

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

JULY 2025

Temperature (°C)		Anomaly	Rank in the past	144	years
Mean maximum	25.8	+2.6	8th highest		
Mean minimum	14.3	+1.5	3rd highest		
Daily mean	20.1	+2.2	4th highest		
Highest maximum	33.3	on 11th	Lowest maximum	20.9	on 29th
Highest minimum	19.2	on 1st	Lowest minimum	8.4	on 3rd
Mean grass minimum	11.1	+1.2	Lowest grass minimum	3.2	on 3rd
Mean earth @30 cm	20.4	+1.5	Earth @100 cm	18.7	+1.8
Frost duration (hrs)	0.0		Rain duration (hrs)	21.1	
Rainfall total (mm)	35.9	76 %	46th lowest		
Highest daily fall	12.0	on 31st	Highest rate mm/hr	96	on 20th
Number of: Dry days (<0.2mm)	19	Wet days (>0.9mm)	8	days ≥5mm	3
Sunshine total (hrs)	220.7	Daily mean	7.12	110 %	Sunniest day
N° days with: Air frost	0	Ground frost	0	Snow falling	0
Thunder	2	Hail ≥5mm	0	Small hail/ice	0
				Fog @09	0
				Nil sun	0
Pressure MSL: Mean @09 GMT, mbar	1015.8	-0.1	Highest	1029.5	on 4th
			Lowest	998.2	on 20th
Relative humidity: Mean (%)	65.7	Lowest	25	on 4th	Water vapour (g/kg), mean at 09 and 15 GMT
Overall mean wind speed (mph)	5.6	Windiest day	11.2	on 15th	Max gust
Wind direction (days)	N 2	NE	1	E	1
		SE	1	S	2
		SW	8	W	10
		NW	6		
Least windy day (mph)	3.3	on 29th	Calm; less than 0.5 mph (minutes)	n/a	

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

Notes:

Very Warm and Sunny with Below Average Rainfall

Temperature: Yet another very warm month, the 4th in a row. The mean this month ranks 4th highest since before 1882, with 2018, 2006 and 1983 the 3 warmer Julies in that period. In terms of the mean minimum, it is 3rd highest after 2006 and 1983, but the mean maximum is 2.2° below the record set in 2018, and ranks only 8th highest. The highest max is 4.4° above the median while the lowest max is 3.9° above its median and 4th highest in 114 years. The highest min is 2.6° above the median and ranks 3rd highest in 114 years while the lowest min is 1.3° above its median. The mean grass min is highest since 2021 and before that, 2006. The lowest grass min is close to average. Earth temperature at 30 cm and 1 m depth are about 1.5° above average. At 1 m depth, the lowest daily value, 17.9°, is a new record high in the past 37 years. 2014 was the first July to have a daily value at 1 m depth of 19° or more, but this is now the 4th year in the past 12 when this has occurred. Anomalies for daily max were above +10° on the 1st, 11th and 12th, and exceeded -1° on the 27th and 29th with extreme values of +11.1° on 1st and -2.6° on 29th. Anomalies for daily min were above +5° on the 1st, 2nd, 17th and 19th, and exceeded -1° on the 3rd, 4th, 9th, 28th and 29th, with extreme values of +7.6° on 1st and -3.3° on 3rd. **Rainfall:** The total this July is below average, but in this millennium there have been 10 drier Julies. Most of this month's rain fell after mid-month, there were only 2 rain days up to the 16th and 10 in the remaining 15 days. A dry spell of 9 days ended on the 5th and another of 7 days on the 13th. Gardens continued to suffer from a lack of rain, and the estimated soil moisture deficit shows that unirrigated shallow rooted plants suffered severe stress throughout the month. Daily rainfall accumulation compared with normal showed a deficit of 22 mm on the 17th, decreasing to 10 mm by the 20th, increasing to 23 mm by the 29th but ending up only 11 mm in deficit due to the rainfall on the 31st. **Sunshine:** It was a sunny month overall, but the second half was decidedly less sunny than the first half. Up to the 16th, 12 days had more than 50% of the maximum, and 6 had over 80%, while after the 16th only 2 days had more than 50%, and 8 had less than 20%. The period 8th to 13th was outstanding, with a 6 day total of 85.6 hours, a mean of 14.3 hours per day. Daily sunshine accumulation compared with normal was +54 hours by the 13th increasing to +58 hours by the 18th, then decreasing steadily to +19 hours by the 31st. Overall there were 10 days with <3 hours, 16 with =>6 hours and 6 with =>12 hours. **Wind:** The mean wind speed of 5.6 mph is 0.6 mph below average. The mean speed on the month's windiest day, and the month's highest gust, are close to average. Daily mean speed was light or moderate throughout, apart from fresh on the 14th and 15th. Daily mean direction was between N and E on the 12th and 13th, between E and S on the 11th and 20th, between S and W on the 4th, 5th, 14th, 15th, 17th to 19th, 21st, 22nd, 25th, 29th and 31st, and between W and N on the remaining 15 days.

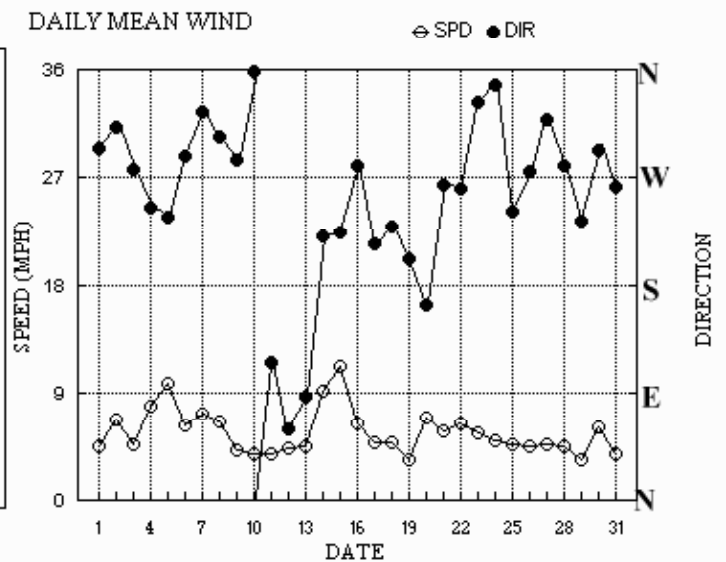
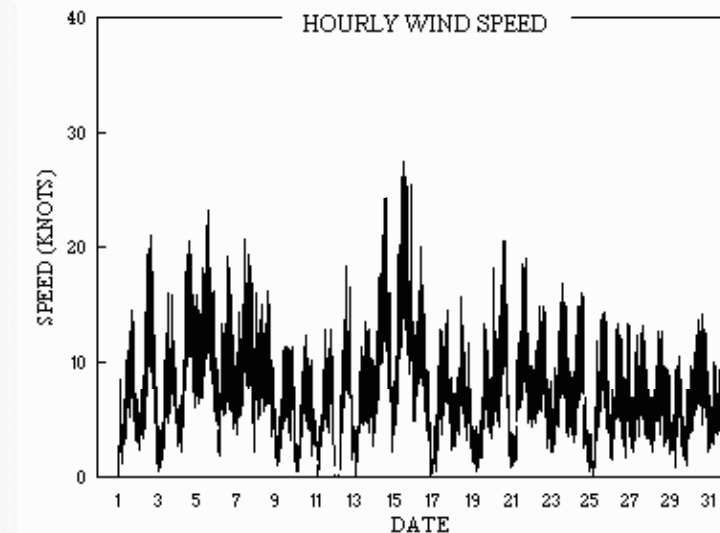
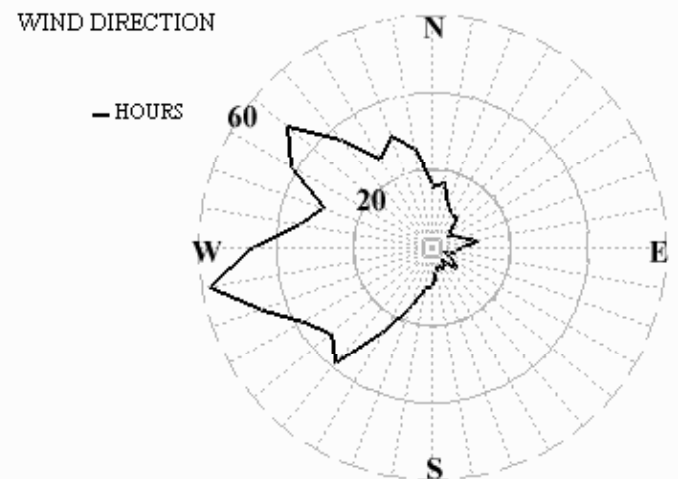
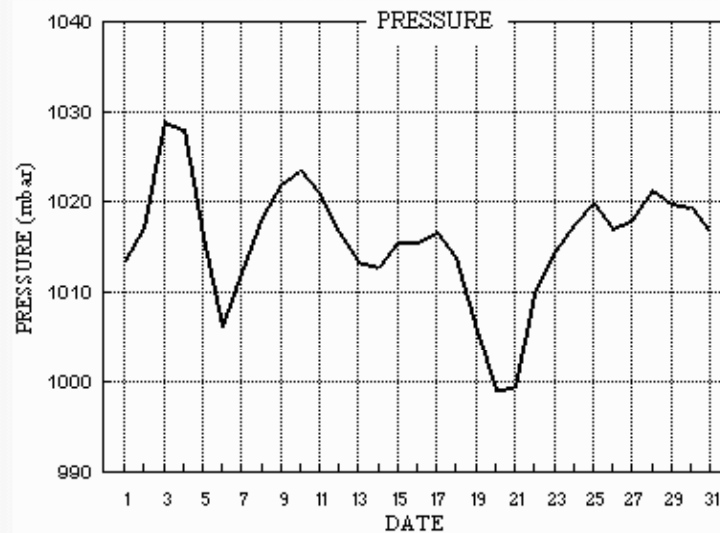
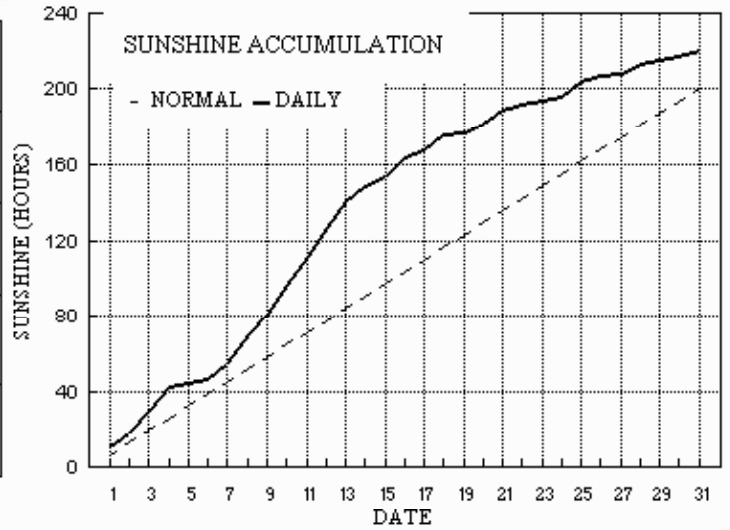
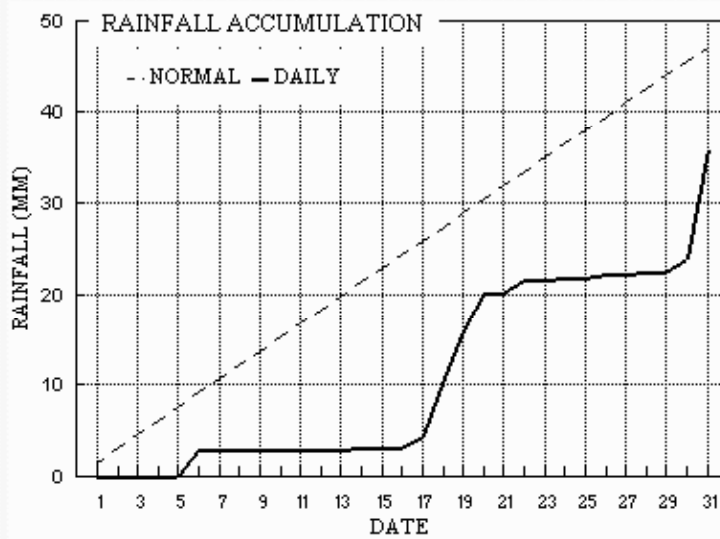
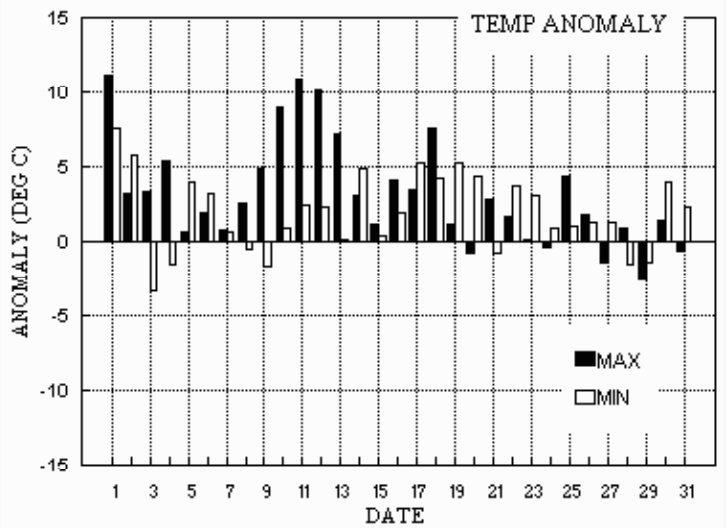
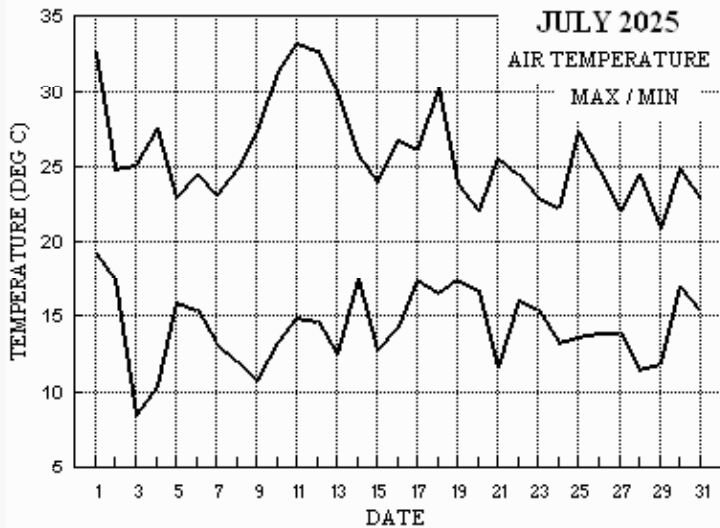
Table 1. Mean anomalies (max, min, rain, sun) for specified periods.

From the 1 st to the 10 th				From the 11 th to the 20 th				From the 21 st to the 31 st			
+4.3°	+1.5°	18%	149%	+4.8°	+3.1°	114%	133%	+0.7°	+1.3°	95%	54%

B J Burton FRMetS.

Hon. Met. Officer to Wokingham Town Council.

Wokingham climatological graphs for July 2025



Month: JULY 2025

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	32.6	19.2	tr	15.9	21.5	17.9	11.0	0.0	1013.4	0	0	0	0	294	3.0	4.0	304	15	1650	291	8	17	0.0
2	24.8	17.4	tr	15.9	21.8	18.2	7.2	0.0	1017.0	0	0	0	0	312	5.3	5.8	297	21	1555	303	10	17	0.0
3	25.1	8.4	0.0	3.2	20.5	18.4	11.5	0.0	1029.0	0	0	0	0	276	3.8	4.1	250	16	1235	277	7	17	0.0
4	27.5	10.3	tr	5.2	20.1	18.4	13.5	0.0	1028.2	0	0	0	0	245	6.7	6.9	243	21	1555	253	12	15	0.0
5	22.9	15.9	tr	14.5	20.4	18.4	1.2	0.0	1016.2	0	0	0	0	236	8.2	8.4	234	23	1450	224	12	14	0.1
6	24.4	15.4	2.8	11.3	20.1	18.4	2.1	0.0	1006.3	0	0	0	0	287	4.7	5.5	325	19	1455	328	9	15	4.5
7	23.1	13.2	tr	13.3	19.9	18.4	8.2	0.0	1012.3	0	0	0	0	325	5.7	6.3	8	21	1025	354	9	11	0.1
8	24.9	12.0	0.0	7.8	19.5	18.3	15.2	0.0	1018.4	0	0	0	0	303	5.4	5.8	314	16	1410	293	8	00	0.0
9	27.3	10.7	0.0	6.0	19.7	18.3	11.1	0.0	1022.0	0	0	0	0	285	2.6	3.7	280	12	1110	218	6	20	0.0
10	31.3	13.3	0.0	9.6	20.0	18.3	15.5	0.0	1023.4	0	0	0	0	357	2.3	3.4	321	12	1300	331	6	11	0.0
11	33.3	14.9	0.0	11.1	20.7	18.3	15.2	0.0	1021.0	0	0	0	0	116	1.6	3.4	65	13	1255	205	7	19	0.0
12	32.7	14.7	0.0	10.8	21.2	18.4	15.3	0.0	1016.7	0	0	0	0	60	3.3	3.8	56	18	1520	78	9	18	0.0
13	29.9	12.5	tr	7.5	21.5	18.6	13.3	0.0	1013.5	0	0	0	0	87	2.2	3.9	81	14	1400	185	6	19	0.0
14	25.7	17.4	0.3	15.2	21.8	18.8	9.0	0.0	1012.9	0	0	0	0	221	7.4	8.0	206	25	1510	208	13	14	0.2
15	23.9	12.8	0.1	9.0	21.2	19.0	5.1	0.0	1015.6	0	0	0	0	224	9.3	9.7	213	28	1310	221	14	13	0.4
16	26.7	14.3	0.0	11.2	20.6	19.0	9.6	0.0	1015.7	0	0	0	0	280	4.4	5.6	272	20	1030	285	9	10	0.0
17	26.1	17.5	1.2	12.6	20.9	19.0	3.7	0.0	1016.6	0	0	0	0	214	3.8	4.2	212	15	1805	219	8	17	0.9
18	30.2	16.6	6.2	13.6	21.0	19.0	8.7	0.0	1013.9	0	0	0	0	228	3.8	4.2	194	16	1055	223	6	11	3.3
19	23.8	17.5	5.3	14.9	21.8	19.0	0.9	0.0	1005.8	0	0	0	0	202	2.0	3.0	236	13	1445	221	6	16	4.0
20	22.0	16.7	4.2	15.6	21.2	19.1	5.2	0.0	999.2	0	0	0	0	163	5.0	6.0	198	21	1440	199	11	15	0.5
21	25.6	11.6	tr	8.7	20.4	19.2	7.1	0.0	999.5	0	0	0	1	264	4.2	5.1	252	19	1740	231	9	16	0.0
22	24.4	16.1	1.5	13.1	20.5	19.1	2.5	0.0	1009.9	0	0	0	0	261	5.4	5.6	267	15	1130	265	8	11	0.6
23	22.9	15.4	tr	14.2	20.3	19.1	2.2	0.0	1014.5	0	0	0	0	333	4.8	5.0	345	17	1535	320	8	13	0.2
24	22.3	13.2	0.2	9.5	20.1	19.0	1.9	0.0	1017.6	0	0	0	0	346	4.0	4.3	354	16	1500	2	7	13	1.2
25	27.2	13.6	0.0	10.5	19.7	18.9	8.1	0.0	1019.8	0	0	0	0	242	3.7	4.0	210	14	1740	223	8	15	0.0
26	24.7	13.9	0.5	10.3	19.9	18.8	3.6	0.0	1017.0	0	0	0	0	275	3.1	4.0	254	13	1020	252	7	08	0.2
27	22.0	13.9	0.0	11.0	19.8	18.8	0.1	0.0	1017.9	0	0	0	0	318	3.9	4.1	297	13	1620	299	7	16	0.0
28	24.4	11.5	0.2	7.5	19.3	18.7	5.5	0.0	1021.4	0	0	0	0	280	3.8	3.9	301	13	1145	306	7	15	0.4
29	20.9	11.8	tr	7.5	19.4	18.6	1.7	0.0	1019.9	0	0	0	0	234	1.5	2.9	222	11	1230	210	5	12	0.1
30	24.9	17.0	1.4	15.3	19.4	18.6	2.7	0.0	1019.5	0	0	0	0	292	5.1	5.4	271	14	1825	290	7	14	2.1
31	22.8	15.3	12.0	11.5	19.7	18.5	2.8	0.0	1016.7	0	0	0	1	262	2.7	3.3	316	30	1725	231	5	08	2.3
Total			35.9				220.7	0.0															21.1
Mean	25.8	14.3		11.1	20.4	18.7	7.12	0.0	1015.8					268	2.8	5							
Anom	+2.6	+1.5	76%		+1.5	+1.8	110%		-0.1														
Daily mean		20.1							Pressure, abs highest =														
Anom		+2.2							Pressure, abs lowest =														
Number of days with:																							
Air frost = 0				Ground frost = 0				Nil sun = 0															
Snow falling = 0				Snow lying = 0				Thunder = 2															
Hail=>5mm = 0				Hail<5mm or ice = 0				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.
 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 JULY 2025

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Cf	NCh	shs	NCh	shs	NCh	shs	Date	Remarks
1	82	6	29	07	13	31.7	15.6	38	11.0	1012.5	7	008	02	2	2	1	2	7	7	2	81856	85072					1	1Ac66 2As67 2Ac69 Cu med Ci cas/spi	
2	88	1	31	09	20	24.6	6.4	31	5.9	1018.2	8	001	01	1	1	1	1	7	0	2	81856						2	1Cc70 1Ci72 Cu hum Ci cas/spi/unc Ci edge E	
3	88	6	31	06	11	24.5	4.3	27	5.1	1027.4	7	010	03	1	1	1	1	7	6	1	81857	83358	85075				3	2Ac65 Cu hum	
4	84	5	27	10	20	27.2	7.1	28	6.2	1023.8	7	021	03	1	1	1	2	7	4	1	81850	85078					4	1Ac70 COTRA Cu med Ac len Iridescence	
5	65	8	23	12	25	21.3	15.4	69	10.8	1013.2	7	019	15	6	2	7	5	4	/	/	85615	87620					5	/Ac60 jpNW	
6	70	7	33	08	20	21.4	13.3	60	9.5	1005.2	5	001	80	8	2	7	3	5	6	/	81925	83830	85650				6	/Ac58 Cb cal Cu con jpW VV50k ex p	
7	86	5	32	09	16	21.6	7.4	40	6.4	1013.9	1	006	02	2	2	4	4	7	0	1	83850						7	2Sc56 1Ci75 Cu med	
8	86	1	31	07	17	24.2	6.9	33	6.1	1018.2	7	003	02	0	0	1	1	7	0	0	81856						8	Cu hum	
9	88	5	33	05	12	25.6	13.5	47	9.5	1021.3	7	002	03	1	1	5	8	6	0	0	83848	83650					9	Cu med/con S	
10	88	1	03	04	12	30.8	11.7	31	8.5	1021.0	7	015	02	0	0	1	1	7	0	1	81856						10	1Ci80 Cu hum	
11	84	1	03	04	10	31.8	11.0	28	8.1	1018.2	8	014	02	0	0	1	1	8	0	1	81857						11	1Ci81 COTRA Cu hum	
12	88	1	05	07	17	31.8	11.6	29	8.4	1014.0	7	011	03	0	0	1	1	7	0	2	81856						12	1Ci75 Cu hum Ci cas. Ci to E	
13	82	2	05	05	12	27.5	12.7	40	9.1	1010.6	7	013	02	0	0	2	2	7	0	4	82850						13	1Ci78 Cu med Ci distant SW	
14	82	4	22	13	26	25.1	10.2	39	7.7	1013.0	6	006	02	1	1	3	8	6	0	2	83840						14	1Sc56 2Ci75 Cu med El hz lyr	
15	80	6	23	14	28	22.3	10.1	46	7.7	1013.7	8	013	15	8	2	3	2	6	6	1	83838	83075					15	2Ac57 Cu med jpNE&NW	
16	86	5	31	07	14	26.2	9.5	35	7.4	1015.9	3	002	03	1	1	2	1	7	3	2	82850	84073					16	1Ac69 Cu hum	
17	80	7	22	07	12	25.3	18.2	65	13.0	1015.4	7	010	15	8	2	5	8	5	7	1	84820	85357					17	2Sc35 /Ci75 Cu med/con jpS vv60k ex p	
18	84	6	30	05	11	29.1	12.5	36	9.0	1010.6	7	016	03	1	1	2	8	7	0	4	82850	85080					18	1Sc56 COTRA Cu med	
19	58	7	27	06	14	21.4	17.6	79	12.6	1004.2	5	012	80	6	2	4	3	5	7	1	81920	86360					19	2Cu25 2Sc50 /Ci75 jpN&SE vv40k ex jp	
20	88	5	20	10	22	21.3	14.2	64	10.2	998.9	3	001	02	8	1	4	8	6	0	1	84835						20	1Sc50 1Ci75 Cu med	
21	82	5	25	10	20	23.3	12.0	49	8.8	1000.9	2	007	15	2	2	2	2	7	6	2	82850	83363					21	1Ac57 3Ci70 Cu con jp NW&S	
22	86	7	24	07	15	24.3	11.9	46	8.7	1010.8	8	002	01	2	2	4	8	6	3	1	82835	83650	86358				22	/Ci80 COTRA	
23	62	7	34	07	17	21.5	10.9	51	8.1	1014.3	3	003	02	2	2	7	8	6	/	/	81840	84650	86656				23	Cu med Sky turbid	
24	63	8	36	07	17	18.8	13.6	72	9.6	1019.0	2	009	50	6	2	8	5	4	/	/	85617	88630					24		
25	70	7	23	07	13	26.4	14.2	47	10.0	1017.8	8	011	02	2	2	7	8	6	/	/	81845	86656					25	2Sc50 Cu med	
26	88	5	26	04	13	24.0	13.8	53	9.8	1016.4	6	005	01	2	2	3	4	6	4	0	83837						26	1Sc56 2Ac64 Cu med	
27	84	7	32	05	11	21.4	7.3	40	6.3	1017.3	8	003	02	2	2	1	8	7	7	/	81850	83358	87360				27	1Sc56 Cu med	
28	83	7	31	07	13	23.4	9.4	41	7.3	1019.5	7	010	02	2	2	4	8	7	3	1	82850	83656	86358				28	/Ci78 Cu med	
29	81	8	20	05	09	18.9	13.7	72	9.7	1018.3	8	010	21	6	2	8	8	4	/	/	81815	87622	88640				29	Cu hum	
30	86	7	30	07	13	23.8	11.5	46	8.4	1018.2	7	008	02	2	2	7	8	6	/	1	82845	86650					30	2Ci75 Cu hum	
31	70	7	30	04	07	21.6	18.2	81	12.9	1015.4	8	006	25	8	2	4	9	3	6	3	81808	86360	81920				31	2Cu020 1Sc040 2Sc060 4Ci220 Cb cap inc Cu fra/con	

Mean vis = 45.1 km

Mean cloud = 5.3 66%

Mean wind speed = 7.3 kn

Mean gust = 15 kn

Mean TT = 24.6 °C

Mean Td = 11.8 °C

Mean RH = 47.2 %

Mean r = 8.8 g/kg

Mean PPP = 1014.7 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

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

Wokingham Sunshine Hourly analysis	Hour	01-Jul	02-Jul	03-Jul	04-Jul	05-Jul	06-Jul	07-Jul	08-Jul	09-Jul	10-Jul	11-Jul	12-Jul	13-Jul	14-Jul	15-Jul	16-Jul
2025	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	0.17	0.00	0.43	0.42	0.00	0.06	0.00	0.40	0.36	0.34	0.33	0.33	0.32	0.28	0.15	0.42
	5	0.97	0.00	1.00	1.00	0.00	0.11	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.48	0.66	1.00
	6	0.95	0.00	1.00	1.00	0.00	0.00	0.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	1.00
	7	1.00	0.00	1.00	1.00	0.17	0.02	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.70	1.00	1.00
	8	0.88	0.00	1.00	1.00	0.20	0.00	0.55	0.97	1.00	1.00	1.00	1.00	0.96	0.90	0.71	1.00
	9	0.98	0.00	1.00	0.77	0.00	0.00	0.87	0.89	1.00	1.00	1.00	1.00	1.00	0.48	0.03	0.97
	10	0.67	0.00	0.93	0.64	0.00	0.00	0.47	0.90	1.00	1.00	1.00	1.00	1.00	0.54	0.07	0.92
	11	0.65	0.02	0.75	0.98	0.00	0.03	0.74	0.93	0.96	1.00	0.90	1.00	1.00	0.15	0.35	0.78
	12	0.71	0.10	0.74	0.97	0.00	0.36	0.25	1.00	0.15	1.00	1.00	1.00	1.00	0.71	0.37	0.91
	13	0.27	0.81	0.27	1.00	0.00	0.38	0.29	1.00	0.45	1.00	1.00	1.00	1.00	0.53	0.00	0.42
	14	0.36	0.97	0.54	1.00	0.01	0.28	0.45	1.00	0.38	1.00	1.00	1.00	0.84	0.49	0.34	0.72
	15	0.40	1.00	0.25	1.00	0.02	0.17	0.57	1.00	0.37	1.00	1.00	1.00	0.90	0.86	0.13	0.43
	16	0.51	1.00	0.05	1.00	0.22	0.02	0.95	1.00	0.66	1.00	1.00	1.00	0.78	0.31	0.33	0.00
	17	0.87	1.00	0.35	1.00	0.29	0.02	1.00	1.00	0.60	1.00	1.00	1.00	0.94	0.28	0.00	0.00
	18	1.00	1.00	0.91	0.68	0.03	0.23	1.00	1.00	0.96	1.00	1.00	1.00	0.58	0.59	0.00	0.00
	19	0.58	1.00	1.00	0.00	0.28	0.39	0.97	1.00	0.22	1.00	0.97	0.87	0.00	0.66	0.00	0.00
	20	0.00	0.28	0.26	0.00	0.00	0.00	0.04	0.07	0.00	0.19	0.00	0.14	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		10.97	7.18	11.50	13.47	1.22	2.08	8.15	15.16	11.10	15.53	15.21	15.34	13.34	8.96	5.12	9.58
	Hour	17-Jul	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	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	0.18	0.00	0.00	0.00	0.16	0.00	0.00	0.04	0.00	0.00	0.33	0.00	0.00	0.00	0.15
	5	0.01	0.00	0.00	0.00	0.05	0.96	0.00	0.00	0.98	0.12	0.00	1.00	0.01	0.00	0.00	0.46
	6	0.00	0.00	0.00	0.00	0.66	0.41	0.00	0.12	1.00	0.15	0.00	0.27	0.00	0.00	0.00	0.47
	7	0.01	0.00	0.00	0.00	0.52	0.00	0.00	0.38	1.00	0.50	0.00	0.00	0.00	0.00	0.00	0.46
	8	0.49	0.20	0.00	0.00	0.65	0.22	0.00	0.29	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.49
	9	0.24	1.00	0.00	0.00	0.44	0.32	0.53	0.27	0.84	0.00	0.02	0.26	0.11	0.02	0.00	0.48
	10	0.00	1.00	0.00	0.00	0.87	0.00	0.21	0.19	0.35	0.00	0.00	0.89	0.00	0.21	0.04	0.45
	11	0.01	1.00	0.00	0.00	0.20	0.00	0.09	0.00	0.00	0.00	0.00	0.39	0.00	0.08	0.00	0.39
	12	0.09	1.00	0.00	0.24	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.18	0.00	0.20	0.00	0.39
	13	0.18	1.00	0.33	0.49	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.22	0.00	0.39
	14	0.17	0.87	0.14	0.73	0.76	0.30	0.13	0.00	0.36	0.21	0.00	0.32	0.00	0.31	0.26	0.48
	15	0.12	0.78	0.28	0.47	0.65	0.15	0.36	0.00	0.32	0.36	0.00	0.15	0.00	0.37	0.34	0.47
	16	0.17	0.82	0.11	0.57	0.43	0.00	0.45	0.00	0.10	0.90	0.00	0.50	0.40	0.37	0.49	0.49
	17	0.76	0.82	0.03	0.90	0.21	0.00	0.07	0.00	1.00	0.71	0.00	0.84	0.59	0.08	0.26	0.54
	18	1.00	0.01	0.00	1.00	0.73	0.00	0.24	0.60	0.40	0.19	0.00	0.31	0.57	0.65	0.85	0.57
	19	0.42	0.00	0.00	0.77	0.63	0.00	0.00	0.09	0.77	0.48	0.00	0.00	0.00	0.15	0.58	0.41
	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	0.03
	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		3.70	8.68	0.89	5.17	7.10	2.51	2.19	1.93	8.14	3.62	0.02	5.51	1.68	2.68	2.81	220.53

JULY 2025

	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	25.98	33.1	1446	19.2	428	60.5	92.5	431	33.6	1447	16.9	11.9	13.3	707	9.6	1324	1013.50	1015.0	2308	1012.2	1606	0
2	19.37	25.1	1558	11.4	2359	61.0	87.2	513	27.8	1627	10.5	8.2	11.3	41	4.9	1725	1018.30	1025.7	2359	1014.1	634	0
3	17.71	25.6	1456	8.4	415	49.0	82.5	416	27.3	1457	5.9	5.6	6.9	740	5.1	1459	1027.84	1029.4	2356	1025.7	0	0
4	19.90	27.8	1507	10.3	402	53.3	89.7	402	25.0	1605	9.0	7.0	8.4	1157	5.5	1603	1025.71	1029.5	50	1020.2	2359	0
5	19.25	23.1	1748	15.9	410	70.5	81.2	2359	57.3	0	13.7	9.7	11.3	1323	7.1	32	1014.69	1020.5	21	1009.7	2358	0
6	18.56	24.9	1251	15.4	325	72.4	96.0	343	49.5	1333	13.3	9.5	11.5	1139	7.1	1929	1006.81	1009.9	1	1004.6	1306	0.7
7	16.95	23.3	1633	12.9	2156	63.9	95.5	601	34.3	1526	9.3	7.3	9.5	834	5.7	1523	1012.15	1015.6	2209	1007.4	111	2.1
8	18.44	25.2	1629	12.0	437	53.3	80.6	514	28.3	1637	7.8	6.5	7.9	2350	5.3	1820	1017.99	1020.6	2359	1014.9	1	0
9	20.15	27.7	1552	10.7	408	61.2	96.2	339	36.8	1752	11.6	8.4	10.0	1354	7.0	931	1021.51	1022.7	2324	1020.4	12	0
10	23.28	31.6	1627	13.3	357	54.4	88.7	357	28.5	1701	12.3	8.8	10.6	2348	7.6	1707	1021.99	1023.8	810	1020.0	1736	0
11	24.59	33.6	1515	14.9	430	54.5	94.5	431	25.8	1440	13.4	9.4	10.6	756	7.9	1440	1019.62	1021.7	548	1016.8	1806	0
12	23.64	32.9	1344	14.7	416	55.9	89.2	522	29.0	1344	13.1	9.3	10.2	810	8.4	1604	1015.74	1018.6	0	1012.7	1740	0
13	21.54	30.1	1434	12.5	358	61.9	97.5	454	35.1	1436	12.9	9.2	10.7	952	7.7	1230	1012.15	1015.1	37	1008.9	1758	0
14	20.48	26.1	1514	14.9	2358	60.2	85.1	540	32.7	1522	12.1	8.8	11.4	1127	6.5	1552	1013.30	1016.8	2307	1010.4	150	0.4
15	18.15	24.3	1512	12.8	409	63.6	85.1	413	41.0	1512	10.7	7.9	9.0	2008	7.1	1604	1015.01	1017.0	118	1012.6	1551	0.1
16	19.98	27.0	1434	14.3	255	58.7	86.0	504	34.4	1435	10.9	8.0	9.0	626	7.1	1501	1015.91	1018.1	2227	1014.3	143	0
17	21.86	26.5	1447	17.6	36	70.9	92.0	1104	56.4	904	16.3	11.5	15.2	1340	8.0	238	1016.14	1018.0	7	1014.6	1735	1.2
18	22.71	30.4	1427	16.6	439	66.2	97.6	442	32.9	1437	14.9	10.5	12.5	2	8.2	1322	1012.06	1014.8	0	1009.1	2228	0
19	19.49	23.8	1544	17.1	2359	83.3	98.6	714	60.5	1718	16.4	11.6	14.4	1301	9.6	2149	1005.41	1009.6	0	1002.7	2356	7.8
20	18.18	22.3	1550	13.9	2359	79.7	97.9	515	50.7	1654	14.3	10.3	12.7	1331	7.9	2007	999.79	1002.8	0	998.2	1301	5.7
21	18.15	25.8	1538	11.6	324	72.3	99.2	522	35.8	1404	12.3	9.0	10.7	734	7.2	1404	1001.04	1006.2	2351	998.4	517	0
22	19.40	24.9	1459	16.1	504	71.4	92.7	1028	45.0	1517	13.8	9.8	12.2	1027	8.1	1517	1010.20	1013.1	2359	1006.0	0	1.5
23	18.41	23.1	1303	15.4	351	67.9	92.1	357	45.7	1300	12.0	8.7	9.9	353	7.7	1300	1014.24	1016.3	2324	1012.7	57	0
24	17.55	22.3	1028	13.2	239	79.8	95.5	507	56.3	1028	13.9	9.8	11.1	1658	8.4	7	1018.18	1020.4	2338	1016.0	2	0.3
25	20.90	27.6	1505	13.6	502	65.1	98.2	532	43.1	1505	13.5	9.5	10.6	1437	7.7	2340	1018.80	1020.3	751	1016.7	1753	0
26	19.46	24.9	1508	13.9	234	68.1	87.6	1159	46.6	1739	13.2	9.4	12.5	1210	7.5	2054	1016.91	1018.4	5	1015.3	1747	0.4
27	18.01	22.0	1613	13.9	509	58.0	75.9	506	37.1	1601	9.3	7.2	8.3	912	5.9	1556	1017.94	1019.7	2337	1016.9	1622	0
28	18.76	24.8	1427	11.5	459	62.5	93.4	502	37.9	1726	10.8	8.0	9.0	2323	6.9	1545	1020.19	1021.6	743	1018.9	1735	0
29	17.05	21.5	1643	11.8	401	78.3	93.7	404	60.3	1017	13.1	9.3	11.2	2359	7.9	937	1019.14	1020.8	15	1017.2	1832	0.1
30	20.50	25.4	1428	17.0	515	67.9	89.0	139	44.4	1418	13.9	9.8	11.2	17	8.4	1449	1018.53	1019.8	941	1017.2	1820	0
31	17.95	23.2	1619	12.9	2339	90.8	98.6	1003	66.7	1619	16.4	11.5	14.6	1309	8.9	2357	1016.45	1018.5	0	1014.5	1607	12.4
Total																						32.7
Mean	19.88	26.12		13.85		65.7	91.28		40.82		12.51	9.08	10.90		7.35		1015.39	1018.07		1012.89		
Max	25.98	33.61		19.22		90.8	99.25		66.72		16.95	11.92	15.24		9.64		1027.84	1029.47		1025.67		
Min	16.95	21.46		8.35		49.0	75.94		25.00		5.86	5.64	6.88		4.86		999.79	1002.79		998.22		

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

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.