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 — AUGUST 2025

Temperature (°C)		Anomaly	Rank in the past **144** years			
Mean maximum	24.3	+1.5	13th highest			
Mean minimum	12.3	-0.3	40th highest			
Daily mean	18.3	+0.6	18th highest			
Highest maximum	33.0	on 12th	Lowest maximum	20.0	on	21st
Highest minimum	16.8	on 18th	Lowest minimum	6.2	on	22nd
Mean grass minimum	9.0	-0.6	Lowest grass minimum	2.1	on	22nd
Mean earth @30 cm	19.2	+0.3	Earth @100 cm	18.4	+0.6	
Frost duration (hrs)	0.0		Rain duration (hrs)	15.4		
Rainfall total (mm)	35.0	65 %	41st lowest			
Highest daily fall	12.8	on 28th	Highest rate mm/hr	95	on	29th
Number of: Dry days (<0.2mm)	23	Wet days (>0.9mm) 6	days ≥5mm	2		
Sunshine total (hrs)	215.6	Daily mean 6.95	120 %	Sunniest day	14.2	on 10th
N° days with: Air frost	0	Ground frost 0	Snow falling 0	Snow lying 0		
Thunder	1	Hail ≥5mm 0	Small hail/ice 0	Fog @09 0	Nil sun 0	
Pressure MSL : Mean @09 GMT, mbar	1017.0	+1.2	Highest 1029.0	on 10th	Lowest 993.8	on 29th
Relative humidity : Mean (%)	70.3	Lowest 29	on 11th	Water vapour (g/kg), mean at 09 and 15 GMT	9.3, 9.0	
Overall mean wind speed (mph)	6.1	Windiest day 9.0	on 4th	Max gust	33	on 4th
Wind direction (days)	N 3	NE 4	E 3	SE 0	S 6	SW 9	W 5	NW 1
Least windy day (mph)	3.0	on 22nd	Calm; less than 0.5 mph (minutes)	n/a		

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

Notes: **Drier than Average and Sunny with Mean Temperature Above Average**

Temperature: While the mean maximum ranks 13th highest in 144 years, it is 2.6° below the record set in 2022, the mean minimum ranks only 40th highest but is 2.7° below the record set in 1997. The resulting daily mean is 2.0° below the record set in 2022, and is 1.7° above the long-term median. The mean daily temperature range, 12.0°, is 1.7° above average and 3rd highest in this millennium. The highest max is 5.0° above the median but 3.9° below the record set in 2003 while the lowest max is 3.1° above the median and ranks 4th highest in 113 years, only 0.3° below the record set in 1933. The highest min is 0.4° above the median while the lowest min is 0.2° below its median. The mean grass min is lowest since 2014. Ground frost in August is quite rare, the last was in 2014, and there was also none this month. Earth temperature at both 30 cm and 1 m depth are a little above average.

Rainfall: This August we have had 35 % less rainfall than average, and most of the month was very dry, with 85 % of the month's total falling over the final 5 days, and with 22 dry days up to the 26th. There were 2 dry spells, one of 6 days ended on the 10th and the second of 12 days on the 25th. In this millennium 9 Augusts have been drier, including 2024, 2022 and 2021, but 1995 had the driest August in the past 50 years when only 2.7 mm of rain fell. Rainfall duration was just 54% of average. Rainfall accumulation compared with normal was 40 mm in deficit by the 26th, this decreasing to 18 mm by the 31st. Violent rain showers were recorded on the 4th and 29th, with thunder also on the latter date, but there was no hail. Estimated soil moisture deficit continued to increase until the rainfall near the end of the month, and unirrigated shallow rooted plants would continue to suffer severe stress until the rain on the 27th.

Sunshine: This has been a sunny August with 20 % more sunshine than average. It ranks 5th sunniest in this millennium, but there was a sunnier one as recently as 2022. The period 5th to 12th was outstandingly sunny giving a total of 83.1 hours, a daily mean of 10.4 hours, despite one of its days having only 1.7 hours of sun. Days having over 80% of the maximum were the 8th, 10th, 12th, 15th, 17th and 25th, and those having less than 20 % were the 3rd, 7th, 16th, 18th, 19th and 21st. Sunshine accumulation compared with normal was normal on the 7th, becoming a surplus of 40 hours by the 17th, decreasing to 24 hours by the 21st and increasing to 33 hours by the 31st. Overall there were 6 days with <3 hours, 16 with =>6 hours and 6 with =>12 hours.

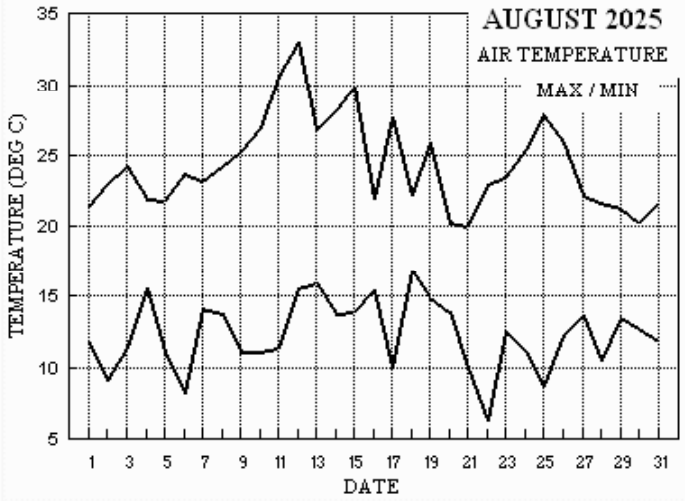
Wind: Both the mean wind speed and the highest gust are close to average. Daily mean directions were between N and E on 12th, 14th to 21st and 23rd, between E and S on 11th, 24th and 25th, between W and N on 1st, 2nd, 5th and 22nd, otherwise were between S and W. Daily mean speeds were mainly moderate, except for light on 1st, 2nd, 12th and 17th to 22nd, and fresh on the 25th.

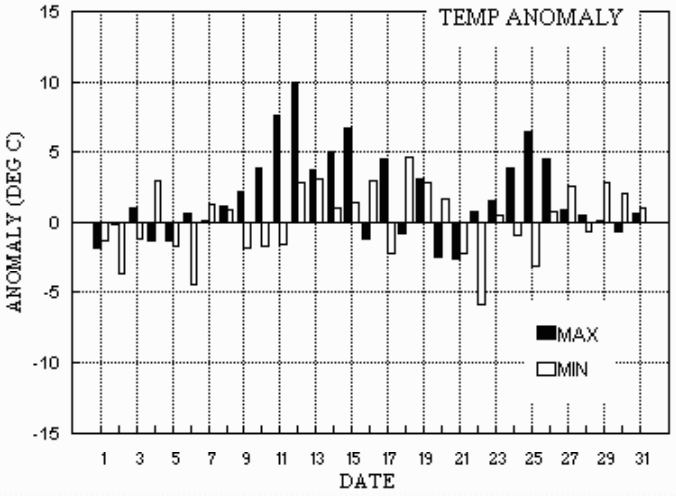
Table 1. Mean anomalies (max, min, rain, sun) for specified periods.

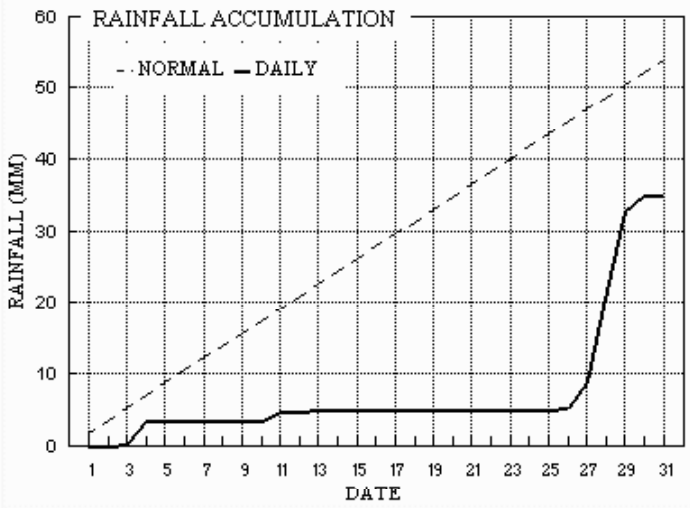
From the 1st to the 10th				From the 11th to the 20th				From the 21st to the			
+0.4°	-1.0°	21%	130%	+3.6°	+1.7°	8%	120%	+1.5°	-0.3°	157%	111%

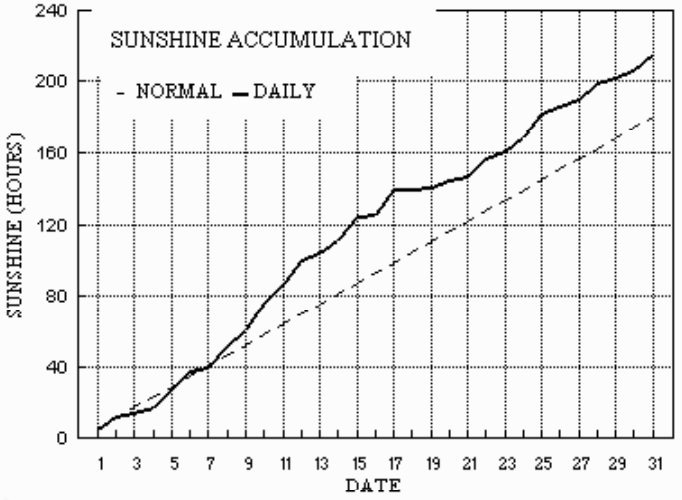
B J Burton FRMetS. Hon. Met. Officer to Wokingham Town Council.

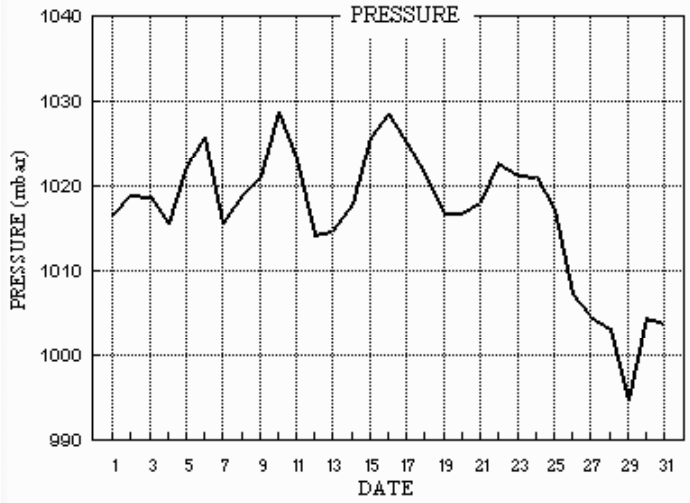
Wokingham climatological graphs for August 2025

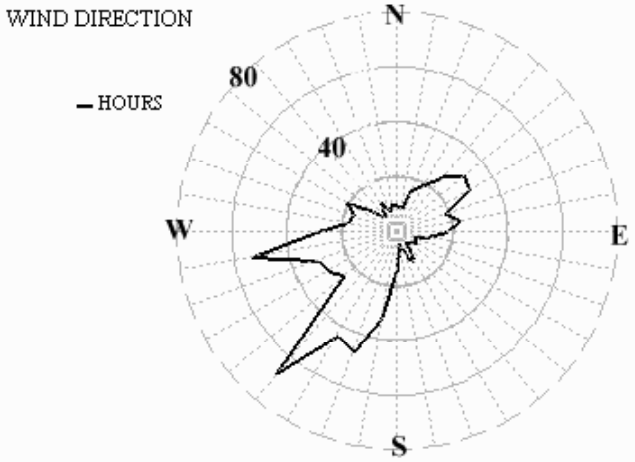


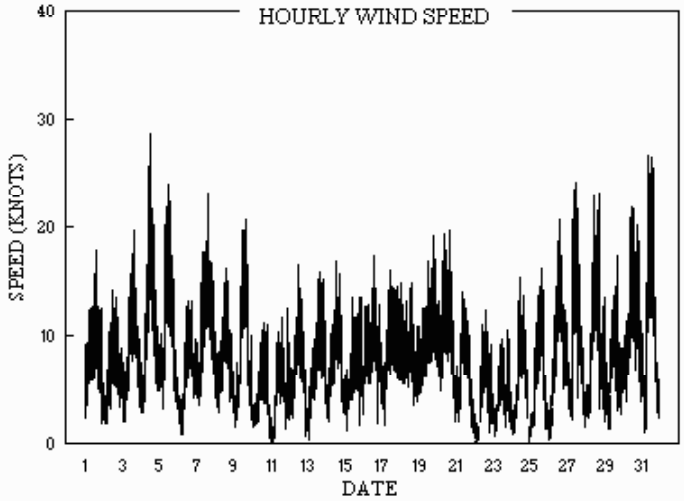


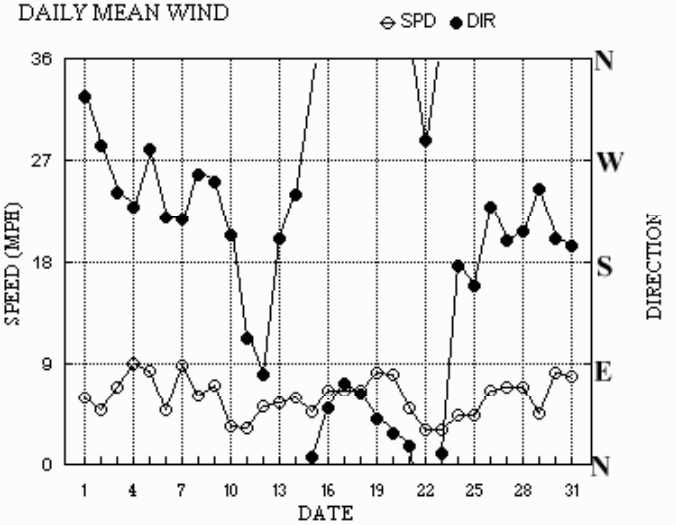












Daily meteorological data. Emmbrook, WOKINGHAM, Berkshire.

Month: AUGUST 2025

Date	Max	Min	Rain	Grass	30cm	100cm	Sun	Frost	pp09	Af	Sf	Th	Ic	Vec mean			Max gust			High hr		Rain
	C	C	mm	Min	C	C	hrs	hrs	mbar	Gf	Sl	Ha	Fg	ddd	ff	sp	ddd	gg	HHhh	ddd	ff	HH	hrs
1	21.4	11.7	tr	9.0	19.5	18.5	5.4	0.0	1016.6	0 0	0 0	0 0	0 0	163	1.6	2.9	212	11	1445	189	5	16	0.1
2	23.0	9.1	0.0	5.1	18.9	18.5	6.6	0.0	1019.1	0 0	0 0	0 0	0 0	8	2.5	3.8	27	11	1720	27	6	17	0.0
3	24.2	11.4	0.1	7.8	18.7	18.4	2.1	0.0	1018.7	0 0	0 0	0 0	0 0	1	4.0	4.9	355	21	1555	30	10	17	0.1
4	21.9	15.6	3.5	13.5	19.1	18.3	3.2	0.0	1015.6	0 0	0 0	0 0	0 0	22	6.5	6.6	35	20	1340	29	10	00	0.7
5	21.8	11.1	0.0	6.2	18.7	18.3	10.0	0.0	1022.3	0 0	0 0	0 0	0 0	22	6.9	7.1	25	22	1720	30	11	13	0.0
6	23.7	8.2	tr	4.3	18.0	18.2	10.3	0.0	1025.7	0 0	0 0	0 0	0 0	30	5.2	5.3	34	17	1630	37	10	16	0.0
7	23.2	14.2	0.0	10.3	18.6	18.1	1.7	0.0	1015.6	0 0	0 0	0 0	0 0	39	5.1	5.1	45	17	1620	38	9	16	0.0
8	24.2	13.8	0.0	10.9	18.9	18.1	12.7	0.0	1018.9	0 0	0 0	0 0	0 0	27	5.8	6.0	16	16	1800	41	8	11	0.0
9	25.2	11.1	0.0	7.1	19.1	18.1	9.4	0.0	1021.2	0 0	0 0	0 0	0 0	70	4.7	5.0	77	18	1420	85	10	15	0.0
10	26.9	11.1	0.0	6.6	19.1	18.1	14.2	0.0	1028.8	0 0	0 0	0 0	0 0	86	4.8	5.1	94	21	1125	99	10	11	0.0
11	30.6	11.3	1.1	7.4	19.5	18.2	11.3	0.0	1023.2	0 0	0 0	0 0	0 0	92	4.3	5.5	121	18	2325	78	10	11	0.7
12	33.0	15.6	0.0	12.4	20.1	18.2	13.5	0.0	1014.4	0 0	0 0	0 0	0 0	146	2.5	3.1	161	13	1505	180	7	13	0.0
13	26.8	15.9	0.2	12.3	20.6	18.4	3.9	0.0	1014.7	0 0	0 0	0 0	0 0	71	3.6	3.8	91	17	1615	87	9	16	0.2
14	28.1	13.8	0.0	9.8	20.4	18.5	7.1	0.0	1017.9	0 0	0 0	0 0	0 0	36	5.4	5.6	40	18	1905	38	9	17	0.0
15	29.8	13.9	0.0	10.1	20.3	18.6	13.2	0.0	1025.8	0 0	0 0	0 0	0 0	19	5.9	5.9	32	18	1815	20	9	12	0.0
16	21.9	15.4	0.0	12.8	20.7	18.7	1.0	0.0	1028.6	0 0	0 0	0 0	0 0	20	4.7	5.0	34	17	1540	31	8	15	0.0
17	27.6	10.0	tr	5.6	19.8	18.8	13.8	0.0	1025.1	0 0	0 0	0 0	0 0	15	4.4	4.7	41	14	0005	39	7	00	0.0
18	22.2	16.8	0.0	14.8	20.2	18.7	0.1	0.0	1021.5	0 0	0 0	0 0	0 0	35	4.2	4.4	53	14	1535	35	6	21	0.0
19	25.9	14.9	0.1	11.9	19.8	18.7	1.5	0.0	1016.9	0 0	0 0	0 0	0 0	61	4.7	4.9	46	15	1230	52	8	12	0.9
20	20.3	13.9	0.0	12.4	19.9	18.7	4.0	0.0	1016.9	0 0	0 0	0 0	0 0	12	2.3	2.7	75	12	1035	52	6	10	0.0
21	20.0	10.0	0.0	5.2	19.1	18.7	1.7	0.0	1018.1	0 0	0 0	0 0	0 0	342	2.1	3.1	44	16	1700	34	7	17	0.0
22	23.0	6.2	0.0	2.1	18.6	18.6	10.0	0.0	1022.8	0 0	0 0	0 0	0 0	42	3.0	3.2	36	15	1510	42	8	15	0.0
23	23.4	12.5	0.0	9.0	19.0	18.5	4.5	0.0	1021.4	0 0	0 0	0 0	0 0	219	5.2	5.4	203	20	1500	214	11	14	0.0
24	25.4	11.1	0.0	7.1	19.1	18.4	7.6	0.0	1021.2	0 0	0 0	0 0	0 0	237	7.2	7.5	247	24	1425	253	12	13	0.0
25	27.8	8.7	tr	4.8	18.9	18.4	13.3	0.0	1017.2	0 0	0 0	0 0	0 0	249	10.1	10.5	254	27	1900	258	14	17	0.1
26	25.9	12.2	0.3	9.0	19.1	18.3	3.8	0.0	1007.2	0 0	0 0	0 0	0 0	225	8.5	8.6	251	26	1430	211	11	23	0.8
27	22.2	13.6	3.5	11.6	19.2	18.3	4.3	0.0	1004.8	0 0	0 0	0 0	0 0	220	8.0	8.2	215	24	0005	212	12	00	0.9
28	21.7	10.4	12.8	6.2	18.8	18.3	8.7	0.0	1003.2	0 0	0 0	0 0	0 0	255	8.0	8.1	248	21	0840	256	12	08	6.9
29	21.3	13.5	11.1	12.9	18.5	18.2	3.4	0.0	994.7	0 0	0 0	1 0	0 0	221	7.1	7.3	241	22	1145	234	11	16	1.1
30	20.3	12.7	2.3	10.4	18.3	18.2	4.0	0.0	1004.6	0 0	0 0	0 0	0 0	226	5.0	5.2	236	17	1115	229	8	11	2.9
31	21.6	11.8	tr	9.3	18.1	18.1	9.3	0.0	1004.0	0 0	0 0	0 0	0 0	228	4.6	4.8	206	17	1830	212	9	18	0.0
Total			35.0				215.6	0.0															15.4
Mean	24.3	12.3		9.0	19.2	18.4	6.95	0.0	1017.0					230	1.5	5.3							
Anom	+1.5	-0.3	65%	-0.6	+0.3	+0.6	120%		+1.2														

Daily mean 18.3 Pressure, abs highest = 1029.0 on 10

Anom +0.6 Pressure, abs lowest = 993.8 on 29

Number of days with:

Air frost = 0 Ground frost = 0 Nil sun = 0

Snow falling = 0 Snow lying = 0 Thunder = 1

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 0900 GMT for AUGUST 2025

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cm	Ch	NChshs	NChshs	NChshs	Date	Remarks
1	82	7	33	05	11	16.1	10.8	71	8.0	1016.6	0	000	03	1	1	7	8	5	/	/	82820	86625		1	Cu hum
2	86	7	32	05	09	17.3	10.9	66	8.0	1019.1	8	001	03	2	2	7	8	5	0	1	82824	86656		2	/Ci75 Cu med
3	81	8	23	08	12	18.3	14.2	77	10.0	1018.7	6	002	03	2	2	8	5	4	/	/	88614			3	
4	75	8	22	10	17	20.3	17.3	83	12.2	1015.6	8	017	02	2	2	8	6	3	/	/	88708			4	
5	82	2	29	11	22	18.1	8.9	55	7.0	1022.3	1	014	03	0	0	2	8	6	0	0	82835			5	1Sc50 Cu med
6	86	1	29	04	07	17.9	10.0	60	7.5	1025.7	8	004	03	1	0	1	1	6	0	1	81835			6	1Ci75 Cu hum Sky turbid el haz lyr
7	75	7	23	09	14	18.7	12.7	68	9.1	1015.6	8	003	21	6	2	7	8	5	7	/	82820	87656		7	/Ac58 Cu hum
8	84	6	30	05	10	19.3	11.8	62	8.6	1018.9	2	007	03	1	1	1	8	5	0	1	81828	86075		8	1Sc45 Cu med Halo 22° part+u/a cont
9	84	6	24	07	12	18.4	11.0	62	8.1	1021.2	1	009	03	2	2	3	8	5	3	1	81827	83648	85367	9	/Ci80 COTRA Cu med
10	80	0	17	04	07	19.1	12.8	67	9.0	1028.8	1	004	02	0	0	0	0	9	0	0				10	El hz lyr
11	70	1	08	05	09	22.4	13.2	56	9.3	1023.2	8	014	02	0	0	1	0	9	8	9	81368			11	1Cc71 1Ci75 Ac cas
12	65	3	05	07	11	23.4	16.4	65	11.6	1014.4	6	008	02	0	0	1	0	9	8	1	81363	83078		12	COTRA Ac cas
13	61	7	20	05	08	20.8	16.0	74	11.2	1014.7	1	003	01	2	2	1	5	4	0	8	81618	87274		13	Halo 22°+U/a cont
14	86	7	23	06	11	21.2	15.3	69	10.7	1017.9	2	003	03	2	2	7	5	5	/	1	87622			14	/Ci75
15	84	1	36	04	09	22.1	15.9	68	11.1	1025.8	1	005	03	0	0	1	1	5	0	0	81822			15	Cu hum El hz lyr
16	70	8	05	06	11	17.5	14.0	80	9.8	1028.6	1	008	02	2	2	8	5	4	/	/	87613	88616		16	
17	84	1	09	08	15	18.7	12.0	65	8.6	1025.1	7	003	03	0	0	1	1	5	0	1	81822			17	1Ci75 Cu hum
18	82	8	09	06	13	18.4	14.1	76	9.9	1021.5	8	002	20	5	2	8	5	4	/	/	83613	88618		18	
19	80	8	05	06	12	18.7	14.4	76	10.1	1016.9	1	005	02	2	2	7	5	4	2	/	87616	88468		19	
20	82	8	04	08	18	17.1	12.0	72	8.7	1016.9	1	005	02	2	2	8	5	4	/	/	87617	88625		20	
21	80	7	02	08	12	16.8	10.9	68	8.0	1018.1	2	009	03	2	2	7	5	4	/	/	82615	87648		21	Absent vv&cld est
22	88	5	27	03	08	15.4	9.1	66	7.1	1022.8	0	000	01	2	2	5	5	7	0	0	85650			22	Absent vv&cld est
23	84	6	36	03	08	18.6	10.9	61	8.0	1021.4	1	005	03	2	2	1	1	6	3	1	81830	85073		23	1Ac57 1Cc71 COTRA Cu hum Parhelia
24	84	3	18	06	12	19.6	11.9	61	8.5	1021.2	0	001	01	1	1	3	5	7	4	1	83656			24	1Ac65 1Ci75
25	88	1	14	05	10	21.5	10.9	51	8.1	1017.2	8	011	02	0	0	0	0	9	0	4	81075			25	COTRA Ci spi Ci to W
26	50	8	26	06	13	18.3	16.1	87	11.4	1007.2	5	001	58	2	2	8	5	3	/	/	85706	88612		26	
27	80	3	20	10	22	19.8	12.8	64	9.2	1004.8	7	009	15	1	1	2	2	5	7	2	82825			27	1Ac57 1Ac63 1Ci70 Cu med jpE vv45k ex p
28	84	3	23	09	17	17.9	11.9	68	8.7	1003.2	8	006	03	0	0	1	2	5	6	3	81822	83078		28	1Ac65 1Ci70 COTRA Cu med Cb top S&SW
29	65	7	26	02	05	14.6	14.4	99	10.4	994.7	3	004	21	6	2	7	7	3	7	/	87706	85650	87362	29	
30	82	5	22	06	13	17.7	13.6	77	9.7	1004.6	1	005	03	1	1	2	8	4	5	1	82818			30	1Sc42 2Ac65 1Ci75 Cu med
31	65	3	19	08	15	17.6	13.5	77	9.7	1004.0	1	003	15	0	0	3	8	4	0	1	81818	83650		31	1Ci77 Cu med/con jpE

Mean vis = 37.9 km
Mean cloud = 5.0 63%
Mean wind speed = 6.3 kn
Mean gust = 12 kn
Mean TT = 18.8 °C
Mean TdTd = 12.9 °C
Mean RH = 69.4 %
Mean r = 9.3 g/kg
Mean PPP = 1017.0 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

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 1500 GMT for AUGUST 2025

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cm	Ch	NChshs	NChshs	NChshs	Date	Remarks
1	60	6	03	11	19	19.5	12.0	62	8.7	1016.3	5	000	80	2	2	5	2	6	6	/	85840			1	2Ac58 Cu med jpNWtoSE via N vv60kex p
2	88	5	34	07	11	21.3	7.9	42	6.6	1018.7	8	007	01	2	2	5	4	7	0	1	82850	84656		2	1Ci75 Cu hum
3	80	7	23	09	19	23.1	18.2	74	12.9	1017.6	7	002	15	6	2	6	8	4	7	/	82816	85625	87465	3	/Ac67 Cu med jpN vv60k ex p
4	62	8	22	12	26	21.0	18.0	83	12.8	1013.2	6	006	50	6	5	8	5	4	/	/	87712	88620		4	
5	84	4	31	10	23	21.7	6.8	38	6.0	1023.8	1	007	02	1	1	4	4	7	0	0	83850			5	2Sc56 Cu hum El hz lyr SW&W
6	86	7	24	06	14	22.7	7.7	38	6.4	1021.4	6	021	03	2	2	1	1	7	0	2	81856	83272	87075	6	1Cc76 COTRA Cu hum U/a cont+parhelia
7	81	8	22	12	24	21.5	13.2	59	9.4	1013.8	6	006	02	2	2	6	5	6	7	/	83633	85650	85358	7	/Ac65 Sc len
8	88	2	26	07	17	23.9	10.6	43	7.9	1018.8	7	006	01	1	1	0	0	9	0	1	82075			8	Ci to S
9	86	1	28	10	20	24.2	9.4	39	7.2	1020.7	4	000	01	1	0	1	4	7	0	1	81650			9	1Ci80 COTRA El hz lyr, thickest to W
10	68	1	08	02	10	25.9	10.1	37	7.6	1026.1	7	015	01	0	0	1	1	7	0	0	81856			10	Cu hum El hz lyr below 6000ft
11	75	6	23	02	12	29.4	11.5	33	8.3	1019.0	7	026	03	1	1	1	0	9	3	6	81365	83270	85075	11	COTRA El hz lyr Halo 22° part+u/a&l/a cont
12	75	1	12	05	13	32.5	11.6	28	8.5	1011.7	7	012	02	0	0	0	0	9	0	1	81075			12	El hz lyr
13	60	7	23	07	16	22.8	19.4	81	13.9	1014.4	0	007	25	8	2	1	5	5	7	/	81625	83363	87465	13	
14	89	4	27	07	18	27.4	13.4	42	9.4	1018.2	2	002	01	1	1	4	4	7	0	0	82850	83656		14	Cu hum
15	84	2	36	05	11	28.9	14.0	40	9.8	1023.9	6	011	02	0	0	2	1	7	0	1	82850			15	1Ci80 Cu hum El hz lyr Sky turbid
16	75	8	05	08	18	20.7	13.7	64	9.6	1026.7	7	017	02	2	2	8	8	5	/	/	84827	88630		16	Cu hum
17	88	2	10	07	15	26.7	10.8	37	8.0	1021.8	6	016	03	0	0	0	0	9	0	1	82080			17	COTRA U/a cont El hz lyr edge SW el 7°
18	88	7	07	07	15	21.2	13.9	63	9.8	1019.5	8	014	02	2	2	7	5	5	/	/	86626	87630		18	
19	82	7	05	07	15	23.9	14.6	56	10.3	1014.4	6	008	02	2	2	2	8	6	7	1	82838	86366		19	1Sc50 /Ci75 Cu med
20	82	7	02	07	14	18.1	9.7	58	7.4	1016.5	8	009	02	2	2	7	5	6	/	/	87635			20	Absent, vv&cld est
21	86	8	01	06	12	19.3	8.6	50	6.9	1018.9	1	005	02	2	2	8	5	7	/	/	88650			21	Absent vv&cld est
22	86	1	31	06	12	21.9	7.0	38	6.1	1020.3	7	016	02	0	0	1	1	7	0	0	81850			22	Absent vv&cld est
23	85	7	36	05	10	21.6	11.3	51	8.2	1020.2	7	005	03	2	2	7	8	6	/	/	83845	87650		23	Cu hum
24	86	7	22	06	13	23.3	10.0	43	7.6	1019.2	8	012	02	2	2	3	4	7	0	1	82855	83173	85078	24	2Sc56 Cu hum
25	88	1	18	08	15	27.4	9.7	33	7.5	1013.3	7	021	02	0	0	0	0	9	0	1	81173			25	1Ci77 COTRA
26	75	7	23	11	21	23.9	12.5	49	9.1	1006.1	6	006	15	2	2	5	8	6	6	1	84845			26	2Sc56 2Ac57 /Ci75 jCu med pSW vv40k ex p
27	50	8	22	04	17	17.8	16.7	93	11.9	1003.7	8	003	25	8	2	8	8	4	/	/	81715	84822	88645	27	jpW to N vv30k ex p
28	65	6	20	10	19	19.6	14.6	73	10.4	1000.7	8	009	25	8	2	2	9	4	6	3	81915	82825	83068	28	1Sc50 1Ac58 1Ac62 3Ci80 COTRA jpE&NW Rainbow
29	60	7	27	07	15	19.6	14.2	71	10.2	996.8	1	010	29	8	2	3	9	5	6	3	83925	81830	83068	29	1Sc56 1Ac59 Cb&jp all quads
30	81	8	19	08	23	17.8	15.6	87	11.1	1002.4	8	011	21	6	2	7	5	4	2	/	85613	85630	88459	30	
31	75	6	19	14	28	20.3	11.5	57	8.5	1003.1	6	001	15	2	2	3	8	6	6	1	82835	83075		31	2Sc50 1Ac58 Cu med/con jp all quads ex N

Mean vis = 40.8 km
Mean cloud = 5.4 67%
Mean wind speed = 7.5 kn
Mean gust = 17 kn
Mean TT = 22.9 °C
Mean TdTd = 12.2 °C
Mean RH = 53.6 %
Mean r = 9.0 g/kg
Mean PPP = 1015.5 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
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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

2025

Hour	01-Aug	02-Aug	03-Aug	04-Aug	05-Aug	06-Aug	07-Aug	08-Aug	09-Aug	10-Aug	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug
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	0.29	0.00	0.27	0.00	0.00	0.00	0.10	0.05	0.03	0.00	0.00	0.00	0.05	0.00
5	0.91	0.00	0.62	0.49	1.00	0.18	0.32	0.65	0.53	1.00	1.00	0.40	0.00	0.34	0.70	0.00
6	1.00	0.52	0.18	0.04	1.00	0.81	0.22	0.94	0.00	1.00	1.00	1.00	0.00	0.03	1.00	0.00
7	0.97	0.47	0.29	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.31	0.25	1.00	0.00
8	0.24	0.73	0.06	0.00	1.00	1.00	0.02	0.99	0.42	1.00	1.00	1.00	0.37	0.46	1.00	0.00
9	0.02	0.35	0.00	0.00	0.50	1.00	0.08	0.33	0.49	1.00	1.00	1.00	0.60	0.01	1.00	0.00
10	0.05	0.16	0.00	0.00	0.53	1.00	0.15	0.31	0.46	1.00	1.00	1.00	0.53	0.19	1.00	0.00
11	0.06	0.00	0.01	0.00	0.62	1.00	0.31	0.95	0.45	0.95	1.00	1.00	0.71	0.52	1.00	0.00
12	0.32	0.12	0.00	0.00	0.40	1.00	0.17	1.00	0.79	0.89	1.00	1.00	0.99	0.30	1.00	0.00
13	0.48	0.06	0.00	0.00	0.19	1.00	0.35	1.00	0.98	1.00	1.00	1.00	0.26	0.49	1.00	0.00
14	0.19	0.46	0.08	0.00	0.55	0.64	0.04	1.00	1.00	1.00	1.00	1.00	0.00	0.73	0.75	0.08
15	0.65	0.49	0.32	0.02	0.39	0.91	0.00	1.00	1.00	1.00	1.00	1.00	0.02	1.00	0.98	0.00
16	0.13	0.84	0.11	0.23	0.09	0.39	0.07	1.00	1.00	1.00	0.26	1.00	0.00	0.71	0.71	0.00
17	0.00	0.95	0.18	0.98	1.00	0.37	0.00	1.00	1.00	1.00	0.00	1.00	0.07	0.71	0.71	0.06
18	0.20	0.96	0.00	0.80	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.90
19	0.22	0.53	0.00	0.62	0.46	0.00	0.00	0.52	0.19	0.26	0.00	0.09	0.00	0.31	0.31	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	**5.42**	**6.64**	**2.14**	**3.17**	**9.98**	**10.31**	**1.73**	**12.69**	**9.40**	**14.15**	**11.29**	**13.49**	**3.87**	**7.05**	**13.22**	**1.04**

Hour	17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug	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	0.03
5	0.93	0.00	0.00	0.00	0.00	0.68	0.00	0.18	0.71	0.00	0.03	0.54	0.00	0.47	0.07	0.38
6	1.00	0.00	0.00	0.00	0.17	1.00	0.84	0.00	1.00	0.50	0.32	1.00	0.00	1.00	1.00	0.53
7	1.00	0.00	0.00	0.00	0.79	0.30	1.00	0.00	1.00	0.34	0.74	1.00	0.00	1.00	1.00	0.56
8	1.00	0.00	0.00	0.00	0.13	0.58	1.00	0.68	1.00	0.00	0.73	1.00	0.00	0.97	0.68	0.55
9	1.00	0.00	0.01	0.00	0.00	1.00	0.97	1.00	1.00	0.00	0.82	0.58	0.05	0.27	0.90	0.48
10	1.00	0.00	0.00	0.00	0.05	0.62	0.53	0.91	1.00	0.02	0.09	0.38	0.29	0.12	0.91	0.43
11	1.00	0.00	0.32	0.00	0.01	0.38	0.12	0.48	1.00	0.54	0.27	0.82	0.28	0.01	0.57	0.46
12	1.00	0.00	0.77	0.00	0.00	0.63	0.02	0.15	1.00	0.76	0.01	0.73	0.18	0.17	0.29	0.47
13	1.00	0.02	0.12	0.00	0.03	0.46	0.03	0.19	1.00	0.48	0.00	0.10	0.70	0.01	0.41	0.43
14	1.00	0.00	0.16	0.09	0.01	1.00	0.00	0.72	1.00	0.38	0.00	0.75	0.39	0.00	0.46	0.47
15	1.00	0.00	0.15	0.95	0.00	1.00	0.00	0.49	1.00	0.46	0.00	0.68	0.57	0.00	0.69	0.54
16	1.00	0.00	0.00	1.00	0.01	1.00	0.00	1.00	1.00	0.09	0.31	0.52	0.36	0.00	0.92	0.48
17	1.00	0.00	0.00	1.00	0.03	1.00	0.00	1.00	1.00	0.22	0.59	0.50	0.48	0.00	0.76	0.54
18	0.90	0.00	0.00	0.93	0.49	0.40	0.00	0.77	0.60	0.00	0.35	0.13	0.16	0.00	0.66	0.49
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	0.11
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	**13.83**	**0.02**	**1.53**	**3.96**	**1.73**	**10.04**	**4.51**	**7.58**	**13.31**	**3.79**	**4.26**	**8.72**	**3.44**	**4.01**	**9.31**	**215.63**

AUGUST 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	15.98	21.9	1303	11.7	438	72.4	97.3	15	49.7	1304	10.8	8.0	9.6	1528	7.0	1404	1016.91	1019.1	2332	1015.7	1422	0
2	16.71	23.6	1542	9.1	415	65.1	97.4	504	34.8	1617	9.3	7.2	8.7	824	5.9	1617	1018.85	1019.5	1147	1017.5	1756	0
3	18.76	24.7	1721	11.4	413	77.4	95.1	420	59.3	1744	14.6	10.3	13.4	1616	7.7	209	1018.47	1019.7	123	1016.8	1715	0.1
4	18.84	22.2	1559	15.6	509	79.5	95.6	1638	55.2	1908	15.1	10.7	14.5	1657	6.8	2223	1015.70	1018.9	51	1012.4	1543	2.9
5	16.61	22.3	1413	10.5	2347	59.2	85.9	2349	36.7	1439	8.0	6.6	7.4	917	5.7	1427	1022.77	1027.2	2357	1017.8	1	0
6	16.67	24.2	1357	8.2	439	63.1	94.9	510	33.7	1322	8.7	6.9	7.9	749	5.9	1328	1023.13	1027.3	12	1018.0	2359	0
7	18.73	24.4	1236	14.2	211	71.5	92.3	2151	42.3	1242	13.2	9.4	11.8	2159	7.9	1242	1015.24	1018.4	19	1013.4	1815	0
8	19.23	25.4	1415	13.8	450	64.0	92.8	522	38.8	1600	11.6	8.4	9.7	757	7.3	1538	1018.54	1020.5	2311	1015.4	0	0
9	18.59	26.2	1347	11.1	355	61.3	92.0	402	36.3	1430	10.3	7.6	8.9	938	6.7	1808	1021.62	1026.2	2348	1019.6	308	0
10	19.55	27.8	1425	11.1	430	66.3	97.9	444	34.4	1427	12.0	8.5	9.6	758	7.6	1429	1026.88	1029.0	811	1024.8	1713	0
11	21.38	31.6	1441	11.3	450	66.2	98.5	534	28.7	1518	13.3	9.4	12.4	2133	7.7	1604	1021.51	1026.4	12	1016.2	2337	0.8
12	24.44	34.2	1450	15.6	458	62.3	97.8	538	28.8	1440	15.3	10.7	12.7	824	9.2	1420	1013.96	1017.7	102	1011.2	1639	0.3
13	20.49	27.8	1255	15.9	357	79.2	98.7	554	55.3	1256	16.5	11.6	14.2	1448	10.3	2354	1014.41	1016.1	2326	1013.2	1322	0.2
14	21.24	29.2	1509	13.8	425	70.1	99.3	541	40.6	1435	14.9	10.4	11.8	643	9.6	1550	1018.58	1023.5	2347	1015.9	0	0
15	22.20	30.8	1433	13.9	436	66.5	98.7	542	36.3	1434	14.7	10.2	11.5	733	9.1	1722	1024.70	1027.0	2352	1023.2	5	0
16	17.89	22.7	1416	14.3	2359	76.7	95.0	147	58.3	1418	13.6	9.5	11.3	153	7.8	2359	1027.22	1029.0	1053	1025.6	1913	0
17	19.23	28.4	1436	10.0	505	66.3	98.5	604	33.1	1513	11.7	8.4	10.1	2213	7.3	1457	1023.70	1026.5	0	1020.8	1758	0
18	18.76	23.1	1348	15.9	2359	70.5	80.5	617	58.0	1352	13.2	9.3	10.3	844	8.2	2318	1020.47	1023.0	109	1018.1	2348	0
19	19.31	26.6	1428	14.9	307	70.2	86.6	455	48.0	1429	13.5	9.5	10.8	1206	8.2	33	1016.02	1018.3	32	1013.9	1713	0
20	16.21	20.8	1537	10.0	2353	70.7	96.1	312	48.6	1537	10.6	7.9	9.7	319	6.4	2145	1016.81	1017.8	2346	1015.9	1633	0
21	15.47	20.5	1446	9.2	2356	65.6	86.3	2359	44.7	1513	8.7	6.9	8.1	841	6.1	1731	1018.85	1022.6	2358	1016.6	423	0
22	15.92	23.5	1638	6.2	528	64.6	98.0	534	35.7	1622	8.2	6.7	9.2	2309	5.7	1013	1021.49	1023.1	751	1019.4	1806	0
23	18.38	24.0	1318	12.5	514	65.0	88.1	519	44.5	1319	11.4	8.2	9.1	2238	7.7	1322	1020.68	1021.6	937	1019.5	1735	0
24	18.09	26.2	1406	11.1	344	65.1	96.0	348	37.5	1407	10.6	7.8	9.1	827	7.1	1705	1020.26	1021.5	16	1018.6	1740	0
25	19.00	28.6	1328	8.7	520	60.2	97.7	607	30.6	1540	9.6	7.4	9.4	736	6.4	1657	1015.20	1019.5	17	1009.9	2358	0
26	18.68	26.6	1444	12.4	406	68.0	94.2	924	38.9	1337	12.3	8.9	11.9	923	7.1	1337	1007.30	1010.1	2	1005.8	1442	0.3
27	17.57	22.7	1244	13.7	427	80.0	95.8	2345	52.5	1245	13.9	9.9	12.3	1455	8.7	935	1004.82	1007.6	11	1002.9	1717	3.5
28	16.04	22.4	1134	10.6	547	81.2	99.0	632	50.8	1134	12.5	9.1	11.5	1446	7.8	1112	1001.90	1004.2	2	998.1	2357	0.9
29	15.92	22.0	1424	13.4	2359	87.7	99.3	758	59.0	1409	13.7	9.8	11.1	915	9.1	1507	997.16	1002.6	2358	993.8	736	20.5
30	16.56	20.8	1243	12.8	536	87.5	98.4	1955	59.8	1009	14.3	10.2	12.8	2028	8.8	1009	1002.57	1004.8	839	999.5	1904	2.3
31	16.57	22.1	1406	11.9	556	75.6	97.4	605	49.8	1409	11.8	8.7	10.1	0	7.8	1600	1003.36	1004.3	827	1002.3	1601	0.1
Total																						31.9
Mean	18.36	25.07		12.08		70.3	94.88		43.90		12.19	8.85	10.68		7.57		1016.42	1019.13		1013.94		
Max	24.44	34.18		15.88		87.7	99.26		59.82		16.53	11.61	14.50		10.33		1027.22	1029.03		1025.56		
Min	15.47	20.50		6.18		59.2	80.50		28.74		8.05	6.58	7.43		5.65		997.16	1002.58		993.84		

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

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

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

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

WOKINGHAM METEOROLOGICAL DATA

Wokingham Climatological Station, Emmbrook, Berkshire.

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

Seasonal Means and Totals — SUMMER 2025

Temperature (°C)			Rank in the past **144** years
Mean maximum	24.9	(+2.6)	3rd highest
Mean minimum	13.2	(+1.2)	*** Highest ***
Daily mean	19.0	(+1.8)	*** Equal highest with 2018 ***
Rainfall total (mm)	97.1	(64%)	26th lowest
Sunshine total (hours)	693.3	(121%)	

Nº of:	Dry days	63 (+7)	Wet days	20 (-5)				
Days with: Air frost	0 (0)	Ground frost	0 (-1)	Snow falling	0 (0)	Snow lying	0 (0)	
Thunder	3 (-4)	Hail ≥5mm	0 (0)	Small hail/ice	0 (0)	Fog @09 GMT	0 (0)	Nil sun 0 (-3)

Air pressure MSL : Mean @09 GMT (mbar) 1016.6 (+0.4)

Departure from 1991 to 2020 average shown in brackets.

Notes: **Dry** **Sunny** **Hot at Times**

Temperature: The daily mean this summer season is equal highest with 2018 in the past 144 years, and is 1.8° above the current 30 year average, but is 2.7° above the long-term median. The mean maximum is 3rd highest after 2018 and 2022 since before 1882, and is 0.4° below the record and 3.8° above the long-term median. The mean minimum is a new record, 0.3° above the previous highest in 1997. It is interesting that 12 of the 14 highest summer mean minimum temperatures have occurred in this millennium, while only 6 of the mean maximum temperatures have done so. The recent transformation of open farmland to the east of the weather station into a large housing estate will have reduced the katabatic night time cooling in the Emm valley, and this may play some part in the above statistic. In terms of the monthly mean temperature, July was the hottest month, mean 20.1° (+2.2°), and August the coolest with 18.3° (+0.6°). The season's highest temperature was 33.3° on the 11th July, 2.9° above the median, but 33.0° was also recorded on the 12th August. The lowest max was 16.9° on the 7th June, 2.4° above its median and 5th highest in 113 years. The highest min was 19.2° on the 1st July, 2.0° above the median while the lowest min was 6.2° on the 22nd August, 1.8° above its median. The mean grass minimum was 9.9° (+0.9°) and the lowest value was 2.1° on the 22nd August. The 45 year mean lowest daily grass min is only 0.5° so it is not surprising that there has been a ground frost in 17 of those summers, but the most recent one was in 2015. Earth temperature mean at 30 cm was 19.2° (+1.0°), equal 2nd highest in 45 years, while at 1 m depth the mean was 17.7° (+1.1°), 2nd highest after 2018 in 35 years.

Rainfall: This has been a dry summer with only 64% of average rainfall, although the total is higher than in some recent summers, e.g. 2024, 2022 and 2018. It is the 6th driest summer in this millennium and the 26th driest in the past 144 years. The driest summer in that period was in 1995 with 38.8 mm, only 40% of this summers total. June was the driest month with 26.2mm (51%), then August with 35.0 mm (65%), then July with 35.9 mm (76%). There were a couple of prolonged dry periods, the 39 days to the 16th July had only 2 wet days, and a rainfall total of 8.3 mm, and the 26 day period to the 26th August also had only 2 wet days and a total of just 5.3 mm. The season's wettest day was the 28th August with 12.8 mm. The highest rainfall rate was 145 mm/hr at 1818 GMT on the 7th June, but rates above 50 mm/hr were also recorded on the 3rd and 26th June, 20th and 31st July and the 4th and 29th August, but there was no hail. Estimated soil moisture deficit reached a total of 351 mm by the end of August, the highest amount for that date in this millennium. An index of stress for unirrigated shallow rooted plants reached 1091 at the end of summer, the highest since 1995, 30 year average 662.

Sunshine: This has been a very sunny summer, the daily mean of 7.54 hours ranks 4th highest in this millennium. June was the sunniest month, mean 8.57 hours/day, (132%), then July with 7.12 hr/day (110%) and August 6.95 hr/day (120%). The 18th June was the season's sunniest day with 15.7 hours, but other days with 15 hours or more were 17th and 19th June, and 10th to 12th July. There were 3 outstandingly sunny periods, 8 days to the 20th June, mean 12.86 hr/day, 7 days to 14th July, mean 13.51 hr/day, and 8 days to 12th August, mean 10.39 hr/day. There were no days with nil sun for the first summer since 2006. Overall there were 19 days with <3 hours, 56 with =>6 hours and 19 with =>12 hours. **Wind:** The mean speed this summer was a close to average 6.3 mph. The 25th August was the windiest day, mean 12.1 mph, and the highest gust was 35 mph on the 31st July, 5 mph below average. The 20th August was the least windy day, mean 3.1 mph. Daily mean direction/number of days; N,5 NE,5 E,7 SE,3 S,10 SW,33 W,22 NW,7. Compared with average, winds from W were 9.3 % more frequent, while those from NW to NE combined were 9.1 % less frequent. The men direction vector was 242°, close to the 37 year average of 239°. **Pressure:** The highest value this summer was 1029.5 mbar on 4th July and the lowest was 993.8 mbar on the 29th August, span 35.7 mbar, average 35.4 mbar. **Humidity:** The overall mean relative humidity was 67.9% and the lowest value was 25 % on the 4th July. The mean water vapour content per kg of air at 0900 GMT and 1500 GMT was 9.2 g and 8.8 g. **June:** Record high temperature with rainfall below and sunshine well above average. Mean temperature a new record high in past 144 years. Highest max 5th highest in 122 years. Highest min 3rd highest in 113 years. Mean grass min highest in past 46 years. There were two heat waves, 18th to 21st and 28th to 30th. The 4th consecutive dry month and month to have well above average sunshine. **July:** Very warm and sunny with below average rainfall. Mean temperature 4th highest in 144 years. Lowest daily max 4th highest in 113 years. Highest min 3rd highest in 113 years. Earth temperatures about 1.5° above average. **August:** Drier than average and sunny with mean temperature above average. Mean daily temperature range 3rd highest in this millennium.

Month	Mean Max	Anom	Mean Min	Anom	Rain mm	Anom	Sun hrs	Anom	Mean Wind mph	Max gust	Mean pressure	Anom
June	24.5°	+3.5°	12.9°	+2.2°	26.2	51%	257.0	132%	7.1	32	1016.9	+0.1
July	25.8°	+2.6°	14.3°	+1.5°	35.9	76%	220.7	110%	5.6	35	1015.8	-0.1
August	24.3°	+1.5°	12.3°	-0.3°	35.0	65%	215.6	120%	6.1	33	1017.0	+1.2

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

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.

B J Burton. 3 August 2009. Updated 4 May 2014.

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 of 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 of 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.