

# 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

FEBRUARY 2004

Temperature (°C / °F)	Anomaly		Rank	
Mean maximum	8.6	47.5	+0.7	52 <sup>nd</sup> highest in 123 years
Mean minimum	3.2	37.8	+1.9	15 <sup>th</sup> highest in 123 years
Daily mean	5.9	42.6	+1.3	29 <sup>th</sup> highest in 123 years
Highest maximum	15.3	59.5	on 4 <sup>th</sup>	Lowest maximum 3.3 37.9 on 28 <sup>th</sup>
Highest minimum	12.1	53.8	on 5 <sup>th</sup>	Lowest minimum -4.5 23.9 on 26 <sup>th</sup>
Mean grass minimum	-0.3	31.5		Lowest grass minimum -9.9 14.2 on 9 <sup>th</sup>
Mean earth @30 cm	6.7	44.1	+1.6	Earth @100 cm 7.9 46.2 +1.2
Frost duration (hrs)	89.7			Rain duration (hrs) 22.1
Rainfall total (mm / in)	23.4	0.92	57 %	35 <sup>th</sup> lowest in 123 years
Highest daily fall	6.6	0.26	on 1 <sup>st</sup>	
Number of: Dry days (<0.2mm)	19	Wet days (>0.9mm)	6	days ≥5mm 2
Sunshine total (hrs) 67.3	Daily mean 2.32			Sunniest day 7.0 on 19 <sup>th</sup>
N° days with: Air frost 10	Ground frost 15	Snow falling 6	Snow lying 0	
Thunder 0	Hail ≥5mm 0	Small hail/ice 1	Fog @09 0	Nil sun 6
Air pressure MSL : Mean @09 GMT (mbar/in)	1021.6	+4.9	30.17	
Absolute highest	1037.1		30.63	on 9 <sup>th</sup>
Absolute lowest	1000.4		29.54	on 27 <sup>th</sup>

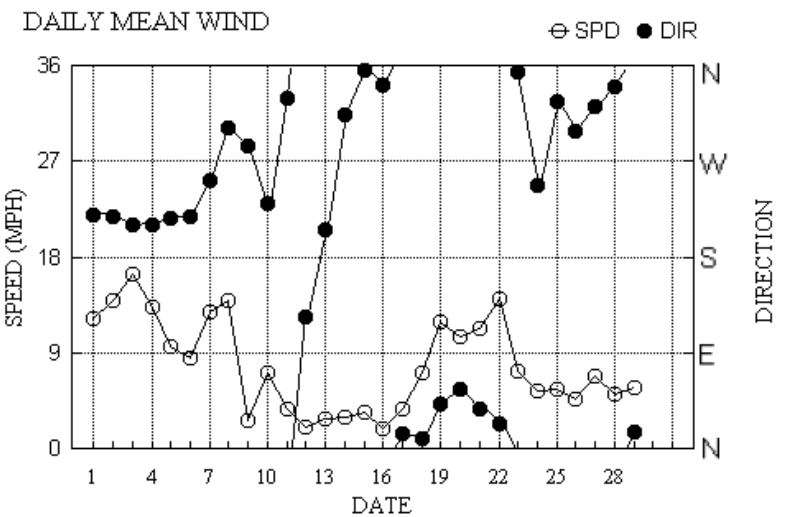
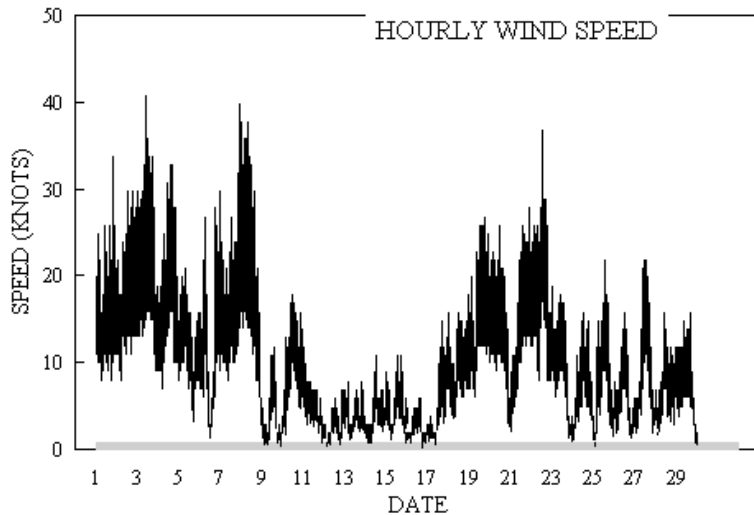
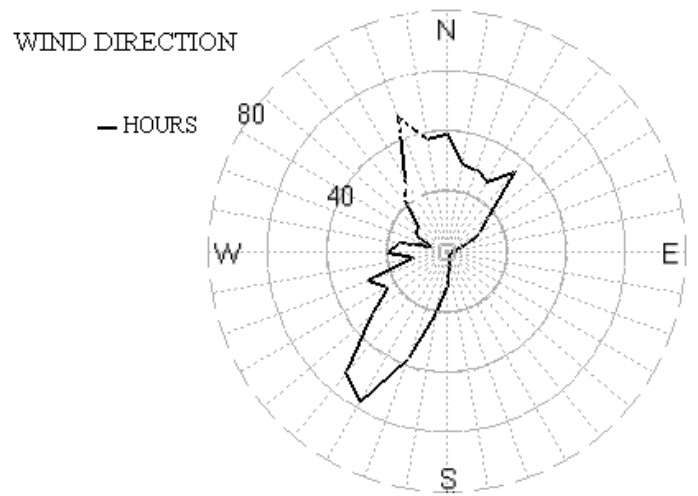
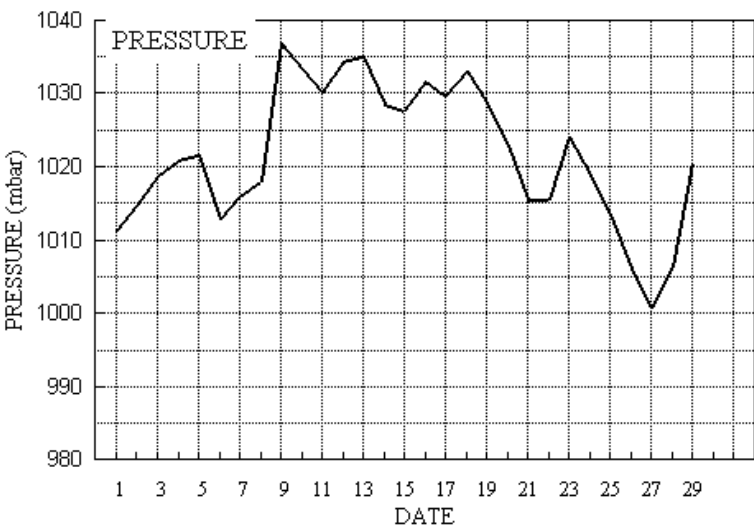
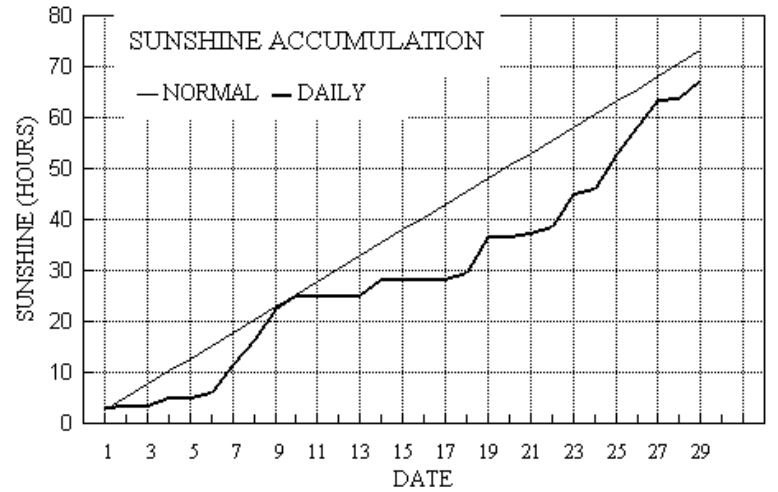
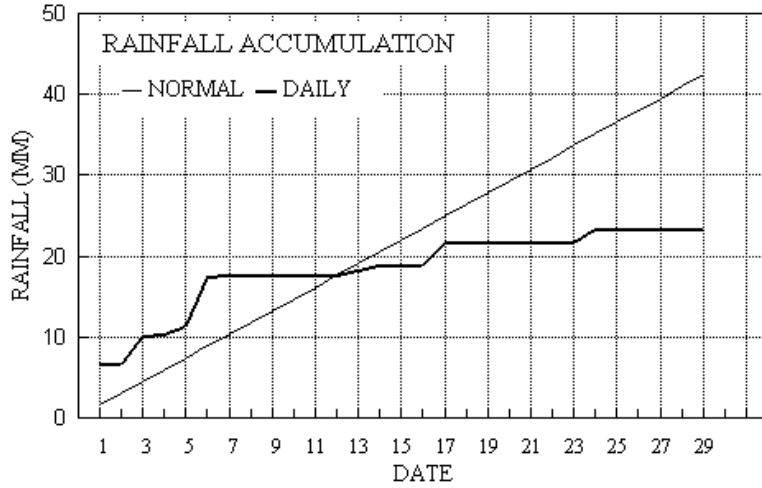
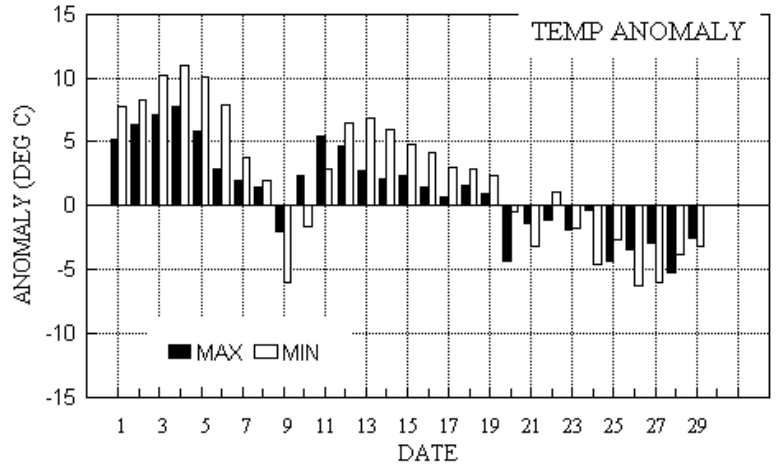
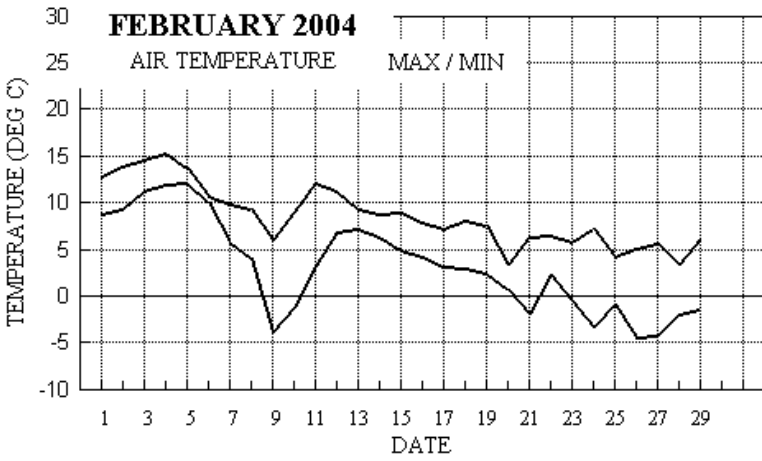
Anomaly = departure from 1971 to 2000 average.

Notes: **Mild and Dry with Below Normal Sunshine.**

**Temperature.** The month started mild and finished cold. Overall, it is the mild conditions that dominate the statistics, with the mean temperature ending up 1.3° above average. It was principally the minima that produced the strong positive anomaly, as the mean maximum was only 0.3° above the median, and lowest since 1996. Despite this, the month's highest maximum, 15.3°, while 2.3° below the record, occurred on the 4<sup>th</sup>, and as such is the highest temperature for the first 12 days of February in the past 29 years. The lowest minimum is 0.5° above the median, and the lowest maximum is 0.9° above the median. The highest minimum, 12.1° on the 5<sup>th</sup>, is a new record for February, 0.6° above the previous highest in 2002, and 4.1° above the median. The mild spell early in the month also produced two more records, for highest grass minimum, 10.9° on 4<sup>th</sup>, and highest 30 cm earth temperature, 9.0° on 6<sup>th</sup>. **Rainfall.** Driest since 1998, with most of the rain falling during the first week, so by the 6<sup>th</sup> a surplus of 9 mm above normal had accumulated. This reduced to zero by the 12<sup>th</sup>, and ended up a deficit of 18 mm by the 29<sup>th</sup>. There were 3 dry spells, 5 days ending on the 12<sup>th</sup>, 6 days ending on the 23<sup>rd</sup> and 5 days unbroken on the 29<sup>th</sup>. Snow fell on the 23<sup>rd</sup> and also on each day from 25<sup>th</sup> onwards, but amounts were negligible. **Sunshine.** Not as sunny as we have been used to in recent years, with the total lowest since 1997. Two periods were especially dull, 2.8 hours in 5 days to the 6<sup>th</sup> and 3.2 hours in 7 days to the 17<sup>th</sup>. There were 18 days with <3 hours and just 4 with • 6 hours. **Wind.** Not a windy month overall, but windy until the 8<sup>th</sup>, then light winds until the 18<sup>th</sup>, after which mainly moderate. The mean speed of 7.8 mph is 0.7 mph below average. The 3<sup>rd</sup> was the windiest day, mean 16.5 mph, with the month's highest gust of 47 mph also on that day. The 12<sup>th</sup> and 16<sup>th</sup> were joint least windy days, mean 2.0 mph. There were just 6 hours with a mean speed of 0.5 mph or less. Daily mean direction/number of days: N,7 NE,4 E,0 SE,1 S,0 SW,9 W,2 NW,6. **Humidity.** The overall mean relative humidity was 79.2 % and the lowest value recorded was 37 % on the 25<sup>th</sup>. The mean amount of water vapour per kg of air was 5.0 g at 0900 hours and 4.8 g at 1500 hours. **Pressure.** The mean this month is highest since 1998. **Commentary.** From the 1<sup>st</sup> to the 10<sup>th</sup>: This was the mildest part of the month with a 10 day mean anomaly of +4.6°. Daily maxima were 8° above normal on the 4<sup>th</sup>, the month's mildest day, with anomalies above +10° for minima on the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup>. Temperatures declined after the 5<sup>th</sup>, and there was an isolated cold day on the 9<sup>th</sup> with anomalies of -2° and -6° for max and min. Although dry on 2<sup>nd</sup>, 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup>, this 10 day period produced 17.6 mm of rain, 117% of normal, and the month's wettest day was the 1<sup>st</sup>. Sunshine was rather variable, with the 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> quite sunny, and a 10 day mean equal to normal. Winds were mainly fresh or strong SW'ly,, veering NW'ly on the 8<sup>th</sup>, decreasing light on 9<sup>th</sup>, ending with a moderate SW'ly on 10<sup>th</sup>. From the 11<sup>th</sup> to the 20<sup>th</sup>: Temperatures were generally above normal, except for the 20<sup>th</sup>. Daily anomalies for max ranged from +5° on the 11<sup>th</sup> to -4° on 20<sup>th</sup>, and for min, +7° on 13<sup>th</sup> to -1° on 20<sup>th</sup>, giving a 10 day mean anomaly of +2.8°. What rain that fell was small amounts on the 13<sup>th</sup>, 14<sup>th</sup> and 17<sup>th</sup>, with a 10 day total of 4.2 mm, just 28 % of normal. Only one sunny day, and the month's sunniest, the 19<sup>th</sup>, and a 10 day mean only 48 % of normal. Winds were light and variable or N'ly until 17<sup>th</sup>, increasing fresh NE'ly by 19<sup>th</sup>. From the 21<sup>st</sup> to the 29<sup>th</sup>: This was the coldest part of the month, with a 9 day mean anomaly of -3.0°. Daily anomalies ranged from -5° for the max on the 28<sup>th</sup>, the month's coldest day, to -1° on 22<sup>nd</sup>, while for minima it was -6° on 26<sup>th</sup>, the month's coldest night, to +1° on 22<sup>nd</sup>. Only traces of precipitation except for 1.6 mm on 24<sup>th</sup>, giving a 9 day total just 12 % of normal. Snow fell on 23<sup>rd</sup> and 25<sup>th</sup> to 29<sup>th</sup>, but never enough to lay. Sunny days on 23<sup>rd</sup>, 25<sup>th</sup> and 27<sup>th</sup> lifted the 9 day mean to 136 % of normal. NE'ly winds were fresh or strong on 21<sup>st</sup> and 22<sup>nd</sup>, then moderate, backing W'ly by 24<sup>th</sup>, then veering NW'ly, ending the month with a light N'ly on the 29<sup>th</sup>.

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

# Wokingham Climatological Data



Daily meteorological data.

Emmbrook, WOKINGHAM, Berkshire.

Month: FEBRUARY 2004

Date	Max C	Min C	Rain mm	Grass Min	30cm C	100cr 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	12.8	8.8	6.6	5.8	6.2	7.3	3.1	0.0	1011.3	0 0 0 0	0 0 0 0	0 0 0 0	220 10.2 10.6	250 34 2016	240 15 20	2.9	
2	13.9	9.3	tr	8.0	6.9	7.3	0.2	0.0	1014.5	0 0 0 0	0 0 0 0	0 0 0 0	218 12.0 12.1	220 30 1928	210 15 23	0.0	
3	14.7	11.2	3.6	10.1	7.6	7.4	0.0	0.0	1018.7	0 0 0 0	0 0 0 0	0 0 0 0	211 14.1 14.3	220 41 1017	220 19 10	4.8	
4	15.3	11.9	0.2	10.9	8.3	7.5	1.6	0.0	1021.0	0 0 0 0	0 0 0 0	0 0 0 0	210 11.4 11.5	210 33 1609	210 17 15	0.5	
5	13.8	12.1	1.0	10.0	8.9	7.8	0.1	0.0	1021.5	0 0 0 0	0 0 0 0	0 0 0 0	216 8.2 8.4	220 21 0724	220 12 07	1.3	
6	10.8	10.0	6.0	8.4	9.0	8.0	0.9	0.0	1012.8	0 0 0 0	0 0 0 0	0 0 0 0	218 6.5 7.4	250 30 2328	210 14 06	4.1	
7	9.9	5.8	0.2	2.6	8.6	8.1	5.7	0.0	1016.0	0 0 0 0	0 0 0 0	0 0 0 0	252 10.8 11.1	260 40 2253	280 16 23	0.1	
8	9.4	4.1	0.0	1.4	7.8	8.3	4.6	0.0	1018.0	0 0 0 0	0 0 1 0	0 0 1 0	302 11.2 12.1	300 38 0017	290 17 08	0.0	
9	6.0	-3.9	0.0	-9.9	6.9	8.3	6.2	12.2	1036.8	1 1 0 0	0 0 0 0	0 0 0 0	285 1.5 2.3	310 12 1553	300 6 11	0.0	
10	9.0	-1.3	0.0	-5.8	6.1	8.2	2.8	0.0	1033.2	1 1 0 0	0 0 0 0	0 0 0 0	230 5.8 6.2	220 18 1135	240 10 12	0.0	
11	12.1	3.2	0.0	2.7	6.2	8.1	0.0	0.0	1030.0	0 0 0 0	0 0 0 0	0 0 0 0	329 2.2 3.2	280 12 0043	280 6 00	0.0	
12	11.3	6.8	0.0	1.5	7.0	8.0	0.0	0.0	1034.4	0 0 0 0	0 0 0 0	0 0 0 0	123 0.6 1.7	170 7 2243	170 4 22	0.0	
13	9.4	7.3	0.7	5.8	7.5	8.0	0.0	0.0	1035.1	0 0 0 0	0 0 0 0	0 0 0 0	206 2.3 2.5	210 8 2056	180 4 00	1.1	
14	8.8	6.4	0.5	4.5	7.5	8.0	3.0	0.0	1028.4	0 0 0 0	0 0 0 0	0 0 0 0	314 2.0 2.6	320 11 1216	320 6 12	1.1	
15	9.0	5.0	0.1	1.2	7.6	8.1	0.2	0.0	1027.6	0 0 0 0	0 0 0 0	0 0 0 0	356 2.9 3.0	20 11 1320	360 6 13	0.1	
16	8.0	4.3	0.0	-1.6	7.6	8.1	0.0	0.0	1031.7	0 1 0 0	0 0 0 0	0 0 0 0	342 1.3 1.7	330 6 1540	320 3 14	0.0	
17	7.3	3.2	2.8	-3.4	7.5	8.1	0.0	0.0	1029.6	0 1 0 0	0 0 0 0	0 0 0 0	14 2.2 3.2	20 16 2353	20 7 23	2.5	
18	8.1	3.0	0.1	-2.0	7.4	8.2	1.2	0.0	1032.9	0 1 0 0	0 0 0 0	0 0 0 0	9 6.1 6.2	10 18 2240	20 8 13	0.1	
19	7.5	2.5	0.0	-1.2	7.2	8.2	7.0	0.0	1028.8	0 1 0 0	0 0 0 0	0 0 0 0	42 10.1 10.3	50 27 1853	50 13 16	0.0	
20	3.4	0.7	0.0	-2.0	6.7	8.2	0.1	1.8	1022.9	0 1 0 0	0 0 0 0	0 0 0 0	55 8.8 9.1	70 26 1158	70 12 12	0.0	
21	6.3	-2.0	tr	-8.4	6.0	8.1	0.7	7.4	1015.5	1 1 0 0	0 0 0 0	0 0 0 0	37 9.8 9.9	30 28 2128	30 15 21	0.0	
22	6.5	2.3	tr	2.5	6.0	8.0	1.1	0.5	1015.6	0 0 0 0	0 0 0 0	0 0 0 0	23 12.1 12.3	30 37 1238	30 17 15	0.0	
23	5.8	-0.6	tr	-3.2	5.6	8.0	6.7	12.1	1024.0	1 1 1 0	0 0 0 0	0 0 0 0	354 5.8 6.3	350 19 0112	10 10 10	0.0	
24	7.3	-3.4	1.6	-8.2	5.1	7.9	0.7	7.6	1018.8	1 1 0 0	0 0 0 0	0 0 0 0	247 3.3 4.6	260 16 1203	250 10 12	3.5	
25	4.2	-0.9	0.0	-4.4	5.1	7.7	6.9	6.2	1013.4	1 1 1 0	0 0 0 0	0 0 0 0	327 4.5 4.8	330 22 1320	340 10 12	0.0	
26	5.1	-4.5	tr	-9.6	4.8	7.5	5.4	13.0	1006.0	1 1 1 0	0 0 0 0	0 0 0 0	298 3.2 4.0	290 16 1256	310 8 12	0.0	
27	5.7	-4.2	tr	-9.7	4.1	7.5	5.3	11.6	1000.8	1 1 1 0	0 0 0 0	0 0 0 0	322 5.3 6.0	340 22 1202	340 12 12	0.0	
28	3.3	-2.0	tr	-7.7	4.0	7.3	0.1	7.9	1006.3	1 1 1 0	0 0 0 0	0 0 0 0	341 4.0 4.4	350 16 0947	350 8 09	0.0	
29	6.1	-1.4	tr	-5.8	3.9	7.1	3.7	9.4	1020.4	1 1 1 0	0 0 0 0	0 0 0 0	15 4.4 4.9	50 16 1603	10 7 10	0.0	
Total			23.4				67.3	89.7									22.1
Mean	8.6	3.2		-0.3	6.7	7.9	2.32	3.1	1021.6					286 1.9 6.8			
Anom	+0.7	+1.9	57%		+1.6	+1.2	92%		+4.9								
Daily mean		5.9															
Anom		+1.3															
Number of days with:																	
Air frost = 10																	
Ground frost = 15																	
Nil sun = 6																	
Snow falling = 6																	
Snow lying = 0																	
Thunder = 0																	
Hail=>5mm = 0																	
Hail<5mm or ice = 1																	
Fog at 09GMT = 0																	

Abbreviations.

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

Rain = total rainfall and melted snowfall in 24 hour period ending at 09 hours, 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 hours.

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

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 9AM. Excludes snow/hail.

Anom = departure from 1971-2000 average. All temperatures in degrees Celsius.

For details of this weather station, to see satellite images, or to find useful links to other meteorological sites worldwide, go to:

[www.btinternet.com/~wokingham.weather/www.html](http://www.btinternet.com/~wokingham.weather/www.html)

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 0900 GMT for FEBRUARY 2004

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	hCr	Cf	NCh	shs	NCh	shs	NCh	shs	Date	Remarks
1	73	5	23	10	18	9.3	6.5	83	6.0	1011.3	2	035	03	8	1	1	8	4	3	1	81815	85078			1	1Sc25 1Ac68 COTRA Cu fra		
2	58	7	22	12	22	12.8	11.7	93	8.6	1014.5	3	023	50	6	5	7	5	4	/	/	84710	86615	87630		2			
3	70	7	21	13	30	14.0	11.4	84	8.4	1018.7	3	007	21	6	2	7	5	4	7	2	82712	87615			3	/Ac65 /Ci75		
4	62	7	21	12	21	13.0	10.7	86	8.0	1021.0	5	002	60	6	2	2	5	3	8	2	81708	85358	86362		4	2Sc25 /Ci75 Ac cas pra		
5	75	8	21	11	21	12.8	10.9	88	8.1	1021.5	2	005	02	2	2	1	6	3	7	7	81708	85365	88275		5	1Sc56 1Ac62		
6	40	8	20	09	18	10.9	10.1	95	7.7	1012.8	6	021	58	6	5	8	5	3	/	/	82706	85708	87612		6	8Sc20 Hvy ra 0918-30 CF0923		
7	82	3	25	09	16	6.9	3.6	80	4.9	1016.0	2	029	02	0	0	0	0	9	0	2	83072				7			
8	75	1	30	17	33	6.5	0.1	63	3.8	1018.0	3	031	02	0	0	1	5	7	0	0	81650				8			
9	78	6	21	02	03	-1.3	-3.0	88	3.0	1036.8	2	015	03	1	1	0	0	9	0	1	81075	86080			9	COTRA Hoar mod Gnd sfc frzn		
10	68	7	23	06	13	3.2	-0.6	76	3.5	1033.2	6	010	02	2	2	4	5	6	3	8	84640	87272			10	2Ac65		
11	61	7	33	03	06	9.0	7.5	90	6.4	1030.0	3	015	01	2	2	7	5	6	3	1	87630				11	/Ac62 /Ci75		
12	30	8	08	03	05	7.9	7.7	99	6.4	1034.4	3	008	10	2	2	7	6	2	/	/	88705				12			
13	50	8	19	02	03	7.6	6.7	94	6.0	1035.1	3	007	05	2	2	8	5	6	/	/	88635				13			
14	30	7	35	02	03	6.9	6.7	99	6.0	1028.4	0	002	10	6	2	7	5	2	/	/	83705	85635	87656		14			
15	40	7	34	02	03	6.4	5.7	95	5.6	1027.6	3	011	60	6	2	7	5	4	/	/	83612	85622	87656		15			
16	59	8	35	02	03	5.9	3.8	86	4.9	1031.7	2	015	05	2	2	8	5	6	/	/	88630				16			
17	40	7	00	00	03	5.7	4.5	92	5.1	1029.6	3	005	05	2	2	7	5	6	/	/	86635	87640			17			
18	60	7	35	05	08	4.3	2.8	90	4.6	1032.9	1	006	05	2	2	6	5	5	0	1	81628	86632	86078		18	COTRA		
19	77	1	04	09	17	4.5	1.2	79	4.1	1028.8	1	010	03	0	0	1	1	4	0	1	81815				19	1Ci80 COTRA Cu fra		
20	68	7	04	11	20	1.8	-1.9	76	3.2	1022.9	6	003	02	2	2	7	8	4	/	/	81816	87625			20			
21	50	7	04	09	17	2.3	0.4	87	3.9	1015.5	6	003	05	2	2	2	0	9	1	8	82465	87270			21	Halo 22 part		
22	81	7	02	10	17	4.7	1.7	81	4.3	1015.6	1	016	80	8	2	7	8	4	/	1	81715	86820	85640		22	/Ci75 Cu med		
23	81	2	35	08	17	1.5	-2.6	74	3.1	1024.0	3	013	02	0	0	1	5	6	0	1	81640				23	2Ci80 COTRA Hoar slt Gnd sfc frzn		
24	77	7	22	06	12	1.5	-2.3	76	3.2	1018.8	7	018	03	2	2	2	5	6	7	8	82645	83465	87272		24	1Ac63 Hoar slt Gnd sfc frzn		
25	72	5	34	06	12	0.9	-3.1	74	3.0	1013.4	0	011	03	1	1	1	5	6	0	1	81645	85070			25	COTRA Hoar slt Sn lyng tr		
26	82	1	28	05	10	-0.2	-4.1	75	2.8	1006.0	7	011	02	0	0	1	5	6	0	0	81640				26	Hoar mod Gnd sfc frzn		
27	68	6	33	09	17	2.0	-2.4	73	3.2	1000.8	1	005	22	7	2	1	5	4	3	2	81715	86068			27	1Sc25 1Sc56 1Ac65 jp S Sn ly tr Gnd sfc frzn		
28	58	7	35	05	09	1.9	-1.5	78	3.4	1006.3	1	020	26	8	2	7	5	4	/	/	86715	87625			28	Sh sn+sn pellets 0815-25		
29	65	3	35	07	12	1.1	-2.1	79	3.2	1020.4	2	021	15	1	1	3	8	4	0	0	81715	83650			29	1Cu20 Cu med jp W Hoar slt Gnd sfc frzn		

Mean vis = 17.3 km  
 Mean cloud = 5.9 74%  
 Mean wind speed = 7.1 kn  
 Mean gust = 13 kn  
 Mean TT = 5.6 C  
 Mean TdTd = 3.1 C  
 Mean RH = 83.9 %  
 Mean r = 5.0 g/kg  
 Mean PPP = 1021.6 mbar

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 1500 GMT for FEBRUARY 2004

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	C	Nh	Ch	shs	N	Ch	shs	Date	Remarks	
1	61	8	19	08	20	11.4	8.1	80	6.8	1011.9	8	019	03	2	2	3	6	4	2	/	83712	88460						1	1Sc25	
2	72	8	23	14	26	12.4	9.8	84	7.5	1018.6	2	010	21	6	2	8	5	4	/	/	81715	87618	88622					2		
3	70	7	22	16	34	14.0	10.6	80	7.9	1019.1	7	002	02	2	2	7	5	4	7	2	86616	83625						3	/Ac65 /Ci75	
4	72	7	21	16	33	14.5	9.9	74	7.6	1018.8	8	021	03	2	2	1	1	5	7	2	81820	83365	87075					4	1Ac60 COTRA Cu hum	
5	40	8	23	08	13	11.7	11.1	96	8.2	1020.5	5	008	58	6	5	8	5	2	/	/	82705	87615	88620					5		
6	72	7	22	03	06	8.4	8.0	97	6.7	1010.1	7	018	20	6	5	7	5	4	/	/	81710	84712	87630					6		
7	84	3	27	10	22	8.7	1.8	62	4.3	1016.9	8	001	02	8	1	3	8	6	0	0	82835								7	1Sc45 Cu med
8	83	2	34	09	26	7.3	-3.6	46	2.9	1024.1	2	022	01	1	1	2	4	6	0	1	81840								8	2Sc45 1Ci80 COTRA Cu med
9	80	7	31	04	11	5.4	-2.7	56	3.0	1036.2	5	006	02	2	2	1	4	6	0	8	81635	87275						9	COTRA Parhelia U/a cont	
10	78	6	24	10	15	8.1	1.9	65	4.3	1029.8	8	023	01	2	2	1	5	6	3	1	81645	86075						10	2Ac65 Parhelia	
11	65	7	35	04	07	12.0	7.7	75	6.4	1030.7	3	001	02	2	2	7	5	5	/	/	87628								11	
12	61	7	28	02	05	11.3	7.6	78	6.4	1033.6	5	006	02	2	2	7	8	4	/	/	81818	87645						12		
13	63	8	24	04	07	9.3	4.7	73	5.2	1033.4	6	014	03	2	2	8	8	5	/	/	81820	87630	88640					13	Cu hum	
14	58	6	33	03	06	8.2	5.1	81	5.4	1026.8	8	009	05	1	1	1	8	4	7	6	81815	86270						14	1Sc45 2As63 1Ac65 Cu fra	
15	82	7	04	05	08	8.7	5.9	82	5.7	1027.6	4	000	02	8	2	7	8	5	/	/	81820	87645						15	2Sc35 Cu med	
16	65	8	34	03	06	8.1	2.6	68	4.5	1030.9	6	005	02	2	2	8	8	5	/	/	82825	88635						16	Cu hum	
17	56	7	01	04	07	6.8	5.9	94	5.7	1029.9	7	001	21	6	2	7	5	3	/	/	86708	87625						17		
18	82	7	36	07	14	7.1	2.5	73	4.5	1030.6	7	013	02	2	2	7	8	5	/	/	82822	87640						18		
19	82	3	06	12	26	6.4	-3.1	51	3.0	1026.8	7	017	02	1	1	2	2	6	0	1	82838								19	2Ci80 Cu med ra
20	70	7	06	11	21	3.4	-2.3	66	3.2	1019.5	7	015	02	2	2	7	8	5	/	/	82822	87628						20		
21	58	8	04	14	26	5.8	0.4	68	3.9	1012.9	7	020	05	2	2	1	1	5	3	7	81825	88270						21	2Ac65 Cu fra COTRA	
22	80	7	02	16	28	5.7	-1.6	59	3.3	1017.2	3	006	15	8	2	7	8	6	/	/	83832	86650						22	Cu med jp S&W	
23	75	6	35	07	16	4.7	-4.1	53	2.8	1024.2	6	002	26	8	1	2	8	6	0	1	82835	84080						23	2Sc50 COTRA Cu med Past ra+sn	
24	62	8	25	04	12	5.8	4.6	92	5.3	1013.7	7	027	61	6	2	8	5	4	/	/	81712	83615	87618					24	8Sc50	
25	84	6	33	08	18	3.5	-7.7	44	2.1	1011.3	8	016	02	2	2	1	1	6	0	2	81845	86070						25	Cu hum	
26	82	6	31	05	11	3.7	-6.4	47	2.4	1002.2	7	021	15	1	1	2	8	6	0	8	82840	85270						26	Cu med jp W Parhelia	
27	80	7	33	09	20	3.5	-5.1	53	2.6	1001.3	3	001	03	1	1	7	5	6	/	/	87632								27	
28	70	8	35	03	07	2.4	-1.9	73	3.3	1009.9	2	015	70	7	2	8	5	5	/	/	85625	88635						28		
29	81	3	04	08	13	5.6	-3.5	52	2.9	1024.1	2	020	15	1	1	3	8	6	0	0	82830								29	2Sc40 Cu med jp E

Mean vis = 24.6 km  
 Mean cloud = 6.5 81%  
 Mean wind speed = 7.8 kn  
 Mean gust = 16 kn  
 Mean TT = 7.7 C  
 Mean TdTd = 2.3 C  
 Mean RH = 69.7 %  
 Mean r = 4.8 g/kg  
 Mean PPP = 1021.1 mbar

VV = Visibility code (Code FM12-4377)  
 dd = Direction from which wind is blowing, tens of degrees true  
 gg = Highest gust in past hour, knots  
 TdTd = Dew point temperature at 1.2 m, deg Celsius  
 r = Humidity mixing ratio at 1.2 m, g/kg  
 a = Characteristic of pressure tendency (Code FM12-0200)  
 ww = Present weather code (Code FM12-4677)  
 Nh = Amount of low cloud present, oktas  
 h = Height of low cloud (Code FM12-1600)  
 Ch = Type of high cloud (Code FM12-0509)  
 N = Amount of cloud, oktas  
 hshs = Height of cloud (FM12-1677)

N = Total cloud amount, oktas  
 ff = 10 minute mean wind speed, knots  
 TT = Air temperature at 1.2 m, deg Celsius  
 RH = Relative humidity at 1.2 m  
 PPP = Air pressure reduced to sea level, mbar  
 ppp = 3 hr pressure tendency, tenths of mbar  
 W1, W2 = Past weather code (Code FM12-4561)-  
 covers past 3 hours.  
 Cl = Type of low cloud (Code Fm12-0513)  
 Cm = Type of medium cloud (Code FM12-0515)  
 8 groups. 8 = indicator for cloud detail  
 C = Type of cloud (FM12-0500)  
 Remarks : COTRA = persistent condensation  
 trails present.

Wokingham Psychrometer  
 Daily means and extremes, 00-24 GMT  
 FEBRUARY 2004

Date	Mean			Min			Max			Missing RH N >0	Number of minutes RH in given ranges								
	TT	TT	Time	TT	Time	RH	RH	Time	RH		Time	RH	Time	RH	Time	RH	Time	RH	
01	10.5	11.6	20:25	8.9	08:26	84.5	94.5	02:12	69.6	12:13		0	0	0	298	771	371	0	0
02	12.0	13.8	12:01	10.6	02:18	87.7	95.7	05:10	78.1	13:11		0	0	0	125	929	299	87	0
03	13.3	14.8	10:25	12.0	20:38	87.3	95.7	20:38	72.8	17:54		0	0	0	307	431	475	227	0
04	13.3	15.3	12:34	12.1	00:17	85.0	95.5	00:00	68.9	12:37		0	0	0	423	501	417	99	0
05	12.0	13.8	12:26	10.1	21:41	90.8	96.8	16:37	82.2	13:13		0	0	0	0	638	567	235	0
06	9.3	11.6	06:24	6.7	23:57	91.6	98.5	13:28	79.8	22:28		0	0	0	8	439	577	413	3
07	7.2	10.1	11:51	5.8	05:54	73.2	87.3	00:00	56.1	14:29		0	0	102	968	370	0	0	
08	5.3	9.4	13:25	0.1	23:59	58.6	83.6	00:24	39.9	15:19		0	2	670	747	21	0	0	
09	1.2	6.0	13:14	-3.1	07:07	72.6	90.5	08:00	49.4	12:24	72	0	0	387	461	489	31	0	
10	5.1	8.7	16:12	1.1	00:00	76.1	90.5	21:11	62.5	12:53		0	0	0	1089	325	26	0	
11	9.5	12.1	15:05	7.4	03:15	85.3	93.4	21:32	74.0	14:09		0	0	0	338	872	230	0	
12	9.0	11.4	14:10	7.1	04:27	89.9	98.0	05:50	76.9	15:01		0	0	0	174	431	350	485	0
13	8.2	9.4	13:43	7.5	23:59	85.5	92.9	06:48	71.5	15:01		0	0	0	347	534	559	0	0
14	7.1	9.0	11:39	6.1	20:55	90.8	97.9	08:01	78.8	15:30		0	0	0	33	541	496	370	0
15	6.9	9.0	12:57	4.9	22:55	87.6	95.8	06:02	76.2	13:17		0	0	0	131	665	519	125	0
16	6.2	8.1	14:29	3.9	19:02	81.0	88.8	21:28	66.7	15:46		0	0	0	468	972	0	0	0
17	6.0	7.4	14:31	5.0	06:29	90.5	97.9	13:28	83.8	00:23		0	0	0	0	628	635	177	0
18	5.7	8.1	13:53	3.0	07:59	83.4	93.9	03:52	66.1	13:52		0	0	0	493	501	446	0	0
19	4.4	7.5	13:38	2.0	23:39	70.7	88.3	00:56	45.5	14:24		0	0	333	588	519	0	0	
20	1.9	3.5	14:52	-1.3	23:58	72.1	85.3	23:57	64.6	13:37		0	0	0	1348	92	0	0	0
21	2.8	6.5	11:57	-1.5	00:11	79.3	91.4	06:20	64.7	12:12	80	0	0	0	813	457	90	0	0
22	3.7	6.5	11:49	-0.3	23:59	69.0	84.6	12:48	47.0	15:58		0	0	281	1013	146	0	0	
23	1.6	5.8	12:44	-1.5	23:59	70.2	84.3	02:42	47.9	15:38	91	0	0	410	520	419	0	0	
24	2.5	7.3	11:57	-2.1	02:55	81.8	96.8	17:49	62.6	11:59		0	0	0	794	228	359	59	0
25	1.4	4.8	12:44	-2.1	22:47	69.3	94.9	01:49	36.7	13:49		0	22	466	444	209	299	0	0
26	0.1	5.3	13:56	-3.4	04:28	68.0	88.2	05:26	44.0	14:03	45	0	0	490	601	304	0	0	
27	0.7	5.7	12:37	-3.3	03:57	68.1	87.6	07:50	48.3	13:46	33	0	0	474	710	223	0	0	
28	1.4	3.3	13:16	-1.8	01:02	74.4	85.4	05:03	63.6	13:01	16	0	0	0	1037	387	0	0	
29	1.1	6.1	14:52	-2.2	23:59	73.7	87.6	05:34	50.7	14:53	38	0	0	156	798	448	0	0	
Mean	5.8	8.7		3.2		79.2	91.8		63.1			0.00	0.01	2.17	8.66	7.75	3.88	1.31	0.00
Hi	13.3	15.3		12.1		91.6	98.5		83.8	Tot	375	0	24	3769	15076	13490	6746	2277	3
Lo	0.1	3.3		-3.4		58.6	83.6		36.7										

Note. Aspirated Psychrometer exposed near house. Winds with a component from 030 deg can produce temperature maxima up to 2C higher than standard screen values recorded about 500m away. Minima on radiation nights can also be about 1C higher than screen values, due partly to topography. Humidity readings are similar to screen derived values under most conditions and in most instances can be considered more accurate due to controlled aspiration. The psychrometer is of experimental design, and logs one minute average values of temp and RH.

# WOKINGHAM METEOROLOGICAL DATA

Wokingham Climatological Station, Emmbrook, Berkshire.

Lat 51°25'N 00°51'W NGR (SU)800699 Altitude 44m ASL

## Seasonal Means and Totals

## WINTER 2003/2004

Temperature (°C)				Rank					
Mean maximum	8.6	+0.8		26 <sup>th</sup> highest in 122 years					
Mean minimum	2.6	+0.9		14 <sup>th</sup> highest in 122 years					
Daily mean	5.6	+0.8		22 <sup>nd</sup> highest in 122 years					
Rainfall total (mm)	160.6	97 %		58 <sup>th</sup> highest in 122 years					
Sunshine total (hours)	197.0								
N° of:	Dry days	45	Wet days	35					
Days with:	Air frost	30	Ground frost	47	Snow falling	10	Snow lying	1	
Thunder	1	Hail ≥5mm	0	Small hail/ice	4	Fog @09 GMT	3	Nil sun	32
Air pressure MSL : Mean @09 GMT (mbar)		1015.8				-0.3			

Departure from 1971 to 2000 average shown in brackets.

Notes: **Mild. Near Normal Rainfall. Sunny.**

**Temperature.** The mean this winter is 0.3° higher than last winter, but the same as the winter before. For the mean minimum, at 2.6° it is highest since 1999. The highest maximum of 15.3°, 1.4° above the median, occurred on the 4<sup>th</sup> February, an unusually early date for such a high temperature. The lowest minimum of -5.2°, 2.3° above the median, is highest since 1998, and was recorded on the 8<sup>th</sup> December. The lowest maximum, 3.1° on the 29<sup>th</sup> December, ranks 3<sup>rd</sup> highest in 91 years, and is 3.4° above the median. Similarly, the highest minimum, 12.1° on the 5<sup>th</sup> February, ranks 4<sup>th</sup> highest in 91 years and is 2.2° above the median. December was the coldest month, mean 5.2°, and February the mildest with 5.9°, but as can be seen, all three months had very similar temperatures. The lowest grass minimum temperature was -9.9° on 9<sup>th</sup> February, 3.2° above average and highest since 1998. The mean earth temperature at 30 cm depth was 6.5°, anomaly +0.8°, while at 1 metre depth it was 8.4°, anomaly +0.4°. There were 30 days with air frost and 47 with ground frost, 2 and 4 fewer than average respectively. There were 219 hours with a temperature below 0°, 70 fewer than average.

**Rainfall.** Rainfall total this winter was close to average. January was the wettest month with 79.4 mm, 130 % of average, and February the driest, 23.4 mm, 57 % of average. The wettest day was the 7<sup>th</sup> January when 11.3 mm was recorded. The total duration of measurable rain was 158.7 hours, 17 fewer than average. The number of dry days, 45, is one more than average. Snow fell on 10 days, but only thickly enough to lay on the 28<sup>th</sup> January, giving a level depth of 1 cm at 0900 hours on the 29<sup>th</sup>, the only day this season with lying snow. A notable thunderstorm accompanied the snowfall of the 28<sup>th</sup>, during which the spire of St. Paul' s church in Reading Road was struck by lightning and substantially damaged in the subsequent fire. **Sunshine.** Not a time of the year to expect too much in the way of sunshine, but the total of 197 hours is in the sunny category. It is, however, least since 1999. The sunniest day was the 29<sup>th</sup> January, 8.5 hours, and there were 32 days without sunshine, 2 more than average. Overall there were 61 days with <3 hours and 12 with >6 hours. **Wind.** The mean wind speed this winter was 7.5 mph, 0.6 mph below average. The windiest day was the 31<sup>st</sup> January, mean speed 19.0 mph, and the season' s highest gust of 53 mph was also on that day. The least windy day was 18<sup>th</sup> December, mean 0.9 mph. There were 83 hours with a mean speed of 0.5 mph or less, 7 more than average. Daily mean direction/number of days: N,9 NE,11 E,5 SE,4 S,10 SW,26 W,10 NW,16. **Humidity.** The mean relative humidity was 83.6 %, and a value of 37 % recorded on the 25<sup>th</sup> February was the minimum. The mean amount of water vapour per kg of air was 5.0 g at 0900 hours and 5.1 g at 1500 hours.

**Pressure.** The absolute lowest air pressure this season was 984.1 mbar on the 13<sup>th</sup> January and the highest was 1037.1 mbar on the 9<sup>th</sup> February. **December.** Temperature and rainfall near normal, very sunny. **January.** Mild, wet and sunny. Notable thunderstorm with hail and snow on the 28<sup>th</sup>. **February.** Mild, dry, below normal sunshine. Mean maximum lowest since 1996. 15.3° on 4<sup>th</sup> highest for the first 12 days of Feb in past 29 years. Highest minimum, 12.1°, is a new record high. Driest since 1998.

Month	Mean Max	Anom	Mean Min	Anom	Rain mm	Anom %	Sun hrs	Anom %	Wind Mn mph	Max gust	Mean pressure	Anom
Dec	8.5	+0.2	1.9	-0.6	57.8	89	63.3	128	6.3	43	1017.8	+2.7
Jan	8.7	+1.2	2.7	+1.2	79.4	130	66.4	122	8.3	53	1008.4	-7.6
Feb	8.6	+0.7	3.2	+1.9	23.4	57	67.3	92	7.8	47	1021.6	+4.9

B J Burton FRMetS.

Hon. Met. Officer to Wokingham Town Council.