

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

FEBRUARY 2009

Temperature (°C / °F)			Anomaly	Rank in the past 128 years			
Mean maximum	7.9	46.2	0.0	60 th lowest			
Mean minimum	1.7	35.1	+0.4	48 th highest			
Daily mean	4.8	40.6	+0.2	57 th highest			
Highest maximum	14.2	57.6	on 27 th	Lowest maximum	0.4	32.7	on 2 nd
Highest minimum	8.1	46.6	on 25 th	Lowest minimum	-5.1	22.8	on 3 rd
Mean grass minimum	-1.3	29.7	+0.4	Lowest grass minimum	-14.6	5.7	on 3 rd
Mean earth @30 cm	4.5	40.1	-0.6	Earth @100 cm	5.9	42.6	-0.9
Frost duration (hrs)	96.0			Rain duration (hrs)	39.0	*	
Rainfall total (mm / in) ¶	61.3	2.41	148 %	33 rd highest			
Highest daily fall	25.0	0.98	on 9 th				
Number of: Dry days (<0.2mm)	17	Wet days (>0.9mm)	10	days ≥5mm	4		
Sunshine total (hrs) 73.8	Daily mean	2.64	110 %	Sunniest day	9.4	on 21 st	
N° days with: Air frost 11	Ground frost	14	Snow falling	8	Snow lying	7	
Thunder 1	Hail ≥5mm	0	Small hail/ice	1	Fog @09	0	Nil sun 10
Air pressure MSL : Mean @09 GMT (mbar/in)	1016.2	-0.5	30.01				
Absolute highest	1033.6		30.52	on 20 th			
Absolute lowest	976.9		28.85	on 9 th			

Anomaly = departure from 1971 to 2000 average (degrees C, percent and mbar). * Excludes snowfall ¶ Includes melted snowfall.

Notes:

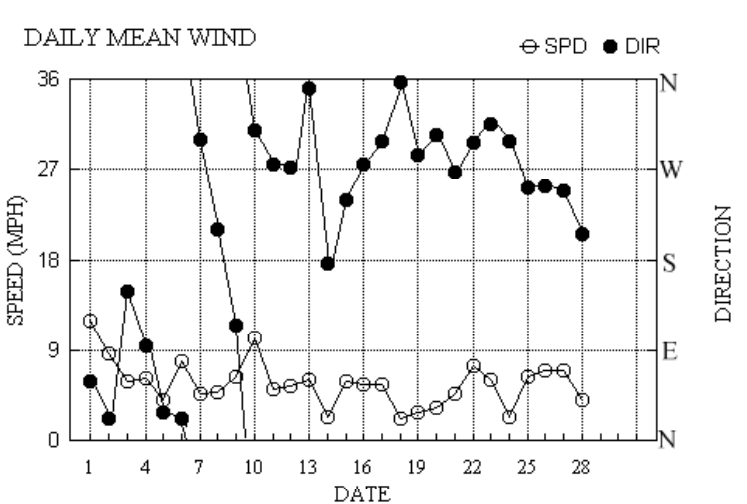
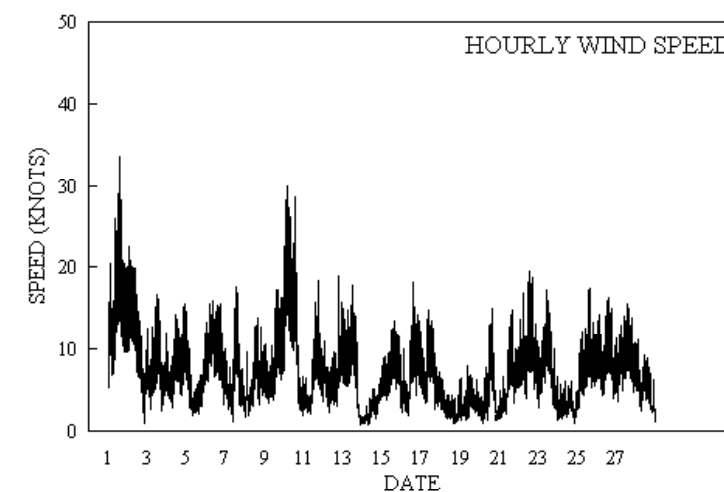
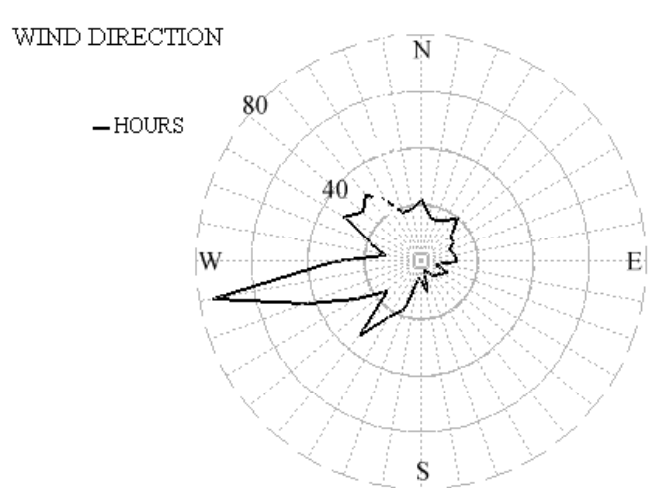
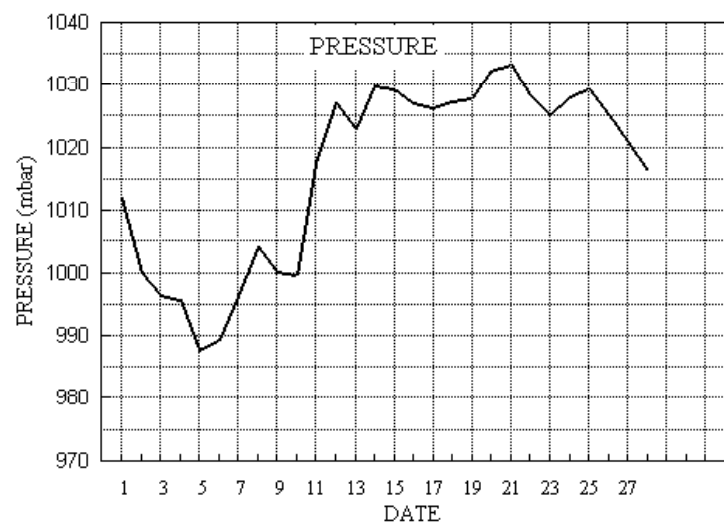
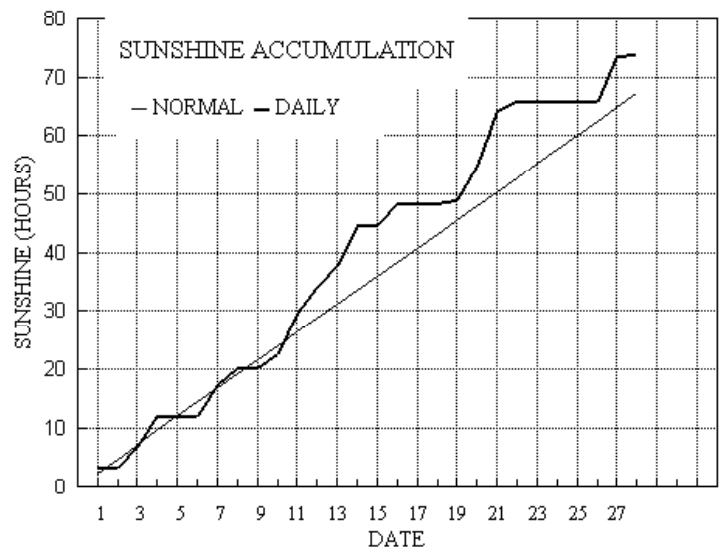
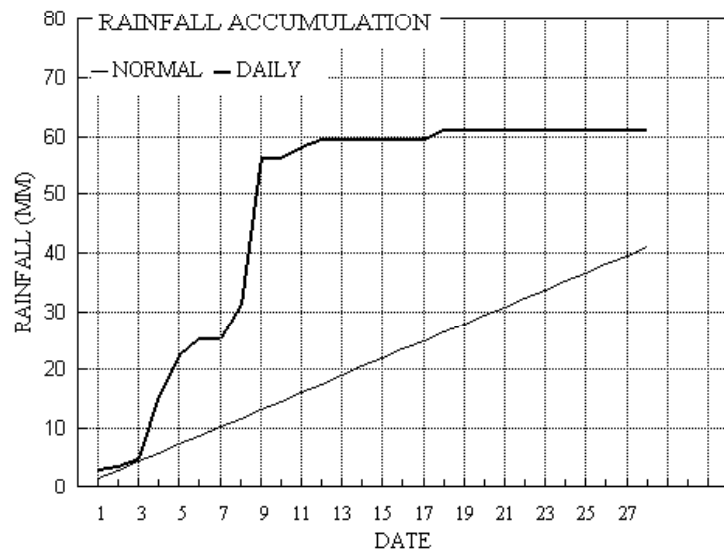
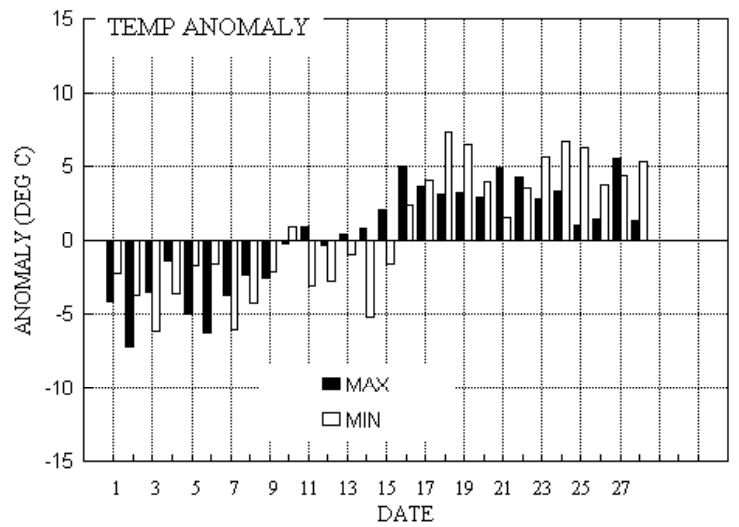
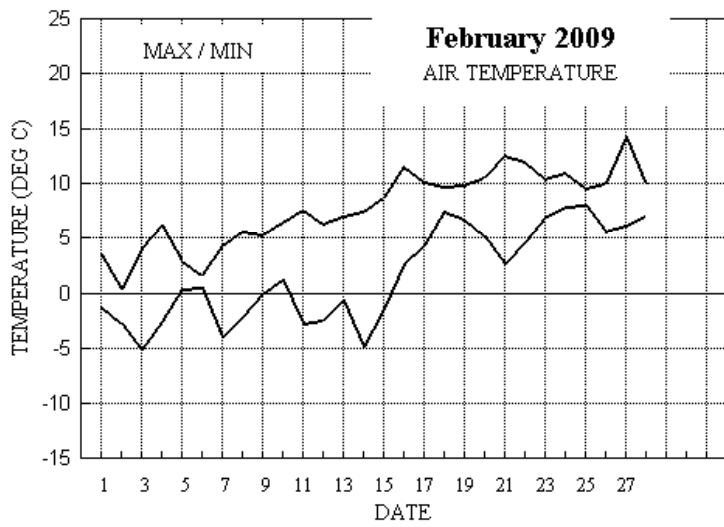
Wet with Temperature and Sunshine Near Normal. Snowy at first. Light winds.

Temperature : The near normal temperature headline masks the contrasty nature of this February, where the first week was cold and snowy, but it was mild after mid month. The mean max is lowest since 2006 but the mean min is 1.4° higher than in 2008. The lowest max is 2.0° below the median but only lowest since 2006, while the lowest min is on the median. The highest max is 1.2° above the median and the highest min is close to its median. As very low grass minima are to be expected with snow cover, the lowest grass min is lowest for February since 1991. Mean earth temp at 30 cm is lowest since 1996, and at 1 m depth, since 1991. The duration of air frost is close to average. **Rainfall :** Quite a high total this month, but wettest only since 2007. Most of the month's precipitation fell before the 12th, there being only 1.6 mm thereafter, with a dry spell of 5 days ending on the 17th and another unbroken on the 28th after 10 days. The month's highest 24 hour total, 25.0 mm on the 9th, is the highest for February since 1969, and 3rd highest since 1904. The combination of this high daily fall and a thaw of lying snow resulted in local flooding when the Emm and Loddon burst their banks. Much of the precipitation in the first week fell as snow, and a depth of 9 cm on the 2nd is deepest for any day since the 8th Feb 1991. The occurrence of significant lying snow after many years with little led to considerable disruption to transport and the closure of schools. Since 1976 snow depths here exceeding 9 cm were recorded in 1978, 79, 81, 82, 85, 86 and 87, with the deepest being 17 cm on 12th Dec 1981. Daily snow depth at 09 GMT this month were (date/depth): 2nd/9cm, 3rd/5cm, 4th/1cm, 5th/4cm, 6th/2cm, 7th/2cm, 8th/1cm. The number of days with snow falling is most only since 2005, but with snow lying, since 1991. **Sunshine :** Despite the number of sunless days being equal highest with 1997 since 1993, the sunshine total is a little above average, due to a handful of sunny days around the 12th and the 20th. Overall there were 16 days with <3 hours, 5 with =>6 hours and 1 with =>9 hours. **Wind :** The mean speed of 5.6 mph is 2.5 mph below average and lowest for February since before 1988. The 1st was the windiest day, mean 12.0 mph, 2nd lowest since before 1988, and the highest gust of 39 mph was also on that day. The 18th was the least windy day with 2.2 mph, and there were 407 minutes (6.78 hours) with a mean speed of 0.5 mph or less. Daily mean direction/number of days: N,4 NE,2 E,1 SE,2 S,1 SW,3 W,8 NW,7. **Humidity :** The mean relative humidity was 79.4 % and the lowest value was 34 % on the 1st. The mean water vapour content per kg of air was 4.3 g at 0900 GMT and 4.1 g at 1500 GMT. **Pressure :** The minimum value of 976.9 mbar is the lowest for February since 1990. **Commentary : From the 1st to the 9th :** Cold, with both daily max and min continuously below normal, and anomalies of -7.2° for the max on the 2nd, and -6.1° for the min on the 3rd. Very wet, with a good deal of snow, and snow lying every day from the 2nd to the 8th. Sunshine was near normal. A strong NE'ly wind on the 1st dropped light or moderate by the 3rd, backed NW'ly on 7th, and SE'ly by 9th. **From the 10th to the 15th :** Temperatures were near normal. Dry apart from the 11th and 12th, and fairly sunny. Mainly NW'ly winds were fresh on the 10th, then light or moderate. **From the 16th to the 28th :** Temperatures were above normal, with anomalies of +5.6° for the max on the 27th and +7.3° for the min on the 18th. Apart from the 18th, this period was dry. Sunshine was variable, 6 sunless days, but also 91 % of the maximum on the 21st. Winds were mainly W'ly, light or moderate.

Table1. Mean anomalies (max, min, rain, sun) for specified periods.

1 st to the 9 th				10 th to the 18 th				19 th to the 28 th			
-4.0	-3.5	429 %	96 %	+1.7	+0.1	34 %	135 %	+3.1	+4.8	1 %	109 %

Wokingham Climatological Graphs for February 2009



Month: February 2009

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 ddd	mean ff	sp	Max gust ddd	gg	HHhh	High hr ddd	ff	HH	Rain hrs				
1	3.5	-1.2	3.1	-4.1	4.5	6.5	3.4	10.5	1011.9	1	1	0	0	0	0	0	58	10.0	10.4	50	34	1430	50	17	14	x	
2	0.4	-2.7	0.5	-5.8	3.9	6.5	0.0	18.9	999.8	1	1	1	0	0	0	0	22	6.2	7.6	32	23	0230	31	12	02	x	
3	4.1	-5.1	1.5	-14.6	3.8	6.4	3.3	12.8	996.4	1	1	1	0	0	0	0	148	4.1	5.1	180	17	1152	171	8	14	x	
4	6.2	-2.6	10.4	-7.5	3.7	6.3	5.3	6.3	995.6	1	1	1	0	0	0	0	95	5.1	5.4	66	16	2251	72	7	21	x	
5	3.0	0.4	7.0	-1.1	3.6	6.1	0.0	0.0	987.7	0	1	1	1	0	0	0	28	3.2	3.5	63	13	0040	63	6	00	x	
6	1.7	0.5	2.8	0.0	3.5	6.0	0.0	0.8	989.3	0	0	1	1	1	0	1	0	22	6.5	6.9	28	16	0930	35	10	08	x
7	4.3	-3.9	tr	-8.7	3.4	5.9	5.3	10.3	996.1	1	1	0	1	0	0	0	0	300	3.6	4.0	313	18	1234	312	8	12	0.0
8	5.7	-2.2	6.0	-7.4	3.1	5.8	2.9	8.6	1004.2	1	1	0	1	0	0	0	0	211	3.7	4.2	198	14	1518	215	7	15	7.6
9	5.4	0.0	25.0	-2.5	3.1	5.7	0.0	0.0	1000.2	0	1	0	0	0	0	0	0	114	2.7	5.5	89	17	1551	74	8	17	21.3
10	6.5	1.3	tr	0.7	3.3	5.5	2.6	0.0	999.6	0	0	1	0	0	0	0	0	309	7.7	8.8	336	30	0351	337	15	03	0.0
11	7.6	-2.7	1.9	-7.6	3.3	5.4	6.8	5.0	1017.5	1	1	0	0	0	0	0	0	275	2.8	4.4	356	19	1735	265	7	13	1.2
12	6.4	-2.4	1.5	-6.9	3.3	5.4	4.4	9.0	1027.1	1	1	1	0	0	0	0	0	272	3.0	4.6	200	19	1855	250	8	23	2.0
13	7.1	-0.6	0.0	0.0	3.2	5.3	3.7	4.2	1022.9	1	0	0	0	0	0	0	0	351	4.3	5.3	5	18	1202	11	9	11	0.0
14	7.5	-4.8	0.0	-9.2	3.3	5.3	6.9	9.6	1029.7	1	1	0	0	0	0	0	0	176	1.0	2.0	210	7	2301	212	4	23	0.0
15	8.7	-1.4	tr	1.9	3.2	5.3	0.1	0.0	1029.2	1	0	0	0	0	0	0	0	239	5.0	5.2	254	14	1527	261	7	15	0.0
16	11.6	2.6	0.0	-1.6	3.7	5.3	3.8	0.0	1027.0	0	1	0	0	0	0	0	0	275	4.5	4.8	310	18	1441	298	9	14	0.0
17	10.2	4.3	tr	-1.0	4.2	5.3	0.0	0.0	1026.4	0	1	0	0	0	0	0	0	299	4.3	4.9	300	15	0914	310	7	12	0.0
18	9.7	7.5	1.5	6.4	4.8	5.4	0.0	0.0	1027.4	0	0	0	0	0	0	0	0	358	0.9	1.9	296	6	0021	69	3	23	6.5
19	9.8	6.7	0.1	6.5	5.4	5.5	0.4	0.0	1027.9	0	0	0	0	0	0	0	0	285	1.1	2.4	281	8	0920	305	4	13	0.4
20	10.6	5.2	0.0	1.2	5.6	5.6	6.0	0.0	1032.3	0	0	0	0	0	0	0	0	304	2.1	2.8	315	15	1421	297	7	14	0.0
21	12.6	2.7	0.0	-2.2	5.7	5.8	9.4	0.0	1033.2	0	1	0	0	0	0	0	0	267	3.8	4.1	270	15	1507	294	7	13	0.0
22	12.0	4.7	0.0	1.2	5.7	6.0	1.5	0.0	1028.3	0	0	0	0	0	0	0	0	297	5.0	6.4	338	20	1230	333	10	12	0.0
23	10.5	6.9	tr	4.0	6.0	6.1	0.0	0.0	1025.1	0	0	0	0	0	0	0	0	315	5.0	5.3	320	17	1014	331	9	10	0.0
24	11.0	7.9	0.0	3.9	6.2	6.2	0.0	0.0	1028.0	0	0	0	0	0	0	0	0	299	1.7	2.0	283	6	0807	307	3	15	0.0
25	9.6	8.1	tr	7.5	6.6	6.4	0.0	0.0	1029.3	0	0	0	0	0	0	0	0	252	5.5	5.5	259	18	1443	259	8	13	0.0
26	10.0	5.6	0.0	3.3	6.7	6.5	0.0	0.0	1025.2	0	0	0	0	0	0	0	0	253	6.0	6.1	258	16	1442	272	8	12	0.0
27	14.2	6.2	0.0	2.4	6.7	6.6	7.9	0.0	1021.0	0	0	0	0	0	0	0	0	249	6.0	6.0	289	16	1346	263	8	14	0.0
28	9.9	7.1	0.0	5.9	7.0	6.8	0.1	0.0	1016.2	0	0	0	0	0	0	0	0	205	2.2	3.5	239	11	0148	203	5	10	0.0
Total			61.3				73.8	96.0																			39.0
Mean	7.9	1.7		-1.3	4.5	5.9	2.64	3.4	1016.2								301	1.6	4.9								
Anom	-0.1	+0.4	148%		-0.6	-0.9	110%																				
Daily mean		4.8																									
Anom		+0.2																									

Number of days with:

Air frost = 11 Ground frost = 14 Nil sun = 10
 Snow falling = 8 Snow lying = 7 Thunder = 1
 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 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 February 2009

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	pppww	W1W2	Nh	Cl	h	Cr	Ch	shs	NChs	NChs	Date	Remarks	
1	65	8	07	12	26	1.6	-5.0	61	2.6	1011.9	6	004	02	2	2	8	5	6	/	/	88630	1	Hoar slt. Gnd sfc part frzn	
2	12	8	02	11	20	-1.9	-3.1	92	3.1	999.8	7	020	71	7	7	8	7	2	/	/	85704 88706	2	Sn ly 9cm	
3	59	5	13	06	10	-0.8	-2.1	91	3.3	996.4	2	014	85	8	1	5	8	3	0	0	82708 84635	3	1Cu18 Sn ly 5cm TSR frzn	
4	56	7	09	03	09	0.3	-1.2	90	3.5	995.6	3	001	05	2	2	1	0	9	3	1	81362 87075	4	COTRA Hoar slt. Snly 90% 1cm Gnd frzn	
5	18	8	04	02	04	0.5	-0.1	96	3.9	987.7	3	006	61	6	2	8	7	2	/	/	88703	5	Sn ly 4cm 100%	
6	50	8	03	10	16	0.7	-0.0	95	3.9	989.3	4	000	68	9	7	8	7	2	/	/	82704 87706 88712	6	Sn ly 2cm 100%. Thunder+snow 0559-0611	
7	82	7	27	01	04	-0.9	-2.7	87	3.1	996.1	3	009	03	1	1	7	6	4	/	/	87710	7	Hoar mod Snly 2cm 90% Gnd frzn	
8	62	7	20	04	06	-0.0	-1.9	87	3.3	1004.2	2	002	01	2	2	7	0	9	7	/	/	86460	8	/Ac62 Hoar slt Snly 1cm 70% Gnd frzn
9	40	8	17	05	11	3.7	2.8	93	4.7	1000.2	8	013	63	6	6	3	5	4	2	/	/	81712 83618 88525	9	Snly 30% 1cm
10	60	8	30	13	26	2.3	0.4	87	4.0	999.6	1	080	61	6	6	8	5	4	/	/	85710 88615	10	snly tr	
11	59	1	21	01	04	0.8	-0.2	93	3.7	1017.5	1	008	05	0	0	0	0	9	0	8	81275	11	Hoar mod. Gnd frzn	
12	62	7	30	04	08	-0.6	-3.9	79	2.8	1027.1	1	015	02	2	2	2	0	9	3	1	82365 86078	12	1Cc72 COTRA Hoar mod Gnd frzn Parheliion	
13	68	7	36	06	13	3.3	0.6	83	3.9	1022.9	2	017	02	2	2	7	8	4	/	/	81812 87625	13	Cu fra	
14	56	1	22	01	02	-1.4	-2.4	93	3.1	1029.7	2	012	10	0	0	1	5	7	0	1	81656	14	1Ci80 COTRA Hoar mod Gnd frzn	
15	62	7	23	04	08	4.2	1.0	80	4.0	1029.2	2	001	02	2	2	1	5	7	7	/	/	81656 87357	15	
16	60	7	22	02	03	4.9	3.5	91	4.8	1027.0	2	002	05	2	2	3	0	9	7	8	82363 87275	16	1Ac66 COTRA Halo 22 part	
17	70	7	31	07	13	8.3	4.0	75	5.0	1026.4	2	009	03	2	2	7	5	5	/	/	81620 87638	17		
18	15	7	34	02	04	8.2	7.2	94	6.2	1027.4	5	000	20	5	2	7	5	2	/	/	85704 86710 87640	18		
19	13	7	27	02	05	6.9	6.3	96	5.8	1027.9	2	009	28	6	4	7	6	0	7	/	/	82701 86702	19	3Sc45 /Ac57
20	33	6	28	02	05	5.5	3.5	86	4.8	1032.3	1	012	05	2	2	1	5	7	0	1	81656 86080	20	COTRA	
21	65	6	23	02	04	5.7	2.2	78	4.4	1033.2	1	006	02	1	1	2	5	6	0	1	82645 85080	21	COTRA	
22	84	7	23	04	08	8.2	4.8	79	5.3	1028.3	3	003	02	2	2	7	8	4	/	1	81815 87635	22	2Sc25 /Ci75 Cu fra	
23	82	7	33	08	13	8.9	4.4	73	5.1	1025.1	1	001	02	2	2	7	5	4	/	/	85618 87625	23		
24	32	7	06	01	07	8.7	6.6	87	6.0	1028.0	2	011	05	2	2	7	5	4	/	/	81710 83625 87630	24	dd vrb, mainly NW	
25	58	8	24	05	10	8.5	4.5	76	5.1	1029.3	1	007	05	2	2	8	5	5	/	/	82624 88628	25		
26	58	8	25	06	09	6.7	4.5	86	5.1	1025.2	2	001	05	2	2	1	6	4	2	/	/	81710 88462	26	
27	60	6	26	06	13	8.7	5.2	79	5.4	1021.0	2	007	05	2	2	1	5	4	4	1	81710 85080	27	1Sc45 1Ac62 COTRA	
28	82	8	20	05	08	7.9	2.7	70	4.6	1016.2	6	005	02	2	2	8	5	6	/	/	88630	28		

Mean vis = 13.3 km

Mean cloud = 6.7 84%

Mean wind speed = 4.8 kn

Mean gust = 10 kn

Mean TT = 3.9 °C

Mean TdTd = 1.5 °C

Mean RH = 84.9 %

Mean r = 4.3 g/kg

Mean PPP = 1016.2 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 February 2009

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Ch	NCh	shs	NCh	shs	NCh	shs	Date	Remarks
1	86	1	05	15	34	1.9	-9.2	44	1.9	1009.0	6	020	02	8	1	1	8	6	0	0	81840						1	1Sc56 Cu hum/med	
2	40	8	01	07	13	-0.1	-2.3	85	3.3	994.1	7	034	70	7	2	8	5	3	/	/	87708	88615					2	Sn ly 8cm	
3	58	5	17	08	15	3.1	-0.5	77	3.7	997.0	0	001	15	8	1	5	8	4	0	0	81712	84650					3	2Cu018 jpNW Snly 2cm	
4	68	8	11	07	12	4.0	-5.6	50	2.6	993.5	6	012	03	2	2	3	0	9	7	7	81362	83465	88272				4	Snly 70% 1cm. Halo 22° part	
5	58	8	36	02	04	2.7	1.3	91	4.3	989.1	3	006	05	2	2	8	5	2	/	/	82705	87708	87615				5	Sn ly 3cm. Thaw	
6	35	8	01	07	15	1.4	0.2	91	3.9	990.6	3	006	68	7	6	7	7	2	2	/	83705	87707	87515				6	Snly 2cm 90% vv 12k NW	
7	82	3	32	08	17	3.7	-1.8	67	3.3	997.5	2	011	02	1	1	3	8	5	0	0	82822							7	2Sc35 Cu hum/med Snly 70% 2cm
8	70	8	22	06	13	4.5	-1.7	64	3.4	1003.0	7	008	60	6	2	4	8	5	2	/	81825	84632	88540				8	Snly 70% 1cm	
9	62	8	10	07	12	3.7	2.2	90	4.5	992.1	7	056	63	6	6	6	5	3	2	/	81708	86612	88525				9	Snly 10% 1cm	
10	84	3	28	10	20	5.8	-1.9	58	3.3	1008.7	2	035	02	1	1	3	8	6	0	0	81830	83640					10	Cu hum	
11	80	4	27	05	13	7.1	1.2	66	4.1	1018.0	0	002	02	1	1	4	8	5	3	1	81825	83650					11	2Sc35 1Ac66 1Ci75 Cu fra/hum	
12	70	8	25	04	10	2.9	-3.3	64	2.9	1026.4	8	009	14	2	2	7	0	9	7	/	87358							12	/As62 Ac op vir
13	82	2	02	07	14	5.5	-1.4	61	3.4	1024.3	1	005	01	1	1	2	5	0	1		82828							13	1Ci78 COTRA Cu hum/med
14	86	7	12	01	05	5.8	-4.3	48	2.7	1029.9	5	002	03	1	1	1	4	6	7	/	81640	87357					14		
15	60	8	26	06	13	8.4	3.3	70	4.7	1027.2	6	013	60	6	2	3	8	5	2	/	81820	83645	88550				15	Cu fra/hum	
16	83	7	31	10	18	11.2	2.4	54	4.4	1025.9	8	012	02	2	2	1	8	6	3	1	81832	87075					16	1Sc45 1Ac68 1Cc72 COTRA Parhelia	
17	60	8	31	07	13	10.0	6.5	79	5.9	1026.8	5	000	05	2	2	8	5	4	/	/	81712	86615	88620				17		
18	60	8	35	01	03	9.0	5.6	79	5.6	1026.4	7	012	05	2	2	8	5	4	/	/	82612	87620	88635				18		
19	67	7	29	03	07	9.0	4.5	73	5.1	1028.3	3	002	02	2	2	7	8	4	/	/	81818	83630	87640				19	Cu fra	
20	84	7	29	06	15	9.6	0.1	51	3.8	1032.4	7	001	02	2	2	6	5	6	3	1	86638	87077					20	2Ac64 COTRA	
21	75	3	28	07	12	12.2	2.9	53	4.6	1031.5	7	013	02	1	1	0	0	9	0	1	83080							21	COTRA
22	88	6	31	08	16	11.5	1.7	51	4.3	1026.9	6	005	02	2	2	6	8	6	0	0	81838	86643					22	Cu hum	
23	82	8	32	08	15	10.1	3.0	61	4.6	1024.6	6	008	02	2	2	7	5	5	7	/	82628	87632					23	/Ac57	
24	57	8	30	02	05	10.8	6.4	74	5.9	1027.9	6	007	05	2	2	8	8	4	/	/	81818	88635					24	Cu hum	
25	84	8	25	07	18	8.8	4.4	74	5.1	1028.0	8	014	02	5	2	8	8	4	/	/	83818	88625					25	Cu hum	
26	78	8	27	08	16	9.2	1.8	60	4.3	1023.8	7	013	02	2	2	1	1	5	7	/	81828	87360	88465				26	Cu fra	
27	75	7	25	08	15	12.8	5.2	60	5.4	1019.9	5	007	03	1	1	3	5	6	0	1	83630	86078					27	COTRA	
28	81	7	19	04	09	9.2	1.7	59	4.3	1013.1	7	020	02	2	2	7	5	6	/	/	87630							28	

Mean vis = 28.4 km

Mean cloud = 6.5 81%

Mean wind speed = 6.4 kn

Mean gust = 13 kn

Mean TT = 6.9 °C

Mean TdTd = 0.8 °C

Mean RH = 66.2 %

Mean r = 4.1 g/kg

Mean PPP = 1015.6 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.

February 2009	T mn	Tx	Time	Tn	Time	RHmn	RH x	Time	RH n	Time	Tdmn	r mn	r x	Time	r n	Time	p mn	p x	Time	p n	Time	R tot
1	-0.10	3.3	1407	-3.1	2246	66.7	86.2	2359	34.0	1508	-5.82	2.49	3.2	1	1.4	1519	1010.48	1013.2	7	1006.3	2358	0.0
2	-1.00	0.4	2049	-2.7	23	88.3	93.3	2252	83.1	1209	-2.70	3.16	3.6	2256	2.7	1	997.45	1006.4	0	991.4	2024	1.8
3	-0.37	3.8	1424	-5.5	516	88.0	95.2	524	74.6	1433	-2.15	3.31	4.0	1335	2.4	516	996.26	998.0	1650	992.7	0	1.1
4	1.21	5.8	1306	-2.8	634	74.5	95.4	702	47.0	1532	-3.12	3.08	3.6	53	2.3	1532	994.33	996.8	0	990.5	2357	0.0
5	0.94	2.9	1443	-0.0	403	94.1	96.1	712	86.2	0	0.09	3.91	4.3	1443	3.3	2	989.23	991.6	2021	986.9	641	8.9
6	0.87	1.6	1440	-0.7	2359	89.2	95.8	715	71.4	2014	-0.75	3.69	4.1	418	2.9	2112	991.00	994.3	2358	989.1	628	6.1
7	0.29	4.2	1447	-4.0	804	81.0	93.8	830	65.0	1448	-2.67	3.17	3.5	1813	2.6	501	997.60	1003.1	2306	994.0	151	0.0
8	1.67	5.3	1409	-2.4	103	83.2	93.6	106	53.5	1336	-1.02	3.58	4.5	2114	2.9	1336	1002.89	1004.5	1008	1000.2	2035	2.4
9	3.07	5.4	1224	0.9	230	92.6	94.9	2314	87.9	1334	1.98	4.47	5.2	1214	3.7	230	993.53	1002.6	313	976.9	2317	18.7
10	2.91	6.4	1356	-0.0	2019	79.7	94.5	0	54.6	1512	-0.40	3.73	4.6	0	3.1	1542	1001.44	1015.8	2358	977.4	2	0.8
11	2.38	7.1	1459	-2.6	624	84.3	95.5	743	65.3	1502	-0.10	3.76	4.5	1817	3.0	624	1018.41	1024.0	2359	1015.7	6	1.9
12	1.05	4.2	2353	-2.6	800	77.3	91.0	2008	60.1	1448	-2.59	3.12	4.5	2359	2.7	800	1025.27	1027.7	1049	1020.4	2359	0.9
13	3.35	6.9	1259	-2.4	2359	81.1	94.7	2349	55.1	1536	0.23	3.87	5.3	239	2.9	2359	1023.45	1027.5	2357	1019.3	234	0.4
14	1.35	6.7	1417	-4.8	717	73.5	95.2	131	43.3	1429	-3.37	2.93	3.9	1107	2.4	717	1029.41	1030.6	2210	1027.4	31	0.1
15	5.58	8.7	1444	3.2	634	76.8	89.5	2348	66.5	1342	1.83	4.29	5.1	1729	3.3	1	1028.24	1030.4	7	1026.7	2304	0.0
16	7.17	11.6	1443	2.2	808	74.4	93.6	841	53.0	1445	2.67	4.54	5.5	1111	4.0	1813	1026.46	1027.2	1124	1025.6	1904	0.0
17	8.08	10.3	1537	4.0	540	80.7	88.5	541	73.8	915	4.95	5.35	6.2	1831	4.2	537	1026.61	1027.9	2355	1025.0	407	0.0
18	8.24	9.6	1320	6.8	2358	89.2	95.6	2320	73.0	1222	6.54	5.94	6.3	2035	5.2	1137	1027.00	1028.1	100	1025.8	1654	1.0
19	7.44	9.7	1231	4.9	2349	85.8	96.2	817	64.9	1547	5.11	5.39	6.5	1013	4.6	1623	1027.98	1029.8	2356	1026.2	257	0.4
20	7.01	10.6	1249	5.1	1958	74.2	94.5	403	45.1	1240	2.38	4.45	5.4	559	3.4	1240	1032.00	1033.6	2317	1029.7	126	0.2
21	7.61	12.5	1416	2.5	740	71.7	89.5	805	51.1	1455	2.65	4.51	5.1	1415	3.9	702	1032.13	1033.6	58	1030.5	1748	0.0
22	8.25	12.0	1148	4.4	234	68.1	82.3	651	48.0	1551	2.53	4.49	5.5	920	4.0	1545	1028.07	1030.9	15	1026.7	1552	0.0
23	8.82	10.5	1356	6.7	6	69.6	83.9	2357	58.7	1358	3.53	4.83	5.5	2358	4.1	3	1025.38	1027.2	28	1024.3	1621	0.0
24	9.19	11.0	1446	7.8	421	82.1	88.6	652	72.7	1342	6.28	5.83	6.2	2141	5.3	2339	1027.86	1029.4	2314	1026.2	4	0.0
25	8.61	9.6	1154	7.3	2349	75.6	81.1	222	69.0	403	4.54	5.16	5.6	225	4.9	411	1028.39	1029.7	958	1026.4	2319	0.0
26	7.47	10.0	1259	5.4	647	75.5	90.6	649	55.7	1223	3.28	4.75	5.3	1006	4.0	1229	1024.25	1026.8	2	1021.8	2349	0.0
27	9.18	14.0	1303	6.5	650	74.7	89.2	613	55.1	1410	4.78	5.29	6.2	1117	4.7	1	1020.37	1022.3	100	1018.8	2313	0.0
28	6.80	9.9	1252	0.2	2354	70.9	93.1	2359	52.9	1151	1.70	4.29	5.0	402	3.6	2354	1014.54	1019.0	11	1009.7	2357	0.0

Total																						44.7
Mean	4.54	7.64		1.23		79.4	91.84		61.44		1.09	4.19	4.94		3.48		1015.71	1019.00		1011.83		
Max	9.19	14.00		7.77		94.1	96.20		87.90		6.54	5.94	6.53		5.33		1032.13	1033.58		1030.49		
Min	-1.00	0.37		-5.50		66.7	81.10		33.97		-5.82	2.49	3.19		1.45		989.23	991.63		976.87		

Wokingham Automatic Weather Station
 AWS samples taken every 0.5 seconds
 x and n refer to maximum and minimum respectively

Readings taken at Wokingham Climatological Station, Emmbrook, Berkshire
Lat 51.425 N, Long 0.853 W, NGR (SU) 798701
Altitude 45 m ASL.

Tmn = 00 to 24 GMT mean air temperature at 1.2 m, deg C
 RHmn = 00-24 GMT mean relative humidity at 1.2 m, percent
 Tdmn = 00-24 GMT mean dew point at 1.2 m, deg C
 rmn = 00-24 GMT mean humidity mixing ratio, g/kg
 pmn = 00-24 GMT mean air pressure reduced to mean sea level, mbar
 Rtot = 00-24 GMT rainfall total from AWS tipping bucket raingauge, mm
 Time = hours and minutes in GMT of extreme values

WOKINGHAM METEOROLOGICAL DATA

Wokingham Climatological Station, Emmbrook, Berkshire.

Lat 51°25'N 00°51'W NGR (SU)798701 Altitude 46m ASL

Seasonal Means and Totals

WINTER 2008/2009

Temperature (°C)

Rank in the past 127 years

Mean maximum	7.3	(-0.5)	49 th lowest
Mean minimum	0.6	(-1.1)	29 th lowest
Daily mean	3.9	(-0.9)	40 th lowest
Rainfall total (mm)	153.0	(93 %)	63 rd highest
Sunshine total (hours)	232.5	(129 %)	
N° of: Dry days	57 (+12)	Wet days	26 (-5)
Days with: Air frost	41 (+12)	Ground frost	56 (+3)
		Snow falling	11 (+1)
		Snow lying	8 (+3)
Thunder	1 (0)	Hail ≥5mm	0
		Small hail/ice	2
		Fog @09 GMT	6 (-1)
		Nil sun	22
Air pressure MSL : Mean @09 GMT (mbar)	1015.4		(-0.7)

Departure from 1971 to 2000 average shown in brackets.

Notes:

Temperature and Rainfall Below Normal, Very Sunny.

Temperature : In terms of the mean, this is the coldest winter since 1996, but if just the mean min is considered, it is equal coldest with 1991 since 1985. However, it is along time since we experienced a really cold winter such as 1963, when the mean temperature was 4.4° lower than this winter's. The highest max was 14.2° on the 27th February, 0.3° above the median. The lowest max, 0.3° on the 9th January, is 0.6° above the median. The highest min was 9.9° on the 21st December, exactly on the median, while the lowest min was -8.6° on the 7th January, 1.1° below the median and lowest since 1997. The mean grass min was -2.1°, 1.0° below average and lowest since 1991. The lowest grass min, -14.6° recorded over snow cover on the 3rd February, is also lowest since 1991. The mean earth temperature at 30 cm depth was 4.9°, 0.9° below average and lowest since 1997, while at 1 m depth the mean was 7.0°, 1.1° below average and also lowest since 1997. The number of days with air frost is most since 1987, but with ground frost is only equal highest with 2005 since 2000. The duration of air frost, 395.6 hours, is 118 hours above average. January was the coldest month, mean 3.1°, and February the least cold, mean 4.8°. Both December and January were over 1.0° below average, but February was just above average. **Rainfall :** The total this winter, including melted snowfall, is 7 % below the current climatological average, but is slightly more than we received last winter. The wettest day was the 9th February when 25.0 mm fell, the 3rd highest February fall in over a century. However, as the highest fall of the season it only ranks 15th, but is highest since 1996. The cold and snowy start to February perhaps leaves the impression that it was a snowy winter, but the number of days with snow was exceeded in both 2006 and 2005, although the number of days with snow lying is most since 1996. February was the wettest month with 61.3 mm, and December the driest with 32.1 mm. Only 0.9 mm of rain fell between the 17th December and the 6th January, and only 1.6 mm between the 13th and 28th of February. The highest rainfall rate of the season was 60 mm/hr on the 17th January. Snow fell on the 5th, 7th and 10th January, and the 1st to 6th February, as well as on the 10th and 12th of that month. Snow depth, measured at 0900 GMT, was deepest on the 2nd February at 9 cm. Small hail fell on the 17th January and 6th February, and there was a thunderstorm with snow also on that day. The total duration of measurable rain (excludes snowfall) was 135.3 hours, 27 hours below average. **Sunshine :** Quite a sunny winter overall, although the total is 72 hours less than the record set last winter. Each of the months had above average sunshine with December the sunniest and January the least sunny. Overall there were 55 days with <3 hours, 14 with =>6 hours and 1 with =>9 hours. The distribution of days with =>6 hours was 6 for December, 3 in January and 5 in February. **Wind :** The mean wind speed this winter was 6.2 mph, 1.7 mph below average and 2nd lowest in 21 years. The windiest day was the 12th January, mean 14.5 mph, and the season's highest gust was 52 mph on the 17th January. The 8th January was the least windy day, mean 1.5 mph, and there were 2137 minutes (35.62 hours) with a mean speed of 0.5 mph or less. Daily mean direction/number of days: N,7 NE,16 E,3 SE,4 S,11 SW,22 W,17 NW,10. Compared with average, winds from W and NW were appx. 12 % more frequent, while those from SW and S were 14 % less frequent. Winds from N and NE were appx. 5 % more frequent. **Humidity :** The overall mean relative humidity was 82.6 %, and the lowest value reached was 34 % on the 1st February. The mean water vapour content per kg of air was 4.2 g at both 0900 and 1500 GMT. **Pressure :** The season's highest pressure was 1038.2 mbar on the 26th December, and the lowest was 967.6 mbar on the 23rd January, the lowest winter pressure since 1990.

December : Dry and very sunny with temperatures well below normal. Mean max and daily mean temp lowest since 2001

January : Coldest for 12 years. Rainfall near normal. very sunny. Highest max 8th lowest since 1904 and lowest since 1979. Most days with air frost since 1997. Air pressure on 23rd lowest since before 1976.

February : Wet with near normal temperature and sunshine. Snowy at first. Light winds. Lowest grass min lowest since 1991. Month's highest daily rainfall 3rd highest since 1904. Local flooding followed. Snow depth 9 cm on 2nd deepest for any day since 8th February 1991. Least windy since before 1988. Min air pressure lowest since 1990.

Month	Mean Max	Anom	Mean Min	Anom	Rain mm	Anom %	Sun hrs	Anom %	Mean wind mph	Max gust	Mean pressure	Anom
December	7.3	-1.0	0.8	-1.7	32.1	50 %	84.7	161 %	6.2	39	1019.0	+3.9
January	6.8	-0.7	-0.6	-2.1	59.6	98 %	74.0	126 %	6.6	52	1011.1	-4.9
February	7.9	0.0	1.7	+0.4	61.3	148 %	73.8	110 %	5.6	39	1016.2	-0.5

B J Burton FRMetS.

Hon. Met. Officer to Wokingham Town Council.