WOKINGHAM METEOROLOGICAL DATA

Wokingham Climatological Station, Emmbrook, Berkshire.

Lat/Long 51°25′N 00°51′W NGR (SU)798701 Altitude 46m ASL.

Monthly Means and Totals — DECEMBER 2006

Temperature (°C / °F)			Anomaly	Rank in past **125** years			
Mean maximum	9.6	49.3	+1.3	12th highest			
Mean minimum	4.5	40.1	+2.0	6th highest			
Daily mean	7.0	44.6	+1.6	10th highest			
Highest maximum	14.4	57.9	on 4th	Lowest maximum	0.4	32.7	on 21st
Highest minimum	11.6	52.9	on 14th	Lowest minimum	-2.1	28.2	on 2nd
Mean grass minimum	3.0	37.4		Lowest grass minimum	-6.5	20.3	pn 10th
Mean earth @30 cm	8.1	46.6	+1.5	Earth @100 cm	10.7	51.3	-1.7
Frost duration (hrs)	71.4			Rain duration (hrs)	55.0		
Rainfall total (mm / in)	73.9	2.91	114 %	37th highest			
Highest daily fall	16.6	0.65	on 29th				

Number of: Dry days (<0.2mm)	12	Wet days (>0.9mm)	12	days ≥5mm	7			
Sunshine total (hrs)	57.7	Daily mean	1.86	Sunniest day	7.1	on 17th		
N° days with: Air frost	6	Ground frost	9	Snow falling	0	Snow lying	0	
Thunder	1	Hail ≥5mm	0	Small hail/ice	1	Fog @09	4	Nil sun 14

Air pressure MSL : Mean @09 GMT (mbar/in)	1019.8	+4.7	30.11	
Absolute highest	1045.3		30.87	on 22nd
Absolute lowest	983.0		29.03	on 8th

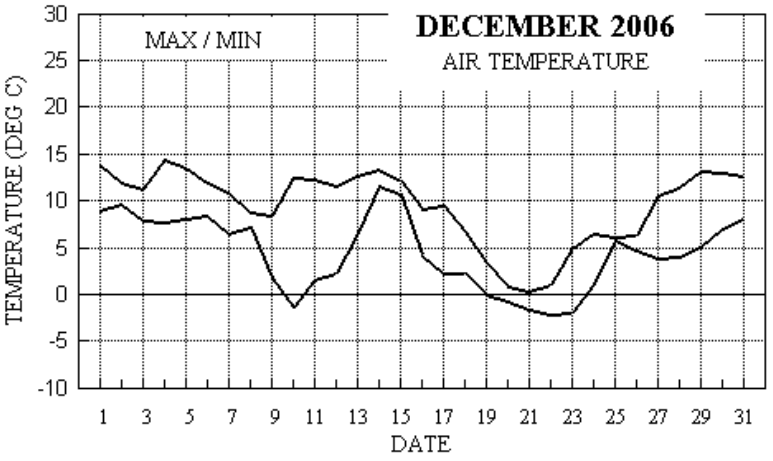
Anomaly = departure from 1971 to 2000 average (degrees C, percent and mbar).

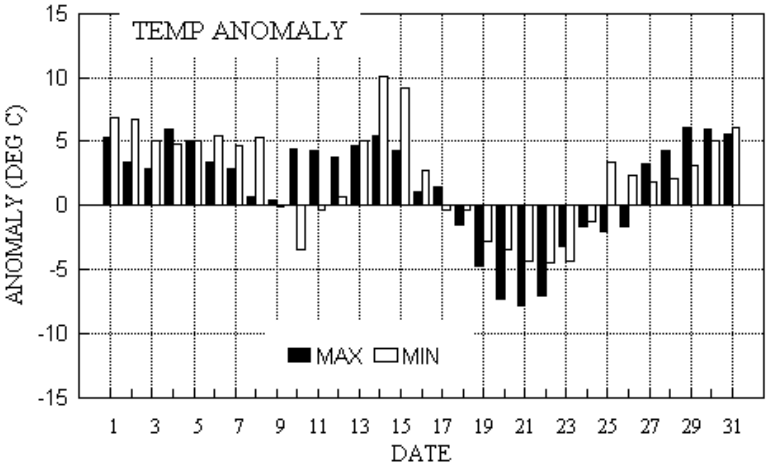
Notes: **Very Mild. Wet. Sunny.**

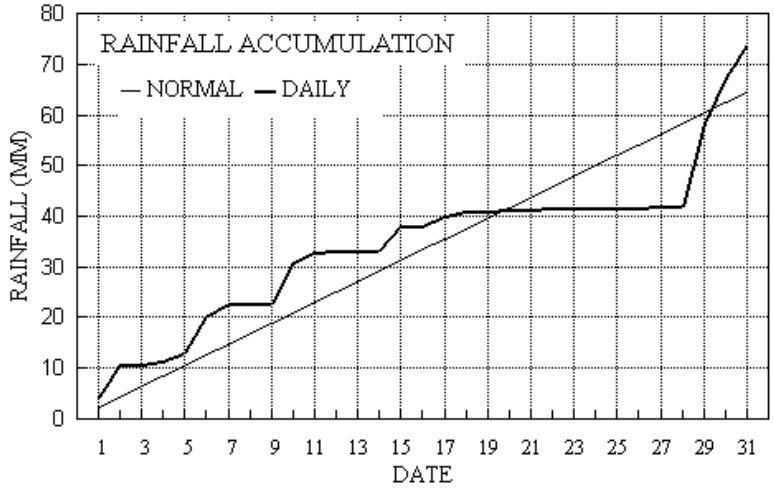
Temperature. Once more we can report a month in the very mild category, that is in the warmest 10% of Decembers since 1882, and this is the 9th consecutive month in the mild or very mild category. The mean temperature is highest since 1988, while the mean max is equal highest with 1998 since 1994, and the mean min is equal highest with 2002 since 1988. The highest max is 1.5° above the median and is highest since 1997, but the lowest max is an exception at 1.0° below the median, and lowest since 1996. The highest min is 2.3° above the median and is highest since 2000, while the lowest min is 3.1° above the median and highest since 1988. Earth temperatures at both 30 cm and 1m depth are well above normal. The number of days with ground frost is 7 fewer than average. **Rainfall.** This is the wettest December since 2002, and while in the wet category, would not have been so had there been 0.7 mm less. Although there was plenty of rain in the first half of the month, the accumulated surplus over normal was only 10 mm by the 11th, and the period 18th to 28th was essentially dry, with just small amounts from fog and drizzle preventing the dry spell criteria being met. Wetter conditions set in again on the 29th. Rainfall rates reached 85 mm/hr during a thunderstorm on the 7th, and a phenomenal 227 mm/hr was recorded at 1546 GMT on the 30th during the passage of what may have been a tornadic storm. The duration of measurable rain is slightly below normal. **Sunshine.** Despite there being 8 sunless days between the 18th and 27th, the sun only being seen for 1.4 hours in that 10 days, the total for the month is nearly 10 % above normal. Overall there were 22 days with <3 hours and just 3 with =>6 hours. **Wind.** The mean wind speed of 8.5 mph is 1.1 mph above average and highest since 1999. The 7th was the windiest day, mean 15.7 mph, and the month's highest gust of 51 mph was also on that day. The 19th was the least windy day, 1.7 mph, and there were 414 minutes (6.9 hours) with a mean speed of 0.5 mph or less. Daily mean direction/number of days : N,2 NE,3 E,2 SE,0 S,2 SW,17 W,4 NW,1. **Humidity.** The mean relative humidity was 87.5 % while the lowest value was 57 % on the 3rd. The mean water vapour content per kg of air was 5.5 g at 0900 GMT and 5.7 g at 1500 GMT. **Pressure.** The pressure of 1045.3 mbar on the 22nd is highest for December probably since 1970, although 1045.2 mbar was recorded in 1991. **Commentary. From the 1st to the 10th :** Mean anomalies (max, min, rain, sun), +3.4°, +4.0°, 149 %, 188 %. Generally mild throughout with anomalies for daily max ranging from +5.9 on the 4th, the month's mildest day, to +0.4° on the 9th. The range for daily min was +6.9° on the 1st to –3.4° on the 10th. Quite wet, just 2 dry days, and 4 with >5 mm. The sunniest period of the month, with 3 days having >66 % of the maximum, but 5 with <33 %. SW'ly winds were fresh of strong until the 7th, dropping light on the 9th, increasing fresh again on 10th. **From the 11th to the 20th :** Mean anomalies, +1.1°, +2.0°, 49 %, 106 %. Mild at first but colder after the 18th. Daily anomalies for max ranged from +5.4° on the 14th to –7.3° on the 20th. For min, these were +10.0° on the 14th, the month's mildest night, to –3.5° on the 20th. This was the driest period with 5 dry days and a total of 10.2 mm. Apart from 2 sunny days, including 90 % of the max on 17th, the month's sunniest day, it was otherwise dull, and 6 days had nil sun. Fresh or strong SW'ly winds became light and variable after the 17th. **From the 21st to the 31st :** Mean anomalies +0.2°, +0.9°, 143 %, 41 %. Cold at first, but turning milder again after the 26th. Daily anomalies for max ranged from –7.8° on the 21st , the month's coldest day, to +6.1° on the 29th. For min, anomalies ranged from –4.5° on 22nd, the month's coldest night, to +6.1° on the 31st. Mainly dry at first, but wet after the 28th, with 16.6 mm on the 29th, the month's wettest day, and a further 15.5 mm over the last two days. A period of 88.3 hours of continuous fog, sometimes freezing, ended on the 23rd, and produced 0.6 mm of water in the gauge. Sunshine was meagre, 7 days with nil, and the 28th the only exception, though still with only 57 % of the max. Light and variable, mainly E'ly winds picked up to moderate S'ly on 27th, becoming strong SW'ly for the last 3 days.

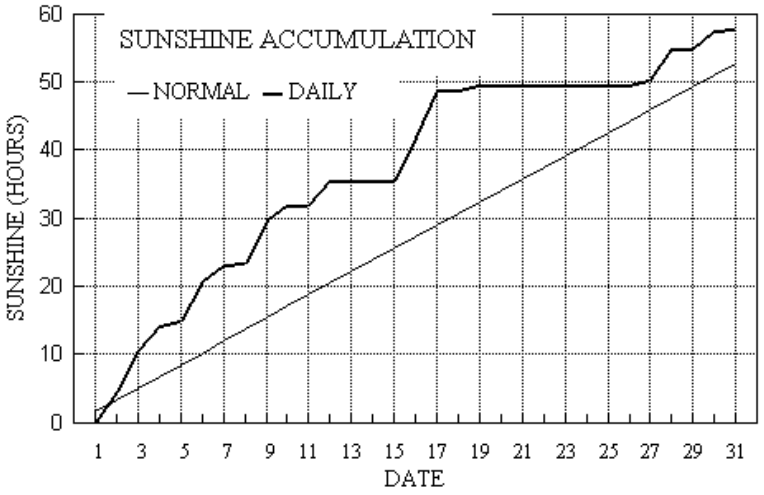
B J Burton. FRMetS. Hon. Met. Officer to Wokingham Town Council.

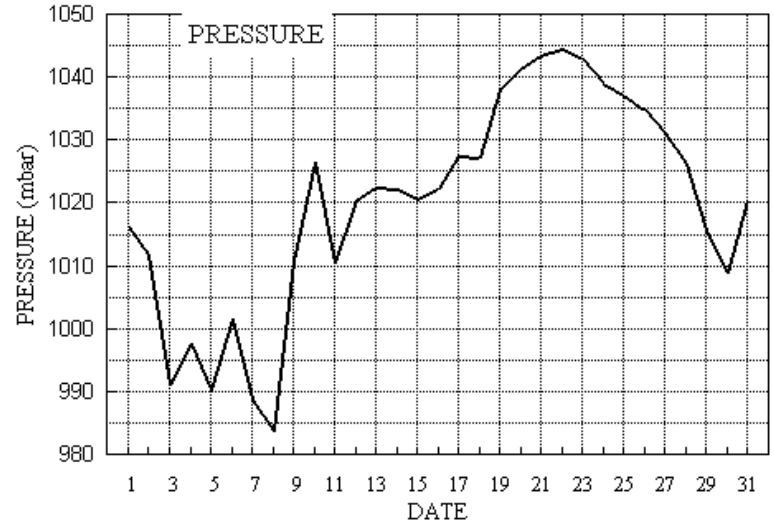
Wokingham Climatological Graphs December 2006

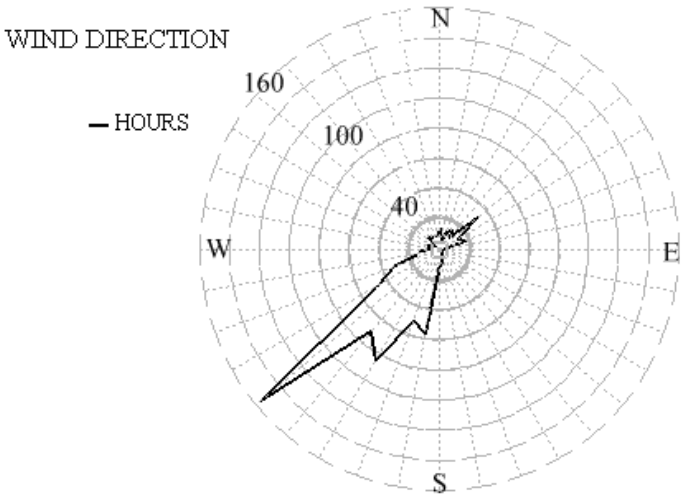


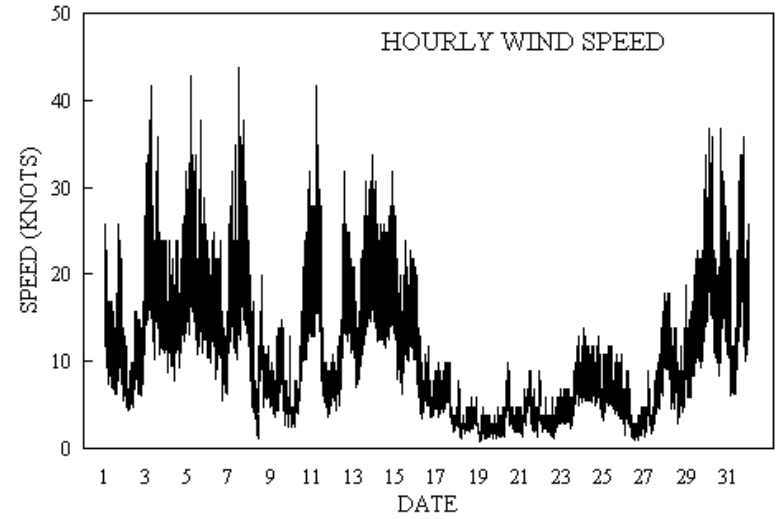


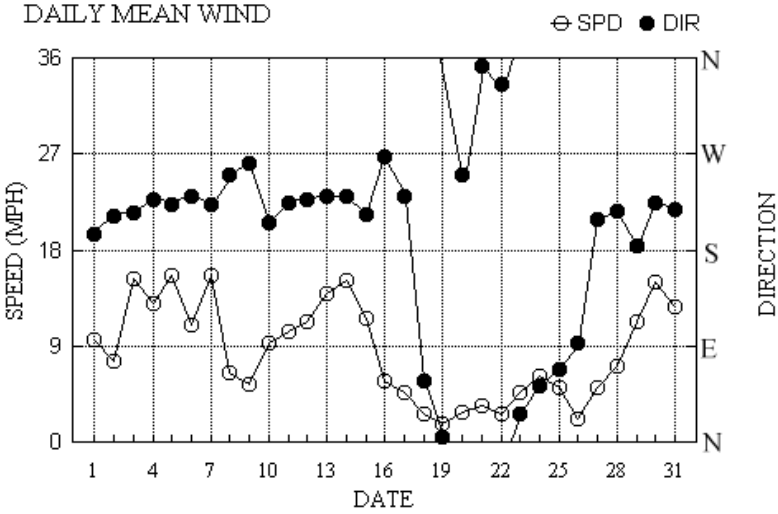












Daily meteorological data. Emmbrook, WOKINGHAM, Berkshire.

Month: DECEMBER 2006

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	13.9	8.9	4.2	7.6	9.3	11.5	0.0	0.0	1016.2	0 0	0 0	0 0	0 0	195	8.2	8.3	190	26	1614	190	13	00	3.6
2	11.9	9.7	6.3	8.3	10.0	11.5	4.6	0.0	1011.8	0 0	0 0	0 0	0 0	212	6.4	6.6	200	27	2329	200	13	23	3.9
3	11.3	8.0	0.3	5.1	9.7	11.5	5.9	0.0	991.1	0 0	0 0	0 0	0 0	215	12.7	13.4	190	42	0600	190	19	04	0.3
4	14.4	7.8	0.5	4.3	9.2	11.5	3.7	0.0	997.6	0 0	0 0	0 0	0 0	228	11.2	11.3	230	32	2215	230	16	22	1.1
5	13.6	8.1	1.7	11.0	9.8	11.5	0.6	0.0	990.4	0 0	0 0	0 0	0 0	222	13.4	13.5	220	43	0440	210	17	07	0.2
6	11.9	8.4	7.2	5.2	9.7	11.5	5.8	0.0	1001.6	0 0	0 0	0 0	0 0	230	9.1	9.5	250	23	0758	250	12	07	5.5
7	11.0	6.6	2.6	3.3	9.3	11.5	2.6	0.0	988.7	0 0	0 0	1 0	1 0	222	13.2	13.6	250	44	1020	230	17	13	1.1
8	8.8	7.2	tr	5.0	9.1	11.5	0.3	0.0	983.7	0 0	0 0	0 0	0 0	251	4.5	5.6	300	20	1403	300	10	13	0.0
9	8.5	1.8	0.0	-3.2	8.5	11.4	6.1	0.2	1010.8	0 1	0 0	0 0	0 0	261	4.2	4.7	290	15	1340	290	8	12	0.0
10	12.5	-1.5	8.2	-6.5	7.4	11.3	2.3	7.4	1026.4	1 1	0 0	0 0	0 0	205	8.0	8.0	210	32	2043	210	14	21	8.9
11	12.3	1.5	1.8	8.2	7.9	11.1	0.0	0.0	1010.4	0 0	0 0	0 0	0 0	224	8.8	9.0	220	42	0428	220	16	04	2.4
12	11.7	2.3	0.3	-1.1	8.1	10.9	3.6	0.0	1020.4	0 1	0 0	0 0	0 0	227	9.7	9.8	230	32	1314	230	15	13	0.1
13	12.7	6.6	0.0	8.4	8.2	10.8	0.0	0.0	1022.4	0 0	0 0	0 0	0 0	230	12.0	12.0	230	34	2148	230	16	21	0.0
14	13.4	11.6	0.0	9.9	8.8	10.7	0.0	0.0	1022.2	0 0	0 0	0 0	0 0	230	13.2	13.2	230	32	1947	230	15	20	0.0
15	12.2	10.8	5.0	8.6	9.3	10.8	0.0	0.0	1020.7	0 0	0 0	0 0	0 0	213	10.0	10.1	210	24	1157	230	13	00	5.3
16	9.1	4.3	0.0	1.0	9.5	10.8	6.2	0.0	1022.3	0 0	0 0	0 0	0 0	268	3.6	4.9	210	20	0007	280	11	00	0.0
17	9.6	2.3	2.0	-2.5	8.3	10.9	7.1	0.0	1027.3	0 1	0 0	0 0	0 0	230	3.7	4.0	250	10	1235	250	6	12	3.2
18	6.7	2.3	0.8	-2.8	7.6	10.9	0.0	0.0	1027.1	0 1	0 0	0 0	0 0	57	1.6	2.3	150	8	0013	180	3	01	2.4
19	3.4	-0.1	0.2	-4.5	7.4	10.7	0.7	0.9	1038.0	1 1	0 0	0 0	0 1	4	1.1	1.5	10	5	0413	360	2	22	0.0
20	0.9	-0.8	0.1	-0.4	7.3	10.6	0.0	15.2	1041.2	1 1	0 0	0 0	0 1	250	2.2	2.5	280	10	1049	280	6	10	0.0
21	0.4	-1.6	0.1	-1.9	6.8	10.4	0.0	22.7	1043.5	1 1	0 0	0 0	0 1	353	2.5	3.0	340	9	2243	360	5	10	0.0
22	1.1	-2.1	0.2	-2.0	6.5	10.2	0.0	19.6	1044.5	1 1	0 0	0 0	0 1	335	1.4	2.3	30	7	2315	340	4	05	0.0
23	4.9	-2.0	0.0	0.0	6.3	10.1	0.0	5.4	1042.9	1 0	0 0	0 0	0 0	27	3.7	4.1	50	13	1937	40	7	18	0.0
24	6.5	1.1	0.0	4.1	6.5	9.9	0.0	0.0	1038.9	0 0	0 0	0 0	0 0	52	5.4	5.4	50	14	0118	50	7	13	0.0
25	6.1	5.8	0.0	5.4	6.8	9.8	0.0	0.0	1037.0	0 0	0 0	0 0	0 0	68	4.4	4.5	90	12	0938	70	6	06	0.0
26	6.4	4.7	0.2	4.1	6.9	9.7	0.0	0.0	1034.8	0 0	0 0	0 0	0 0	92	0.4	1.9	60	9	0213	50	4	03	0.5
27	10.5	3.8	0.1	3.4	7.0	9.7	0.7	0.0	1031.1	0 0	0 0	0 0	0 0	209	3.8	4.4	220	18	2237	210	10	23	0.2
28	11.4	4.1	tr	1.9	7.1	9.6	4.5	0.0	1026.2	0 0	0 0	0 0	0 0	217	5.9	6.2	180	19	2343	230	10	01	0.0
29	13.3	5.1	16.6	2.7	7.5	9.6	0.0	0.0	1015.6	0 0	0 0	0 0	0 0	184	9.6	9.8	190	34	2113	200	16	21	10.0
30	13.1	7.1	9.0	7.6	8.1	9.7	2.9	0.0	1008.9	0 0	0 0	0 0	0 0	224	12.5	13.1	250	37	1547	210	19	01	3.0
31	12.7	8.1	6.5	4.1	8.2	9.7	0.1	0.0	1020.5	0 0	0 0	0 0	0 0	218	10.7	11.0	210	36	1730	210	17	15	3.3
Total			73.9				57.7	71.4															55.0
Mean	9.6	4.5		3.0	8.1	10.7	1.86	2.3	1019.8					222	5.5	7.4							
Anom	+1.3	+2.0	114%		+1.5	+1.7	109%		+4.7														

Daily mean 7.0 Pressure, abs highest = 1045.3 on 22

Anom +1.6 Pressure, abs lowest = 983.0 on 8

Number of days with:

Air frost = 6 Ground frost = 9 Nil sun = 14

Snow falling = 0 Snow lying = 0 Thunder = 1

Hail=>5mm = 0 Hail<5mm or ice = 1 Fog at 09GMT = 4

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 2006

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cm	Ch	N	Chshs	N	Chshs	N	Chshs	Date	Remarks
1	56	8	19	07	16	11.7	11.1	96	8.2	1016.2	2	003	50	6	5	8	5	3	/	/	8	3706	8	7708	8	8612	1	
2	67	7	22	05	08	10.1	8.7	91	7.0	1011.8	3	003	01	2	2	4	0	9	7	8	8	2357	8	3460	7	2272	2	COTRA U/a contact
3	80	6	21	11	24	8.1	5.7	85	5.8	991.1	0	013	61	6	6	1	5	3	2	3	8	1708	8	6530			3	1Sc45 1Ci70 Cb topNW vv60k NW
4	84	1	24	08	16	8.4	5.0	79	5.5	997.6	2	023	02	8	1	1	8	6	3	0	8	1835					4	1Sc45 1Ac60 Cu hum
5	75	7	21	14	29	13.5	10.2	81	8.0	990.4	6	014	60	6	2	4	8	4	7	/	8	2818	8	3650	8	6358	5	/Ac65 Cu hum
6	82	1	25	09	26	9.0	3.7	69	5.0	1001.6	3	034	01	1	1	1	5	6	0	0	8	1635					6	
7	86	5	21	10	19	9.5	4.1	69	5.2	988.7	8	002	01	6	2	1	8	6	8	2	8	1830	8	4072			7	1Sc50 1Ac58 2As150
8	67	8	30	01	03	7.5	6.0	90	6.0	983.7	5	009	21	6	2	2	5	6	7	/	8	1630	8	3550	8	8460	8	2Sc45 1Ac58
9	88	1	26	05	08	3.8	1.8	87	4.3	1010.8	2	043	02	0	0	1	5	6	0	1	8	1645					9	1Ci80 COTRA Hoar slt
10	70	7	22	04	07	1.5	0.1	91	3.8	1026.4	2	004	03	1	1	1	0	9	4	1	8	1368	8	7077			10	Hoar mod. Gnd sfc frzn
11	45	8	22	13	24	12.2	11.3	94	8.4	1010.4	6	004	63	6	5	8	5	3	/	/	8	2707	8	7708	8	8612	11	
12	80	4	21	07	12	6.6	4.0	84	5.0	1020.4	0	000	03	0	0	0	0	9	0	4	8	2072	8	3080			12	COTRA
13	81	8	23	11	21	11.7	8.7	83	7.0	1022.4	2	013	02	2	2	1	8	4	7	8	8	1815	8	7463			13	1Sc40 /Ac65 /Cs75 Cu fra/hum
14	84	7	23	12	23	11.8	8.8	82	7.0	1022.2	1	012	02	2	2	7	5	4	/	2	8	2618	8	7628			14	/Ci72
15	75	7	21	08	16	10.9	7.6	80	6.4	1020.7	7	008	02	2	2	6	5	6	0	2	8	1630	8	6640	8	7077	15	1Cc72 COTRA
16	59	4	26	04	07	4.4	3.4	93	4.8	1022.3	2	026	10	1	1	1	6	3	7	2	8	1708	8	4070			16	1As66 1Ac68 Parhelion
17	70	2	24	04	09	3.9	2.7	92	4.5	1027.3	3	009	03	0	0	2	5	6	0	1	8	1645					17	2Sc56 1Ci80 COTRA Hoar slt
18	25	8	05	02	03	5.0	4.8	98	5.3	1027.1	1	007	61	6	6	7	5	2	2	/	8	1705	8	6630	8	8545	18	2Sc20
19	01	9	32	01	04	1.3	1.3	100	4.1	1038.0	2	016	45	4	4	9	/	/	/	/							19	vv 150m
20	01	9	26	04	07	-0.6	-0.7	99	3.5	1041.2	3	011	45	4	4	9	/	/	/	/							20	vv 180m. Ice on screen. No rime
21	02	9	36	04	07	-0.5	-0.6	100	3.5	1043.5	3	009	49	4	4	9	/	/	/	/							21	Rime slt. Glaze slt.vv220
22	02	9	24	02	03	-2.0	-2.3	98	3.1	1044.5	3	004	49	4	4	9	/	/	/	/							22	Rime slt. Glaze slt. vv220
23	20	8	35	03	06	1.1	0.8	98	3.9	1042.9	2	005	10	4	2	8	5	4	/	/	8	8618					23	Continuous fog ceased 0745z after 88.3 hrs
24	57	8	05	06	12	4.9	3.5	90	4.7	1038.9	3	007	05	2	2	8	6	4	/	/	8	8710					24	
25	58	8	07	05	10	6.0	4.4	89	5.0	1037.0	2	005	05	2	2	8	6	4	/	/	8	8710					25	
26	57	8	26	01	04	4.9	2.4	84	4.4	1034.8	3	002	05	2	2	8	5	4	/	/	8	8618					26	
27	38	8	17	02	05	4.2	2.5	88	4.4	1031.1	3	003	05	2	2	8	5	4	/	/	8	6615	8	8620			27	
28	56	7	22	05	11	9.4	8.4	93	6.8	1026.2	3	008	05	2	2	1	6	3	7	1	8	1708	8	7078			28	2Ac60 1Ac65 COTRA
29	60	7	16	09	17	7.4	4.9	84	5.4	1015.6	8	016	60	6	2	1	5	6	7	8	8	1645	8	6365			29	2Ac58 2Ac62 3As67 /Cs75
30	81	1	22	10	24	10.9	7.4	79	6.4	1008.9	1	043	02	1	1	1	0	9	3	1	8	1360					30	1Ci80 COTRA
31	58	7	20	07	14	9.6	7.9	89	6.6	1020.5	8	002	60	6	2	5	5	4	7	1	8	2712	8	3635	8	7358	31	2Sc25 /Ci75

Mean vis = 19.3 km
Mean cloud = 6.2 78%
Mean wind speed = 6.3 kn
Mean gust = 13 kn
Mean TT = 6.7 C
Mean TdTd = 4.8 C
Mean RH = 88.2 %
Mean r = 5.5 g/kg
Mean PPP = 1019.8 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 DECEMBER 2006

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cm	Ch	N	Chshs	N	Chshs	N	Chshs	Date	Remarks
1	57	8	20	09	16	12.9	12.1	95	8.7	1014.4	7	016	51	5	2	8	7	2	/	/	8	3705	8	7707	8	8710	1	
2	80	2	21	07	14	10.8	6.2	73	5.9	1010.5	7	011	01	1	1	1	8	5	0	2	8	1825					2	1Sc30 1Ci75 Cu fra Cu con S
3	80	1	23	13	27	9.3	3.5	67	5.0	993.8	2	009	02	0	0	1	8	6	0	3	8	1835					3	1Sc50 1Ci72 Absent vv&cld est
4	75	8	21	10	18	12.3	8.9	80	7.2	997.7	8	011	21	6	2	4	8	5	7	/	8	2825	8	3640	8	7358	4	8As62 Cu fra
5	72	5	22	14	31	11.5	6.6	72	6.2	990.6	0	000	01	8	2	1	9	5	6	1	8	1922	8	1825	8	4075	5	1Ac58 1Ac65 CbE
6	82	2	24	10	21	8.9	3.4	68	4.9	1005.2	2	015	01	8	1	2	8	6	0	0	8	1830					6	2Sc45 Cu hum
7	65	4	24	15	34	8.8	6.2	84	6.0	987.3	5	006	25	8	1	2	9	5	6	3	8	2925	8	3072			7	1Ac62 Absent vv,cld&wx est
8	86	7	30	08	18	7.9	4.0	77	5.2	989.4	2	040	02	2	2	1	8	5	0	8	8	1820	8	7275			8	1Sc45 COTRA Cu fra/hum U/a cont
9	86	4	29	07	16	7.5	3.0	73	4.7	1016.1	3	024	03	1	1	4	8	5	0	0	8	2825	8	3630			9	Absent vv&cld est
10	62	8	20	12	24	9.3	6.4	82	5.9	1022.0	6	023	60	6	2	3	8	4	7	/	8	1818	8	3630	8	5358	10	8As60
11	84	7	24	05	10	9.3	7.3	87	6.3	1013.8	2	014	02	6	5	1	8	4	7	/	8	1815	8	7465			11	1Sc50 2Ac62 Cu hum
12	75	7	24	13	25	10.7	5.9	72	5.7	1016.8	6	020	02	2	2	4	8	5	3	1	8	1825	8	4650	8	6075	12	2Sc56 1Ac62 COTRA Cu fra/hum
13	82	8	23	14	29	12.2	7.9	75	6.5	1020.6	6	008	02	2	2	4	8	5	7	8	8	2825	8	3635	8	6466	13	3Ac60 /Cs75
14	84	7	22	13	26	12.9	8.7	75	6.9	1021.3	5	004	02	2	2	7	5	5	/	1	8	6625	8	5630			14	/Ci75
15	75	8	21	09	18	11.4	8.7	84	6.9	1018.1	7	015	02	2	2	7	8	5	/	8	8	3820	8	3630	8	7645	15	Cu med
16	88	1	26	06	11	7.9	3.8	75	4.9	1023.9	3	003	02	0	0	1	8	5	0	0	8	1820					16	1Sc56 Cu fra
17	86	2	26	06	10	8.3	4.5	77	5.1	1026.8	5	004	02	0	0	1	8	5	0	1	8	1825					17	1Sc56 2Ci80 COTRA Cu fra/hum
18	40	7	04	02	03	6.6	6.2	97	5.8	1028.6	3	008	10	2	2	7	5	3	/	1	8	1708	8	7645			18	2Sc35 /Ci75
19	25	6	01	02	03	2.9	2.6	98	4.5	1038.2	5	002	40	4	2	1	6	1	0	8	8	1702	8	6275			19	1Sc20 1Sc45 vv4000SW Fog NW
20	02	6	23	02	05	0.5	0.5	100	3.8	1040.9	6	004	46	4	4	6	6	0	/	/	8	6701					20	vv200
21	01	9	02	03	06	-0.1	-0.1	100	3.7	1043.7	5	002	47	4	4	9	/	/	/	/							21	vv120
22	01	9	30	02	04	0.2	0.2	100	3.7	1043.1	7	012	45	4	4	9	/	/	/	/							22	vv110
23	56	8	03	05	07	4.2	4.0	99	4.9	1040.8	6	018	10	2	2	8	5	3	/	/	8	2708	8	8615			23	
24	62	7	05	05	12	6.2	4.0	86	4.9	1037.6	6	011	02	2	2	7	5	4	/	/	8	7615					24	
25	56	8	07	04	09	5.6	3.8	88	4.9	1035.9	6	010	05	2	2	8	5	4	/	/	8	8612					25	
26	56	8	03	01	03	6.1	3.5	83	4.8	1032.6	7	011	05	2	2	8	5	4	/	/	8	3710	8	8615			26	
27	59	6	19	05	09	5.4	3.0	84	4.6	1028.5	7	016	05	1	1	5	5	6	3	1	8	5635	8	3075			27	2Ac62
28	61	7	20	03	05	10.7	8.2	84	6.6	1024.4	7	013	02	2	2	2	8	4	0	1	8	1818	8	7078			28	2Sc30 COTRA Cu med
29	59	8	19	10	25	9.8	8.2	90	6.8	1011.6	6	019	60	6	2	8	5	3	/	/	8	1708	8	7610	8	8615	29	
30	50	8	19	12	25	10.7	8.8	88	7.1	1002.3	8	069	62	6	2	2	7	4	2	/	8	2712	8	8540				
31	62	8	21	15	32	11.6	9.3	86	7.3	1012.0	8	054	60	6	2	8	5	4	/	/	8	1715	8	7618	8	8625	31	

Mean vis = 22.7 km
Mean cloud = 6.2 77%
Mean wind speed = 7.8 kn
Mean gust = 16 kn
Mean TT = 8.1 C
Mean TdTd = 5.5 C
Mean RH = 83.8 %
Mean r = 5.7 g/kg
Mean PPP = 1019.0 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 2006

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	11.6	13.6	19:40	9.0	00:00	93.4	97.6	10:44	78.2	03:01		0	0	0	100	140	288	912	0
02	10.2	12.3	00:03	8.6	19:09	84.4	95.8	07:56	66.4	12:24		0	0	0	483	345	472	140	0
03	9.4	11.2	01:23	7.7	09:00	75.2	94.3	06:46	56.7	13:43		0	0	41	1008	201	190	0	0
04	11.2	14.4	22:52	7.8	08:22	80.2	93.7	17:19	69.4	11:36		0	0	0	745	556	139	0	0
05	12.2	14.3	02:46	9.2	23:55	76.5	87.6	00:28	66.2	14:28		0	0	0	1034	406	0	0	0
06	8.7	10.9	12:11	6.7	19:29	74.4	87.0	23:59	62.1	12:15		0	0	0	1184	256	0	0	0
07	9.5	11.8	05:19	6.8	10:45	79.7	94.8	04:13	61.3	21:46		0	0	0	714	336	390	0	0
08	7.4	9.6	03:01	3.9	23:59	80.1	91.0	09:40	64.9	00:07		0	0	0	765	649	26	0	0
09	4.8	9.0	13:30	1.3	23:54	81.4	92.0	05:21	65.6	14:04		0	0	0	635	492	313	0	0
10	5.7	11.3	23:59	-0.2	04:10	88.5	95.9	23:59	70.9	13:24		0	0	0	256	360	693	131	0
11	9.6	12.2	02:31	4.7	23:05	92.3	96.1	00:30	83.5	21:35		0	0	0	0	342	826	272	0
12	8.1	11.4	13:25	4.0	03:41	83.8	94.3	21:24	67.9	13:30		0	0	0	464	753	223	0	0
13	11.8	12.7	14:01	10.7	05:37	79.5	90.4	06:18	70.8	16:17		0	0	0	815	606	19	0	0
14	12.3	13.6	13:45	11.6	07:53	76.9	86.4	06:45	69.7	23:13		0	0	0	1120	320	0	0	0
15	11.7	12.2	11:57	10.8	08:36	80.1	91.5	22:43	70.3	01:24		0	0	0	652	699	89	0	0
16	5.8	12.1	00:12	3.0	23:59	90.2	96.8	03:32	69.9	14:45		0	0	0	217	265	430	528	0
17	5.0	9.7	13:47	2.4	05:14	90.2	96.2	09:24	70.9	14:38		0	0	0	208	194	841	197	0
18	5.1	6.9	14:31	2.1	23:57	98.2	100.0	10:42	94.5	01:21		0	0	0	0	0	23	424	993
19	2.0	3.6	13:54	0.6	23:59	99.6	100.0	13:54	94.2	00:48		0	0	0	0	0	11	102	1327
20	-0.2	1.1	14:01	-1.6	23:07	99.6	100.0	14:01	93.0	12:20		0	0	0	0	0	22	52	1366
21	-0.5	0.4	13:56	-1.5	00:31	99.7	100.0	09:44	98.5	13:48		0	0	0	0	0	0	72	1368
22	-0.7	0.8	13:41	-2.2	06:52	99.7	100.0	23:26	99.9	13:16		0	0	0	0	0	32	24	1384
23	2.4	4.6	23:59	-0.6	00:25	99.2	100.0	12:01	94.5	05:37		0	0	0	0	0	3	255	1182
24	5.5	6.5	14:28	4.4	02:12	90.4	95.3	00:00	85.5	16:07		0	0	0	0	667	757	16	0
25	5.8	6.3	00:42	4.8	23:47	87.7	90.2	00:01	85.4	20:11		0	0	0	0	1436	4	0	0
26	5.6	6.6	13:45	4.7	00:42	85.9	97.2	23:55	81.6	06:09		0	0	0	0	1261	82	97	0
27	5.5	9.5	23:58	3.9	06:27	92.4	97.7	04:44	81.7	14:33		0	0	0	0	388	475	577	0
28	9.8	11.5	13:53	7.4	23:44	88.7	95.3	00:04	81.4	13:38		0	0	0	0	913	498	29	0
29	8.5	11.8	23:59	5.2	04:39	91.0	96.7	22:57	80.4	02:07		0	0	0	0	584	540	316	0
30	10.9	13.0	04:53	7.9	21:26	86.5	98.3	15:55	71.3	11:10		0	0	0	319	584	309	226	2
31	9.8	12.5	17:58	8.0	02:02	86.4	95.7	09:52	75.2	01:07		0	0	0	41	1135	211	53	0
Mean	7.2	9.6		4.9		87.5	95.1		76.8			0.00	0.00	0.02	5.78	7.47	4.25	2.38	4.10
Hi	12.3	14.4		11.6		99.7	100.0		99.9	Tot	0	0	0	41	10760	13888	7906	4423	7622
Lo	-0.7	0.4		-2.2		74.4	86.4		56.7										

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.