

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 2004

Temperature (°C / °F)			Anomaly	Rank in the past 123 years			
Mean maximum	8.5	47.3	+0.2	40 th highest			
Mean minimum	1.9	35.4	-0.6	57 th highest			
Daily mean	5.2	41.4	-0.2	50 th highest			
Highest maximum	13.5	56.3	on 30 th	Lowest maximum	4.1	39.4	on 26 th
Highest minimum	8.3	46.9	on 31 st	Lowest minimum	-4.0	24.8	on 20 th
Mean grass minimum	-1.3	29.7		Lowest grass minimum	-9.4	15.1	on 26 th
Mean earth @30 cm	7.2	45.0	+0.6	Earth @100 cm	9.9	49.8	+0.9
Frost duration (hrs)	70.5			Rain duration (hrs)	30.6		
Rainfall total (mm / in)	42.8	1.69	66 %	35 th lowest			
Highest daily fall	13.0	0.51	on 18 th				
Number of: Dry days (<0.2mm)	22	Wet days (>0.9mm)	5	days ≥5mm	5		
Sunshine total (hrs) 54.9	Daily mean 1.77	104 %		Sunniest day 7.3		on 26 th	
N ^o days with: Air frost 10	Ground frost 18	Snow falling 0	Snow lying 0				
Thunder 0	Hail ≥5mm 0	Small hail/ice 1	Fog @09 2	Nil sun 9			
Air pressure MSL : Mean @09 GMT (mbar/in)	1018.9	+3.8	30.09				
Absolute highest	1032.4		30.49			on 8 th	
Absolute lowest	987.5		29.16			on 17 th	

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

Notes: **Temperatures Near Normal.**

Dry.

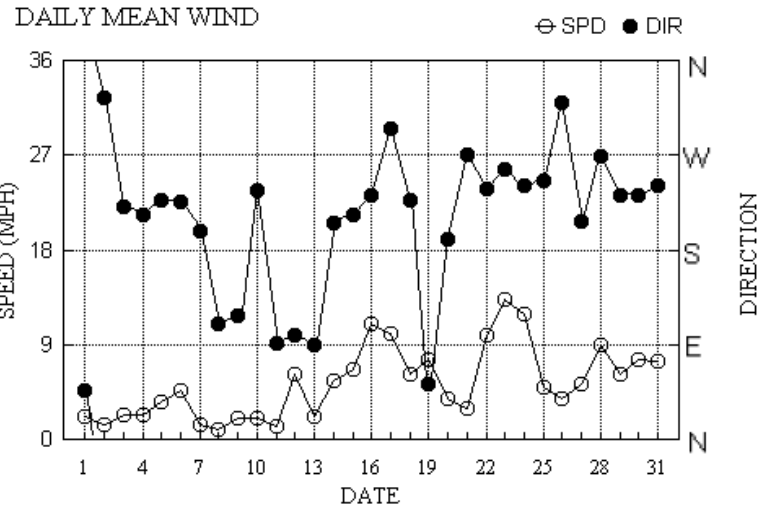
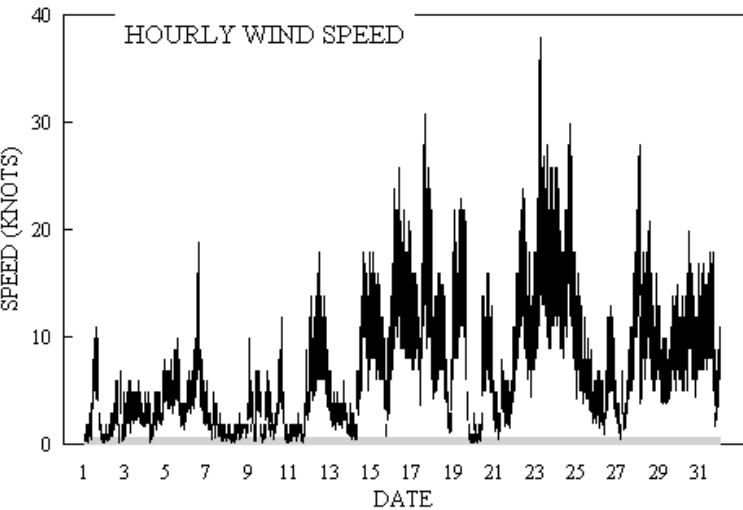
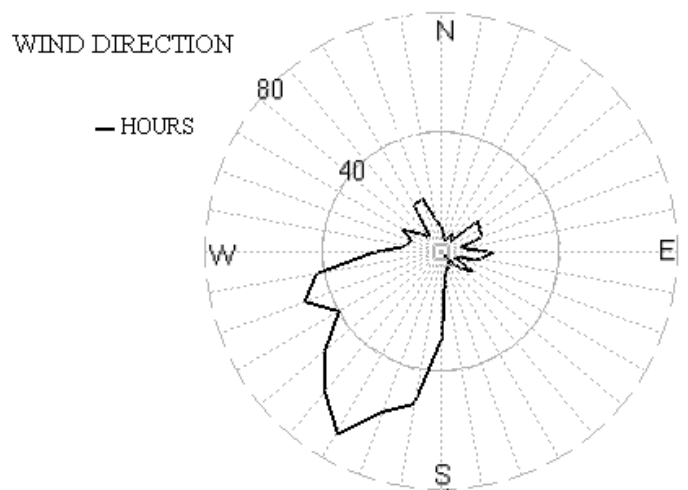
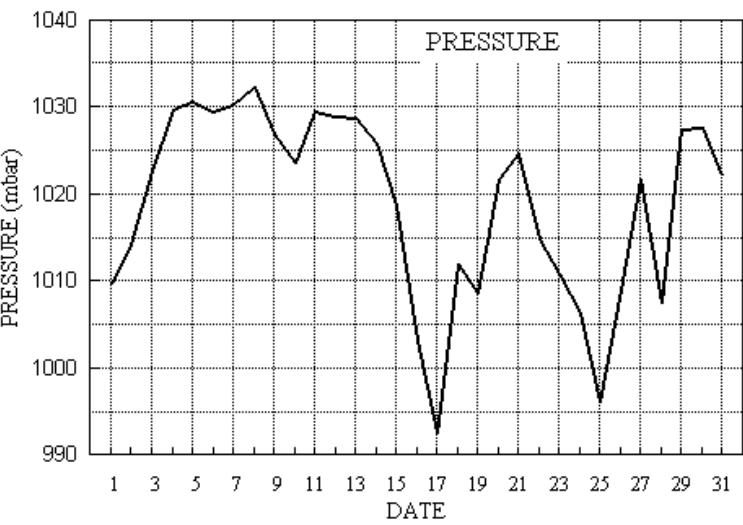
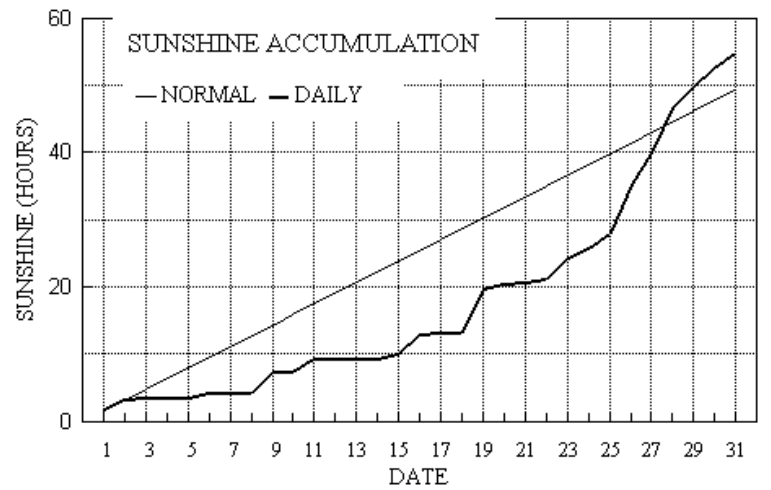
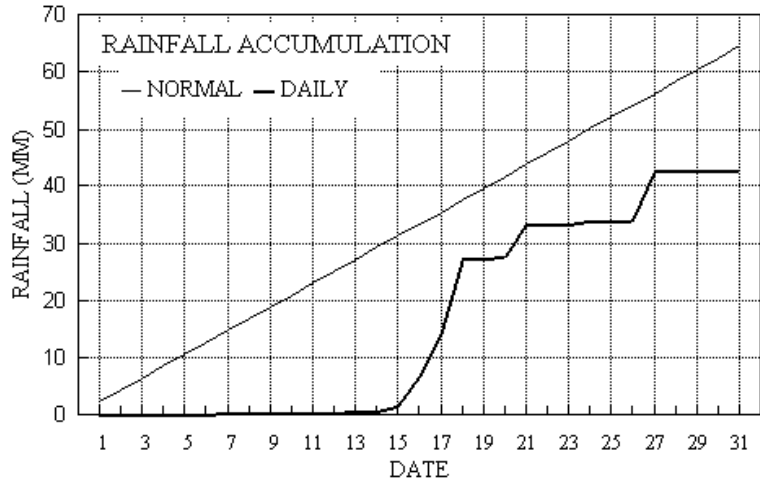
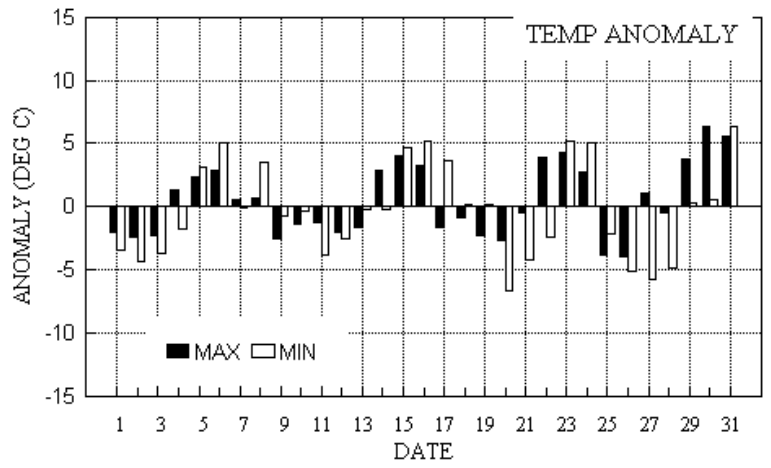
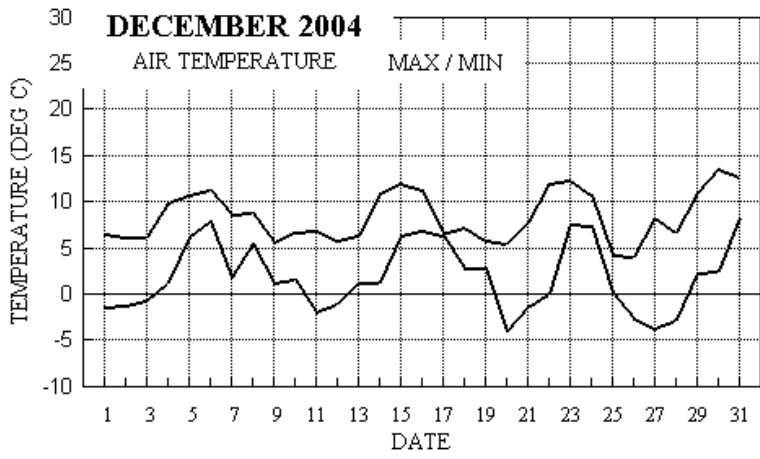
Sunny.

Low wind speed.

Temperature. A month with alternating cool and mild spells, resulting in a mean temperature close to normal. Of interest, both the mean maximum and mean minimum are exactly the same as in December 2003. The highest maximum is 0.5° above the median, while the lowest minimum is 1.2° above its median. The lowest maximum, 4.1°, is 2.5° above the median and is highest since 1974, and ranks 8th highest in 92 years. The highest minimum, 8.3°, is 1.0° below the median and is lowest since 1996. The mean grass minimum is lowest since 2001, but the lowest value of -9.4° is 0.5° higher than in the same month last year. Earth temperatures at both 30 cm and 1 metre depth are over half a degree above average. The number of hours with air frost is a little below average. **Rainfall.** A dry first half with most of the month's total falling after the 15th. The total is lowest since 2001, and ranks in the dry category, 17.6 mm below the long-term median. The number of dry days is most since 1991. The month's highest daily fall of 13.0 mm is close to the median. No snow was observed this December, but hail fall during the night of the 28th, accompanied by heavy rain that produced 6.6 mm in the hour commencing 0100 GMT, the 2nd highest hourly total in 2004, (after 6.8 mm on 20th October). A dry spell of 14 days ended on the 12th. **Sunshine.** Markedly dull until the 18th, but a run of sunny days from the 25th onwards more than made up for the earlier deficit. Compared with the long-term, this month's sunshine is in the sunny category, but the amount is not much above the current climatological average. There were 24 days with <3 hours and 3 with =>6 hours. **Wind.** The mean speed this December, 5.3 mph, is lowest since before 1987, and is 2.1 mph below average. The windiest day was the 23rd, mean speed 13.2 mph, and the highest gust of 44 mph was also on that day. The least windy day was the 8th, 0.9 mph, and there were 57 hours with a mean speed of 0.5 mph or less. Daily mean direction/number of days: N,0 NE,2 E,4 SE,1 S,2 SW,16 W,3 NW,3. **Humidity.** The mean relative humidity was 87.9 %, and the lowest was 54 % on the 19th. The mean amount of water vapour per kg of air was 5.0 g at 0900 GMT and 5.3 g at 1500 GMT. **Commentary. From the 1st to the 10th:** Mean anomalies were, max -0.3°, min -0.3°, rainfall 1 %, sunshine 41 %. Overall a dull and dry period. with 10 dry days and 5 sunless ones. Anomalies for daily maxima were between -2.1° and -2.5° on the 1st, 2nd, 3rd and 9th, but reached +2.8° on the 6th. For daily minima, anomalies ranged from +5.0° on the 6th to -4.3° on the 2nd. Winds were generally light or very light, just reaching moderate on the 6th, and were NE'ly on 1st, backing SW'ly by 3rd and to SE'ly on 8th, veering SW'ly on 10th. **From the 11th to the 20th:** Mean anomalies were: max -0.2°, min 0.0°, rain 133 %, sun 76 %. A change from dry to wet regimes occurred on the 16th, the dry spell having been broken on the 13th with 0.3 mm of rain. The 18th saw 13.0 mm of rainfall, and was the wettest day of the month. Anomalies for daily maxima ranged from +4.0° on the 15th to -2.7° on the 20th, while for minima the anomalies were +5.2° on the 16th and -6.7° on the 20th, the coldest night of the month. Sunshine still rather poor with 4 days with nil sun, but 6.4 hours on the 19th made a welcome change. Light or moderate E'ly winds became SW'ly on 14th, increased fresh on 16th, veered NW'ly on 17th, became moderate NE'ly on 19th and veered SW'ly on 20th. **From the 21st to the 31st:** Mean anomalies were +1.7° and -0.7° for max/min, 66 % for rain and 182 % for sun. Quite the sunniest period of the month, with 7.3 hours on the 26th, the month's sunniest day, and 6.9 hours on the 28th, and no days with nil sun. There were 8 dry days, but the 21st and 27th were wet with 5.6 mm and 9.0 mm resp. Anomalies for daily maxima ranged from +6.3° on the 30th, the month's mildest day, to -4.0° on the 26th, the month's coolest. For minima, anomalies of +6.3° on the 31st, the month's highest minimum, and -5.8° on the 27th. Light W'ly winds on the 21st increased strong by 23rd, the month's windiest day, decreased moderate by 25th, were light NW'ly on 26th, increased fresh W'ly on 28th, then light or moderate SW'ly until 31st.

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

Wokingham Climatological Data



Daily meteorological data.

Emmbrook, WOKINGHAM, Berkshire.

Month: DECEMBER 2004

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	6.5	-1.5	0.0	-6.1	8.5	11.2	1.9	5.5	1009.6	1 1 0 0	0 0 0 0	0 0 0 0	46	1.7	1.8	60 11 1400	60 5 11	0.0	
2	6.1	-1.3	0.0	-5.8	7.9	11.1	1.4	7.5	1014.2	1 1 0 0	0 0 0 0	0 0 0 0	325	0.8	1.2	350 7 1920	340 3 19	0.0	
3	6.2	-0.7	0.0	-5.6	7.5	11.0	0.3	0.7	1022.6	1 1 0 0	0 0 0 0	0 0 0 1	221	1.2	2.0	210 6 1559	220 3 16	0.0	
4	9.8	1.2	0.0	-1.8	7.5	10.8	0.0	0.0	1029.6	0 1 0 0	0 0 0 0	0 0 0 0	213	2.0	2.0	200 8 2128	200 5 21	0.0	
5	10.8	6.1	0.0	1.0	8.0	10.6	0.0	0.0	1030.7	0 0 0 0	0 0 0 0	0 0 0 0	227	2.9	3.1	250 10 1344	250 5 13	0.0	
6	11.3	8.0	0.0	3.9	8.4	10.5	0.8	0.0	1029.5	0 0 0 0	0 0 0 0	0 0 0 0	226	3.8	4.0	260 19 1322	250 9 13	0.0	
7	8.6	1.8	0.1	-3.0	8.2	10.4	0.0	0.0	1030.3	0 1 0 0	0 0 0 0	0 0 0 0	198	0.9	1.1	180 5 0622	190 3 06	0.3	
8	8.8	5.4	tr	5.4	8.4	10.4	0.0	0.0	1032.2	0 0 0 0	0 0 0 0	0 0 0 0	110	0.3	0.8	130 4 2350	130 2 23	0.0	
9	5.6	1.2	0.0	-3.7	8.4	10.4	3.0	0.0	1026.9	0 1 0 0	0 0 0 0	0 0 0 0	117	1.3	1.8	140 10 0140	130 4 01	0.0	
10	6.7	1.5	0.0	-3.6	8.0	10.4	0.0	1.3	1023.6	0 1 0 0	0 0 0 0	0 0 0 0	236	1.2	1.7	260 12 1432	270 5 14	0.0	
11	6.8	-2.0	0.0	-5.5	7.6	10.3	2.0	10.6	1029.5	1 1 0 0	0 0 0 0	0 0 0 1	91	0.6	1.1	130 12 2345	80 3 23	0.0	
12	5.9	-1.0	0.0	-2.4	7.5	10.2	0.0	0.0	1028.9	1 1 0 0	0 0 0 0	0 0 0 0	99	5.2	5.4	100 18 1028	100 8 10	0.0	
13	6.3	1.3	0.3	1.4	7.5	10.1	0.0	0.0	1028.8	0 0 0 0	0 0 0 0	0 0 0 0	90	1.6	1.9	120 7 0047	70 3 16	2.8	
14	10.9	1.3	tr	1.4	7.4	10.0	0.0	0.0	1025.7	0 0 0 0	0 0 0 0	0 0 0 0	205	4.7	4.9	210 18 1435	200 11 15	0.0	
15	12.0	6.3	0.9	7.7	7.8	9.9	0.6	0.0	1018.7	0 0 0 0	0 0 0 0	0 0 0 0	213	5.7	5.8	210 18 0150	220 8 02	1.5	
16	11.3	6.8	5.1	0.4	8.2	9.9	2.9	0.0	1003.1	0 0 0 0	0 0 0 0	0 0 0 0	232	8.4	9.5	230 26 0902	200 12 06	2.9	
17	6.6	6.3	8.0	3.6	8.1	9.9	0.4	0.0	992.6	0 0 0 0	0 0 0 0	0 0 0 0	295	5.2	8.8	330 31 1433	330 14 14	3.1	
18	7.3	2.8	13.0	-1.2	7.6	9.9	0.0	0.0	1011.9	0 1 0 0	0 0 0 0	0 0 0 0	227	3.8	5.4	70 18 2317	70 8 23	9.5	
19	5.9	2.9	0.0	1.0	7.4	9.8	6.4	6.0	1008.6	0 0 0 0	0 0 0 0	0 0 0 0	52	6.4	6.6	50 23 0913	50 12 08	0.0	
20	5.5	-4.0	0.3	-9.2	6.5	9.7	0.8	10.1	1021.6	1 1 0 0	0 0 0 0	0 0 0 0	191	3.3	3.4	190 16 1508	200 8 15	0.7	
21	7.7	-1.5	5.6	-5.1	6.1	9.6	0.2	0.0	1024.6	1 1 0 0	0 0 0 0	0 0 0 0	271	0.7	2.5	210 11 2258	210 5 22	5.2	
22	12.0	0.0	0.1	-5.8	6.0	9.4	0.5	0.0	1014.8	0 1 0 0	0 0 0 0	0 0 0 0	238	8.0	8.6	230 24 0906	230 12 08	0.1	
23	12.3	7.6	0.0	7.5	6.9	9.2	3.2	0.0	1010.9	0 0 0 0	0 0 0 0	0 0 0 0	257	11.5	11.5	270 38 0505	260 16 05	0.0	
24	10.8	7.4	0.4	4.3	7.4	9.1	1.3	0.0	1006.3	0 0 0 0	0 0 0 0	0 0 0 0	241	9.6	10.3	250 30 1521	200 15 14	1.2	
25	4.3	0.2	0.0	-5.1	7.2	9.1	2.3	5.3	996.1	0 1 0 0	0 0 0 0	0 0 0 0	246	3.8	4.3	230 16 0216	240 8 02	0.0	
26	4.1	-2.7	0.0	-9.4	6.3	9.1	7.3	13.0	1009.0	1 1 0 0	0 0 0 0	0 0 0 0	320	3.0	3.4	340 13 1518	340 6 15	0.0	
27	8.3	-3.8	9.0	-9.0	5.3	9.0	4.5	10.5	1021.6	1 1 0 0	0 0 0 0	0 0 0 0	208	4.3	4.5	200 27 2359	210 12 23	3.3	
28	6.7	-2.9	0.0	-1.7	4.9	8.9	6.9	0.0	1007.5	1 1 0 0	0 0 1 0	0 0 1 0	269	6.6	7.8	210 28 0119	220 14 01	0.0	
29	10.9	2.3	tr	-2.2	4.9	8.7	3.1	0.0	1027.5	0 1 0 0	0 0 0 0	0 0 0 0	232	5.1	5.4	230 15 2203	230 8 21	0.0	
30	13.5	2.5	tr	6.4	5.4	8.5	2.9	0.0	1027.7	0 0 0 0	0 0 0 0	0 0 0 0	232	6.5	6.6	260 20 1244	250 9 12	0.0	
31	12.7	8.3	tr	2.9	6.1	8.4	2.2	0.0	1022.0	0 0 0 0	0 0 0 0	0 0 0 0	241	5.4	6.4	310 18 1523	260 9 11	0.0	
Total			42.8				54.9	70.5										30.6	
Mean	8.5	1.9		-1.3	7.2	9.9	1.77	2.3	1018.9					236	2.7	4.6			
Anom	+0.2	-0.6	66%		+0.6	+0.9	104%		+3.8										
Daily mean		5.2																	
Anom		-0.2																	

Number of days with:

Air frost = 10 Ground frost = 18 Nil sun = 9
 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 DECEMBER 2004

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	hCr	Cr	NCh	shs	NCh	shs	NCh	shs	Date	Remarks
1	40	6	06	03	04	1.1	1.1	100	4.1	1009.6	5	003	10	1	1	6	8	5	0	0	81828	86635					1	Hoar slt
2	32	7	27	01	02	1.5	1.5	100	4.2	1014.2	3	012	10	2	2	2	8	6	3	2	82830	87075					2	1Sc50 1Ac68 COTRA Hoar slt U/a cont
3	01	9	22	02	05	1.2	1.2	100	4.1	1022.6	3	017	45	4	4	9	/	/	/	/							3	vv 150m
4	40	7	20	02	03	6.2	5.8	97	5.6	1029.6	2	012	10	2	2	7	5	5	/	1	81628	87635					4	/Ci75
5	63	7	23	03	05	8.0	6.9	93	6.1	1030.7	3	009	03	2	2	5	5	4	0	1	82710	84646	87075				5	COTRA
6	68	7	22	04	09	9.9	7.4	84	6.3	1029.5	1	007	02	2	2	7	5	6	/	/	87630						6	
7	56	8	16	02	03	5.4	5.2	98	5.4	1030.3	3	009	10	2	2	8	6	3	/	/	82707	88709					7	
8	30	8	11	01	02	7.9	7.5	97	6.3	1032.2	3	011	50	5	2	8	5	3	/	/	81708	83712	87615				8	8Sc20
9	25	7	15	01	02	2.1	2.1	100	4.4	1026.9	6	003	10	1	1	7	6	3	/	/	87708						9	
10	50	7	15	02	03	4.8	3.6	92	4.9	1023.6	2	013	05	2	2	7	5	4	/	/	87615						10	
11	01	2	19	01	02	-1.0	-1.1	99	3.4	1029.5	2	012	48	4	4	2	6	0	0	1	82701						11	1Ci80 COTRA vv120m Hoar mod+rim
12	38	8	09	06	12	5.6	4.2	91	5.0	1028.9	3	007	05	2	2	8	6	3	/	/	83707	88709					12	
13	32	8	15	02	05	1.4	0.3	92	3.8	1028.8	3	006	05	2	2	8	6	3	/	/	88706						13	
14	45	7	19	03	05	6.4	5.7	95	5.6	1025.7	6	003	10	2	2	7	5	5	/	/	87623						14	
15	59	8	23	07	16	10.9	9.1	89	7.2	1018.7	3	009	05	6	2	2	5	4	7	/	81712	83364	88466				15	2Sc18 1Ac62
16	62	7	23	13	22	11.3	8.9	85	7.2	1003.1	6	030	60	6	2	7	8	4	/	/	81712	83815	87645				16	Cu med vv20kE
17	50	8	16	03	09	6.4	5.7	95	5.5	992.6	7	076	65	6	2	6	7	3	2	/	81708	84712	88525				17	3Sc20
18	82	7	21	09	15	4.5	2.0	84	4.4	1011.9	5	001	80	2	2	6	8	5	3	2	81820	85650	85072				18	2Sc35 1Ac67 Cu fra
19	86	5	05	11	22	3.5	-2.2	66	3.2	1008.6	2	046	01	2	2	1	5	6	3	2	81640	84072					19	2Ac65 COTRA
20	67	7	17	02	03	-1.5	-2.0	96	3.2	1021.6	6	006	03	2	2	7	5	6	7	2	82635	86645	86075				20	2Ac57 Mod hoar Gnd sfc frzn
21	13	8	03	03	08	1.9	1.9	100	4.3	1024.6	2	040	10	4	2	8	6	1	/	/	88702						21	
22	68	8	23	12	23	7.7	6.8	94	6.2	1014.8	6	026	58	6	5	8	5	4	/	/	83710	86615	88625				22	
23	83	4	25	14	26	11.0	7.0	76	6.3	1010.9	3	002	01	1	1	4	8	5	0	0	81820	84640					23	Cu fra
24	72	7	21	08	16	7.6	4.4	80	5.2	1006.3	7	007	03	2	2	1	5	7	0	2	81656	83072	85078				24	COTRA
25	82	2	20	04	06	1.0	-0.4	90	3.7	996.1	3	021	03	0	0	1	0	9	6	3	81365						25	2Ci70 Cb top W Hoar slt
26	84	1	29	01	03	-2.6	-2.9	98	3.1	1009.0	2	029	02	0	0	1	0	9	6	3	81360						26	1Ci72 Hoar thk Gnd sfc frzn
27	72	1	19	02	04	-2.9	-3.3	97	2.9	1021.6	1	011	02	0	0	0	0	9	0	1	81080						27	COTRA Hoar thk Gnd sfc frzn
28	84	0	29	06	12	3.0	0.3	83	3.9	1007.5	1	031	02	0	0	0	0	9	0	0							28	Icy patches on roads/cars
29	77	2	22	03	10	2.5	1.5	93	4.2	1027.5	2	023	02	0	0	1	0	9	3	1	81364						29	2Ci78 Ac str vir Hoar slt Gnd sfc frzn
30	82	7	24	06	13	10.9	7.8	81	6.5	1027.7	3	004	02	2	2	7	5	6	/	/	87632						30	
31	50	7	22	07	14	10.5	9.9	96	7.5	1022.0	6	002	50	6	5	7	7	3	/	/	83706	86708	87630				31	St clearance to 1ok @0915

Mean vis = 17.2 km
 Mean cloud = 6.0 75%
 Mean wind speed = 4.6 kn
 Mean gust = 9 kn
 Mean TT = 4.7 C
 Mean TdTd = 3.4 C
 Mean RH = 91.6 %
 Mean r = 5.0 g/kg
 Mean PPP = 1018.9 mbar

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 1500 GMT for DECEMBER 2004

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	N	Ch	shs	N	Ch	shs	Date	Remarks
1	72	7	05	04	11	5.9	1.9	76	4.4	1009.4	3	001	02	1	1	7	8	5	/	/	81825	87635				1	
2	56	2	35	02	06	5.3	3.5	88	4.9	1014.3	3	001	05	1	1	1	0	9	7	2	81365					2	1Ci75
3	56	7	19	02	05	5.4	4.8	96	5.3	1023.7	4	000	10	2	2	1	5	7	2	81656	84358	86362			3	/Ci75	
4	58	8	24	03	05	9.6	8.1	90	6.6	1030.1	3	001	05	2	2	8	5	5	/	/	81627	88630				4	
5	60	7	25	03	08	10.8	9.2	90	7.1	1030.1	7	008	02	2	2	7	5	4	/	/	81712	87640				5	Absent vv&cld est
6	82	6	25	07	14	10.7	5.0	68	5.3	1028.0	6	008	01	2	2	5	5	6	0	2	84630	85080				6	COTRA Absent vv&cld est
7	25	8	19	02	03	8.4	7.6	94	6.4	1029.8	5	001	50	5	2	8	6	2	/	/	83705	88708				7	
8	50	7	21	01	03	8.7	7.2	90	6.2	1030.5	6	015	05	6	2	7	5	5	/	/	82620	87625				8	
9	50	0	03	02	05	5.2	2.8	84	4.6	1023.2	6	032	05	1	1	0	0	9	0	0						9	
10	58	7	26	05	12	6.6	2.7	76	4.6	1024.6	3	008	05	2	2	7	5	4	/	/	87618					10	
11	20	0	00	00	01	3.5	3.0	97	4.6	1028.8	7	007	28	4	1	0	0	9	0	0						11	Fog until 1415
12	50	8	08	06	12	5.8	4.2	89	5.0	1027.5	6	009	05	2	2	8	6	3	/	/	85708	88710				12	
13	32	8	36	02	03	1.7	0.2	90	3.8	1028.4	6	004	05	2	2	8	6	3	/	/	88707					13	
14	59	7	21	10	18	10.0	7.5	84	6.4	1022.8	7	019	05	2	2	7	5	4	3	/	81712	83615	87618			14	/Ac65
15	61	7	24	05	10	11.6	8.8	83	7.0	1018.3	5	005	02	2	2	2	5	5	7	2	82620	87363				15	1Ac61 /Ci75
16	72	1	27	11	22	9.7	4.7	71	5.1	1001.4	5	002	01	1	1	1	1	5	0	0	81825					16	Cu hum
17	88	5	33	14	31	6.5	3.4	81	4.9	997.3	2	078	01	6	2	5	8	5	0	2	85820					17	1Sc30 1Ci72
18	80	8	22	03	10	7.2	5.1	86	5.5	1008.0	7	022	03	2	2	2	5	6	7	/	82645	85362	88465			18	Absent vv&cld est
19	84	1	04	11	21	5.1	-2.1	60	3.2	1015.6	3	030	02	0	0	1	8	6	0	2	81832					19	1Sc45 1Ci75 Cu fra
20	80	7	20	08	16	5.5	1.1	73	4.1	1018.1	7	019	14	2	2	3	5	6	7	/	81635	83650	87357			20	Ac str op vir
21	58	6	30	04	06	4.2	2.6	89	4.5	1026.8	2	005	05	2	2	6	6	3	0	0	86708					21	
22	78	6	24	06	14	11.5	9.5	88	7.4	1011.1	6	015	01	2	2	6	8	4	0	1	83815	84635				22	1Sc50 1Ci75 Cu fra Cu hum
23	66	7	25	09	26	11.8	7.3	74	6.4	1009.6	5	007	03	1	1	7	8	5	/	/	81822	86625	87640			23	Cu fra
24	59	8	21	16	28	10.0	8.8	92	7.2	995.5	7	082	60	6	2	7	5	4	2	/	82710	85613	87625			24	8As57
25	84	6	27	03	07	3.8	0.4	78	4.0	997.2	3	005	01	2	2	1	5	6	6	2	81635	86070				25	1Ac62 COTRA
26	81	0	34	05	10	3.5	-0.9	73	3.5	1013.0	1	018	02	0	0	0	0	9	0	0						26	Hoar slt
27	75	7	20	06	10	4.0	0.0	75	3.8	1017.7	6	026	03	1	1	1	5	7	7	8	81656	83468	87275			27	1Ac63 Hoar slt Gnd sfc frzn
28	84	1	28	07	16	6.5	0.2	64	3.8	1012.4	2	019	02	0	0	1	8	5	0	0	81828					28	1Sc40 Absent vv&cld est
29	72	7	20	06	09	6.9	4.6	85	5.2	1027.5	7	006	21	6	2	5	5	7	7	/	81650	85656	87358			29	Pptn v slt
30	80	5	24	07	16	12.5	7.1	70	6.2	1026.4	6	005	01	1	1	2	5	6	0	1	82640	84072				30	COTRA
31	88	2	29	07	17	11.7	6.2	69	5.8	1022.6	2	003	01	1	1	2	8	5	0	0	81825					31	2Sc35 Cu med

Mean vis = 22.2 km

Mean cloud = 5.4 67%

Mean wind speed = 5.7 kn

Mean gust = 12 kn

Mean TT = 7.4 C

Mean TdTd = 4.3 C

Mean RH = 81.4 %

Mean r = 5.3 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

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 2004

Date	Mean			Max			Min			Missing RH	Number of minutes RH in given ranges								
	TT	TT	Time	TT	Time	RH	RH	Time	RH		Time	RH	N >0	0-20	20-40	40-60	60-80	80-90	90-95
01	2.8	6.5	13:04	-0.6	01:26	90.0	97.9	08:33	73.9	13:04	89	0	0	0	252	271	307	521	0
02	2.7	6.1	14:15	-0.5	01:05	93.1	98.5	23:09	85.1	14:24	230	0	0	0	0	282	436	489	3
03	3.2	5.6	15:27	-0.3	00:18	96.6	100.0	11:19	87.4	16:23		0	0	0	0	169	245	210	816
04	7.3	9.9	13:47	3.9	00:00	94.9	98.9	05:46	87.9	13:47		0	0	0	0	163	482	520	275
05	8.8	10.9	13:50	6.6	03:34	93.7	97.8	23:56	90.1	14:52		0	0	0	0	0	934	506	0
06	8.9	11.3	14:17	4.7	23:55	85.5	97.9	00:17	63.2	14:16		0	0	0	477	262	341	360	0
07	6.6	8.7	13:23	3.1	05:03	95.2	98.1	23:24	87.3	13:11		0	0	0	0	206	189	1040	5
08	7.8	8.8	12:44	5.2	22:55	95.3	98.7	22:40	89.2	14:55		0	0	0	0	76	447	867	50
09	4.4	5.7	00:30	1.7	08:11	93.2	100.0	01:41	78.9	12:28		0	0	0	12	340	433	272	383
10	4.6	6.8	13:49	0.4	23:59	87.2	96.1	23:34	76.4	14:58		0	0	0	282	700	445	13	0
11	1.8	6.7	23:59	-1.8	07:09	97.4	100.0	11:53	92.1	22:14	22	0	0	0	0	0	364	288	766
12	5.3	6.9	01:18	2.1	23:55	88.2	94.8	04:44	81.8	16:43		0	0	0	0	866	574	0	0
13	1.7	2.5	23:58	1.1	08:37	92.4	98.9	22:13	85.8	00:14		0	0	0	0	321	697	345	77
14	7.4	10.1	13:42	2.5	00:00	91.9	98.8	06:45	84.2	15:01		0	0	0	0	809	92	339	200
15	10.4	12.0	13:35	8.0	18:01	88.2	95.9	19:57	80.8	13:32		0	0	0	0	1030	343	67	0
16	9.3	11.1	09:01	7.1	23:28	84.4	96.4	07:04	69.3	14:33		0	0	0	628	237	446	129	0
17	6.1	7.3	04:30	3.5	23:39	81.6	98.9	10:45	64.3	21:17		0	0	0	718	325	143	155	99
18	5.1	7.5	13:29	2.8	05:21	86.6	98.4	23:47	73.6	00:25		0	0	0	140	924	84	285	7
19	2.7	5.9	13:24	-1.8	22:50	81.0	97.7	00:02	54.5	13:49		0	0	153	436	273	294	284	0
20	1.7	5.7	16:04	-3.4	04:34	83.7	96.3	07:00	56.8	12:23	49	0	0	127	306	301	478	179	0
21	1.9	4.3	14:52	0.3	04:15	96.8	100.0	10:27	88.4	15:03		0	0	0	0	51	250	490	649
22	8.7	12.0	20:00	1.7	00:00	91.0	95.8	06:43	85.3	20:00		0	0	0	0	704	536	200	0
23	11.4	12.3	11:30	10.5	08:21	75.7	89.6	01:06	64.0	22:23		0	0	0	1180	260	0	0	0
24	8.6	10.9	00:16	4.3	23:59	75.6	93.4	14:40	64.3	03:53		0	0	0	1233	137	70	0	0
25	2.0	4.3	12:57	-1.6	22:45	83.1	90.3	22:35	73.5	11:34	27	0	0	0	451	958	4	0	0
26	0.5	4.1	13:28	-2.2	08:18	85.1	95.4	08:10	68.5	13:27	53	0	0	0	458	389	533	7	0
27	2.1	8.0	23:59	-2.7	04:31	87.6	97.5	07:44	72.5	12:56	12	0	0	0	298	461	326	343	0
28	4.7	8.2	01:10	2.4	08:34	79.5	96.9	04:00	63.9	14:54		0	0	0	870	239	177	154	0
29	5.9	10.0	23:56	2.0	08:54	85.9	94.9	21:46	72.7	12:36		0	0	0	164	1013	263	0	0
30	10.7	13.5	13:15	8.6	19:43	83.2	95.6	02:33	64.7	13:10		0	0	0	502	609	241	88	0
31	10.0	12.7	13:09	7.0	19:41	82.0	96.1	09:08	67.4	15:24		0	0	0	531	696	101	112	0
Mean	5.6	8.3		2.4		87.9	97.0		75.7			0.00	0.00	0.15	4.81	7.03	5.52	4.44	1.79
Max	11.4	13.5		10.5		97.4	100.0		92.1	Tot	482	0	0	280	8938	13072	10275	8263	3330
Min	0.5	2.5		-3.4		75.6	89.6		54.5										

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.