

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

JANUARY 2022

Temperature (°C)	Anomaly		Rank in the past 141 years						
Mean maximum	8.1	0.0	47 th highest						
Mean minimum	0.7	-1.3	43 rd lowest						
Daily mean	4.4	-0.7	68 th highest						
Highest maximum	15.0	on 1 st	Lowest maximum	4.2 on 24 th					
Highest minimum	11.8	on 1 st	Lowest minimum	-4.9 on 6 th					
Mean grass minimum	-1.1	0.0	Lowest grass minimum	-8.4 on 6 th					
Mean earth @30 cm	6.2	+0.5	Earth @100 cm	7.9 +0.2					
Frost duration (hrs)	106.8		Rain duration (hrs)	17.2					
Rainfall total (mm)	15.9	24%	8 th lowest						
Highest daily fall	3.3	on 8 th	Highest rate mm/hr	13 on 2 nd					
Number of: Dry days (<0.2mm)	21	Wet days (>0.9mm)	7	days ≥5mm	0				
Sunshine total (hrs)	94.1	Daily mean	3.04	129%	Sunniest day	8.0 on 17 th			
N° days with: Air frost	16	Ground frost	19	Snow falling	2	Snow lying	0		
Thunder	0	Hail ≥5mm	0	Small hail/ice	0	Fog @09	3	Nil sun	7
Pressure MSL : Mean @09 GMT, mbar	1026.4	+10.1	Highest	1043.0 on 12 th	Lowest	992.3 on 8 th			
Relative humidity : Mean (%)	86.9	Lowest	40 on 31 st	Water vapour (g/kg), mean at 09 and 15 GMT		4.5, 4.9			
Overall mean wind speed (mph)	5.5	Windiest day	11.5 on 29 th	Max gust	38 on 31 st				
Wind direction (days)	N 0	NE 1	E 2	SE 0	S 6	SW 12	W 8	NW 2	
Least windy day (mph)	1.5 on 14 th	Calm; less than 0.5 mph (minutes)		1272					

Anomaly = departure from 1991 to 2020 average (degrees C, percent and mbar).

Notes:

Very Dry and Very Sunny with Below Average Temperature

Temperature: The overall mean this January is 0.7° below the current climatological average, but is 0.1° above the long-term median. Several recent Januaries have been colder, including 2021 and 2019, and in this millennium there have been 8. There is a large disparity between the rankings for the mean maximum and mean minimum, and the mean minimum is 3rd lowest in this millennium while the mean maximum is only 11th lowest. The highest max is equal highest with 1998 in the past 119 years and is 2.5° above the median, while the lowest max is 3.1° above its median. The highest min is 3.3° above the median and 2nd highest in 110 years, while the lowest min is 1.0° above its median. There were 5 more air frosts, and 1 more ground frost, than average. The duration of air frost is 10.2 hours above average, but has been exceeded in 7 Januaries this millennium. The mean and lowest grass min are lowest since 2019. Earth temperatures are somewhat above average. Anomalies for daily max were above +5° on the 1st, 27th and 29th, and exceeded -3° on the 24th and 25th, with extreme values of +7.4° on the 1st and -3.4° on the 24th. Anomalies for daily min were above +5° on the 1st to 3rd, and exceeded -5° on the 6th and 21st, with extreme values of +10.1° on the 1st and -6.6° on the 6th. **Rainfall:** This has been an exceptionally dry January, driest since 1997 and 8th driest in the past 141 years. Also, the month's wettest day, the 8th, saw only 3.3 mm of rain, making it the lowest for any January in the past 119 years, (the median value is 14.0 mm). Nearly all of the month's total fell in the first 11 days with only 0.8 mm recorded after that, and a 16 day dry spell ended on the 27th. Daily accumulation compared with normal was 8 mm in deficit by the 11th, this increasing to 50 mm by the 31st. There was no thunder or hail this month, but sleet fell briefly on the 4th and 7th. **Sunshine:** This is the 2nd sunniest January here after 2003, and the daily mean of 3.04 hours is close to the average for February. It is interesting to note that 9 of the sunniest 10% of Januaries in the past 115 years have been in this millennium. However, it should be noted that there was a change of instrument to a more sensitive electronic one in 1999 which may have skewed the statistics. There were 8 days having over 80 % of the maximum, with 3 consecutive, 12th to 14th, each having over 90 %, and giving a 3 day total of 23.2 hours. Conversely, the 6 day period to the 26th had a total of only 2.7 hours, with no sunshine from the 22nd to 25th. Daily accumulation compared with normal was 5 hours in deficit on the 11th, but became a surplus of 22 hours by the 21st, decreasing to 10 hours on the 26th then increasing to 19 hours by the 31st. Overall there were 19 days with <3 hours and 8 with =>6 hours. **Wind:** This has been quite a calm January overall, with a mean speed 2.3 mph below average and 3rd lowest in 35 years after 2017 and 1997. The month's highest gust is also low, 13 mph below average. The duration of calm is highest since 2017. Daily mean speeds were mainly moderate to the 9th but fresh on the 2nd, then mostly light or very light to the 25th, then moderate or fresh.. Directions were between S and W except between N and E on the 14th and 18th, between E and S on 10th, 23rd and 24th, and between W and N on 20th, 22nd and 31st. **Pressure:** The mean this January is highest since 1992. After the 11th the lowest value at 09 GMT was 1024.0 mbar on the 31st. The pressure pulse from the enormous volcanic explosion in Tonga was observed here on the 15th, 16th and 17th, as it did 2 circuits of the globe.

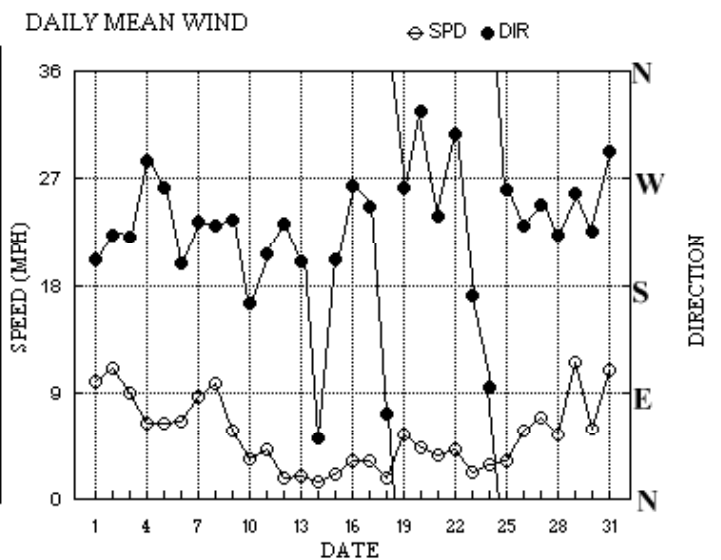
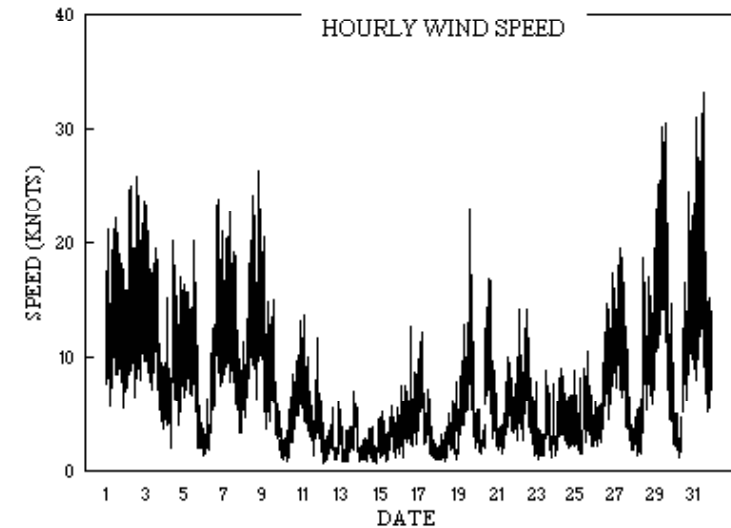
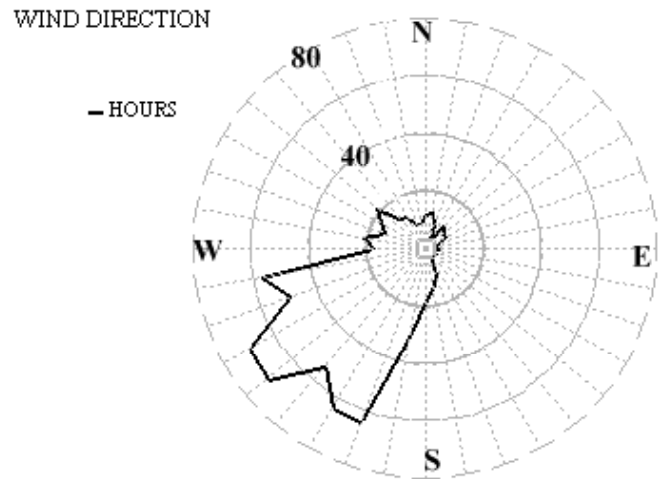
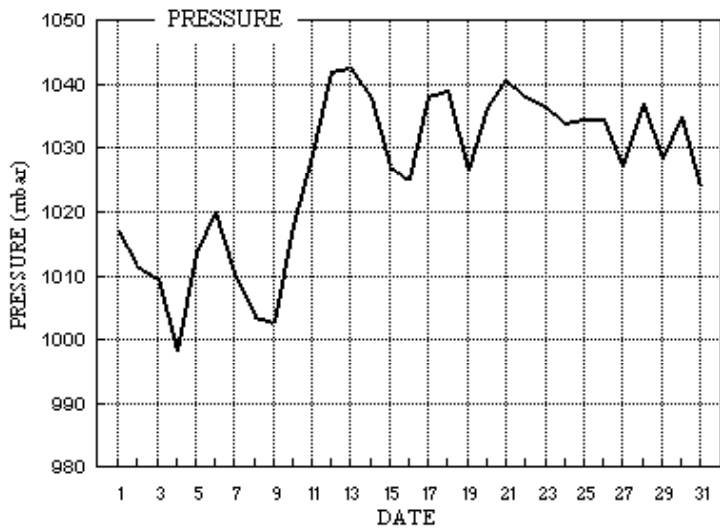
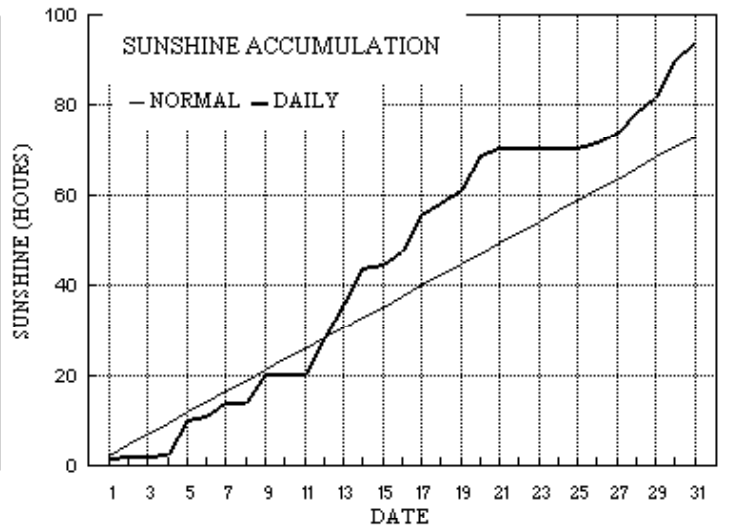
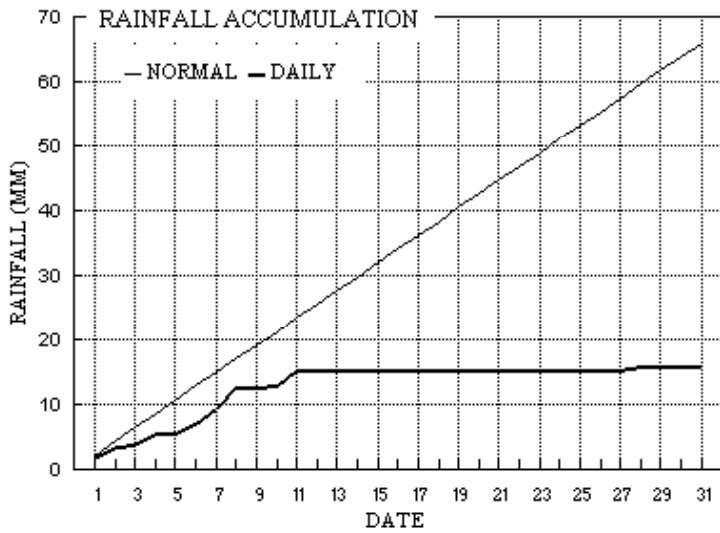
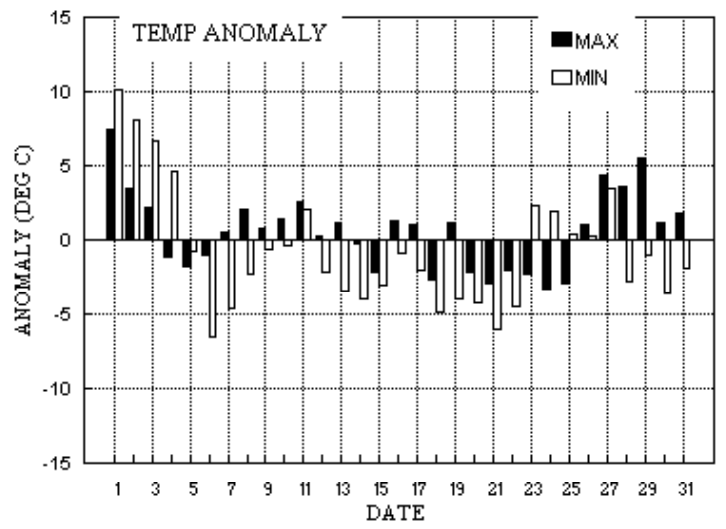
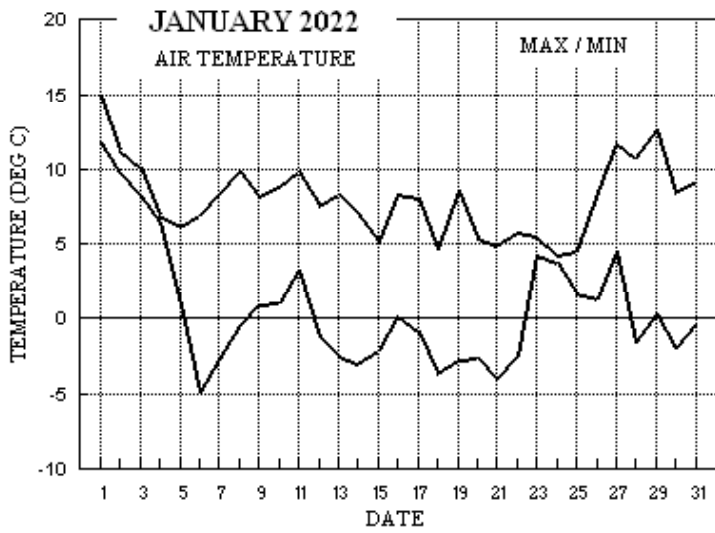
Table 1. Mean anomalies (max, min, rain, sun) for specified periods.

From the 1 st to the 10 th				From the 11 th to the 20 th				From the 21 st to the 31 st			
+1.4°	+1.4°	60 %	87 %	0.0°	-2.7°	12 %	205 %	+0.3°	-1.0°	2 %	98 %

B J Burton FRMetS.

Hon. Met. Officer to Wokingham Town Council.

Wokingham climatological graphs for January 2022



Month: JANUARY 2022

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	High hr HHhh	High ddd	ff	Rain HH	hrs	
1	15.0	11.8	1.8	8.5	10.0	9.3	1.7	0.0	1016.9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	202	8.5	8.6	222	22	1111	207	12	11	0.8	
2	11.2	9.7	1.7	7.1	10.1	9.5	0.4	0.0	1011.7	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	223	9.4	9.6	221	26	1438	229	13	15	1.1	
3	10.1	8.2	0.3	5.5	9.8	9.7	0.0	0.0	1009.5	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	221	7.8	7.9	233	23	0116	231	11	12	0.5	
4	6.9	6.4	1.8	4.4	9.4	9.8	0.6	0.0	998.3	0 0 1 0	0 0 0 0	0 0 0 0	0 0 0 0	284	3.7	5.6	4	20	0948	4	9	10	2.3	
5	6.1	0.9	0.0	-2.1	8.4	9.7	7.4	4.5	1013.5	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	262	5.2	5.5	286	20	1226	286	9	12	0.0	
6	6.9	-4.9	1.3	-8.4	7.3	9.5	1.1	10.1	1020.0	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	198	5.4	5.8	193	24	1753	197	12	18	0.8	
7	8.3	-2.8	2.5	-0.2	6.6	9.2	2.7	1.3	1010.4	1 1 1 0	0 0 0 0	0 0 0 0	0 0 0 0	234	7.4	7.5	238	23	0847	233	10	09	1.3	
8	9.8	-0.5	3.3	-4.9	6.3	8.9	0.1	0.0	1003.5	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	230	7.4	8.5	267	27	1915	268	11	19	2.9	
9	8.2	0.9	tr	-3.1	6.5	8.6	6.5	0.0	1002.6	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	235	4.7	5.0	257	21	0119	246	10	01	0.0	
10	8.8	1.1	0.1	-2.8	6.2	8.5	0.0	0.0	1017.8	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	165	2.5	3.0	175	13	2250	191	6	23	0.4	
11	9.9	3.2	2.3	6.9	6.7	8.3	0.0	0.0	1028.8	0 0 0 0	0 0 0 0	0 0 0 1	0 0 0 0	207	1.5	3.7	175	14	0318	199	7	03	4.5	
12	7.5	-1.2	tr	-5.1	7.2	8.2	7.7	6.7	1041.9	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	232	1.0	1.6	191	6	2054	242	3	13	0.0	
13	8.3	-2.5	0.0	-5.7	6.3	8.2	7.8	12.5	1042.5	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	200	1.7	1.8	188	7	1753	194	4	18	0.0	
14	7.0	-3.0	0.1	-5.9	5.6	8.1	7.8	14.2	1038.0	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	52	0.3	1.3	61	5	2347	59	3	23	0.0	
15	5.1	-2.1	tr	-5.4	5.0	7.8	1.1	8.9	1027.1	1 1 0 0	0 0 0 0	0 0 0 1	0 0 0 0	201	0.7	1.8	208	6	1457	183	3	22	0.1	
16	8.3	0.1	tr	-1.3	5.2	7.6	3.0	0.0	1025.0	0 1 0 0	0 0 0 0	0 0 0 1	0 0 0 0	263	2.3	2.9	299	13	1425	300	5	14	0.1	
17	8.1	-0.9	0.0	-5.0	5.4	7.4	8.0	5.7	1038.2	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	246	2.4	2.9	261	12	0505	251	6	04	0.0	
18	4.6	-3.7	tr	-6.3	5.0	7.3	2.5	10.8	1039.0	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	72	0.4	1.6	134	8	2221	161	4	22	0.0	
19	8.6	-2.8	0.1	-0.8	4.8	7.2	2.8	0.0	1026.6	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	262	3.6	4.8	308	23	1540	320	10	15	0.4	
20	5.4	-2.7	0.0	-6.8	5.0	7.1	7.6	8.4	1036.4	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	326	2.8	3.8	348	17	1431	350	8	11	0.0	
21	4.9	-4.0	0.0	-7.6	4.4	6.9	1.6	9.9	1040.8	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	238	3.0	3.2	257	10	1227	243	5	15	0.0	
22	5.8	-2.5	0.0	0.1	4.2	6.8	0.0	0.0	1038.2	1 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	306	3.5	3.7	281	14	1312	309	6	13	0.0	
23	5.5	4.2	0.0	3.5	4.7	6.7	0.0	0.0	1036.6	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	172	1.0	2.0	175	9	1317	190	4	13	0.0	
24	4.2	3.7	tr	3.2	5.0	6.6	0.0	0.0	1034.0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	95	2.3	2.6	67	9	0750	128	4	10	0.0	
25	4.5	1.7	tr	1.9	5.2	6.6	0.0	0.0	1034.7	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	260	0.9	2.8	344	11	1627	340	5	16	0.0	
26	8.5	1.3	0.0	1.5	5.1	6.7	1.1	0.0	1034.7	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	230	4.9	5.0	222	18	2256	228	9	22	0.0	
27	11.7	4.5	tr	-1.3	5.4	6.7	2.2	0.0	1027.2	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	248	5.3	6.0	262	20	0717	238	10	05	0.3	
28	10.7	-1.6	0.4	-5.3	5.5	6.7	4.6	8.6	1037.1	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	223	4.6	4.8	243	19	1233	234	8	13	0.9	
29	12.7	0.3	0.0	5.5	5.5	6.7	3.7	0.0	1028.2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	258	9.7	10.0	262	31	1400	253	15	11	0.0	
30	8.5	-2.0	0.2	-6.2	6.1	6.7	7.7	5.2	1034.8	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	226	4.9	5.2	227	25	2006	229	12	20	0.5	
31	9.2	-0.3	tr	2.6	5.7	6.8	4.4	0.0	1024.0	1 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	292	8.6	9.5	330	33	1303	323	15	13	0.3	
Total			15.9				94.1	106.8																17.2
Mean	8.1	0.7		-1.1	6.2	7.9	3.04	3.4	1026.4					238	3.3	4.8								
Anom	-0.0	-1.3	24%	+0.0	+0.5	+0.2	129%			+10.1														

Daily mean 4.4 Pressure, abs highest = 1043.0 on 12
 Anom -0.7 Pressure, abs lowest = 992.3 on 8

Number of days with:

Air frost = 16 Ground frost = 19 Nil sun = 7
 Snow falling = 2 Snow lying = 0 Thunder = 0
 Hail=>5mm = 0 Hail<5mm or ice = 0 Fog at 09GMT = 3

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.
 Maximum daily rain rate in mm/hr
 All temperatures in degrees Celsius.
 Anomaly - Departure from the 1991 to 2020 climatological average

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 1500 GMT for JANUARY 2022

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Cf	NChs	hshs	NChs	hshs	Date	Remarks
1	61	7	20	10	20	13.3	10.8	85	8.0	1016.2	6	011	20	6	5	4	5	4	3	1	82713	83620		1	2Ac68 /Ci72	
2	65	7	23	13	26	11.1	8.5	84	6.9	1008.2	5	027	25	8	2	7	8	4	7	/	82815	86630		2	/Ac60 Cu med jp NW&N	
3	75	7	23	09	19	9.8	6.9	82	6.2	1006.6	7	020	02	2	2	1	8	4	2	/	81818	87468		3	1Sc25 Cu hum	
4	82	5	31	07	14	3.7	0.2	78	3.9	1003.2	3	015	01	6	7	1	1	4	7	2	81815	83358		4	3Ci68 Cu fra	
5	80	1	31	06	17	5.5	0.1	68	3.8	1016.4	2	012	02	0	0	1	8	5	0	0	81828			5	1Sc35 Cu hum	
6	82	8	18	08	13	6.1	2.0	75	4.4	1013.4	7	040	21	6	2	1	5	6	2	/	81635	88550		6		
7	70	8	23	07	15	4.9	1.4	78	4.2	1010.4	0	001	16	2	2	1	7	4	2	/	81818	88550		7	Cu fra jp S-W vv50k ex p	
8	59	8	24	11	19	9.6	8.0	90	6.8	992.7	6	049	21	6	2	7	8	4	1	/	83818	87625		8	/As65 Cu med jpNW	
9	75	5	24	03	15	7.2	2.5	72	4.6	1004.1	3	010	03	1	1	1	8	5	7	6	81828	84278		9	1Sc32 1Ac68 COTRA Cu hum	
10	62	8	17	05	09	8.2	6.0	86	5.8	1020.5	2	008	21	6	2	3	5	4	2	/	81618	83645	88550	10		
11	15	8	26	01	04	9.9	9.4	97	7.2	1030.8	3	008	51	5	6	8	7	1	/	/	87702	88703		11		
12	72	1	31	02	04	7.4	4.0	79	4.9	1041.5	7	005	02	0	0	0	0	9	0	1	81080			12		
13	80	0	17	02	04	8.3	1.0	60	4.0	1040.5	6	013	02	0	0	0	0	9	0	0				13		
14	60	1	03	01	03	7.0	2.7	74	4.5	1034.6	7	022	05	0	0	0	0	9	0	1	81080			14	Hoar slt in shade	
15	50	7	20	03	06	4.7	4.1	96	5.0	1024.9	6	015	10	1	1	7	5	5	/	/	87624			15		
16	63	2	31	04	13	7.4	5.4	87	5.5	1028.3	3	012	02	1	1	1	8	4	7	0	81815			16	1Sc50 2Ac67 Cu hum Ac vir	
17	72	0	31	01	04	7.9	3.2	72	4.6	1038.4	8	008	02	0	0	0	0	9	0	0				17		
18	15	7	34	01	04	3.1	3.0	99	4.6	1036.3	7	024	10	4	2	7	5	3	/	/	83708	87612		18		
19	82	3	32	11	17	8.6	4.0	73	5.0	1026.0	5	000	01	6	1	3	8	5	0	1	81825	83645		19	1Ci75 Cu hum	
20	82	4	35	07	17	4.6	-2.7	59	3.0	1037.8	3	003	03	0	0	4	8	6	0	1	81832	84642		20	1Ci75 Cu hum	
21	75	8	24	04	08	3.5	-0.1	77	3.7	1038.9	7	016	02	2	2	8	5	5	/	/	88627			21		
22	70	8	34	05	12	5.7	1.6	75	4.2	1037.9	8	003	02	2	2	8	5	4	/	/	88618			22		
23	58	8	21	03	07	5.1	1.6	78	4.2	1034.3	6	016	05	2	2	8	5	4	/	/	88615			23		
24	58	8	06	03	06	4.1	1.1	81	4.0	1033.3	6	008	05	2	2	8	5	4	/	/	88614			24		
25	50	8	34	03	08	2.2	-0.1	85	3.7	1034.5	6	009	20	5	2	8	6	3	/	/	88709			25		
26	60	7	24	07	13	7.8	2.5	69	4.4	1032.1	6	021	03	1	1	7	5	5	/	/	82625	87628		26		
27	82	2	35	05	13	11.1	7.0	76	6.1	1028.9	3	011	01	6	1	2	8	5	0	8	81823			27	2Sc40 1Cs75 Cu med Cs edge S	
28	82	7	25	07	17	8.6	4.0	73	4.9	1034.1	6	015	02	2	2	1	1	5	7	2	81820	85365	87070	28	Cu fra	
29	84	7	25	14	31	11.9	8.6	80	6.8	1026.7	6	011	02	2	2	7	8	4	/	/	83815	86625		29	Cu hum	
30	80	7	22	11	17	8.0	1.2	62	4.1	1029.2	7	039	03	1	1	4	8	5	3	1	81828	84631		30	3Ac59 /Ci75 Cu hum	
31	80	6	31	08	28	7.8	-1.7	51	3.3	1026.8	3	007	03	1	1	6	8	6	/	1	81835	86642		31	1Ci75 Cu hum	

Mean vis = 21.9 km

Mean cloud = 5.6 70%

Mean wind speed = 5.9 kn

Mean gust = 13 kn

Mean TT = 7.2 °C

Mean TdTd = 3.4 °C

Mean RH = 77.5 %

Mean r = 4.9 g/kg

Mean PPP = 1025.4 mbar

See appendix 2 below for full code details

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 Sunshine Hourly analysis 2022	Hour	01-Jan	02-Jan	03-Jan	04-Jan	05-Jan	06-Jan	07-Jan	08-Jan	09-Jan	10-Jan	11-Jan	12-Jan	13-Jan	14-Jan	15-Jan	16-Jan
	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8	0.32	0.00	0.00	0.00	0.44	0.44	0.13	0.00	0.40	0.00	0.00	0.51	0.57	0.58	0.00	0.00
	9	0.58	0.10	0.00	0.00	1.00	0.68	0.70	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
	10	0.51	0.00	0.00	0.00	1.00	0.00	0.99	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
	11	0.33	0.33	0.00	0.00	1.00	0.00	0.91	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.11
	12	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.48	0.84
	13	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.63	0.84
	14	0.00	0.00	0.00	0.21	1.00	0.00	0.00	0.03	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.94
	15	0.00	0.00	0.00	0.45	0.99	0.00	0.00	0.00	0.12	0.00	0.00	1.00	1.00	1.00	0.00	0.29
	16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.20	0.22	0.00	0.00
	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot		1.73	0.44	0.00	0.64	7.43	1.12	2.74	0.03	6.52	0.00	0.00	7.67	7.77	7.80	1.11	3.02

Hour	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan	22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan	28-Jan	29-Jan	30-Jan	31-Jan	Mean
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.65	0.67	0.04	0.68	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.88	0.03	0.23
9	1.00	0.98	0.28	1.00	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.70	1.00	0.44	0.43
10	1.00	0.02	0.19	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.91	1.00	0.31	0.37
11	1.00	0.00	0.81	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.85	1.00	1.00	0.43
12	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.87	0.15	1.00	1.00	0.37
13	1.00	0.26	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.97	0.52	1.00	0.00	0.93	1.00	0.42
14	1.00	0.58	0.31	1.00	0.00	0.00	0.00	0.00	0.00	0.05	0.45	0.68	0.00	0.87	0.63	0.38
15	1.00	0.01	0.87	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.33	0.48	0.70	0.00	0.31
16	0.30	0.00	0.27	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.21	0.56	0.34	0.01	0.10
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot	7.95	2.53	2.75	7.56	1.57	0.00	0.00	0.00	0.00	1.13	2.24	4.61	3.65	7.72	4.43	94.14

JANUARY 2022	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	13.03	15.0	1110	11.8	819	86.3	96.3	15	70.9	1113	10.8	8.0	8.8	16	7.1	932	1016.89	1020.1	6	1012.9	2356	0.2
2	10.50	12.7	1	8.4	2113	87.5	93.8	1310	81.4	1118	8.5	6.9	8.2	8	5.7	2113	1010.55	1013.1	5	1007.7	1429	2.8
3	8.98	10.1	1248	7.8	2353	86.1	93.4	2333	79.4	1007	6.8	6.1	6.4	2007	5.7	1008	1007.73	1012.1	54	1001.3	2355	0.1
4	4.46	8.0	50	1.4	2243	86.1	96.4	925	69.0	1525	2.3	4.7	6.2	19	3.3	2344	1002.22	1008.7	2349	997.3	617	1.9
5	1.96	6.1	1246	-2.5	2346	81.5	97.3	0	65.2	1200	-1.0	3.5	3.9	1246	3.0	2356	1014.95	1021.3	2359	1008.5	6	0
6	1.59	6.9	1948	-4.9	734	90.8	98.4	854	72.6	1521	0.2	4.0	5.8	1950	2.5	800	1016.21	1021.5	118	1009.9	2047	1.4
7	2.83	5.2	1048	-0.5	2159	87.1	98.2	2213	72.9	1320	0.8	4.0	4.6	1	3.5	2159	1011.30	1014.3	2324	1009.8	521	1.9
8	6.12	9.8	1350	1.1	0	88.8	97.2	3	70.0	1857	4.4	5.3	7.2	1350	4.0	0	1001.32	1014.2	4	992.3	1512	3
9	3.96	8.2	1306	0.9	515	83.4	97.4	2324	64.5	1316	1.3	4.2	4.7	1135	3.6	504	1003.68	1010.2	2359	998.2	0	0
10	5.52	8.8	2333	1.8	335	93.2	98.0	339	85.7	1524	4.5	5.2	6.3	2156	4.2	335	1018.82	1025.4	2359	1010.1	0	0.1
11	8.60	9.9	1358	4.6	2355	95.7	97.6	2357	90.2	0	8.0	6.5	7.2	1531	5.0	2355	1030.31	1037.0	2355	1025.3	7	2
12	2.22	7.5	1310	-1.2	735	95.1	99.7	856	78.2	1503	1.5	4.1	5.2	1	3.3	753	1041.11	1043.0	2251	1036.9	3	0.1
13	1.15	8.3	1500	-2.5	759	92.9	99.5	707	59.4	1458	0.0	3.7	4.9	1227	3.0	759	1041.37	1042.8	4	1039.4	2346	0.2
14	0.53	7.0	1500	-3.0	729	93.6	99.1	2336	72.2	1323	-0.5	3.6	4.7	1535	2.9	730	1036.09	1039.5	14	1031.0	2357	0.1
15	1.38	4.8	1509	-2.0	259	97.8	99.9	1058	92.6	1618	1.1	4.1	5.0	1448	3.2	259	1026.40	1031.0	4	1023.5	2034	0.1
16	5.11	8.3	1323	1.9	2243	93.9	99.3	1106	83.3	2337	4.2	5.1	6.1	1237	3.8	2352	1027.83	1035.4	2358	1022.6	142	0
17	2.46	8.1	1332	-2.0	2349	88.7	98.9	2357	70.9	1438	0.7	3.9	4.8	1309	3.1	2349	1038.23	1040.2	2121	1035.4	101	0.2
18	0.61	4.4	2209	-3.7	801	98.9	99.8	1145	95.5	2310	0.5	3.9	5.0	2209	2.8	801	1037.21	1039.9	21	1032.5	2355	0.1
19	4.81	8.6	1456	0.0	2328	87.1	97.2	2332	63.0	1539	2.8	4.6	5.9	1346	3.5	2324	1028.51	1032.6	23	1025.2	1257	0.1
20	1.39	5.4	1313	-2.7	759	79.9	99.1	818	55.1	1522	-2.0	3.2	4.1	0	2.8	1603	1036.79	1040.7	2318	1032.1	0	0.2
21	0.68	4.0	1752	-4.0	701	86.0	97.1	858	76.5	1400	-1.5	3.3	4.0	2220	2.6	701	1039.73	1041.1	816	1038.2	1758	0
22	4.92	5.8	1531	3.1	33	79.9	87.1	103	74.3	1530	1.7	4.2	4.5	2241	4.0	32	1037.95	1038.7	1007	1037.2	2330	0
23	4.74	5.5	1203	4.0	2100	81.3	86.7	144	76.7	1328	1.8	4.2	4.5	932	4.0	1706	1035.41	1037.5	11	1033.6	2358	0
24	3.89	4.9	310	3.2	2237	81.8	87.2	119	77.6	310	1.1	4.0	4.3	116	3.8	2353	1033.78	1035.1	2149	1032.7	426	0
25	2.03	3.2	3	1.3	1701	87.3	91.4	740	82.8	1	0.1	3.7	3.9	913	3.6	1708	1034.90	1035.7	2311	1034.2	649	0
26	5.08	8.1	1322	2.1	16	78.9	88.4	52	67.6	1552	1.7	4.2	4.7	2359	3.8	0	1032.93	1035.3	0	1028.8	2359	0
27	7.01	11.7	1424	0.1	2351	87.1	97.3	2355	72.3	1728	5.0	5.4	7.3	1325	3.6	2349	1029.42	1035.4	2359	1026.4	546	0
28	4.32	9.3	2357	-1.6	404	90.3	99.0	755	71.9	1516	2.8	4.6	6.8	2339	3.2	404	1034.61	1037.3	934	1030.5	2358	0.4
29	10.09	12.7	1224	4.6	2246	78.3	94.8	0	61.4	1723	6.4	6.0	6.9	1408	4.0	2239	1029.28	1033.5	2244	1026.1	1336	0.1
30	4.12	8.5	2356	-2.0	739	82.1	97.7	712	60.5	1337	1.1	4.1	5.9	2317	3.1	739	1029.91	1034.9	840	1019.3	2259	0.2
31	6.70	8.7	1306	4.3	2025	66.4	81.1	2046	40.5	1308	0.7	4.0	5.4	0	2.8	1323	1024.83	1028.8	2046	1019.7	6	0
Total																						15.2
Mean	4.54	7.91		0.96		86.9	95.62		72.71		2.44	4.59	5.59		3.70		1026.14	1030.21		1021.89		
Max	13.03	15.01		11.76		98.9	99.90		95.50		10.75	7.97	8.80		7.14		1041.37	1043.02		1039.38		
Min	0.53	3.19		-4.88		66.4	81.10		40.50		-1.99	3.21	3.91		2.54		1001.32	1008.66		992.33		

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
 Time = hours and minutes in GMT of extreme values

Temperature and humidity are from an aspirated Vaisala HMP45 unit
 Pressure is from a Setra CS100 sensor
 Data is logged on a Campbell Scientific CR10X measurement and control system
 R tot = Rainfall from TBR, uncorrected

Appendix 1.

Explanation and definition of some of the terms used in the Wokingham Weather Reports.

Average: Generally refers to the 30 year climatological average, currently 1981 to 2010. This will be next updated in 2020. For some parameters, notably wind, the climatological average is not available, and if the word average is used in the context of wind, it refers to the average for the period for which data is held, namely 1988 to present.

For sunshine, there was a change, in July 1999, in the type of instrument used to detect sunshine amount, making the climatological average based on the old instrument of little use. In general, the new instrument produces higher values in the winter half year, and lower ones in the summer half, than the old type, due to a combination of faster reaction and higher sensitivity than the old type. The average used in this case is based on a theoretical equivalent 1981 to 2010 average, drawn from comparison with the Met Office published tables of departure from climatological average sunshine in the months since 2000 for their area 'Southern England'. Users of the Wokingham Monthly Weather reports should be aware of this, and regard anomalies for sunshine published therein as a guide only, until such time has elapsed since the introduction of the new instrument that a genuine average becomes available.

Mean: The mean of the data under discussion, often the monthly mean of daily data. The mean is obtained by summation of the individual values and dividing by the number of values. The term 'daily mean' in respect of temperature is defined as '(max + min) / 2'. A true daily 24 hour (00 to 24 GMT) mean temperature is available from the Automatic Weather Station (AWS), and is currently published on page 7 of the Wokingham Monthly Weather report, on the Wokingham Weather web site, page 1. <http://www.woksat.info/wwp1.html>

Anomaly: When a value is given for anomaly, this will have one of the following meanings:

- a): The departure of a mean from the current climatological average.
- b): The departure of a value on a particular day from the average for that day, (this need not be a climatological average).

When the word anomaly is used in respect of temperature, any values given are in °C. In respect of rainfall or sunshine, percent. In respect of wind, mph. In respect of pressure, millibars (hpa).

Categories: Reference may be made in the reports to 'categories'. Each category has a strict statistical range, as outlined below.

Temperature: The terms cold/mild are used in the winter half year, and cool/warm in the summer half. The term 'normal' is used when the individual mean (monthly, seasonal or annual) value is within 20 % of the median of all ranked values for that month/season/year.

Mild/warm: The value lies between 10 % and 30 % below the highest value in the ranked series.

Very mild/very warm: The value lies within 10 % of the highest value in the ranked series.

Cold/cool: The value lies between 10 % and 30 % above the lowest value in the ranked series.

Very cold/very cool: The value lies within 10 % of the lowest value in the ranked series.

Sunshine: The terms for sunshine are very sunny, sunny, normal, dull and very dull.

The definition of these terms follow the same rules as for temperature.

Rainfall: The terms for rainfall are very dry, dry, normal, wet and very wet.

The definition of the term 'normal' follows the same rule as for temperature and sunshine.

Wet: The value lies between 10 % and 30% of the highest value in the ranked series.

Very wet: The value lies within 10 % of the highest value in the ranked series.

Dry: The value lies between 10 % and 30 % above the lowest value in the ranked series.

Very dry: The value lies within 10 % of the lowest value in the ranked series.

Long-term: Mention may be made in the reports to the 'long-term'. The long-term record comprises a temperature/rainfall/sunshine data series compiled from records of various weather stations in the Wokingham area in the years prior to the establishment of the weather station at Emmbrook in 1976 together with data from this station.

In the case of monthly max, min and mean temperature and of rainfall total the series starts in 1882. For temperature extremes, the highest max and lowest min go back to 1904, and lowest max and highest min to 1913.

Rank: The word rank refers to the position of a value for a particular month/season/year in the ranked series, and may be expressed relative to either the highest or lowest value in the series. The central value in the ranked series is known as the **median**. This value may be different from the average of the whole series if the population is skewed. It can also be different from the climatological average which only refers to a 30 year period.

Month: Calendar month.

Season: Spring, March to May.

Summer, June to August

Autumn, September to November

Winter, December to February.

When discussing 'winter', if a single year is given this refers to the year in which the January/February fall.

Annual or Year: The calendar year, 1st January to 31st December.

The climatological day: runs from 0900 to 0900 GMT. The max temperature and rainfall read at 0900 hours are attributed to the previous day (thrown back), as is the duration of measurable rain. The min temperature and grass min read at 0900 hours are attributed to the day of reading. Pressure read at 0900 GMT, and the monthly mean pressure is the mean of the 0900 GMT readings. Sunshine data, wind data, rainfall rate data and 24 hour data from the AWS use the normal 00-24 GMT day.

Frost: An air frost day is recorded when the minimum temperature read at 0900 GMT on that day is -0.1°C or below. A ground frost day is recorded when the grass minimum temperature read at 0900 GMT on that day is -0.1°C or lower.

Duration of air frost is defined as the number of minutes that the AWS one minute average temperature is below 0.0°C , and the day runs from midnight to midnight.

Snow: A day with snow falling is triggered if snow falls at any time in the 24 hours from midnight on that day. A day with snow lying is entered if there is at least 50% snow cover at the 0900 GMT observation.

Snow depth is the depth of undrifted snow. Snow that collects in the raingauge funnel is melted and the amount recorded as rainfall.

Hail: A day of hail is recorded if hailstones 5 mm or more in diameter are observed or recorded on the hail pad in a 24 hour period starting at midnight.

A day of small hail is recorded if hailstones less than 5 mm diameter are observed or recorded in a 24 hour period starting at midnight. The term small hail also includes various other types of ice meteor such as ice pellets, snow grains and some types of snow pellets.

Fog: A day with fog is recorded if the horizontal visibility at 0900 GMT is below 1000 m.

Thunder: A day of thunder is recorded if thunder is heard in the 24 hour period from midnight on that day. The appearance of lightning without thunder being heard does not qualify as a thunder day.

Trace of rainfall: A trace of rain, entered as 'tr' in the daily log, is recorded if rain is observed to fall but is of insufficient quantity to collect in the raingauge, or if the amount of rain in the gauge is less than 0.05 mm.

Dry spell: A dry spell is defined as a period of 5 or more consecutive dry days.

Dry day: A dry day is one with less than 0.2 mm of rainfall.

Rain day: A rain day is one with 0.2 mm or more of rainfall.

Wet day: A wet day is one having 1.0 mm or more of rainfall.

Appendix 2.

Explanation and decode for code figures used in the Wokingham 0900 and 1500 GMT observations

VV : Visibility.

Code figures 00 to 50 are in km and tenths e.g. 01 = 0.1 km = 100 m, 33 = 3.3 km, 50 = 5.0 km

Code figures 60 to 80. Subtract 50 to obtain visibility in km. e.g. 56 = 6 km, 65 = 15 km, 77 = 27 km.

Code figures 81 to 89. Subtract 50 and add 5 for every one above 80. e.g. 83 = 45 km, 86 = 60 km.

Code figure 89 = visibility above 70 km.

N : Total cloud amount in okta (eighths of sky covered). 9 = sky obscured (e.g. by fog or snow)

dd : Wind direction in tens of degrees from true north. Wind is measured at a height of 10 m, and the direction is the mean over a period of 10 minutes ending at the observation time.

ff : Wind speed in knots, measured at 10 m, and is the mean over a period of 10 minutes ending at observation time.

gg : Wind gust in knots at 10 m. The highest gust in the 60 minutes up to observation time.

TT : Air temperature at 1.2m, degrees C and tenths.

TdTd : Dew point temperature at 1.2m, degrees C and tenths.

RH : Relative humidity at 1.2m, %.

r : Humidity mixing ratio (amount of water vapour per kg of air), grams and tenths.

PPP : Air pressure reduced to MSL, millibars and tenths.

a : Characteristic of pressure tendency during the past 3 hours.

Code figures 0 to 3, pressure higher than 3 hours ago, 5 to 8, pressure lower than 3 hours ago

Code figure 0 = Increasing then decreasing, pressure the same as or higher than 3 hours ago

1 = Increasing then steady or increasing more slowly

2 = Increasing steadily or unsteadily

3 = Decreasing or steady then increasing, or increasing then increasing more rapidly

4 = Steady, pressure the same as 3 hours ago

5 = Decreasing then increasing, pressure lower than 3 hours ago

6 = Decreasing then steady or decreasing more slowly

7 = Decreasing steadily or unsteadily

8 = Steady or increasing then decreasing, or decreasing then decreasing more rapidly

ppp : 3 hour pressure tendency in tenths of a millibar

ww : Present weather code figures, 00 to 99.

Present weather decode:

00 = Cloud development not observed or not observable

01 = Clouds generally dissolving or becoming less developed

02 = State of sky on the whole unchanged

03 = Clouds generally increasing or becoming more developed

04 = Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes.

05 = Haze, visibility reduced by extremely small dry particles (RH less than appx. 95 %)

06 = Widespread dust in suspension, not raised by the wind near the station at the time of the observation

07 = Dust or sand raised by the wind at or near the station at the time of the observation, but no well-developed dust whirls or sand whirls, and no duststorm or sandstorm seen: In marine environments, blowing spray at the station.

08 = Well-developed dust or sand whirls seen at or near the station during the preceding hour or at the time of the observation, but no duststorm or sandstorm.

09 = Duststorm or sandstorm within sight at the time of the observation, or at the station during the preceding hour

10 = Mist
11 = Patches of shallow fog not deeper than 2 metres on land
12 = More or less continuous shallow fog not deeper than 2 metres on land
13 = Lightning visible, no thunder heard
14 = Precipitation within sight, not reaching the ground
15 = Precipitation within sight, reaching the ground more than 5 km from the station
16 = Precipitation within sight, reaching the ground, near to but not at the station
17 = Thunderstorm, but no precipitation at the time of the observation
18 = Squalls at or within sight of the station at the time of the observation or during the preceding hour
19 = Funnel cloud(s) at or within sight of the station at the time of the observation or during the preceding hour

20 = Drizzle (not freezing) at the station during the preceding hour but not at the time of the observation
21 = Rain (not freezing) at the station during the preceding hour but not at the time of the observation
22 = Snow at the station during the preceding hour but not at the time of the observation
23 = Rain and snow or ice pellets at the station during the preceding hour but not at the time of the observation
24 = Freezing drizzle or freezing rain at the station during the preceding hour but not at the time of the observation
25 = Shower(s) of rain at the station during the preceding hour but not at the time of the observation
26 = Shower(s) of snow or rain and snow at the station during the preceding hour but not at the time of the observation
27 = Shower(s) of hail or rain and hail at the station during the preceding hour but not at the time of the observation
28 = Fog or ice fog at the station during the preceding hour but not at the time of the observation
29 = Thunderstorm, with or without precipitation at the station during the preceding hour but not at the time of the observation

30 = Slight or moderate duststorm or sandstorm has decreased during the preceding hour
31 = Slight or moderate duststorm or sandstorm with no appreciable change during the past hour
32 = Slight or moderate duststorm or sandstorm has begun or increased during the past hour
33 = Severe duststorm or sandstorm has decreased during the preceding hour
34 = Severe duststorm or sandstorm with no appreciable change during the past hour
35 = Severe duststorm or sandstorm has begun or increased during the past hour
36 = Slight or moderate drifting snow generally below eye level
37 = Heavy drifting snow generally below eye level
38 = Slight or moderate blowing snow generally above eye level
39 = Heavy blowing snow generally above eye level

40 = Fog or ice fog at a distance at the time of the observation, but not at the station during the preceding hour, the fog extending to a level above that of the observer.
41 = Fog or ice fog in patches
42 = Fog or ice fog, sky visible has become thinner during the past hour
43 = Fog or ice fog, sky invisible has become thinner during the past hour
44 = Fog or ice fog, sky visible no appreciable change during the past hour
45 = Fog or ice fog, sky invisible no appreciable change during the past hour
46 = Fog or ice fog, sky visible has begun or become thicker during the past hour
47 = Fog or ice fog, sky invisible has begun or become thicker during the past hour
48 = Fog, depositing rime, sky visible
49 = Fog depositing rime, sky invisible

50 = Drizzle, not freezing, intermittent slight at time of observation
51 = Drizzle, not freezing, continuous slight at time of observation
52 = Drizzle, not freezing, intermittent moderate at time of observation
53 = Drizzle, not freezing, continuous moderate at time of observation
54 = Drizzle, not freezing, intermittent heavy at time of observation
55 = Drizzle, not freezing, continuous heavy at time of observation
56 = Drizzle, freezing, slight
57 = Drizzle, freezing, moderate or heavy (dense)
58 = Drizzle and rain, slight
59 = Drizzle and rain, moderate or heavy

60 = Rain, not freezing, intermittent slight at time of observation
61 = Rain, not freezing, continuous slight at time of observation
62 = Rain, not freezing, intermittent moderate at time of observation
63 = Rain, not freezing, continuous moderate at time of observation
64 = Rain, not freezing, intermittent heavy at time of observation
65 = Rain, not freezing, continuous heavy at time of observation
66 = Rain, freezing, slight
67 = Rain, freezing, moderate or heavy
68 = Rain or drizzle and snow, slight
69 = Rain or drizzle and snow, moderate or heavy

70 = Intermittent fall of snowflakes slight at time of observation
71 = Continuous fall of snowflakes slight at time of observation
72 = Intermittent fall of snowflakes moderate at time of observation
73 = Continuous fall of snowflakes moderate at time of observation
74 = Intermittent fall of snowflakes heavy at time of observation
75 = Continuous fall of snowflakes heavy at time of observation
76 = Diamond dust (with or without fog)
77 = Snow grains (with or without fog)
78 = Isolated star-like snow crystals (with or without fog)
79 = Ice pellets

80 = Rain shower(s), slight
81 = Rain shower(s), moderate or heavy
82 = Rain shower(s), violent
83 = Shower(s) of rain and snow mixed, slight
84 = Shower(s) of rain and snow mixed, moderate or heavy
85 = Snow shower(s), slight
86 = Snow shower(s), moderate or heavy
87 = Shower(s) of snow pellets or small hail, with or without rain or rain and snow mixed, slight
88 = Shower(s) of snow pellets or small hail, with or without rain or rain and snow mixed, moderate or heavy
89 = Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder, slight
90 = Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder, moderate or heavy

91 = Slight rain at time of observation, thunderstorm during the past hour but not at time of observation
92 = Moderate or heavy rain at time of observation, thunderstorm during the past hour but not at time of observation
93 = Slight snow, or rain and snow mixed, or hail at time of observation, thunderstorm during the past hour but not at time of observation
94 = Moderate or heavy snow, or rain and snow mixed, or hail at time of observation, thunderstorm during the past hour but not at time of observation
95 = Thunderstorm, slight or moderate, without hail but with rain and or snow at time of observation
96 = Thunderstorm, slight or moderate, with hail at time of observation
97 = Thunderstorm, heavy, without hail but with rain and or snow at time of observation
98 = Thunderstorm combined with duststorm or sandstorm at time of observation
99 = Thunderstorm, heavy, with hail at time of observation

Hail includes large hail, small hail and snow pellets.

W1, W2 : Past weather (for 0900 and 1500 GMT observations, the period covered is 3 hours)

Code figures:

- 0 = Cloud covering half or less of the sky throughout the period
- 1 = Cloud covering more than half the sky during only part of the period
- 2 = Cloud covering more than half the sky throughout the period
- 3 = Sandstorm, duststorm or blowing snow
- 4 = Fog or ice fog or thick haze (visibility less than 1000 m)
- 5 = Drizzle
- 6 = Rain
- 7 = Snow or rain and snow mixed
- 8 = Shower(s)
- 9 = Thunderstorm(s) with or without precipitation

Nh : Amount of low cloud, or medium cloud if no low cloud present, okta

Cl : Type of low cloud

- 0 = No low cloud
- 1 = Cumulus with little vertical extent and seemingly flattened, or ragged Cumulus other than bad weather, or both
- 2 = Cumulus of moderate or strong vertical extent, either accompanied or not by other Cumulus or Stratocumulus all having their bases at the same level
- 3 = Cumulonimbus whose summits, at least partially, lack sharp outline, but are neither clearly fibrous (cirriform), nor in the form of an anvil; Cumulus, Stratocumulus or Stratus may also be present
- 4 = Stratocumulus formed by the spreading out of Cumulus; Cumulus may also be present
- 6 = Stratus in a more or less continuous sheet or layer, or ragged shreds, or both, but no Stratus fractus of bad weather
- 7 = Stratus fractus of bad weather or Cumulus fractus of bad weather or both (pannus), usually below Altostratus or Nimbostratus
- 8 = Cumulus and Stratocumulus other than that formed by the spreading out of Cumulus, the bases of the Cumulus and Stratocumulus are not at the same level.
- 9 = Cumulonimbus, the upper part of which is clearly fibrous (cirriform), often in the form of an anvil, either accompanied or not by any other type(s) of low cloud
- / = Types of low cloud invisible due to darkness, fog, blowing dust or sand or other similar phenomena.

'Bad weather' denotes the conditions which generally exist during precipitation and a short time before and after.

Cm : Type of medium cloud.

- 0 = No medium cloud.
- 1 = Altostratus, the greater part of which is semi-transparent; through this part the sun or moon may be weakly visible, as through ground glass
- 2 = Altostratus, the greater part of which is sufficiently dense to hide the sun or moon, or Nimbostratus
- 3 = Altocumulus, the greater part of which is semi-transparent; the various elements of the cloud change only slowly and are all at a single level
- 4 = Altocumulus in patches (often in the form of almonds or fishes), the greater part of which is semi-transparent ; the clouds occur at one or more levels and the elements are continually changing in appearance
- 5 = Altocumulus in bands semi-transparent, of Altocumulus in one or more fairly continuous layers (semi-transparent or opaque), progressively invading the sky; these Altocumulus clouds generally thicken as a whole
- 6 = Altocumulus resulting from the spreading out of Cumulus (or Cumulonimbus)
- 7 = Altocumulus in two or more layers, usually opaque in places, and not progressively invading the sky; or opaque layer of Altocumulus not progressively invading the sky; or Altocumulus together with Altostratus or Nimbostratus
- 8 = Altocumulus with sproutings in the form of small towers or battlements, or Altocumulus having the appearance of cumuliform tufts
- 9 = Altocumulus of a chaotic sky, generally at several levels
- / = Types of medium cloud invisible owing to darkness, fog, blowing dust or sand or other similar phenomena, or more often because of the presence of a continuous layer of lower clouds.

Ch : Type of high cloud

0 = No high cloud

1 = Cirrus in the form of filaments, strands or hooks, not progressively invading the sky.

2 = Dense cirrus, in patches or entangled sheaves, which usually do not increase and sometimes seem to be the remains of the upper part of a Cumulonimbus; or Cirrus with sproutings in the form of small turrets or battlements, or Cirrus having the appearance of cumuliform tufts

3 = Dense Cirrus, often in the form of an anvil, being the remains of the upper part of Cumulonimbus, or where the rest of the Cumulonimbus is below the horizon

4 = Cirrus in the form of hooks or filaments, or both, progressively invading the sky; they generally become denser as a whole

5 = Cirrus (often in bands converging towards one or two opposite points on the horizon) and Cirrostratus, or Cirrostratus alone; in either case they are progressively invading the sky, and generally growing denser as a whole, but the continuous veil does not reach 45 degrees above the horizon.

6 = Cirrus (often in bands converging towards one or two opposite points on the horizon) and Cirrostratus, or Cirrostratus alone; in either case they are progressively invading the sky, and generally growing denser as a whole; the continuous veil extends more than 45 degrees above the horizon, without the sky being totally covered

7 = Veil of Cirrostratus covering the celestial dome.

8 = Cirrostratus not progressively invading the sky and not completely covering the celestial dome

9 = Cirrocumulus alone, or accompanied by Cirrus or Cirrostratus, or both, but Cirrocumulus is predominant.

/ = Types of high cloud invisible owing to darkness, fog, blowing dust or sand or other similar phenomena, or more often because of the presence of a continuous layer of lower clouds.

8 Groups

N = Amount of cloud reported by C, okta.

C = Type of cloud

0 = Cirrus (Ci)

1 = Cirrocumulus (Cc)

2 = Cirrostratus (Cs)

3 = Altocumulus (Ac)

4 = Altostratus (As)

5 = Nimbostratus (Ns)

6 = Stratocumulus (Sc)

7 = Stratus (St)

8 = Cumulus (Cu)

9 = Cumulonimbus (Cb)

/ = Cloud type not visible owing to darkness, fog, duststorm, or other analogous phenomena.

hshs = Height of cloud above station level reported by type C

00 to 50 = Height in hundreds of feet

51 to 55 Not used

56 to 80 = Subtract 50 to obtain cloud height in thousands of feet

81 to 88 = Height of cloud between 35000 and 70000 ft in 5000 ft steps.