

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

DECEMBER 2005

Temperature (°C / °F)			Anomaly	Rank in past 124 years			
Mean maximum	7.8	46.0	-0.5	60 th highest			
Mean minimum	0.5	32.9	-2.0	29 th lowest			
Daily mean	4.2	39.6	-1.2	50 th lowest			
Highest maximum	12.2	54.0	on 16 th	Lowest maximum	1.3	34.3	on 28 th
Highest minimum	7.3	45.1	on 16 th	Lowest minimum	-6.0	21.2	on 18 th
Mean grass minimum	-2.5	27.5		Lowest grass minimum	-10.2	13.6	on 18 th
Mean earth @30 cm	5.8	42.4	-0.8	Earth @100 cm	8.8	47.8	-0.2
Frost duration (hrs)	134.5			Rain duration (hrs)	40.0		
Rainfall total (mm / in)	54.6	2.15	85 %	49 th lowest			
Highest daily fall	24.4	0.96	on 1 st				
Number of: Dry days (<0.2mm)	21	Wet days (>0.9mm)	6	days ≥5mm	4		
Sunshine total (hrs)	88.3	Daily mean	2.85	168 %	Sunniest day	7.2	on 17 th
N ^o days with: Air frost	17	Ground frost	21	Snow falling	3	Snow lying	1
Thunder	0	Hail ≥5mm	0	Small hail/ice	1	Fog @09	3
Air pressure MSL : Mean @09 GMT (mbar/in)	1018.4		+3.3	30.07			
Absolute highest	1041.7			30.76		on 12 th	
Absolute lowest	975.1			28.79		on 2 nd	

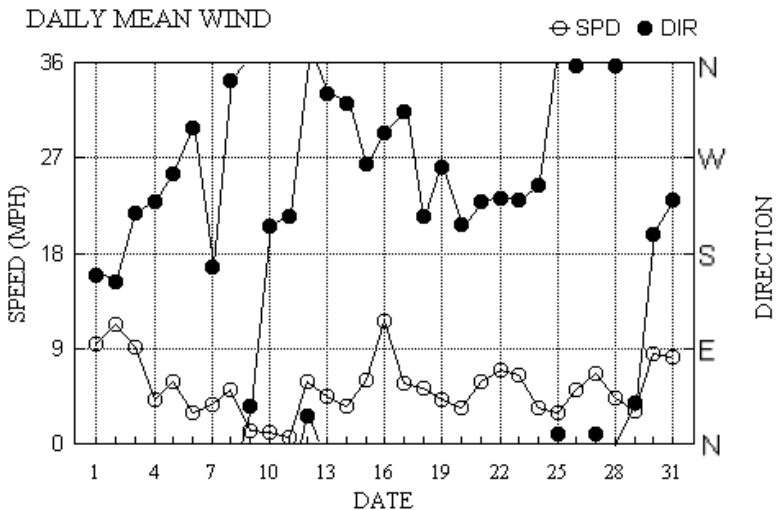
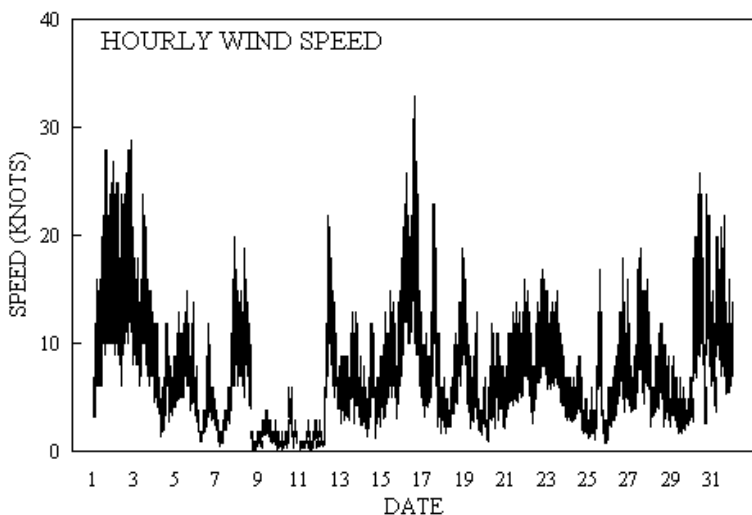
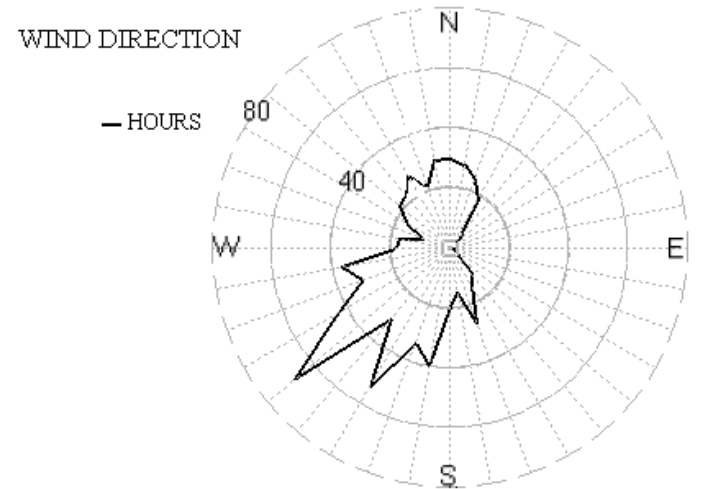
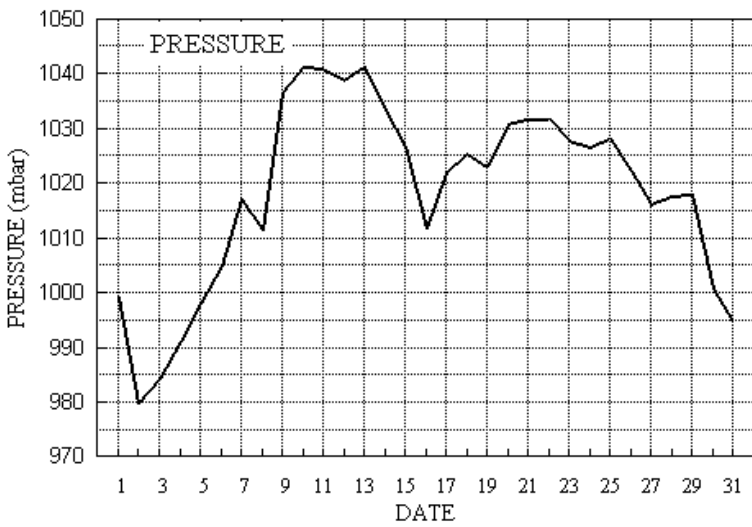
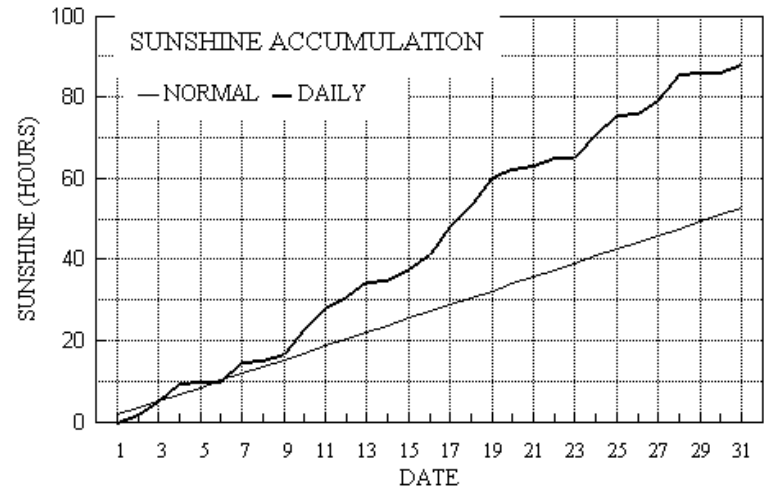
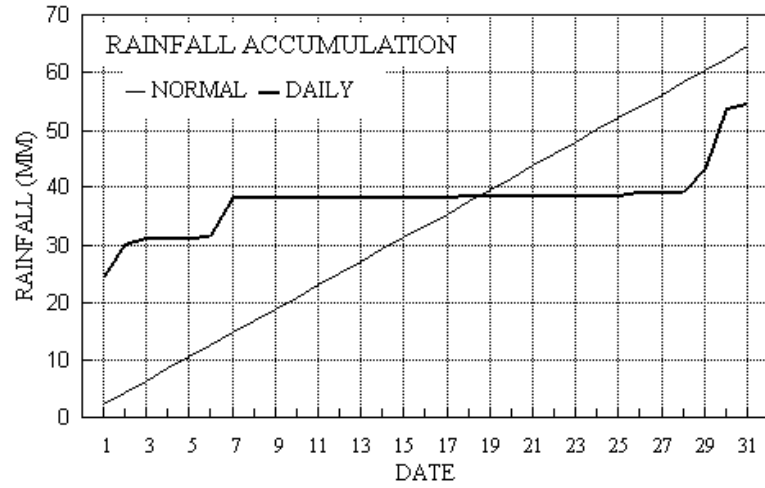
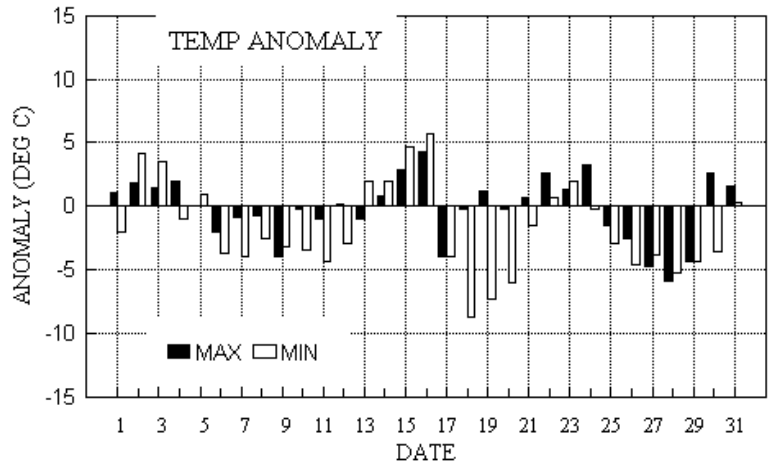
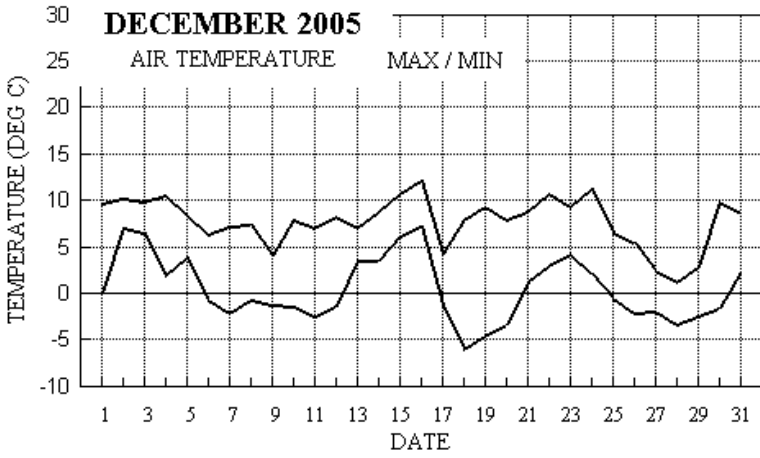
Anomaly = departure from 1971 to 2000 average (degrees C, percent and mbar).

Notes: **Temperature and Rainfall Below Normal, Very Sunny.**

Temperature. This is the second consecutive month with below normal temperature, the first such occasion since Dec96/Jan97. It is the coldest December since 2001, but is nowhere near as cold as in 1981 which had a mean temperature 3.5° lower than this December's. The highest maximum this month is 0.8° below the median and lowest since 1981. The lowest minimum is also 0.8° below its median, but is lowest only since 2000. The lowest maximum is close to the median, but the highest minimum is 2.0° below the median and lowest since 1981. The mean grass minimum is lowest since 2001. Earth temperatures at 30 cm and 1 m depth are lowest since 1996. The number of frost hours is most since 2001, and 45 more than average. **Rainfall.** Much of the month was dry, with a total of only 1 mm recorded between the 8th and 28th, and two dry spells, the first of 10 days ended on the 17th and the second of 7 days ended on the 25th. Most of the month's total fell within 3 days of both the start and end of the month, and the 24.4 mm on the 1st is the highest daily fall for December since 1995, and 9th highest in 102 years. Snow fell on the 27th, 28th and 29th, but amounts were small, though enough to give a covering <0.5 cm depth on the morning of the 28th. A frost after rain produced icy roads on the 7th. **Sunshine.** A very sunny December, sunniest since 2001 and probably 2nd sunniest in 98 years, although a change of instrument in 1999 makes direct comparison difficult. Sunshine accumulation during December showed it to be close to normal until the 9th, but with a surplus of 28 hours by the 19th which had increased to 36 hours by the end of the month. Overall there were 16 days with <3 hours and 3 with =>6 hours. **Wind.** The mean wind speed of 5.4 mph is 2.5 mph below the December average, and second lowest in 19 years. The 16th was the windiest day, 11.6 mph, a new low value in the same period. The month's highest gust of 38 mph was also on the 16th. The least windy day was the 11th, 0.7 mph, and there were 806 minutes (13.4 hours) with a mean speed of 0.5 mph or less. Daily mean direction/number of days: N,5 NE,3 E,0 SE,1 S,3 SW,11 W,3 NW,5. **Humidity.** The overall mean relative humidity was 87.1 % and the lowest value was 43 % on the 17th. The mean amount of water vapour per kg of air was 4.7 g at 0900 and 4.8 g at 1500 GMT. **Pressure.** The month's highest pressure is highest for December since 1991, and the month's lowest is lowest since 1989. **Commentary. From the 1st to the 10th:** Mean anomalies (max, min, rain, sun) were -0.2°, -1.1°, 185 %, 135 %. Both daily maxima and minima were generally above normal until the 5th, then below, with anomalies ranging from +2.0° to -4.0° for max, and +4.1° to -4.0° for min. The 1st with 24.4 mm was the month's wettest day, and also the highest daily total since 25thNov2003. However, there were also 5 dry days in this period. Dull at times, but 3 sunny days lifted the total above normal. Fresh S'ly winds on 1st became light NW'ly by 6th, moderate S'ly on 7th, veering N'ly on 8th and dropping very light. **From the 11th to the 20th:** Mean anomalies +0.3°, -1.9°, 1 %, 229 %. This period saw a brief mild spell followed by cold night time temperatures. Daily anomalies for maxima reached +4.2 on 16th, the month's mildest day, falling to -4.0 on the following day, while anomalies for minima ranged from +5.7° on the 16th to -8.7° on the 18th, the month's mildest and coldest nights resp. Dry throughout, and quite sunny at times, with the month's sunniest day on the 17th with 92 % of maximum possible. Very light winds on 11th became moderate N'ly on 12th, gradually backing SW'ly by 20th, temporarily fresh on 16th, the month's windiest day. **From the 21st to the 31st:** Mean anomalies -0.7°, -2.2°, 69 %, 141 %. Generally near normal temperatures until the 24th, then a cold snap until the 29th, with anomalies for maxima -5.9° on the 28th, the month's coldest day, and -5.3° for the minimum on the same day. Mostly dry until 29th, then 3 wet days including 10.6 mm on the 30th, and with some light snowfall on the 27th, 28th and 29th. 3 days with >50% possible sunshine but also 5 days with 1 hour or less. Light or moderate SW'ly winds veered N'ly on 25th, returning to SW'ly on 30th.

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

Wokingham Climatological Data



Month: DECEMBER 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	9.7	0.0	24.4	1.8	6.5	9.9	0.0	0.0	999.1	0	0	0	0	159	8.1	8.2	160	28	1507	160	13	14	15.9	
2	10.3	7.1	5.7	5.0	7.1	9.8	1.9	0.0	979.6	0	0	0	0	153	9.6	9.8	170	29	2038	160	13	19	3.1	
3	9.9	6.5	1.2	3.6	7.5	9.7	3.1	0.0	984.1	0	0	0	0	218	7.8	8.0	220	24	1032	210	11	09	0.5	
4	10.5	2.0	0.0	-2.7	7.5	9.7	4.7	0.0	990.9	0	1	0	0	229	3.2	3.7	220	12	0118	220	6	01	0.0	
5	8.5	3.9	tr	-0.9	7.2	9.7	0.2	0.0	997.8	0	1	0	0	255	4.9	5.1	280	15	1353	260	7	11	0.0	
6	6.4	-0.7	0.2	-5.1	7.2	9.6	0.1	1.8	1004.9	1	1	0	0	298	1.4	2.5	350	12	1400	350	4	12	0.5	
7	7.2	-2.1	6.8	-6.8	6.8	9.6	4.9	7.8	1017.0	1	1	0	0	167	2.8	3.2	170	20	2105	150	8	21	6.3	
8	7.4	-0.7	0.1	1.5	6.4	9.5	0.4	3.0	1011.4	1	0	0	0	344	2.3	4.4	10	19	0848	30	8	09	0.5	
9	4.1	-1.3	0.0	-5.5	6.4	9.4	1.7	3.0	1036.5	1	1	0	0	36	0.6	1.0	80	4	1102	70	2	10	0.0	
10	7.9	-1.5	0.0	-5.0	6.0	9.3	5.9	10.3	1041.2	1	1	0	0	205	0.6	0.9	190	6	1234	200	3	12	0.0	
11	7.1	-2.4	tr	-5.7	5.5	9.2	5.1	14.8	1040.9	1	1	0	0	215	0.4	0.6	190	3	0925	190	1	09	0.0	
12	8.2	-1.4	tr	-5.2	5.0	9.1	3.1	4.7	1038.8	1	1	0	0	27	4.7	5.2	30	22	0956	30	10	10	0.0	
13	7.0	3.5	0.0	-0.5	5.3	8.9	3.6	0.0	1041.2	0	1	0	0	331	3.1	3.8	320	13	1758	340	6	14	0.0	
14	8.8	3.5	tr	1.0	5.6	8.8	0.3	0.0	1033.1	0	0	0	0	322	2.3	3.1	360	12	1309	360	6	12	0.0	
15	10.8	6.2	0.0	3.3	6.1	8.7	2.9	0.0	1026.5	0	0	0	0	264	5.1	5.3	250	18	2349	250	9	23	0.0	
16	12.2	7.3	tr	2.6	6.5	8.6	3.3	0.0	1011.8	0	0	0	0	294	8.6	10.1	340	33	1411	270	14	05	0.0	
17	4.2	-1.3	0.0	-5.3	6.5	8.6	7.2	10.2	1021.7	1	1	0	0	314	4.6	4.9	340	23	1225	340	11	12	0.0	
18	8.0	-6.0	0.3	-10.2	5.4	8.6	5.0	11.1	1025.3	1	1	0	0	215	4.4	4.6	210	19	2059	210	9	22	0.6	
19	9.4	-4.6	0.0	-3.8	4.9	8.5	7.0	4.3	1023.1	1	1	0	0	262	2.8	3.6	240	16	0004	230	8	00	0.0	
20	7.9	-3.3	tr	-7.5	4.6	8.4	1.9	7.8	1030.7	1	1	0	0	208	2.9	3.0	190	12	0858	230	5	13	0.0	
21	8.8	1.2	0.0	3.9	4.9	8.2	1.0	0.0	1031.6	0	0	0	0	229	5.1	5.1	250	16	2231	230	8	22	0.0	
22	10.7	3.0	0.0	-1.6	5.6	8.1	2.0	0.0	1031.8	0	1	0	0	232	6.0	6.1	210	17	1835	230	8	21	0.0	
23	9.4	4.3	0.0	6.0	6.0	8.1	0.0	0.0	1027.8	0	0	0	0	231	5.6	5.6	230	15	0001	240	8	11	0.0	
24	11.3	2.1	tr	-2.7	6.2	8.1	5.5	0.0	1026.6	0	1	0	0	244	1.8	2.9	270	9	1259	250	4	12	0.0	
25	6.6	-0.6	tr	-4.4	6.0	8.1	4.9	6.7	1028.0	1	1	0	0	10	1.9	2.5	20	17	1210	30	8	12	0.0	
26	5.5	-2.2	0.5	-7.5	5.5	8.1	0.3	0.0	1022.1	1	1	0	0	357	4.2	4.4	30	18	1531	10	7	15	0.4	
27	2.4	-1.9	0.1	-6.8	5.2	8.1	3.2	9.4	1016.0	1	1	1	0	10	5.6	5.7	20	19	1211	20	9	11	xx	
28	1.3	-3.3	0.0	-8.8	4.6	8.0	6.7	19.4	1017.5	1	1	1	0	358	3.7	3.8	360	12	1308	360	6	12	0.0	
29	2.9	-2.4	4.0	-8.0	4.1	8.0	0.1	20.2	1018.0	1	1	1	0	39	0.1	2.7	340	9	0237	150	4	23	3.2	
30	9.8	-1.6	10.6	-3.6	4.0	7.8	0.0	0.0	1000.7	1	1	0	0	198	6.2	7.4	160	26	0914	250	11	18	8.0	
31	8.7	2.3	0.7	2.4	4.5	7.6	2.3	0.0	994.5	0	0	0	0	230	6.9	7.1	240	22	1342	240	10	13	1.0	
Total			54.6				88.3	134.5															40.0	
Mean	7.8	0.5		-2.5	5.8	8.8	2.85	4.3	1018.4					245	1.8	4.7								
Anom	-0.5	-2.0	85%		-0.8	-0.2	168%		+3.3															
Daily mean		4.2							Pressure, abs highest =					1041.7										on 12
Anom		-1.2							Pressure, abs lowest =					975.1										on 2

Number of days with:

Air frost = 17 Ground frost = 21 Nil sun = 3
Snow falling = 3 Snow lying = 1 Thunder = 0
Hail=>5mm = 0 Hail<5mm or ice = 1 Fog at 09GMT = 3

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 DECEMBER 2005

Date	VV	N	dd	ff	gg	TT	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Ch	NCh	shs	NCh	shs	NCh	shs	Date	Remarks
1	60	8	16	06	15	9.2	8.0	92	6.8	999.1	7	018	50	5	2	8	5	3	/	/	82709	87712	88618			1		
2	70	6	15	04	24	7.1	6.4	96	6.2	979.6	0	005	80	8	6	2	9	4	6	3	82915	85070			2	1Cu20 1Sc40 1Ac62 vv60k ex p		
3	65	7	21	08	16	8.0	5.8	86	5.9	984.1	2	016	25	8	2	6	8	4	/	2	81815	85625	85070		3	2Sc45 COTRA Cu fra jpNW		
4	84	7	25	01	06	4.0	3.5	97	5.0	990.9	2	001	03	1	1	5	5	6	3	2	81630	84645			4	1Ac64 3Ci72		
5	75	6	23	06	11	5.3	3.4	87	4.9	997.8	2	012	02	2	2	2	5	6	7	1	82645	84357			5	3Ci72 COTRA		
6	60	7	20	02	04	2.3	2.0	98	4.4	1004.9	3	019	10	1	1	7	5	4	/	1	84710	87638			6	/Ci75		
7	35	2	18	02	04	-0.7	-1.4	95	3.4	1017.0	0	009	10	0	0	0	0	9	0	2	82075				7	COTRA Hoar thk Gnd sfc frzn lcy patches		
8	50	8	02	08	19	6.7	6.0	96	5.8	1011.4	2	060	50	5	2	8	7	2	/	/	86705	88708			8			
9	02	9	04	02	04	0.5	0.5	100	3.8	1036.5	1	020	43	4	4	9	/	/	/	/					9			
10	15	7	32	01	02	-1.0	-1.1	99	3.4	1041.2	3	007	10	2	2	0	0	9	0	1	81070	87075			10	COTRA Hoar mod Gnd sfc frzn		
11	01	0	20	01	03	-1.1	-1.2	99	3.4	1040.9	1	002	48	4	4	0	0	9	0	0					11	vv150 Rime ice Gnd sfc frzn		
12	65	7	03	08	15	7.1	5.5	90	5.5	1038.8	2	018	02	2	2	7	5	4	/	1	81715	87635			12	/Ci75 Extensive smoke pall 3500		
13	80	7	35	03	07	5.2	3.3	87	4.7	1041.2	0	001	02	2	2	7	5	6	/	1	87633				13	/Ci75		
14	57	6	34	02	05	7.0	6.1	94	5.7	1033.1	3	003	05	2	2	6	5	4	/	1	81715	86645			14	/Ci75 COTRA		
15	82	7	28	05	11	8.8	5.7	81	5.6	1026.5	5	006	01	2	2	7	5	5	/	1	81622	86625	87072		15	COTRA		
16	82	7	27	10	19	10.7	7.8	82	6.6	1011.8	5	006	15	2	2	7	8	4	/	1	81818	83622	87635		16	1Ac68 jp N vv60k ex p Rainbow		
17	86	6	31	06	11	-0.1	-2.8	82	3.1	1021.7	3	014	02	1	1	1	8	6	0	1	81840	86078			17	1Sc40 COTRA Hoar slt Gnd sfc frzn		
18	81	6	20	03	06	-4.6	-5.5	93	2.5	1025.3	1	004	02	1	1	0	0	9	0	1	81072	86080			18	COTRA Hoar mod Gnd sfc frzn		
19	80	1	27	04	07	3.7	3.0	95	4.6	1023.1	2	028	02	0	0	0	0	9	0	1	81075				19	Hoar slt		
20	65	7	18	06	11	1.2	0.7	96	3.9	1030.7	0	007	02	2	2	7	5	6	/	1	87640				20	/Ci78 COTRA Hoar slt Gnd sfc frzn		
21	08	8	23	05	11	7.4	7.2	99	6.2	1031.6	1	008	46	4	2	8	6	1	/	/	85702	88703			21			
22	60	7	21	04	07	4.3	4.1	98	5.0	1031.8	2	002	10	1	1	3	5	6	0	1	81645	83650	86075		22	COTRA		
23	81	7	23	07	13	8.5	4.4	75	5.1	1027.8	3	002	02	2	2	7	5	6	/	/	81638	87645			23			
24	56	7	20	04	06	6.0	5.3	95	5.5	1026.6	1	006	14	2	2	7	5	7	/	/	82650	87656			24	Sc str un vir		
25	28	7	36	01	02	2.6	2.4	98	4.5	1028.0	3	011	21	6	4	7	6	2	/	/	83703	87705	86625		25			
26	59	7	32	04	09	3.0	1.7	91	4.3	1022.1	4	012	60	6	2	7	5	4	/	/	81710	83625	87630		26			
27	80	1	36	07	12	0.2	-0.9	92	3.5	1016.0	5	001	03	0	0	1	6	4	3	0	81710				27	1Sc50 1Ac58 Hoar thk lcy patches Gnd sfc frzn		
28	61	1	36	04	11	-2.4	-3.0	95	3.0	1017.5	1	007	02	7	1	1	5	6	0	0	81645				28	Sn lnyg 95% <0.5cm Hoar mod. Gnd sfc frzn		
29	58	8	36	02	07	-1.4	-3.1	88	2.9	1018.0	0	002	05	2	2	8	6	4	/	/	88710				29	Sn ly <10%<0.5 Gnd sfc frzn.		
30	56	8	16	11	24	2.3	1.8	96	4.4	1000.7	7	045	61	6	6	7	7	3	2	/	83707	87710	88525		30			
31	77	7	24	09	18	7.0	4.7	85	5.4	994.5	2	013	02	2	2	3	8	5	7	2	83820	85070			31	1Sc35 2Ac65 Cu hum		

Mean vis = 18.0 km

Mean cloud = 6.1 76%

Mean wind speed = 4.7 kn

Mean gust = 10 kn

Mean TT = 3.8 C

Mean Td = 2.6 C

Mean RH = 92.2 %

Mean r = 4.7 g/kg

Mean PPP = 1018.4 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

Td = 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 DECEMBER 2005

Date	VV	N	dd	ff	gg	TT	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Ch	shs	NCh	shs	NCh	shs	Date	Remarks
1	70	8	16	13	28	9.6	7.5	87	6.6	992.4	7	039	02	6	2	7	5	4	2	/	81712	87615	88460		1		
2	70	7	14	10	26	9.2	6.2	81	6.1	976.9	8	026	80	8	1	5	9	4	/	3	82918	83640	87070		2	1Cu20	
3	86	5	24	10	21	8.4	4.8	78	5.5	986.1	3	016	01	8	2	3	8	5	3	1	81825	83645			3	2Ac62 2Ci75 COTRA Cu hum	
4	86	1	27	06	12	9.2	4.0	70	5.2	991.1	3	005	01	1	1	1	8	5	0	1	81825				4	1Sc45 1Ci75	
5	84	7	26	06	12	8.3	5.1	80	5.5	999.1	3	004	02	8	2	6	8	5	7	/	82820	85645	85359		5	Cu hum/fra	
6	56	7	32	02	12	6.3	4.3	87	5.2	1008.0	2	017	05	2	2	6	5	4	/	/	86712	87640			6		
7	62	7	16	03	05	5.5	3.1	84	4.7	1014.7	7	024	03	1	1	7	0	9	7	8	86466	87272			7	1Ac68	
8	65	2	02	04	11	7.3	5.0	86	5.4	1021.0	1	042	01	1	1	2	8	5	0	0	82820				8	Absent vv&cld est	
9	06	7	01	02	04	3.9	3.9	100	4.9	1038.2	3	007	41	4	1	0	0	9	0	1	87078				9	vv2500S, 600N	
10	59	2	26	02	06	7.5	4.3	80	5.0	1040.6	6	007	05	0	0	1	5	3	1		81620				10	1Ac68 2Ci80 COTRA	
11	15	0	19	01	01	2.2	1.9	98	4.3	1038.1	6	017	10	0	0	0	0	9	0	0						11	Absent. vv&cld est Elevated thick smoke lyr
12	80	3	02	06	15	6.9	3.4	78	4.7	1039.8	3	003	03	0	0	3	8	5	0	0	81825	83635			12	Cu hum EI smoke lyr NW.	
13	80	7	33	04	13	5.9	1.8	75	4.2	1039.4	6	016	03	1	1	7	8	5	/	1	82825	87630	85075		13	Cu hum	
14	75	7	36	05	12	7.7	5.4	85	5.4	1033.2	5	003	25	8	2	7	8	5	/	/	82825	83635	87645		14		
15	77	7	28	05	12	10.3	5.8	73	5.7	1023.9	6	015	02	2	2	2	5	5	0	1	82625	87075			15	COTRA	
16	78	7	33	07	33	9.7	1.5	57	4.2	1014.5	2	015	02	2	2	2	8	6	0	1	82838	87072			16	1Sc45 Cu hum	
17	88	7	33	07	19	3.7	-6.9	46	2.2	1023.0	2	008	02	2	2	0	0	9	0	1	87078				17	COTRA Absent vv&cld est	
18	82	7	20	05	11	3.5	-2.7	64	3.1	1022.1	7	022	03	2	2	7	5	6	0	1	87635				18	/Ci75	
19	77	3	29	03	13	8.4	4.0	74	5.0	1025.8	3	011	03	0	0	1	1	5	0	1	81820	83080			19	Cu fra	
20	70	7	22	03	10	7.2	2.1	70	4.3	1030.1	5	007	02	6	2	7	5	6	/	1	82640	87648			20	/Ci75 COTRA	
21	68	8	24	06	11	8.6	6.4	86	5.9	1031.0	5	008	02	2	2	8	5	6	/	/	82645	88650			21		
22	80	7	24	07	13	9.3	5.3	76	5.5	1030.2	6	013	03	2	2	7	8	5	3	2	81820	87645	86075		22	/Ac65 COTRA	
23	75	7	24	07	12	9.2	4.6	73	5.2	1026.7	7	005	02	2	2	7	5	6	/	/	87645				23		
24	70	3	28	03	09	10.4	6.3	76	5.9	1025.4	5	009	03	0	0	1	5	7	0	2	81656	83075			24	COTRA	
25	84	2	04	05	13	6.0	-1.2	60	3.4	1026.8	5	008	01	0	0	2	8	6	0	0	81832				25	1Sc38	
26	62	6	01	05	13	5.4	2.0	79	4.4	1018.3	7	020	15	6	2	6	8	4	0	0	82815	85635			26	jp W to N vv30k ex p	
27	84	5	02	07	14	1.6	-1.9	78	3.3	1014.7	6	005	01	2	2	5	8	4	0	1	85818				27	1Sc28 1Ci70 Cu hum	
28	63	1	01	05	13	0.8	-2.9	76	3.0	1017.8	3	002	02	0	0	1	8	4	0	0	81818						1Sc45 Cu fra Sn ly <10%<0.5 in shade
29	60	7	10	03	06	-0.7	-2.9	85	3.1	1015.6	7	019	01	2	2	1	5	6	7	1	81640	85365	85075		29	2As63 COTRA Gnd sfc frzn	
30	57	8	21	04	10	6.6	6.4	98	6.1	993.2	6	023	63	6	6	7	7	2	2	/	83705	87707	88515		30		
31	84	5	23	10	17	7.1	3.8	80	5.1	993.7	6	009	01	8	2	2	8	5	6	3	82825	84072			31	1Sc45 1Ac62 Cu hum/fra	

Mean vis = 27.0 km
 Mean cloud = 5.4 67%
 Mean wind speed = 5.4 kn
 Mean gust = 13 kn
 Mean TT = 6.6 C
 Mean TdTd = 2.9 C
 Mean RH = 78.1 %
 Mean r = 4.8 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
 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
 December 2005

Date	Mean			Max			Min			Mean			Max			Min			Missing RH	Number of minutes RH in given ranges								
	TT	TT	Time	TT	Time	RH	RH	Time	RH	Time	RH	Time	RH	Time	RH	Time	RH	N >0		0-20	20-40	40-60	60-80	80-90	90-95	95-98	98-100	
01	8.7	9.7	15:19	7.2	23:59	93.7	96.8	03:01	85.2	15:19								0	0	0	0	191	674	575	0			
02	8.1	10.3	13:06	7.1	08:44	89.9	97.0	05:33	72.4	13:08								0	0	0	186	362	416	476	0			
03	7.9	9.9	11:57	6.6	05:24	85.0	94.6	23:58	66.5	11:58								0	0	0	216	1090	134	0	0			
04	6.4	10.4	13:44	3.0	07:05	88.9	97.1	07:38	67.0	14:16								0	0	0	254	343	388	455	0			
05	6.5	8.6	13:41	4.0	23:55	84.6	91.8	00:51	78.1	14:03								0	0	0	135	1237	68	0	0			
06	3.9	6.5	15:11	0.5	05:40	93.3	96.0	07:00	87.2	14:55								0	0	0	0	142	1074	224	0			
07	3.4	7.4	19:57	-1.1	06:49	92.1	99.2	07:19	81.9	13:52	85							0	0	0	0	490	161	585	119			
08	5.1	7.4	14:56	0.1	23:30	95.0	98.0	07:43	85.4	14:56								0	0	0	0	179	198	1063	0			
09	1.3	4.7	14:05	-0.7	01:10	99.6	100.0	14:05	96.0	00:18	114							0	0	0	0	0	0	61	1265			
10	2.2	7.9	14:10	-0.9	08:33	96.1	100.0	10:07	78.3	14:22	114							0	0	0	39	134	91	414	648			
11	0.8	4.3	15:40	-1.9	06:00	98.6	100.0	06:00	95.2	21:15	90							0	0	0	0	0	0	471	879			
12	4.5	8.2	13:21	-0.5	02:59	90.6	99.3	07:07	67.9	14:16	88							0	0	0	216	235	238	398	265			
13	5.3	6.8	12:06	3.8	21:55	82.7	96.0	00:03	66.7	12:12								0	0	0	574	483	264	119	0			
14	6.9	8.9	12:58	4.3	00:00	85.1	93.2	08:03	73.4	21:51								0	0	0	341	822	277	0	0			
15	8.8	10.8	14:00	6.9	00:00	78.6	85.8	19:35	69.0	13:59								0	0	0	908	532	0	0	0			
16	8.8	12.2	10:25	3.1	23:44	68.8	83.0	01:37	48.7	13:44								0	0	475	620	345	0	0	0			
17	1.5	4.2	13:36	-1.5	21:29	63.6	78.1	07:42	42.6	12:26								0	0	468	972	0	0	0	0			
18	1.2	7.6	23:59	-4.6	07:09	79.8	95.9	07:28	59.3	12:56	27							0	0	17	600	477	232	87	0			
19	5.1	9.2	13:27	0.0	22:42	88.5	97.9	23:56	69.7	14:01								0	0	0	297	181	774	188	0			
20	3.5	7.9	14:12	-2.2	03:30	85.5	98.6	03:19	62.9	14:15	34							0	0	0	534	306	74	409	83			
21	8.0	9.2	11:43	6.6	00:25	90.7	98.4	08:55	83.3	14:09								0	0	0	0	815	282	287	56			
22	7.7	10.9	12:48	4.0	08:07	84.3	97.9	08:18	67.1	12:57								0	0	0	536	559	84	261	0			
23	8.4	9.5	13:07	5.3	23:44	78.4	93.0	23:51	72.4	11:16								0	0	0	970	378	92	0	0			
24	6.8	11.4	12:57	2.5	23:47	90.1	97.5	22:55	73.4	13:01								0	0	0	196	290	716	238	0			
25	2.6	6.6	13:44	-0.8	20:23	89.6	100.0	09:36	55.6	13:52								0	0	84	177	261	209	112	597			
26	2.8	5.5	14:50	-0.1	23:57	86.2	94.6	22:35	71.9	02:34								0	0	0	377	347	716	0	0			
27	0.3	2.4	12:11	-1.6	05:22	87.9	95.4	06:18	77.2	14:49	40							0	0	0	146	616	626	12	0			
28	-0.9	1.3	14:16	-3.1	05:22	87.9	94.6	09:17	74.9	14:35								0	0	0	74	835	531	0	0			
29	-0.6	0.8	23:59	-1.7	09:53	86.3	88.3	10:17	80.7	23:59								0	0	0	0	1440	0	0	0			
30	5.0	9.9	17:41	0.8	00:00	90.7	99.2	17:05	68.9	02:09								0	0	0	157	457	243	414	169			
31	6.2	8.7	13:25	4.0	20:18	86.7	96.0	04:59	73.5	13:45								0	0	0	173	974	228	65	0			
Mean	4.7	7.7		1.6		87.1	95.3		72.6									0.00	0.00	0.56	4.68	7.81	4.73	3.72	2.19			
Hi	8.8	12.2		7.2		99.6	100.0		96.0	Tot	592							0	0	1044	8698	14521	8790	6914	4081			
Lo	-0.9	0.8		-4.6		63.6	78.1		42.6																			

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.