a total of just 6.7 mm, 31 % of normal. 4 sunless days and just sunny on the 23rd, 7.8 hours and the sunniest day of the month, giving an 11 day mean just above normal. A fresh W'ly wind on 21st gave way to light or moderate N'ly on 22nd, temporarily increasing fresh on 28th, and backing NW'ly on 30th.

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

Wokingham Climatological Data



Month: JANUARY 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	11.8	6.1	1.0	-1.2	6.6	8.3	0.0	0.0	1022.4	0	1	0	0	0	230	8.1	8.9	270	40	1737	240	17	17	1.0	
2	8.0	3.1	0.0	-0.2	6.7	8.3	7.1	0.0	1024.7	0	1	0	0	0	253	8.1	8.4	280	28	0102	270	12	01	0.0	
3	10.2	3.5	tr	-0.8	6.1	8.4	3.1	0.0	1033.1	0	1	0	0	0	234	7.7	7.8	230	26	2336	230	11	20	0.0	
4	11.1	7.1	1.2	6.7	6.5	8.4	0.1	0.0	1023.5	0	0	0	0	0	232	9.7	9.9	230	34	1038	230	16	10	1.4	
5	8.9	0.4	0.2	-4.7	6.6	8.4	0.4	0.0	1024.9	0	1	0	0	0	223	6.7	6.9	230	25	1507	220	13	19	0.5	
6	12.8	2.5	tr	-1.2	6.4	8.4	2.2	0.0	1029.5	0	1	0	0	0	222	7.8	7.9	220	32	2008	230	15	22	0.0	
7	13.9	5.1	2.8	9.3	6.8	8.3	1.8	0.0	1020.9	0	0	0	0	0	222	16.5	16.7	220	44	2359	210	23	23	2.1	
8	9.0	7.7	tr	4.8	7.5	8.4	5.4	0.0	1008.6	0	0	0	0	0	238	14.2	14.9	250	49	0717	220	23	01	0.1	
9	13.0	5.7	0.7	1.9	7.2	8.4	0.0	0.0	1021.2	0	0	0	0	0	209	9.8	10.0	210	28	2356	220	14	19	2.7	
10	11.6	7.7	4.2	8.9	7.5	8.5	0.0	0.0	1013.4	0	0	0	0	0	214	10.2	10.3	210	38	0612	210	18	04	3.1	
11	12.4	6.3	1.2	-1.0	7.7	8.5	0.1	0.0	1017.5	0	1	0	0	0	213	8.9	9.5	200	33	1453	210	16	14	2.7	
12	9.6	5.6	tr	2.0	7.7	8.5	7.1	0.0	1019.3	0	0	0	0	0	239	9.0	9.2	250	26	1156	250	13	11	0.0	
13	9.3	1.7	0.0	-3.9	7.1	8.6	7.5	3.4	1029.7	0	1	0	0	0	242	3.0	3.2	250	13	0347	240	7	01	0.0	
14	8.7	-2.6	0.1	-7.7	6.4	8.6	5.2	9.5	1028.8	1	1	0	0	0	162	3.5	3.7	170	18	1513	160	7	14	0.2	
15	9.7	-0.6	tr	3.4	6.2	8.5	0.5	0.0	1023.7	1	0	0	0	0	160	5.0	5.0	160	15	2005	160	7	11	0.1	
16	11.4	2.4	0.0	-2.1	6.5	8.5	2.0	0.0	1021.3	0	1	0	0	0	214	5.1	5.5	220	22	1311	220	11	12	0.0	
17	10.0	5.5	2.1	0.5	6.5	8.4	0.0	0.0	1015.1	0	0	0	0	0	223	9.8	10.1	220	29	1208	210	13	09	2.7	
18	7.1	1.9	0.0	-0.7	6.7	8.3	4.7	0.0	998.3	0	1	0	0	0	266	9.7	10.3	290	32	1921	270	13	14	0.0	
19	11.7	2.3	0.2	0.1	6.3	8.3	3.5	0.0	1013.1	0	0	0	0	0	253	7.1	7.5	290	20	0527	240	10	21	0.2	
20	12.6	5.2	0.1	5.2	6.5	8.2	0.2	0.0	1011.4	0	0	0	0	0	253	11.5	12.0	250	34	1402	250	17	13	0.1	
21	8.9	5.4	tr	0.6	7.1	8.2	1.2	0.0	1016.3	0	0	0	0	0	296	7.4	7.6	310	28	0007	310	13	00	0.0	
22	6.6	-0.5	2.0	-5.9	6.9	8.2	4.0	3.5	1020.5	1	1	1	0	0	80	2.3	3.1	80	19	2107	90	7	21	4.0	
23	5.9	-0.1	tr	-4.8	6.5	8.2	7.8	0.0	1029.3	1	1	0	0	0	358	5.9	6.4	340	20	1445	30	9	02	0.0	
24	5.1	0.4	0.1	-3.1	5.9	8.2	1.7	0.0	1030.9	0	1	1	0	0	355	7.8	7.9	350	29	0702	10	11	13	0.3	
25	5.2	1.4	0.2	-1.8	5.6	8.1	0.6	0.1	1030.5	0	1	0	0	0	6	6.6	6.7	20	20	1144	20	10	12	0.3	
26	5.4	-0.9	0.1	-7.6	5.6	8.0	6.0	4.5	1034.5	1	1	1	0	0	13	4.1	4.5	40	16	1103	40	9	11	0.2	
27	6.8	1.1	2.5	-2.0	5.4	8.0	0.0	0.0	1026.6	0	1	0	0	0	356	6.6	6.7	20	24	0437	350	9	20	3.5	
28	7.6	4.7	1.5	3.3	5.7	7.9	0.0	0.0	1020.2	0	0	0	0	0	355	8.8	9.0	350	30	1111	350	12	14	2.3	
29	7.3	4.1	0.2	0.2	6.0	7.8	0.0	0.0	1026.5	0	0	0	0	0	357	4.1	4.1	10	14	1248	10	7	12	0.9	
30	8.2	4.9	0.0	4.4	6.2	7.8	0.5	0.0	1033.3	0	0	0	0	0	324	4.7	4.8	330	20	1937	340	8	19	0.0	
31	10.2	5.1	0.1	-1.0	6.4	7.8	0.0	0.0	1033.0	0	1	0	0	0	316	5.5	5.8	340	20	2315	330	8	19	0.3	
Total			20.5				72.7	21.0																	28.7
Mean	9.4	3.3		0.1	6.5	8.3	2.35	0.7	1022.6						249	4.6	7.9								
Anom	+1.9	+1.8	34%		+1.3	+1.0	123%		+6.6																
Daily mean		6.3																							
Anom		+1.8																							

Number of days with:

Air frost = 5 Ground frost = 17 Nil sun = 8
Snow falling = 3 Snow lying = 0 Thunder = 0
Hail=>5mm = 0 Hail<5mm or ice = 0 Fog at 09GMT = 0

Abbreviations.

Max/min = highest and lowest air temperature at 1.2m in 24 hour period ending at 09 GMT

Rain = total rainfall and melted snowfall in 24 hour period ending at 09 GMT, millimetres. (Tr = trace, <.05mm).

Grass min = Lowest overnight temperature at grass tip level.

Sun = hours of bright sunshine, measured electronically. Frost = Number of hours with air temp below 0 deg C.

pp09 = Air pressure corrected to mean sea level at 0900 GMT, millibars.

Af = Air frost. Gf = Ground frost. Sf = Snow falling. Sl = Snow lying at 09 GMT.

Th = Thunder. Ha = Hail =>5mm. Ic = Hail <5mm or ice. Fg = Fog at 09 GMT.

Vec mean = 24 hour mean wind vector, ddd = direction in degrees from true north, ff = speed in knots.

Sp = 24 hour mean wind speed in knots.

Max gust = Highest gust in 24 hours, gg = speed in knots, HHhh = Time, hours and minutes, GMT.

High hr = Highest hourly mean wind, HH = hour commencing. Rain Hrs = Duration of rain, 24 hours to 09 GMT. Excludes snow/hail.

30cm and 100 cm are earth temperatures at those depths, read at 09 GMT.

Anom = Departure from 1971-2000 climatological average.

All temperatures in degrees Celsius.

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 0900 GMT for JANUARY 2005

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	hCr	Cl	NCh	shs	NCh	shs	NCh	shs	Date	Remarks
1	70	7	19	07	12	8.4	6.9	90	6.1	1022.4	8	015	03	2	2	3	5	4	7	2	81715	83367	87075			1	1Sc25 2Sc35 COTRA	
2	80	0	22	06	14	3.6	-0.2	76	3.7	1024.7	2	029	02	0	0	0	0	9	0	0						2		
3	67	6	24	08	16	7.1	5.8	91	5.6	1033.1	1	006	03	1	1	2	5	6	3	1	82645	83368	85075			3	COTRA	
4	80	7	23	14	32	10.2	6.6	78	6.0	1023.5	6	011	01	2	2	7	8	5	/	1	82822	87635				4	/Ci78 COTRA Cu fra Cu hum	
5	72	7	20	04	06	2.5	2.2	98	4.4	1024.9	5	003	03	2	2	1	5	7	7	2	81650	85365	87072			5	Ac str vir Hoar slt	
6	60	7	21	04	07	5.1	4.9	98	5.2	1029.5	3	013	10	2	2	1	5	6	3	8	81645	87275				6	1Ac65 COTRA	
7	80	7	23	14	33	12.7	8.7	77	7.0	1020.9	5	001	02	2	2	7	5	5	/	1	87625	87632				7		
8	84	2	25	14	36	7.8	3.6	75	4.9	1008.6	3	058	25	8	1	2	9	5	6	3	81925					8	1Cu28 1Ac60 1Ci70	
9	70	7	20	06	14	7.8	5.3	84	5.5	1021.2	3	003	03	1	1	6	0	9	7	8	81359	85462	87272			9	1Ac66 COTRA	
10	62	8	22	12	28	11.8	10.0	89	7.7	1013.4	1	006	60	6	2	8	5	4	/	/	87612	88618				10		
11	63	7	19	11	23	9.7	7.6	87	6.5	1017.5	7	019	01	2	2	6	5	4	0	1	81712	86615	86078			11	COTRA	
12	82	1	23	10	18	6.5	2.4	75	4.5	1019.3	0	009	15	1	1	1	8	5	0	0	81820					12	1Sc40 jpW Rainbow part	
13	68	7	20	03	06	2.4	1.1	91	4.0	1029.7	2	015	02	2	2	0	0	9	0	1	82072	87078				13	COTRA Hoar slt	
14	58	7	17	02	03	-0.5	-0.6	99	3.6	1028.8	4	000	10	1	1	2	5	6	0	1	81628	86080				14	2Sc40 COTRA Hoar thk Gnd sfc frzn	
15	59	8	16	05	09	7.8	7.6	99	6.4	1023.7	3	005	50	5	2	8	5	2	/	/	85705	88620				15		
16	56	7	19	05	08	6.1	5.6	97	5.6	1021.3	3	003	10	2	2	7	6	3	/	/	87708					16		
17	75	8	22	11	22	9.4	6.2	80	5.9	1015.1	6	018	15	2	2	1	8	4	7	/	81715	83656	87358			17	1Sc22 8Ac60 jpW	
18	88	1	27	06	13	2.3	-0.4	82	3.7	998.3	3	026	03	6	1	1	8	5	0	3	81820					18	1Sc25 1Ci70 Cu fra Cb top S&W	
19	70	3	28	07	15	5.2	2.0	80	4.4	1013.1	3	018	02	1	1	1	5	7	7	1	81656					19	2Ac58 1Ci72	
20	80	7	25	10	21	11.7	8.7	82	7.0	1011.4	3	007	02	2	2	7	8	4	/	/	81818	86622	87635			20	Cu fra	
21	80	7	27	08	12	5.8	0.4	68	3.9	1016.3	2	013	03	1	1	4	0	9	5	1	86364					21	2Ci78 COTRA Absent VV&cld est	
22	61	1	36	01	02	-0.1	-0.1	100	3.7	1020.5	1	004	01	1	1	1	0	9	7	1	81362					22	1Ci75 COTRA Hoar slt	
23	80	1	34	03	07	0.5	-0.3	94	3.6	1029.3	2	031	02	0	0	1	5	6	0	0	81640					23	Hoar slt.	
24	62	3	34	07	14	1.6	-1.2	81	3.4	1030.9	2	007	26	8	1	3	8	5	0	0	81820					24	2Sc25 1Sc50 Sn lyng Tr(<10%,<.5cm) jpWNW	
25	61	7	36	08	16	3.0	1.4	89	4.1	1030.5	3	005	60	6	2	7	5	4	/	/	82710	87612	87650			25		
26	82	7	01	05	11	1.1	-2.2	79	3.2	1034.5	2	007	03	1	1	7	0	9	7	1	81360	87362				26	/Ci75 COTRA Ac str un vir Hoar slt Gnd sfc frzn	
27	62	7	01	07	14	5.4	3.0	84	4.6	1026.6	6	004	03	2	2	7	5	4	/	1	82712	85618	87635			27	/Ci75	
28	73	7	35	11	20	5.9	3.5	85	4.8	1020.2	7	004	01	6	2	7	5	4	/	/	82715	83625	87650			28		
29	62	7	36	04	10	4.9	3.9	94	5.0	1026.5	3	012	21	6	1	7	8	4	/	/	82712	85620	87630			29	1Cu25 Cu med jpNW vv30k ex p	
30	75	7	28	03	07	6.2	4.1	86	5.0	1033.3	2	001	02	2	2	7	5	5	/	/	81622	87625				30		
31	75	7	32	05	12	7.9	5.2	83	5.4	1033.0	3	007	02	2	2	7	5	4	/	/	87618					31		

Mean vis = 22.9 km
 Mean cloud = 5.6 71%
 Mean wind speed = 7.1 kn
 Mean gust = 15 kn
 Mean TT = 5.8 C
 Mean TdTd = 3.6 C
 Mean RH = 86.2 %
 Mean r = 5.0 g/kg
 Mean PPP = 1022.6 mbar

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 1500 GMT for JANUARY 2005

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	pppwwW1W2	NhCl	hCrCl	NChshs	NChshs	NChshs	Date	Remarks									
1	60	8	21	13	26	11.2	9.6	90	7.5	1013.0	7	066 62	6	5	8	5	3	/ /	81708	87612	88618	1						
2	82	1	27	10	20	7.8	0.5	60	3.9	1027.5	3	014 01	0	0	1	8	6	0	0				2	1Sc40 Cu hum Cu fra				
3	68	7	24	07	17	9.5	5.7	77	5.6	1031.9	7	012 60	2	2	7	8	5	/ /	81822	87630		3	Cu med					
4	62	8	22	11	22	10.2	8.6	90	6.9	1021.2	6	009 61	6	2	8	5	4	/ /	82712	86615	88628	4						
5	84	7	23	10	22	8.4	4.6	77	5.2	1019.8	6	030 03	2	2	1	1	5	7	2				5	1Ac60 1Ac68 COTRA Cu fra				
6	68	7	21	08	16	10.0	7.3	83	6.3	1027.8	8	021 02	2	2	1	8	4	7	2				6	1Sc22 1Ac62 2As68 Cu fra				
7	81	7	23	14	34	13.0	8.6	75	6.9	1018.8	7	014 02	2	2	7	5	8	/	1				7	COTRA Cu hum				
8	82	2	26	09	34	8.0	0.2	58	3.8	1017.5	2	048 02	0	0	2	8	6	0	1				8	1Sc50 1Ci80 COTRA Cu med				
9	61	8	19	11	20	9.6	7.9	89	6.6	1017.4	6	025 60	6	2	7	5	4	2	/				87622	88557	9			
10	65	7	22	05	11	9.7	9.3	97	7.3	1014.6	3	009 61	6	5	2	5	3	7	/				81706	85357	87462	10	2Sc45 Clearance to NNW vv 60k NW	
11	56	8	21	16	33	12.3	11.4	94	8.4	1010.8	6	028 51	6	5	8	7	3	/ /					83706	87708	88712	11		
12	78	2	26	10	24	8.7	2.5	65	4.5	1021.3	3	012 15	0	0	2	8	6	0	0							12	2Sc45 Cu med jpNW	
13	80	6	28	05	11	8.6	1.9	63	4.3	1029.7	6	001 02	2	2	1	1	5	0	1							13	1Ci73 COTRA Cu hum	
14	83	7	16	08	16	8.1	0.9	60	4.0	1026.2	6	008 03	2	2	4	5	7	0	8							14		
15	63	5	16	03	09	9.2	5.9	80	5.7	1022.4	6	010 01	6	2	2	5	7	7	1								15	3Ci75 COTRA
16	78	6	23	10	18	11.3	7.4	77	6.2	1019.5	7	011 02	1	1	6	8	5	0	0								16	2Sc50 Cu med
17	25	8	22	10	21	9.5	8.9	96	7.1	1007.9	7	040 58	6	5	8	5	2	/ /									17	
18	81	5	28	14	26	6.8	1.3	68	4.2	999.7	5	002 03	1	1	4	8	5	3	1								18	1Sc35 2Sc50 1Ac65 1Ci70 Cu med
19	72	8	23	07	16	8.2	5.7	84	5.7	1013.6	7	003 03	2	2	7	5	5	7	/								19	/Ac58
20	81	7	26	17	34	12.2	8.4	77	6.9	1008.6	6	019 02	2	2	7	8	5	/	1								20	/Ci75 Cu fra Cu hum
21	82	7	31	08	21	8.0	-0.8	54	3.6	1017.3	5	001 02	2	2	2	8	6	7	/								21	2Sc50
22	72	8	10	04	09	6.4	-0.1	63	3.7	1019.0	6	016 03	2	2	3	5	7	7	/								22	2Ac57
23	83	1	34	09	20	5.5	-1.9	59	3.2	1029.6	8	009 02	0	0	1	8	6	0	0								23	1Sc45 Cu fra
24	80	4	01	10	20	4.6	-0.9	67	3.5	1030.9	6	003 02	8	1	3	8	5	4	1								24	1Sc50 1Ac68 2Ci75 COTRA Cu med Parhelion
25	80	7	01	07	18	4.3	0.4	76	3.8	1029.4	5	009 02	2	2	7	8	5	3	1								25	/Ac58 /Ci75 COTRA Cu hum
26	81	6	03	08	15	3.8	-4.4	55	2.7	1033.8	6	003 03	1	1	2	4	6	3	1								26	1Sc45 1Ac62 COTRA
27	38	8	36	06	16	6.4	5.7	95	5.6	1024.6	6	012 50	5	2	8	5	3	/ /									27	
28	75	8	35	10	23	7.2	4.2	81	5.1	1019.1	6	008 60	6	2	8	5	4	/ /									28	
29	86	7	01	05	10	7.3	4.6	83	5.2	1028.7	3	009 01	2	2	7	8	4	/ /									29	
30	70	8	34	06	14	7.8	4.7	81	5.2	1033.1	7	007 03	2	2	8	5	4	/ /									30	
31	77	8	31	06	11	10.0	7.3	83	6.2	1031.7	6	012 02	2	2	8	5	4	/ /									31	

Mean vis = 26.8 km
 Mean cloud = 6.3 79%
 Mean wind speed = 8.9 kn
 Mean gust = 20 kn
 Mean TT = 8.5 C
 Mean TdTd = 4.4 C
 Mean RH = 76.0 %
 Mean r = 5.3 g/kg
 Mean PPP = 1021.5 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
 JANUARY 2005

Date	Mean			Max			Min			Missing RH	Number of minutes RH in given ranges								
	TT	TT	Time	TT	Time	RH	RH	Time	RH		Time	N >0	0-20	20-40	40-60	60-80	80-90	90-95	95-98
01	8.7	11.8	17:06	6.2	02:48	83.9	93.5	16:40	68.0	17:57		0	0	0	374	874	192	0	0
02	5.4	8.2	13:51	3.2	08:14	68.8	78.2	23:38	57.6	13:40		0	0	106	1334	0	0	0	0
03	7.7	10.0	12:26	4.6	00:18	82.6	94.5	07:31	72.7	20:26		0	0	0	571	652	217	0	0
04	9.0	11.1	13:21	3.8	23:52	82.0	97.2	17:40	69.5	00:33		0	0	0	843	62	418	117	0
05	5.8	8.9	13:10	2.0	06:17	88.6	97.1	06:14	74.6	14:32		0	0	0	289	473	299	379	0
06	8.4	11.4	23:59	4.9	06:08	88.2	97.0	08:52	78.5	20:55		0	0	0	62	723	443	212	0
07	12.4	13.9	11:51	11.1	03:46	76.0	93.4	04:08	65.5	20:57		0	0	0	1188	190	62	0	0
08	8.3	11.9	00:01	5.8	19:47	70.4	95.8	05:22	50.5	12:59		0	0	265	969	85	118	3	0
09	9.4	12.9	20:18	6.0	04:06	84.6	95.8	16:58	73.5	12:29		0	0	0	353	785	206	96	0
10	10.8	13.0	01:30	7.1	23:58	90.8	97.7	12:56	78.1	04:50		0	0	0	142	452	170	676	0
11	9.6	12.4	16:38	7.0	01:12	87.5	98.0	01:12	65.6	18:51		0	0	0	351	255	487	347	0
12	7.0	9.6	13:49	4.3	23:44	72.6	83.0	22:11	59.6	13:26		0	0	7	1255	178	0	0	0
13	4.1	9.1	13:43	-0.6	23:48	82.9	95.6	22:26	60.5	14:10		0	0	0	362	771	305	2	0
14	4.3	8.7	12:38	-1.7	06:17	82.8	98.6	07:22	58.4	15:21		0	0	47	570	236	202	382	3
15	7.6	9.5	13:57	6.4	23:58	88.7	97.5	05:59	74.1	15:34		0	0	0	295	326	304	515	0
16	7.6	11.4	12:36	3.7	06:04	87.0	96.3	06:34	76.5	13:22		0	0	0	246	601	521	72	0
17	8.3	10.1	12:01	5.0	23:59	86.4	97.4	15:44	79.6	22:10		0	0	0	12	1064	255	109	0
18	4.9	7.2	15:59	1.9	06:49	75.8	92.1	07:20	60.8	11:52		0	0	0	890	406	144	0	0
19	7.4	11.2	21:36	4.1	03:56	81.0	96.5	19:20	66.3	12:35		0	0	0	863	195	230	152	0
20	11.3	12.6	12:14	9.3	04:17	80.3	89.5	00:04	71.9	23:59		0	0	0	780	660	0	0	0
21	7.2	10.7	00:02	5.1	23:58	65.9	78.5	23:01	52.0	14:09		0	0	299	1141	0	0	0	0
22	3.4	6.8	14:05	0.3	05:54	82.4	95.0	08:39	55.0	15:50		0	0	165	261	402	612	0	0
23	2.9	5.9	13:54	-0.2	08:08	75.9	92.6	06:05	55.3	14:33	99	0	0	154	659	233	295	0	0
24	2.7	5.1	14:18	1.4	08:18	76.2	92.7	18:18	63.5	13:42		0	0	0	1007	366	67	0	0
25	3.2	5.2	12:23	0.0	23:47	83.2	94.6	23:12	69.1	12:45		0	0	0	401	879	160	0	0
26	1.8	4.6	12:09	-0.7	07:08	76.1	95.0	00:40	49.4	13:11	80	0	0	266	347	545	202	0	0
27	5.4	6.8	13:57	2.6	00:03	89.1	96.3	16:38	82.8	09:19		0	0	0	0	1005	220	215	0
28	6.0	7.7	13:19	4.8	05:05	87.1	95.0	05:05	75.5	12:51		0	0	0	228	797	415	0	0
29	5.9	7.3	14:58	4.0	06:55	90.8	97.2	11:02	77.8	15:49		0	0	0	38	575	412	415	0
30	6.8	8.2	12:56	5.5	23:58	80.2	88.9	00:02	69.1	18:59		0	0	0	595	845	0	0	0
31	8.5	10.3	15:41	5.3	01:42	81.7	85.4	13:41	77.8	19:18		0	0	0	342	1098	0	0	0
Mean	6.8	9.5		3.9		81.6	93.4		67.4			0.00	0.00	0.70	9.02	8.46	3.74	1.98	0.00
Hi	12.4	13.9		11.1		90.8	98.6		82.8	Tot	179	0	0	1309	16768	15733	6956	3692	3
Lo	1.8	4.6		-1.7		65.9	78.2		49.4										

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.