

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 2008

Temperature (°C / °F)			Anomaly	Rank in past 127 years			
Mean maximum	11.1	52.0	+3.2	5 th highest			
Mean minimum	0.3	32.5	-1.0	40 th lowest			
Daily mean	5.7	42.3	+1.1	39 th highest			
Highest maximum	15.4	59.7	on 9 th	Lowest maximum	5.1	41.2	on 14 th
Highest minimum	8.2	46.8	on 24 th	Lowest minimum	-7.0	19.4	on 17 th
Mean grass minimum	-3.4	25.9		Lowest grass minimum	-12.0	10.4	on 17 th
Mean earth @30 cm	5.4	41.7	+0.3	Earth @100 cm	8.0	46.4	
Frost duration (hrs)	111.0			Rain duration (hrs)	17.2		
Rainfall total (mm / in)	22.0	0.87	53 %	34 th lowest			
Highest daily fall	5.6	0.22	on 25 th				
Number of: Dry days (<0.2mm)	22	Wet days (>0.9mm)	5	days ≥5mm	1		
Sunshine total (hrs) 149.5	Daily mean 5.16	215 %		Sunniest day 9.7	on 18 th		
N° days with: Air frost 13	Ground frost 22	Snow falling 0	Snow lying 0	Fog @09 1	Nil sun 3		
Thunder 1	Hail ≥5mm 0	Small hail/ice 0					
Air pressure MSL : Mean @09 GMT (mbar/in)	1023.8	+7.1	30.23				
Absolute highest	1043.5		30.81	on 16 th			
Absolute lowest	987.5		29.16	on 4 th			

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

Notes: **Mean Temperature Well Above Normal with Exceptional Daily Range, Dry, Very Sunny.**

Temperature: One of the outstanding features of this month is the very high daily range of temperature, 10.8°, highest since before 1882, the previous highest being 10.3° in 1891, and compared with the average of 6.7°. The mean max is highest since 2002 and ranks 5th highest in 127 years, only 0.3° below the record, yet the mean min is lowest since 1996, is 0.9° below the median, and ranks 40th lowest in 127 years. The highest max is 2.4° above the median and is highest since 1998. The lowest max is 2.7° above the median and is highest since 2002. The lowest min is 1.9° below the median while the highest min is close to its median. The mean grass min is lowest since 1996 and the lowest grass min is lowest since 1991. The number of days with air frost is 3 above average and the duration of air frost is 14 hours above average, and is equal highest with 2003 since 1996. **Rainfall:** Only 22 mm fell this February, about half the normal, but lowest only since 2005. The number of dry days is most since 1998 and is 7 more than average. There was a long dry spell of 17 days ending on the 24th. The total rain duration is 30.7 hours below average and lowest since 1998. A thunderstorm in the evening of the 5th was accompanied by a rainfall rate of 95 mm/hr. **Sunshine:** The second outstanding feature of the month is the exceptionally high sunshine total, over twice the average, and far exceeding any February total in the past 100 years. Two periods stand out, the 6 days ending on the 13th and the 4 days ending on the 19th, both with an average of 91 % of the maximum sunshine. This month's daily mean sunshine of 5.16 hours is not normally reached until May (average 5.5 hours). Overall there were 11 days with <3 hours, 17 with =>6 hours and 7 with =>9 hours. **Wind:** The mean wind speed of 6.8 mph is 1.4 mph below average. The 5th was the windiest day, mean 13.6 mph, and the month's highest gusts of 43 mph were on that day and also on the 29th. The 10th was the least windy day, mean 2.0 mph, and there were 25.9 hours with a mean speed of 0.5 mph or less. Daily mean direction/number of days; N,1 NE, 10 E, 0 SE, 1 S, 4 SW, 11 W, 2 NW, 0. **Humidity:** The mean relative humidity was 79.2 %, and the lowest value was 32 % on the 17th. The mean water vapour content per kg of air was 4.4 g at both 0900 and 1500 GMT. **Pressure:** The mean pressure is highest since 1998. **Miscellaneous:** On the 17th and 18th there were spectacularly colourful sunrises and sunsets, probably associated with unusually low stratospheric temperatures of around -90°. **Commentary:** The month started dry with normal temperatures, but a 3 day wet spell from the 3rd produced over half the month's rainfall. Winds were from between S and W, often fresh. It then turned dry and mild, with decreasing winds and daily max temps around 8° above normal by the 10th, by which time there was a light NE'ly wind. It became very sunny after the 7th, and the clear skies at night allowed low minima, generally around 4° below normal. After 2 cloudy days with near normal temps and a moderate NE'ly wind on the 14th and 15th, it became sunny once more with above normal temp by day and below normal by night, with an anomaly of -7.2° for the min on the 17th. An abrupt change on the 20th saw a SW'ly wind become established, ending the run of cold nights, but daily maxima continued above normal. Winds became fresh on the 21st, setting the scene for the rest of the month, increasing to strong on the 29th. Some rain fall on the 24th, ending a 17 day dry spell, with more on the 25th and 29th.

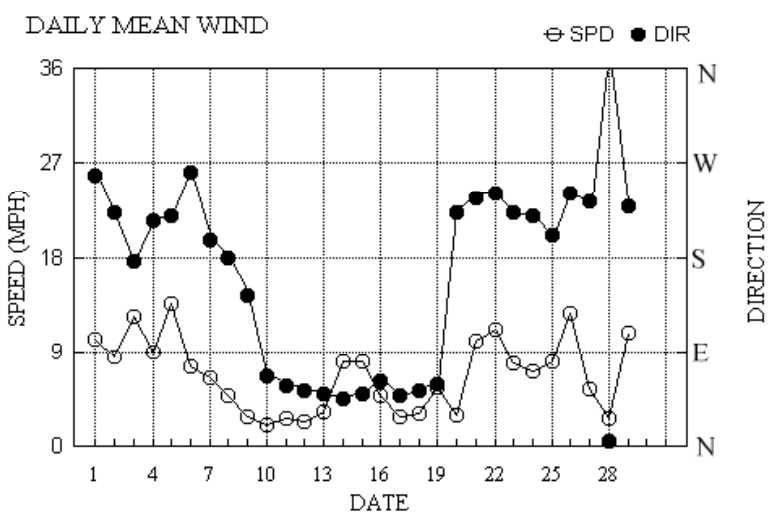
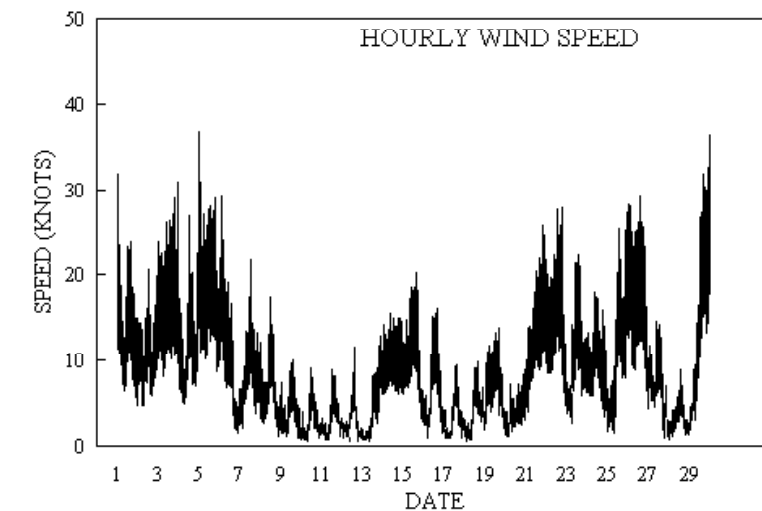
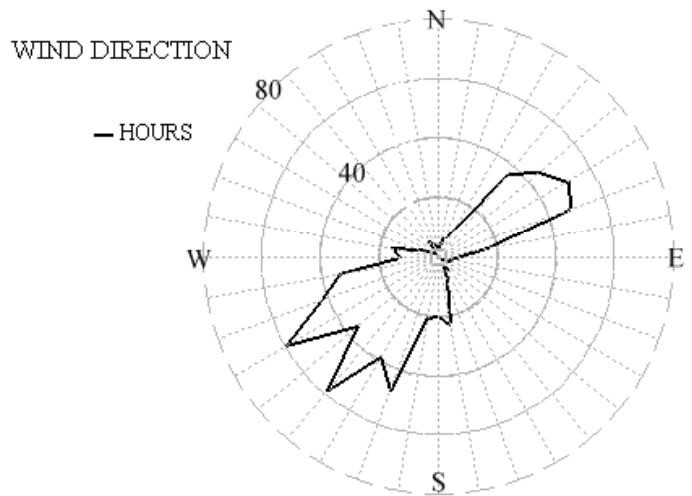
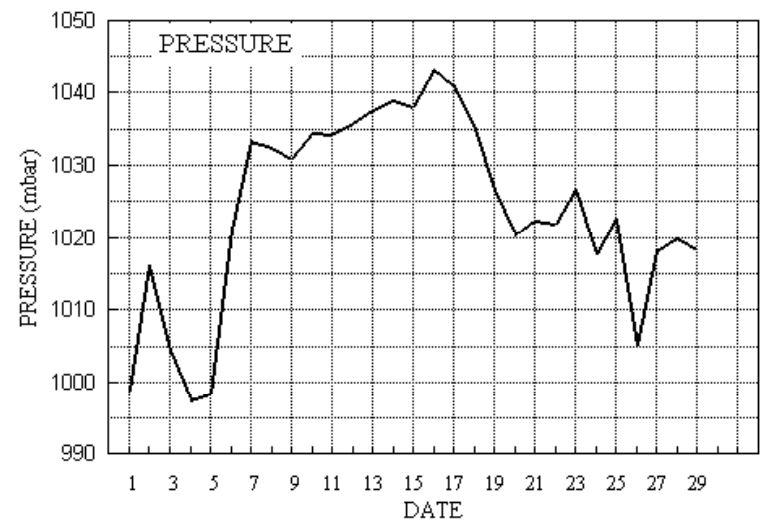
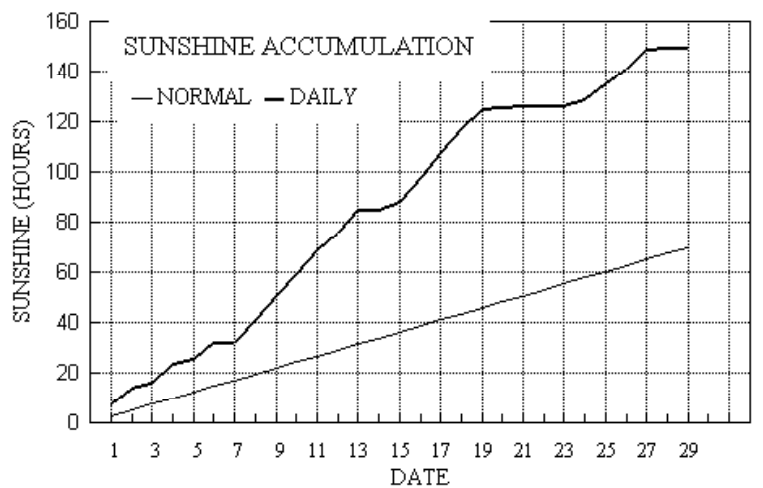
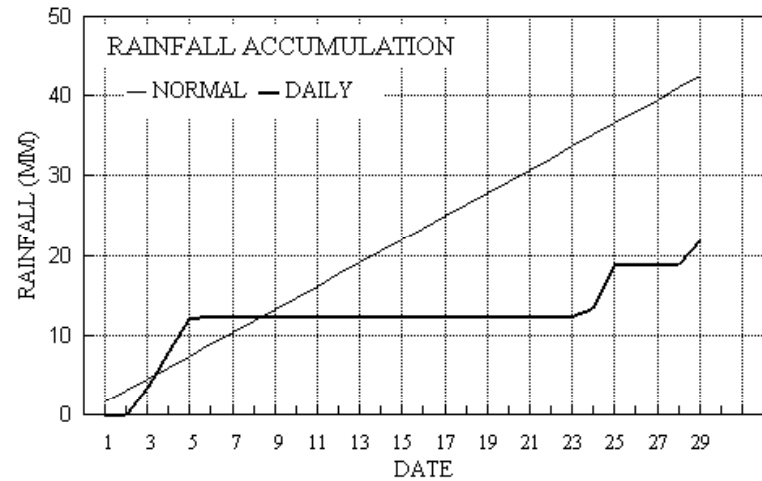
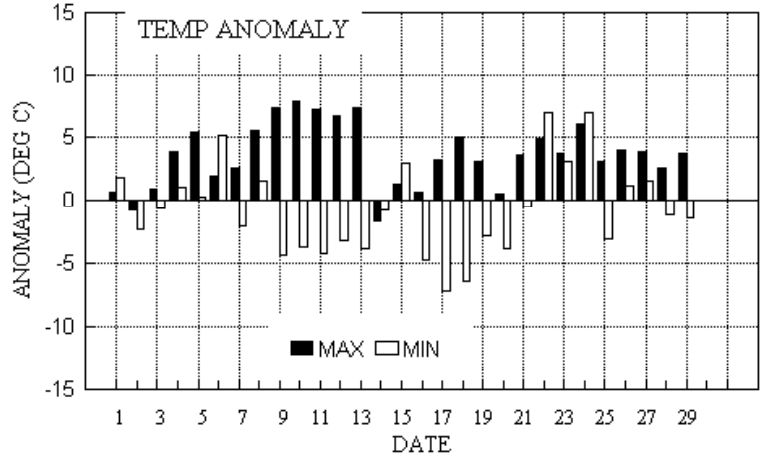
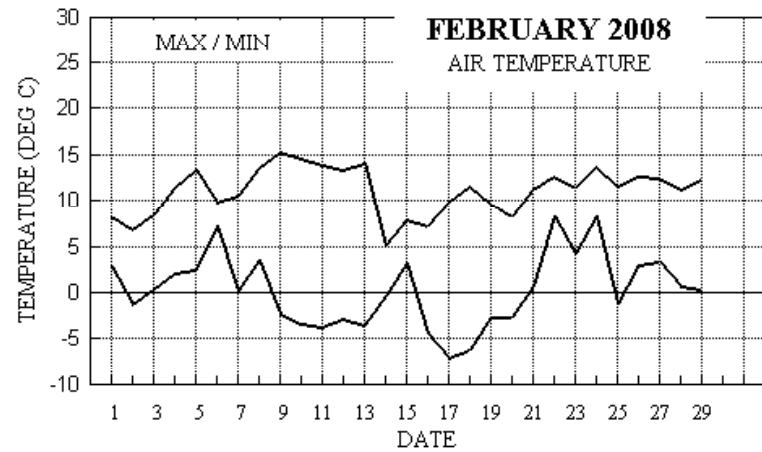
Mean anomalies (max, min, rain, sun)

1 st to the 10th				11 th to the 20th				21 st to the 29 th			
+3.6°	-0.3°	82 %	246 %	+3.4°	-3.4°	0 %	275 %	+4.0°	+1.5°	75 %	113 %

B J Burton FRMetS

Hon. Met. Officer to Wokingham Town Council.

Wokingham Climatological Graphs for February 2008



Daily meteorological data.

Emmbrook, WOKINGHAM, Berkshire.

Month: FEBRUARY 2008

Date	Max	Min	Rain	Grass	30cm	100cr	Sun	Frost	pp09	Af	Sf	Th	Ic	Vec mean			Max gust			High hr			Rain	
	C	C	mm	Min	C	C	hrs	hrs	mbar	Gf	SI	Ha	Fg	ddd	ff	sp	ddd	gg	HHhh	ddd	ff	HH	hrs	
1	8.3	2.8	0.0	-1.9	6.5	9.0	7.6	0.0	998.8	0	1	0	0	258	8.5	8.9	254	32	0011	245	12	01	0.0	
2	6.9	-1.3	0.0	-7.4	5.8	8.9	6.2	4.4	1016.0	1	1	0	0	223	6.8	7.4	246	21	1349	233	9	13	0.0	
3	8.5	0.4	3.3	1.7	5.6	8.8	2.4	0.0	1004.5	0	0	0	0	176	10.4	10.7	178	31	2215	157	12	17	3.2	
4	11.5	2.1	4.5	-3.2	5.8	8.7	7.4	0.0	997.5	0	1	0	0	215	7.2	7.8	187	34	2352	190	14	23	3.5	
5	13.4	2.4	4.4	3.4	5.9	8.6	2.1	0.0	998.4	0	0	0	0	219	11.4	11.8	192	37	0008	188	14	00	1.4	
6	9.9	7.3	0.2	3.9	6.6	8.5	6.2	0.0	1021.0	0	0	0	0	262	5.8	6.5	246	29	0235	252	13	02	0.2	
7	10.6	0.1	tr	-5.1	6.3	8.5	0.3	0.0	1033.4	0	1	0	0	197	5.5	5.6	194	22	1221	206	10	12	0.0	
8	13.6	3.6	0.0	-2.8	6.5	8.6	9.1	1.1	1032.5	0	1	0	0	179	3.9	4.1	202	18	1148	199	7	12	0.0	
9	15.4	-2.3	0.0	-6.7	6.1	8.6	9.2	10.0	1031.0	1	1	0	0	144	1.6	2.4	150	10	1442	161	5	14	0.0	
10	14.6	-3.3	0.0	-8.0	5.5	8.6	8.9	11.4	1034.5	1	1	0	0	67	1.3	1.7	62	9	1255	93	4	13	0.0	
11	13.9	-3.8	0.0	-8.4	5.0	8.4	9.1	10.0	1034.3	1	1	0	0	57	1.9	2.3	148	9	1234	66	5	14	0.0	
12	13.4	-2.8	0.0	-7.1	4.6	8.3	7.4	10.5	1035.9	1	1	0	0	52	1.6	2.0	65	12	1432	64	6	14	0.0	
13	14.1	-3.5	0.0	-8.0	4.4	8.1	9.3	9.1	1037.5	1	1	0	0	50	2.2	2.8	38	13	2127	42	7	21	0.0	
14	5.1	-0.4	tr	-4.5	4.5	8.0	0.0	0.0	1038.9	1	1	0	0	45	6.9	6.9	29	16	0933	48	8	19	0.0	
15	7.9	3.2	0.0	2.7	5.0	7.9	3.2	2.0	1038.0	0	0	0	0	50	6.8	6.9	59	20	1541	60	10	13	0.0	
16	7.3	-4.5	0.0	-10.2	4.9	7.8	9.5	13.3	1043.3	1	1	0	0	62	4.0	4.1	54	16	1554	59	8	15	0.0	
17	9.9	-7.0	0.0	-12.0	4.1	7.8	9.7	15.2	1040.9	1	1	0	0	48	2.0	2.4	75	10	1405	46	5	13	0.0	
18	11.6	-6.2	0.0	-10.8	3.5	7.7	9.7	12.9	1034.9	1	1	0	0	52	2.5	2.7	59	10	1541	61	5	12	0.0	
19	9.7	-2.6	tr	-9.4	3.2	7.5	7.8	3.2	1026.6	1	1	0	0	59	4.7	4.8	59	14	1611	67	7	13	0.0	
20	8.2	-2.6	tr	-8.6	3.4	7.3	0.5	5.2	1020.3	1	1	0	0	222	1.1	2.5	224	9	2344	208	5	20	0.0	
21	11.3	0.7	tr	-3.8	3.8	7.1	0.4	0.0	1022.3	0	1	0	0	236	8.6	8.7	246	26	2058	240	12	21	0.0	
22	12.6	8.2	0.0	8.9	4.9	7.1	0.0	0.0	1022.0	0	0	0	0	241	9.6	9.7	244	28	1839	248	13	12	0.0	
23	11.4	4.3	0.0	-1.0	5.5	7.2	0.0	0.0	1026.6	0	1	0	0	222	6.6	6.8	251	23	1409	232	11	14	0.0	
24	13.8	8.2	0.9	6.4	6.0	7.3	2.8	0.0	1017.7	0	0	0	0	219	5.2	6.2	186	18	0945	198	9	10	0.7	
25	11.7	-1.3	5.6	-6.4	6.3	7.5	6.2	2.7	1022.7	1	1	0	0	201	6.8	7.0	218	28	2349	215	13	23	5.4	
26	12.6	3.0	0.0	7.6	6.4	7.7	6.3	0.0	1005.2	0	0	0	0	241	10.4	11.0	265	29	1308	211	14	03	0.0	
27	12.5	3.3	0.0	-0.5	6.6	7.8	7.7	0.0	1018.1	0	1	0	0	233	4.3	4.7	256	15	0954	255	7	13	0.0	
28	11.2	0.7	0.0	-2.6	6.3	7.9	0.2	0.0	1019.9	0	1	0	0	4	1.6	2.3	357	9	1347	10	4	13	0.0	
29	12.3	0.4	3.1	-5.1	6.5	8.0	0.3	0.0	1018.4	0	1	0	0	229	9.2	9.4	256	37	2315	253	18	23	2.8	
Total			22.0				149.5	111.0															17.2	
Mean	11.1	0.3		-3.4	5.4	8.0	5.16	3.8	1023.8					219	2.7	5.9								
Anom	+3.2	-1.0	53%		+0.3	+1.3	215%		+7.1															
Daily mean		5.7							Pressure, abs highest =					1043.5										
Anom		+1.1							Pressure, abs lowest =					987.5										
Number of days with:																								
Air frost =	13																							
Ground frost =		22																						
Nil sun =							3																	
Snow falling =	0																							
Snow lying =		0																						
Thunder =																								
Hail=>5mm =	0																							
Hail<5mm or ice =		0																						
Fog at 09GMT =																								

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. SI = 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 2008

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	N	Ch	shs	N	Ch	shs	N	Ch	shs	Date	Remarks		
1	77	6	25	07	13	3.5	0.4	80	3.9	998.8	1	013	02	2	2	1	5	7	3	1	81650	86072	1	1	Ac69	COTRA	Halo	22	part	1	1Ac69 COTRA Halo 22 part		
2	80	5	21	08	12	0.4	-2.6	80	3.1	1016.0	2	021	02	1	1	1	0	9	3	1	81364	85075	2	2	COTRA	Hoar	slt	Gnd	sfc	frzn	Parhelion	2	COTRA Hoar slt Gnd sfc frzn Parhelion
3	81	7	17	11	23	5.2	-1.0	64	3.5	1004.5	7	023	02	2	2	1	8	6	3	1	81830	87075	3	3	1Sc45	1Ac68	COTRA	Cu	hum	3	1Sc45 1Ac68 COTRA Cu hum		
4	82	2	22	06	11	2.3	1.3	93	4.2	997.5	2	042	02	0	0	0	0	9	0	3	82070		4	4	Cb	top	S-SE	Hoar	slt	4	Cb top S-SE Hoar slt		
5	62	7	22	11	24	10.8	6.9	77	6.3	998.4	1	027	03	2	2	1	8	5	1	2	81820	83465	87075	5	5	1Sc56	2Cc70	COTRA	Cu	med	5	1Sc56 2Cc70 COTRA Cu med	
6	86	5	26	08	14	8.0	3.5	73	4.8	1021.0	2	061	03	1	1	4	8	6	0	1	81830	84645	6	6	2Ci75	Cu	med	6	2Ci75 Cu med				
7	75	7	20	07	13	7.6	5.1	84	5.3	1033.4	3	002	21	6	2	7	5	6	/	/	81635	86645	87656	7	7				7		7		
8	60	3	18	03	07	5.7	5.0	95	5.3	1032.5	3	001	10	0	0	0	0	9	0	1	83080		8	8	COTRA					8	COTRA		
9	56	4	27	01	05	1.1	0.5	96	3.9	1031.0	2	010	10	0	0	0	0	9	0	1	84080		9	9	COTRA	Hoar	mod	Gnd	sfc	frzn	9	COTRA Hoar mod Gnd sfc frzn	
10	56	5	03	01	02	-0.6	-1.0	97	3.4	1034.5	2	009	10	1	1	0	0	9	0	1	85080		10	10	COTRA	Hoar	mod	Gnd	sfc	frzn	10	COTRA Hoar mod Gnd sfc frzn	
11	20	1	27	01	02	-0.3	-0.9	96	3.5	1034.3	2	007	10	0	0	0	0	9	0	1	81080		11	11	COTRA	Hoar	mod	Gnd	sfc	frzn	11	COTRA Hoar mod Gnd sfc frzn	
12	28	6	27	01	01	0.0	-0.4	97	3.6	1035.9	1	010	10	1	1	6	6	1	0	0	86702		12	12	Hoar	mod	Gnd	sfc	frzn	12	Hoar mod Gnd sfc frzn		
13	30	0	00	00	02	-0.3	-0.7	97	3.5	1037.5	2	005	10	0	0	0	0	9	0	0			13	13	Hoar	mod	Gnd	sfc	frzn	13	Hoar mod Gnd sfc frzn		
14	50	8	04	09	15	3.7	1.1	83	4.0	1038.9	2	010	05	2	2	8	6	4	/	/	88712		14	14	Absent	14-15	vv&cld	est	14	Absent 14-15 vv&cld est			
15	58	8	06	08	17	5.1	1.4	77	4.1	1038.0	1	009	05	2	2	8	5	4	/	/	88618		15	15						15			
16	60	1	05	04	08	-0.3	-1.7	90	3.2	1043.3	1	012	05	0	0	0	0	9	0	1	81080		16	16	COTRA	Hoar	mod	Gnd	sfc	frzn	16	COTRA Hoar mod Gnd sfc frzn	
17	45	0	02	02	03	-2.3	-3.3	93	2.9	1040.9	2	005	05	0	0	0	0	9	0	0			17	17	Hoar	thk	Gnd	sfc	frzn	17	Hoar thk Gnd sfc frzn		
18	25	0	03	02	03	-1.1	-1.9	94	3.2	1034.9	6	005	10	0	0	0	0	9	0	0			18	18	Hoar	mod	Gnd	sfc	frzn	18	Hoar mod Gnd sfc frzn		
19	28	7	06	06	10	2.8	1.2	89	4.1	1026.6	7	008	05	2	2	7	6	2	/	1	83705	87708	19	19	/Ci75					19	/Ci75		
20	01	9	07	01	05	0.7	0.6	99	3.9	1020.3	3	011	45	4	4	9	/	/	/	/			20	20	vv	110				20	vv 110		
21	60	7	24	08	16	8.2	5.1	81	5.4	1022.3	2	013	05	2	2	1	5	4	7	2	81712	85362	87075	21	21	1Sc25	2Ac59				21	1Sc25 2Ac59	
22	84	8	24	11	22	10.7	7.4	80	6.3	1022.0	2	001	01	2	2	7	5	4	7	/	85618	87625	22	22	/Ac65					22	/Ac65		
23	60	7	23	06	13	9.2	8.1	93	6.6	1026.6	6	004	05	2	2	7	6	2	/	1	82705	86707	87712	23	23	/Ci75	COTRA				23	/Ci75 COTRA	
24	72	7	20	09	15	9.3	4.9	74	5.3	1017.7	6	006	02	2	2	1	5	6	7	1	81635	83363	87072	24	24	1Ac60	2As66	CZarc	UAcont	Parhelia	24	1Ac60 2As66 CZarc UAcont Parhelia	
25	63	7	20	03	09	3.0	1.7	91	4.2	1022.7	8	003	02	1	1	0	0	9	0	1	87080		25	25	COTRA	Hoar	slt			25	COTRA Hoar slt		
26	70	4	25	11	18	9.9	6.2	78	5.9	1005.2	3	031	03	6	1	4	8	5	0	8	81820	84650	26	26	1Cs72	Cu	fra			26	1Cs72 Cu fra		
27	65	6	24	06	13	5.6	3.3	85	4.8	1018.1	1	016	02	2	2	0	0	9	0	2	82070	86072	27	27	COTRA	Halo	22	part		27	COTRA Halo 22 part		
28	59	8	06	03	05	5.5	4.3	91	5.1	1019.9	2	005	05	2	2	8	5	6	/	/	88630		28	28						28			
29	40	8	21	05	09	4.1	2.8	91	4.6	1018.4	5	003	05	2	2	1	6	3	1	/	81708	88467	29	29						29			

Mean vis = 15.3 km
 Mean cloud = 5.2 66%
 Mean wind speed = 5.5 kn
 Mean gust = 11 kn
 Mean TT = 4.1 C
 Mean Td = 2.0 C
 Mean RH = 86.8 %
 Mean r = 4.4 g/kg
 Mean PPP = 1023.8 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
 Td = Dew point temperature at 1.2 m, deg Celsius
 RH = Relative humidity at 1.2 m
 r = Humidity mixing ratio at 1.2 m, g/kg
 PPP = Air pressure reduced to sea level, mbar
 a = Characteristic of pressure tendency (Code FM12-0200)
 ppp = 3 hr pressure tendency, tenths of mbar
 ww = Present weather code (Code FM12-4677)
 W1, W2 = Past weather code (Code FM12-4561)-
 covers past 3 hours.
 Nh = Amount of low cloud present, oktas
 Cl = Type of low cloud (Code Fm12-0513)
 h = Height of low cloud (Code FM12-1600)
 Cm = Type of medium cloud (Code FM12-0515)
 Ch = Type of high cloud (Code FM12-0509)
 8 groups. 8 = indicator for cloud detail
 N = Amount of cloud, oktas
 C = Type of cloud (FM12-0500)
 hshs = Height of cloud (FM12-1677)
 Remarks : COTRA = persistent condensation
 trails present.

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 1500 GMT for FEBRUARY 2008

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	pppww	W1W2	NhCl	hCrCl	NChshs	NChshs	NChshs	Date	Remarks					
1	80	5	29	12	23	7.1	-4.3	44	2.8	1000.2	3	008	15	1	1	1	9	6	0	3	81935	84070	1	1Cu45 jpS vv60k exS	
2	86	7	23	08	15	6.3	-1.6	57	3.4	1015.1	8	011	02	2	2	1	8	6	4	2	81835	83068	86072	2	1Sc56 1Ac62 1Ac65 COTRA Cu hum
3	80	8	17	10	26	6.5	0.4	65	4.0	996.0	6	041	03	2	2	5	8	5	7	/	81828	85656	86359	3	8As65 Cu hum
4	84	5	23	09	20	9.3	1.8	60	4.4	1002.3	2	014	01	1	1	1	8	6	0	3	81830	84078		4	1Sc35 2Ci70 Cb top N&W Cu hum
5	65	7	22	12	27	11.5	8.4	81	6.9	998.8	5	008	80	8	2	7	8	5	/	/	85820	87635		5	Cu med
6	88	2	31	07	13	9.7	-0.2	50	3.7	1029.2	2	030	02	0	0	1	1	6	0	1	81840			6	2Ci80 COTRA Cu hum
7	61	8	21	06	14	10.1	8.0	87	6.5	1033.2	5	003	02	2	2	8	6	3	/	/	86706	88708		7	
8	80	2	19	07	14	12.7	1.1	45	4.0	1029.6	6	014	02	0	0	0	0	9	0	1	82080			8	COTRA
9	78	3	16	05	10	14.4	0.6	39	3.9	1030.4	6	007	02	0	0	0	0	9	0	1	83080			9	COTRA
10	64	5	09	02	06	13.4	0.1	40	3.7	1032.6	6	012	02	1	1	0	0	9	0	1	85080			10	COTRA
11	59	1	07	04	08	12.7	2.0	48	4.3	1032.4	7	012	05	0	0	0	0	9	0	1	81080			11	
12	56	0	07	06	12	12.7	4.7	58	5.2	1034.9	6	010	05	0	0	0	0	9	0	0				12	
13	75	0	07	04	08	13.1	1.8	46	4.2	1035.4	6	016	02	0	0	0	0	9	0	0				13	Absent 13-15 inc vv&cld est
14	57	8	05	07	14	4.6	0.7	76	3.9	1037.7	6	014	05	2	2	8	5	4	/	/	88615			14	
15	62	1	06	09	17	6.7	-0.3	61	3.6	1038.2	5	004	01	1	1	1	5	5	0	0	81625			15	
16	70	1	06	08	15	6.2	-4.0	48	2.7	1041.6	6	014	02	0	0	0	0	9	0	1	81080			16	COTRA
17	65	0	06	04	10	9.0	-4.9	37	2.6	1037.9	7	020	02	0	0	0	0	9	0	0				17	
18	60	0	05	05	09	10.6	-3.5	37	2.9	1031.7	7	021	05	0	0	0	0	9	0	0				18	Hoar slt in shade
19	59	5	06	06	12	8.1	-1.4	51	3.4	1022.4	7	027	05	2	2	0	0	9	0	2	81170	85073		19	
20	22	7	25	02	07	4.7	3.7	93	4.9	1019.8	5	004	05	4	2	7	5	2	/	/	83705	87645		20	
21	78	8	25	11	20	11.2	5.5	69	5.6	1021.5	7	010	02	2	2	2	5	5	7	/	82625	88462		21	1Sc30 2Ac58
22	86	8	25	10	25	12.4	7.9	74	6.5	1022.3	5	002	02	2	2	8	5	5	/	/	87620	88625		22	
23	84	7	23	11	22	11.0	5.7	70	5.6	1023.9	7	018	02	2	2	7	5	4	/	/	82618	87622		23	
24	56	8	21	06	13	12.5	7.2	70	6.3	1015.2	6	014	15	2	2	3	5	5	7	/	81625	83640	88459	24	2Ac58 jpNW
25	80	8	20	08	22	9.5	2.6	62	4.5	1016.7	6	034	03	2	2	1	8	5	1	/	81828	88465		25	1Sc35 Cu fra Sc len
26	80	2	26	13	24	10.7	1.0	51	4.1	1007.5	2	007	02	0	0	2	2	6	0	1	82845			26	1Ci75 Cu med
27	84	4	24	07	13	12.1	1.7	49	4.3	1018.2	7	009	02	1	1	2	4	6	0	1	82840	83075		27	1Sc50
28	83	8	36	03	07	10.5	3.7	63	5.0	1018.7	6	008	02	2	2	8	5	5	/	/	83628	88632		28	
29	68	8	23	13	25	8.0	4.9	81	5.4	1009.4	6	058	61	6	2	7	8	5	2	/	83820	86630	88550	29	Cu hum

Mean vis = 26.6 km
 Mean cloud = 4.7 59%
 Mean wind speed = 7.4 kn
 Mean gust = 16 kn
 Mean TT = 9.9 C
 Mean TdTd = 1.8 C
 Mean RH = 59.0 %
 Mean r = 4.4 g/kg
 Mean PPP = 1022.5 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 2008	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	4.29	8.1	1327	1.2	2321	63.39	83.5	43	40.8	1529	-2.29	3.28	4.2	1019	2.5	1535	1000.86	1009.7	2359	996.6	411	0.0
2	3.28	6.6	2345	-1.7	713	67.69	84.8	808	54.2	1540	-2.24	3.24	4.4	2154	2.7	611	1013.96	1016.7	953	1009.6	0	0.0
3	6.30	8.3	2156	4.2	813	66.09	87.3	2349	48.4	1250	0.35	3.96	5.2	2353	3.0	1250	999.89	1011.5	0	988.5	2358	1.7
4	5.70	9.3	1504	1.7	738	79.60	94.6	740	57.5	1514	2.29	4.54	5.4	141	4.1	736	998.46	1005.0	1902	987.5	100	2.1
5	10.15	13.2	1217	6.1	28	79.40	92.3	305	65.6	1242	6.70	6.19	7.2	1334	4.9	10	998.95	1003.5	2359	995.5	338	6.9
6	6.55	9.6	1501	0.1	2348	71.90	92.8	2352	48.2	1601	1.63	4.27	5.9	145	3.3	1610	1023.05	1034.3	2157	1003.2	1	0.8
7	7.16	10.5	1247	-0.2	40	85.10	94.1	44	76.3	441	4.82	5.34	6.6	1455	3.4	40	1033.64	1034.5	15	1032.9	1304	0.1
8	6.29	13.1	1406	-0.9	2356	81.70	97.4	629	43.8	1506	2.91	4.62	5.7	1038	3.4	2356	1031.21	1034.0	5	1029.3	1434	0.1
9	4.13	14.7	1432	-2.5	658	78.90	98.0	727	35.6	1526	-0.03	3.74	5.3	1006	3.0	659	1031.10	1033.6	2354	1029.6	411	0.1
10	2.95	13.9	1449	-3.3	715	79.80	97.6	655	32.6	1449	-0.90	3.50	4.7	1251	2.8	715	1033.67	1034.8	1054	1032.4	1533	0.1
11	3.01	12.9	1339	-3.7	615	82.30	97.1	333	42.5	1349	-0.19	3.71	5.1	1209	2.7	615	1033.64	1034.9	2354	1032.3	1450	0.1
12	2.89	12.8	1444	-2.7	637	87.70	97.8	1102	52.6	1401	0.76	3.98	5.8	1219	2.9	638	1035.43	1037.0	2352	1034.3	411	0.1
13	3.75	13.2	1438	-3.2	735	83.10	97.9	141	44.4	1449	0.64	3.94	5.0	1155	2.8	754	1036.73	1037.8	2337	1035.2	1441	0.0
14	3.92	4.9	2338	3.1	1958	82.60	95.9	0	73.8	1425	1.22	4.04	4.8	0	3.7	1454	1038.07	1039.5	1059	1037.2	1649	0.0
15	3.86	7.7	1411	-1.8	2319	77.30	94.5	441	58.7	1452	0.15	3.77	4.6	305	2.8	2203	1038.48	1041.3	2359	1036.9	615	0.1
16	0.30	6.6	1350	-4.4	702	77.70	96.2	754	45.9	1452	-3.50	2.85	3.6	1116	2.5	2355	1042.08	1043.5	941	1041.1	154	0.1
17	-0.62	9.2	1517	-7.2	726	76.10	95.6	231	31.4	1554	-4.99	2.57	3.5	1055	2.0	726	1039.34	1042.1	20	1037.2	1721	0.1
18	0.83	11.1	1427	-6.2	626	77.70	96.9	2335	33.9	1430	-3.32	2.94	4.0	1104	2.2	626	1033.44	1037.4	23	1030.0	2359	0.0
19	2.87	9.0	1412	-2.8	15	82.10	98.0	225	44.8	1357	-0.26	3.69	4.4	1134	2.9	15	1024.71	1030.1	0	1020.2	2356	0.1
20	1.68	5.2	1533	-3.2	133	95.70	99.1	1013	88.2	1643	1.06	4.10	5.0	1455	2.9	133	1020.23	1022.2	2318	1019.0	506	0.1
21	8.18	11.2	1505	3.5	0	81.20	96.3	9	68.2	1338	5.06	5.39	6.1	2356	4.6	4	1021.82	1022.7	1145	1020.6	501	0.0
22	10.59	12.5	1406	7.3	2359	79.30	90.5	2357	71.5	1214	7.15	6.22	6.7	1612	5.6	2255	1023.18	1028.3	2354	1021.4	1415	0.0
23	8.70	11.2	1302	3.7	523	84.40	97.9	602	67.5	1438	6.11	5.79	6.9	1029	4.7	523	1025.13	1028.5	39	1020.8	2355	0.0
24	9.49	13.4	1141	2.9	2358	78.10	90.9	2359	62.4	1142	5.81	5.71	6.5	1842	4.0	2354	1017.95	1021.1	2324	1014.9	1459	0.9
25	5.95	11.6	2316	-1.4	642	81.50	98.2	757	56.2	1235	2.77	4.69	7.0	2241	3.3	643	1017.88	1023.2	627	1007.0	2359	0.2
26	9.37	12.4	1309	5.2	2348	72.60	95.0	620	42.4	1329	4.37	5.33	7.6	621	3.6	1329	1007.22	1014.0	2352	1001.9	535	5.0
27	6.28	12.1	1442	1.9	2255	75.80	93.7	2359	45.9	1519	2.02	4.37	5.4	1038	3.9	1519	1018.06	1020.9	2238	1014.0	0	0.0
28	5.81	11.1	1303	0.4	405	81.90	96.9	414	59.5	1534	2.74	4.61	6.1	1209	3.7	401	1019.72	1021.1	2330	1018.4	1518	0.0
29	6.58	11.9	2302	0.3	424	86.00	94.8	628	75.4	1318	4.38	5.31	7.6	2153	3.6	423	1012.30	1021.2	15	998.8	2359	0.8

Total																					19.5	
Mean	5.18	10.58		-0.12		79.20	94.68		54.07		1.56	4.33	5.52		3.37		1023.11	1027.04		1018.83		
Max	10.59	14.72		7.30		95.70	99.1		88.2		7.15	6.22	7.60		5.60		1042.08	1043.46		1041.15		
Min	-0.62	4.95		-7.18		63.39	83.5		31.4		-4.99	2.57	3.49		2.01		998.46	1003.49		987.50		

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 2007/2008

Temperature (°C)				Rank in the past 126 years					
Mean maximum	10.0	(+2.2)		Equal highest					
Mean minimum	2.2	(+0.5)		34 th highest					
Daily mean	6.1	(+1.3)		9 th highest					
Rainfall total (mm)	149.3	(90 %)		58 th lowest					
Sunshine total (hours)	304.6	(167 %)							
N° of:	Dry days	53 (+9)	Wet days	30 (+1)					
Days with: Air frost	25 (-4)	Ground frost	49 (-4)	Snow falling	2 (-8)	Snow lying	0 (-5)		
Thunder	2 (+1)	Hail ≥5mm	0	Small hail/ice	4	Fog @09 GMT	5 (-2)	Nil sun	22
Air pressure MSL : Mean @09 GMT (mbar)	1019.3		(+3.2)						

Departure from 1971 to 2000 average shown in brackets.

Notes: **Very Mild** **Very Sunny** **Rainfall Below Normal**

Temperature: The mean maximum is not quite a new record, being equal highest with 1990 and 1989. The mean minimum, on the other hand, is 2.0° below the record set last winter, and is 0.8° above the median value. The resulting mean temperature is 0.9° below the record, but is comfortably within the top 10 % of ranked values and is thus in the very mild category. Also, the mean daily temperature range, 7.8°, is the highest for this season since before 1883. In terms of mean temperature, January was the mildest month and December the coolest. The season's highest temperature was 15.4° on the 9th February, 1.5° above the median, and the lowest was on the 17th February, -7.0°, 0.5° above the median. The lowest maximum was 3.6° on the 15th December, 3.9° above the median and 0.4° below the record, and the highest minimum was 12.0° on the 20th December, 2.1° above the median and 0.7° below the record. The mean grass minimum was -1.0°, close to normal, and the lowest grass minimum was -12.0° on the 17th February, the lowest grass temperature since 2001. The mean earth temperature at 30 cm depth was 6.1°, 0.3° above average, and at 1 m depth the mean was 8.8°. There were 237.7 hours with air frost, 41 hours below average. **Rainfall:** The total this winter is 10 % below average. January with 139 % was the only month to exceed the average, whilst February with 58 % was the driest month. The highest daily fall was 13.9 mm on the 11th January. The total duration of measurable rain was 114.0 hours, 52 hours below average. January with 61.7 hours had the highest duration. The highest rainfall rate recorded was 95 mm/hr on the 8th January and again on the 5th February. There were 4 dry spells, one of 12 days ending on the 21st December, one of 6 days ending on the 3rd January and another of 5 days ending on the 26th, and one of 17 days ending on the 23rd February. Thunder occurred on the 17th January and 5th February, and small hail fell on the 28th December, and the 8th, 14th and 31st January. Snow fell on the 3rd and 11th January, mixed with rain on both occasions. **Sunshine:** This has been a remarkably sunny winter, the total of 304.6 hours well above the previous highest of 255.8 hours in 2003. Each month had well above average sunshine but the record breaking sunshine total in February, over twice the average, played a major part in the season's record. The sunniest day was the 18th February, 9.7 hours. The 22 days with nil sun is 8 below average. Overall there were 47 days with <3 hours, 24 with =>6 hours and 7 with =>9 hours. **Wind:** The mean wind speed this winter was 8.1 mph, close to average. The windiest day was the 31st January, 15.3 mph, about 5 mph below normal. the highest gust of 51 mph was on the 2nd December, 8 mph below normal. The 12th December was the least windy day, mean 1.5 mph, and there were 2729 minutes, 45.5 hours, with a mean speed of 0.5 mph or less. Daily mean direction/number of days : N,2 NE,17 E,6 SE,1 S,9 SW,49 W,6 NW,1. **Humidity:** The overall mean relative humidity was 81.8 %, and the lowest value was 32 % on the 17th February. The mean water vapour content per kg of air was 4.8 g at 0900 GMT and 4.9g at 1500 GMT.

December: Temperature above normal, dry and very sunny. The highest max was equal highest since 1985.

January: Wet and windy, but very mild and very sunny. Mean temperature 4th highest in 127 years. Highest max ranks 10th highest in 105 years. Both lowest and highest min are highest on record. The lowest grass min is highest in the past 29 years. The number of air frosts fewest since before 1956. Wettest since 1999.

February: Mean temperature well above normal with an exceptional daily range. Dry and very sunny. Mean max 5th highest, and min 40th lowest, in the past 127 years, the resulting mean daily temperature range is highest since before 1882. Lowest grass min is lowest since 1991. Most dry days since 1998. Exceptional sunshine, over twice the average, and far exceeding any Feb total in the past 100 years.

Month	Mean Max	Anom	Mean Min	Anom	Rain mm	Anom %	Sun hrs	Anom %	Wind Mn mph	Max gust	Mean pressure	Anom
December	8.7	+0.4	2.0	-0.5	42.5	66 %	81.4	154 %	7.7	51	1021.2	+6.1
January	10.3	+2.8	4.3	+2.8	84.8	139 %	73.7	125 %	9.6	47	1013.1	-2.9
February	11.1	+3.2	0.3	-1.0	22.0	53 %	149.5	215 %	6.8	43	1023.8	+7.1