

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

NOVEMBER 2025

Temperature (°C)	Anomaly		Rank in the past 144 years	
Mean maximum	12.4	+1.3	9th highest	
Mean minimum	6.1	+1.7	7th highest	
Daily mean	9.2	+1.4	7th highest	
Highest maximum	17.7	on 6th	Lowest maximum	4.4 on 20th
Highest minimum	13.7	on 6th	Lowest minimum	-2.7 on 26th
Mean grass minimum	3.7	+2.3	Lowest grass minimum	-6.6 on 26th
Mean earth @30 cm	10.8	+1.1	Earth @100 cm	12.3 +0.4
Frost duration (hrs)	37.2		Rain duration (hrs)	49.7
Rainfall total (mm)	59.6	80%	70th highest	
Highest daily fall	9.6	on 22nd	Highest rate mm/hr	11 on 23rd
Number of: Dry days (<0.2mm)	10	Wet days (>0.9mm)	14	days ≥5mm 4
Sunshine total (hrs) 93.0	Daily mean 3.10	118%	Sunniest day	8.0 on 21st
N° days with: Air frost 6	Ground frost 8	Snow falling 1	Snow lying 0	
Thunder 0	Hail ≥5mm 0	Small hail/ice 0	Fog @09 1	Nil sun 3
Pressure MSL: Mean @09 GMT, mbar 1010.1	-3.4	Highest 1029.0	on 21st	Lowest 989.7 on 24th
Relative humidity : Mean (%) 86.8	Lowest 56	on 1st	Water vapour (g/kg), mean at 09 and 15 GMT	6.7, 6.5
Overall mean wind speed (mph) 6.4	Windiest day 11.7	on 3rd	Max gust 32	on 3rd
Wind direction (days) N 1 NE 2 E 1 SE 3 S 7 SW 11 W 1 NW 4				
Least windy day (mph) 3.6	on 15th	Calm; less than 0.5 mph (minutes)	n/a	

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

Notes:

Very Mild and Very Sunny with Rainfall Below Average

Temperature: This November was characterized by two mild spells up to the 15th, then a 5 day cold snap, the month ending mild by day but with a couple of cold nights. The mean temperature is 1.4° below the record set in 1994, but ranks 7th highest in 144 years. It is notable that 7 of the 10 mildest Novembers on record have been in this millennium. The highest max is 2.0° above the median and the lowest max is 0.2° below its median. The highest min is 3.1° above the median and 4th highest in 113 years while the lowest min is 0.8° above its median. The mean grass min is 2.3° above average but is highest only since 2022. The lowest grass min is 1.0° above the 47 year average. Earth temperatures are above average. Anomalies for daily max were above +5° on the 5th, 6th, 12th and 13th, and exceeded -4° on the 19th and 20th, with extreme values of +6.3° on the 13th and -5.1° on the 20th. Anomalies for daily min were over +8° on the 4th to 6th and 12th to 14th, and exceeded -5° on the 18th, 21st and 26th, with extreme values of +9.3° on the 14th and -6.0° on the 18th.

Rainfall:

This has been a fairly dry November overall with just 80% of the current 30 year climatological average, although the total is 2.8 mm above the long-term median. In this millennium 10 Novembers have been drier than this year's, the last in 2021. However, the number of dry days is 5 fewer than average, and it is only the 5th November since 2000 to have no daily fall of 10 mm or more, the wettest day this month having only 9.6 mm, 6.2 mm below its median. Snow fell for about an hour on the 19th, together with rain, but the flakes were large, about 5 to 6 cm across, and did produce a temporary 20% cover on the grass as they melted. Snow has been recorded in 39 of the past 119 Novembers, mostly just one day, but there were 7 in 1919. There was no thunder or hail this November. Rainfall accumulation compared with normal was 13 mm in deficit on the 8th, becoming zero by the 14th, ending the month 15 mm in deficit.

Sunshine: The month's total this November is in the very sunny category, the daily mean of 3.10 hours is 0.68 hours below the record set in 2006, and ranks 7th highest in this millennium. The second half of the month was relatively sunnier than the first half, with 4 days after the 16th having >80% of the maximum, including 93% on the 21st and 91% on the 30th, and 4 having <20%, while before the 16th there were no days with >80% and 9 with <20%. Sunshine accumulation compared with normal was 6 hours in deficit on the 16th becoming a surplus of 14 hours by the 30th.

Wind: The mean speed this November is close to average but the month's highest gust is 12 mph below average and is equal lowest for the month with 2004 since before 1988. Daily mean direction was between N and E on the 14th to 16th, between E and S from the 5th to 7th, 9th, 11th and 12th, between W and N on the 17th, 19th to 21st, 24th and 25th, otherwise was between S and W. Daily mean speed was fresh on the 1st and 3rd, otherwise light or moderate.

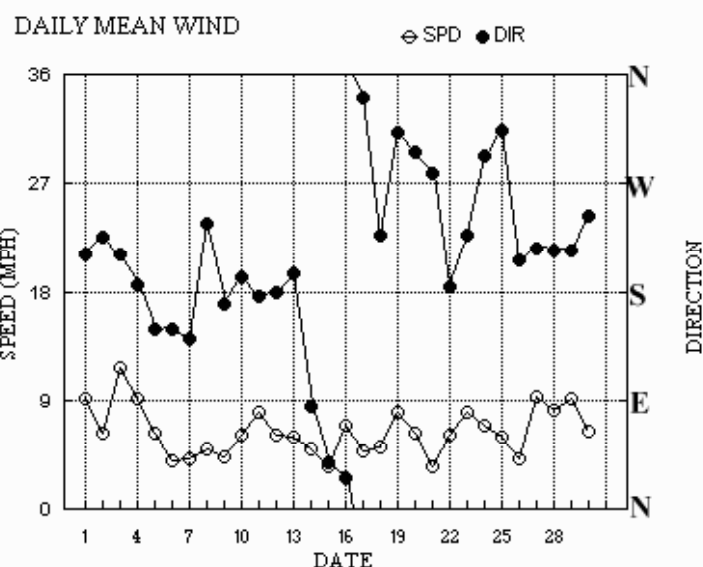
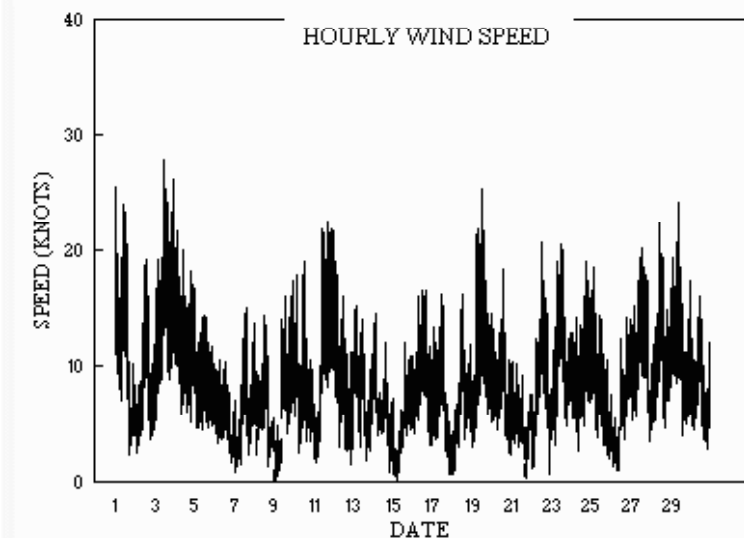
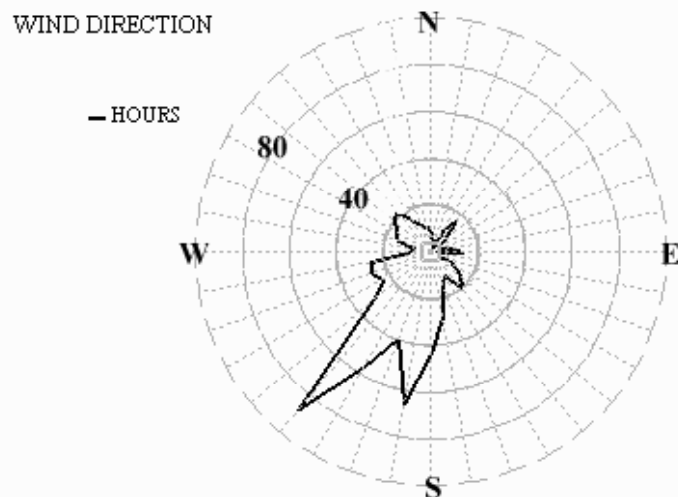
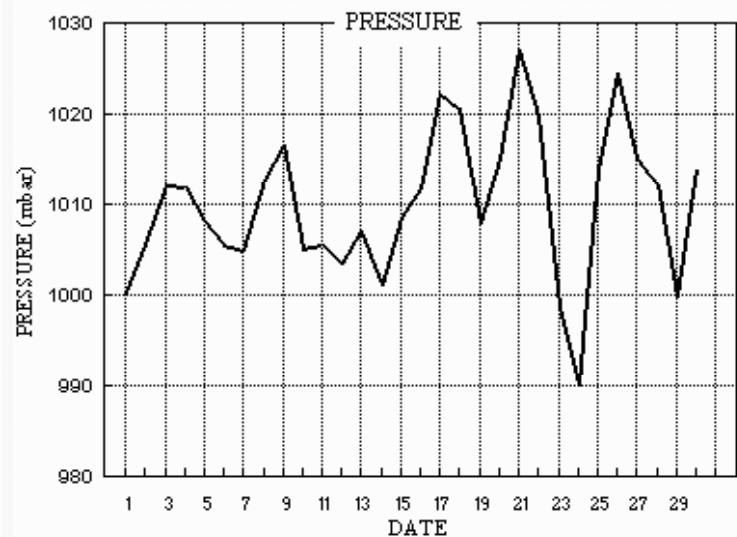
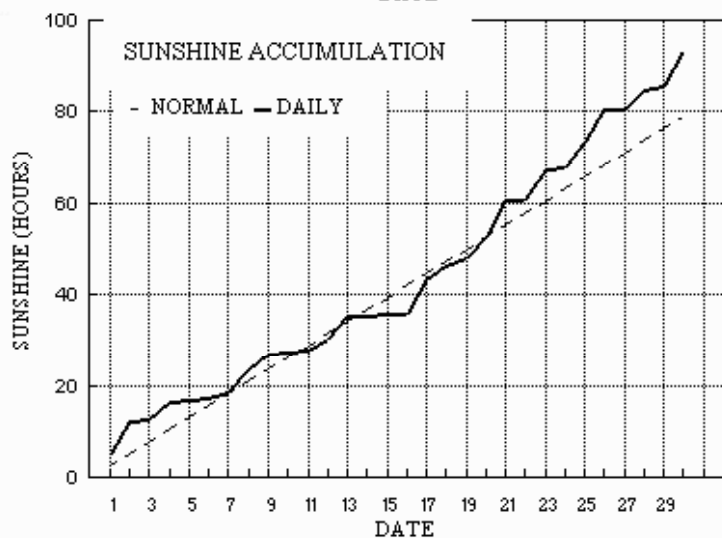
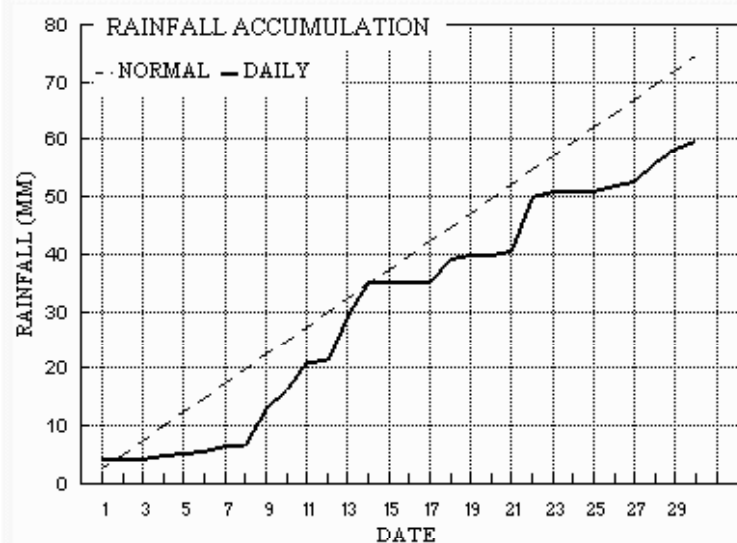
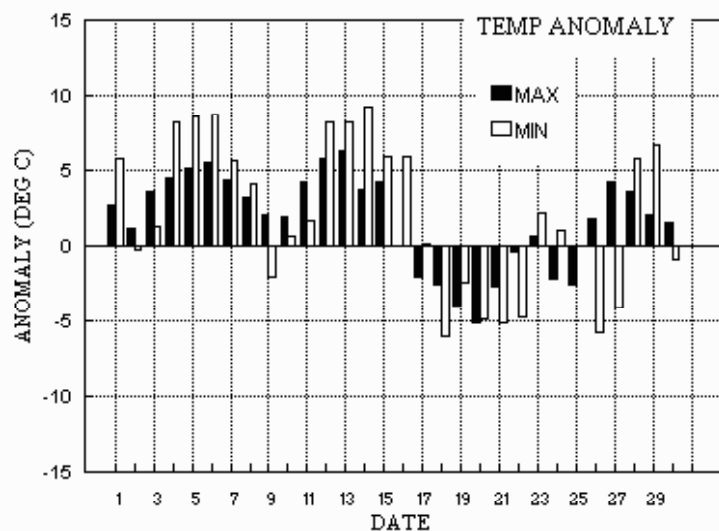
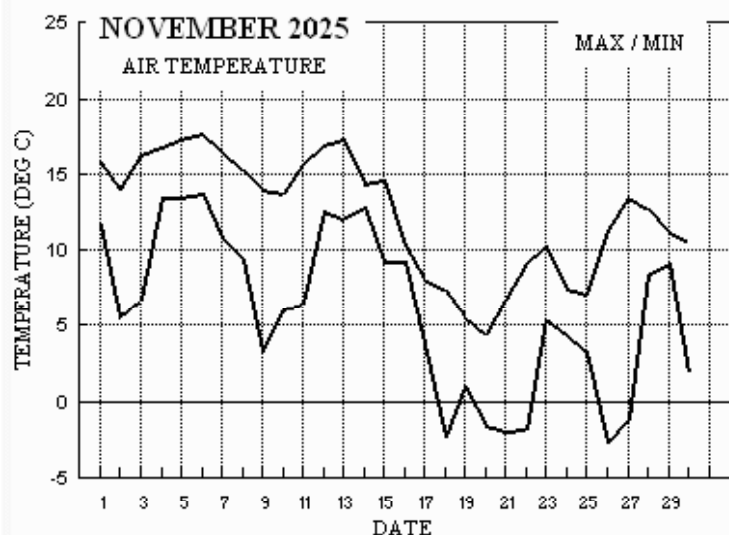
Table 1. Mean anomalies (max, min, rain, sun) for specified periods.

From the 1 st to the 10 th				From the 11 th to the 20 th				From the 21 st to the 30 th			
+3.4°	+4.1°	66%	105%	+1.1°	+2.6°	95%	96%	+0.6°	-0.5°	79%	153%

B J Burton FRMetS.

Hon. Met. Officer to Wokingham Town Council.

Wokingham climatological graphs for November 2025



Daily meteorological data.

Emmbrook, WOKINGHAM, Berkshire.

Month: NOVEMBER 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	15.8	11.7	4.3	9.4	12.4	13.1	5.3	0.0	1000.3	0	0	0	0	211	7.7	8.0	192	26	0030	238	13	10	2.9
2	14.0	5.5	tr	2.8	12.1	13.1	6.9	0.0	1005.7	0	0	0	0	225	4.7	5.5	263	19	1340	259	10	13	0.0
3	16.3	6.7	tr	3.5	11.5	13.1	0.5	0.0	1012.2	0	0	0	0	211	10.1	10.2	215	28	1155	217	14	11	0.2
4	16.8	13.4	0.7	11.7	12.1	13.0	3.9	0.0	1012.0	0	0	0	0	185	7.8	8.0	194	22	0305	209	11	00	0.5
5	17.3	13.4	0.4	12.8	12.6	13.0	0.4	0.0	1008.1	0	0	0	0	149	5.2	5.5	188	17	0055	184	8	00	0.5
6	17.7	13.7	0.1	11.8	12.9	13.0	0.5	0.0	1005.6	0	0	0	0	149	3.4	3.6	137	11	0605	128	5	00	0.3
7	16.5	10.8	1.1	6.1	13.1	13.1	1.0	0.0	1004.9	0	0	0	0	141	3.2	3.7	184	15	1405	182	8	13	1.4
8	15.2	9.4	0.1	5.3	13.2	13.2	5.2	0.0	1012.9	0	0	0	0	237	4.0	4.3	252	14	1245	268	8	14	0.0
9	14.0	3.3	6.5	-0.2	12.4	13.3	3.4	0.0	1016.6	0	1	0	0	169	3.5	3.9	180	16	1400	182	7	11	4.8
10	13.7	6.0	3.1	9.9	12.4	13.2	0.4	0.0	1005.2	0	0	0	0	192	5.0	5.3	234	19	1350	194	8	04	2.9
11	15.6	6.5	4.9	4.1	12.1	13.1	0.4	0.0	1005.7	0	0	0	0	176	6.7	7.0	161	23	1815	191	12	23	4.1
12	16.9	12.5	0.1	10.3	12.4	13.1	2.4	0.0	1003.5	0	0	0	0	179	5.1	5.3	195	22	0055	191	10	00	0.1
13	17.2	12.0	7.8	10.2	12.6	13.0	5.0	0.0	1007.0	0	0	0	0	195	3.2	5.1	204	15	1525	203	8	01	6.2
14	14.3	12.8	6.0	11.3	12.9	13.0	0.0	0.0	1001.1	0	0	0	0	86	4.1	4.4	85	15	0415	76	8	02	4.5
15	14.6	9.2	0.2	5.8	12.9	13.1	0.6	0.0	1008.5	0	0	0	0	39	2.9	3.1	35	12	1415	33	6	21	1.3
16	10.3	9.3	tr	9.1	12.9	13.1	0.0	0.0	1011.8	0	0	0	0	26	5.9	6.1	29	17	1215	36	9	08	0.0
17	8.1	3.8	0.0	1.5	12.3	13.1	7.8	2.6	1022.4	0	0	0	0	341	3.9	4.2	352	16	1150	354	8	11	0.0
18	7.3	-2.4	4.0	-6.1	10.9	13.0	2.7	6.4	1020.7	1	1	0	0	227	4.4	4.5	243	16	1225	236	9	12	3.5
19	5.6	0.9	0.6	-1.5	10.1	12.8	1.7	0.4	1008.0	0	1	1	0	312	6.3	6.9	331	25	1300	334	11	13	0.6
20	4.4	-1.6	0.0	-6.3	9.3	12.4	4.7	8.8	1015.2	1	1	0	0	295	5.3	5.5	314	18	1320	315	8	13	0.0
21	6.7	-2.0	0.6	-6.5	8.4	12.1	8.0	11.6	1027.1	1	1	0	0	278	2.2	3.1	319	11	0130	184	5	22	0.7
22	9.1	-1.8	9.6	-6.1	7.6	11.6	0.0	0.7	1019.9	1	1	0	0	184	5.2	5.3	189	21	1235	187	9	13	6.4
23	10.2	5.4	1.0	5.4	8.0	11.2	6.7	0.0	998.9	0	0	0	0	227	6.1	6.9	259	21	1324	256	12	13	1.0
24	7.4	4.4	tr	0.9	8.1	11.0	0.4	0.0	990.0	0	0	0	0	293	3.2	6.0	338	19	1925	339	8	18	0.4
25	7.1	3.2	0.0	0.4	8.1	10.8	5.5	0.0	1013.9	0	0	0	0	313	5.0	5.1	310	19	0340	310	8	03	0.0
26	11.3	-2.7	1.1	-6.6	7.7	10.6	7.1	6.7	1024.5	1	1	0	0	207	3.1	3.7	196	14	1945	195	7	22	1.7
27	13.5	-1.2	0.5	4.4	7.6	10.4	0.1	0.0	1015.1	1	0	0	0	216	8.1	8.1	214	20	1515	218	11	12	0.4
28	12.7	8.4	3.4	4.0	8.6	10.2	4.1	0.0	1012.1	0	0	0	0	214	7.1	7.1	221	22	1230	220	12	12	2.3
29	11.2	9.1	2.2	5.4	8.8	10.3	0.8	0.0	999.8	0	0	0	0	214	6.9	7.9	177	24	1010	189	11	10	1.8
30	10.5	1.8	1.3	-2.2	8.7	10.3	7.5	0.0	1014.1	0	1	0	0	243	4.6	5.6	292	17	0025	252	9	12	1.2
Total			59.6				93.0	37.2															49.7
Mean	12.4	6.1		3.7	10.8	12.3	3.10	1.2	1010.1					214	2.9	5.6							
Anom	+1.3	+1.7	80%	+2.3	+1.1	+0.4	118%																
Daily mean		9.2							1029.0 on 21														
Anom		+1.4							989.7 on 24														

Number of days with:

Air frost = 6

Ground frost = 8

Nil sun = 3

Snow falling = 1

Snow lying = 0

Thunder = 0

Hail=>5mm = 0

Hail<5mm or ice = 0

Fog at 09GMT = 1

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 NOVEMBER 2025

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Ch	shs	NCh	shs	NCh	shs	Date	Remarks
1	75	1	22	10	19	13.3	8.8	74	7.1	1000.3	2	023	02	1	1	1	1	4	7	3	81818						1	Ac67 1Ci68 Cu fra Cb top W&NW
2	84	3	23	05	09	9.6	8.4	92	6.9	1005.7	3	010	01	6	1	3	5	3	7	0	81708	83650				2	1Sc40 1Ac58	
3	60	8	21	08	20	13.6	12.3	92	8.9	1012.2	2	007	20	5	2	6	7	3	7	/	86708	85362	88468		3			
4	80	6	17	05	16	14.4	11.4	82	8.3	1012.0	8	002	01	2	2	2	5	4	3	1	82615	86076			4	1Ac57 2Cc73 Parhelia Cz arc		
5	80	7	16	04	13	14.9	11.7	81	8.5	1008.1	0	001	15	6	2	7	0	8	7	/	85357	86363			5	jpS		
6	65	8	14	04	08	14.3	13.2	93	9.5	1005.6	3	007	61	6	2	2	5	3	7	/	81708	88359			6	2Sc40		
7	58	7	13	05	09	14.1	13.9	99	10.0	1004.9	8	003	10	2	2	7	5	3	/	/	84707	85640	87656		7			
8	61	7	22	05	08	10.6	10.1	97	7.7	1012.9	1	023	02	2	2	7	6	2	/	/	87705				8			
9	30	6	05	01	04	6.0	5.9	99	5.7	1016.6	7	004	10	4	1	1	5	6	0	5	81640	83270	85073		9	COTRA		
10	60	7	16	04	10	12.8	11.9	94	8.7	1005.2	7	012	80	2	2	7	8	3	/	/	83707	85812	85650		10	/Ac60 Cu med Rainbow		
11	67	7	17	05	11	13.0	11.7	92	8.6	1005.7	7	008	02	2	2	7	5	4	3	/	84712	87618			11	/Ac68 COTRA		
12	68	7	17	06	12	14.3	11.8	85	8.7	1003.5	1	005	02	2	2	7	0	9	7	2	82358	83362	85368		12	/Ci72		
13	80	7	21	04	08	13.7	11.7	88	8.6	1007.0	1	027	03	2	2	3	6	4	0	1	83710	87072			13	COTRA U/a cont+Parhelion		
14	25	8	08	05	07	13.0	12.8	99	9.3	1001.1	7	002	60	6	2	7	5	2	2	/	83703	86530	88550		14			
15	02	8	02	02	03	11.0	11.0	100	8.2	1008.5	1	017	42	4	1	8	5	4	/	/	88615				15			
16	84	8	04	08	16	9.4	8.0	91	6.7	1011.8	2	016	02	2	2	8	5	4	/	/	87613	88630			16			
17	80	1	34	07	13	4.5	1.5	81	4.2	1022.4	2	026	03	0	0	1	1	4	0	0	81812				17	Cu fra		
18	84	7	22	05	09	2.2	1.0	92	4.0	1020.7	7	018	01	2	2	7	5	6	/	1	82640	87650			18	/Ci72		
19	20	8	32	07	22	0.9	0.3	96	3.9	1008.0	3	028	69	7	6	8	7	2	/	/	88705				19	Sn ly 20% <1cm rasn mod		
20	84	2	29	05	12	0.4	-3.3	76	3.0	1015.2	2	007	14	0	0	2	0	9	7	0	81358				20	2Ac61 Ac vir Hoar slt Gnd frzn		
21	62	1	29	02	07	0.0	-0.8	94	3.5	1027.1	1	026	02	0	0	0	0	9	0	1	81080				21	COTRA Hoar mod. Gnd frzn		
22	67	8	18	06	11	6.6	3.6	81	4.9	1019.9	7	023	61	6	2	5	5	5	2	/	83628	83640	88550		22			
23	75	4	24	07	19	9.1	8.8	98	7.1	998.9	6	026	21	6	1	3	8	3	7	8	81809	83656			23	1Sc25 1Ac60 2Cs75 Cu fra jpE vv80k ex p Cs edge S		
24	86	5	24	02	06	5.3	4.6	95	5.4	990.0	5	006	02	1	1	4	5	5	3	1	81625	83632			24	1Sc40 1Ac65 2Ci70		
25	82	3	31	06	12	4.4	2.3	86	4.5	1013.9	2	028	03	0	0	3	5	3	0	0	81708	83656			25	1Sc45		
26	59	3	26	02	04	-1.2	-1.3	99	3.4	1024.5	2	015	10	0	0	1	0	9	4	1	81365	83080			26	COTRA Hoar thk Gnd frzn		
27	84	7	21	07	12	11.3	9.7	90	7.4	1015.1	0	001	01	2	2	7	5	4	/	/	87616				27	/Sc56		
28	59	6	21	07	12	9.9	8.5	91	6.9	1012.1	7	006	05	2	2	1	5	6	7	2	81640	83368	85073		28			
29	58	8	18	10	21	11.2	9.8	91	7.6	999.8	7	027	61	6	6	7	7	4	2	/	87713	88550			29			
30	86	0	24	06	09	2.5	0.2	85	3.8	1014.1	2	022	02	0	0	0	0	9	0	0					30	Hoar slt		

Mean vis = 24.4 km

Mean cloud = 5.6 70%

Mean wind speed = 5.3 kn

Mean gust = 11 kn

Mean TT = 8.8 °C

Mean TdTd = 7.3 °C

Mean RH = 90.4 %

Mean r = 6.7 g/kg

Mean PPP = 1010.1 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 NOVEMBER 2025

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Ch	shs	NCh	shs	NCh	shs	Date	Remarks
1	65	7	21	06	20	12.7	9.5	81	7.4	1003.7	1	011	25	8	2	3	8	5	7	/	81828	83650	87357			1	Cu med jpSW	
2	88	3	26	07	17	11.9	5.1	63	5.5	1009.6	2	016	02	1	1	2	8	6	3	1	81835					2	2Sc50 1Ac59 1Ci80 COTRA Cu med	
3	59	7	22	13	24	15.2	11.8	80	8.6	1012.0	0	000	58	5	2	7	5	4	/	/	86710	87625				3		
4	72	6	16	08	15	15.1	10.7	75	8.0	1008.9	6	018	02	1	1	1	8	4	7	1	81815	83362	85365			4	1Sc40 /Ci75 Cu fra	
5	84	7	14	06	13	15.9	11.3	74	8.3	1005.8	8	012	21	6	2	7	0	9	7	/	86359	87363				5	jpN	
6	83	7	18	04	11	16.6	13.1	80	9.4	1005.2	5	002	03	2	2	7	8	4	3	/	84815	85635				6	/Ac65 Cu med	
7	84	7	17	06	15	14.7	10.3	75	7.8	1004.3	5	000	03	2	2	7	8	4	/	/	82818	87625				7	Cu hum	
8	84	1	26	07	14	13.7	7.2	65	6.3	1014.6	3	006	01	1	1	1	1	6	0	0	81830					8	Cu hum	
9	80	7	17	05	16	13.5	9.7	78	7.5	1013.5	7	016	15	6	2	7	8	4	7	/	81818	87630				9	/Ac60 jpW	
10	58	6	20	04	16	11.1	10.0	95	7.7	1002.5	6	006	81	8	6	5	8	4	6	1	82810	83645				10	2Sc30 4Ac62 3Ci70 Cu med Cu con W&NW vv70k ex E R	
11	80	7	17	09	19	14.4	11.7	84	8.5	1013.3	7	019	21	6	2	3	8	4	4	2	82816	83625	87075			11	1Sc50 2Ac65 COTRA Cu hum	
12	68	7	18	05	12	15.3	11.7	79	8.6	1003.1	7	001	01	2	2	1	5	4	4	2	81615	87072				12	2Ac57 COTRA Halo 22° part Parhelia	
13	82	7	21	04	09	16.7	10.5	67	7.9	1007.2	8	007	03	2	2	1	4	6	7	1	81630	83363	86368			13	/Ci73 Parhelia	
14	58	8	07	05	09	14.2	14.0	99	10.1	998.2	6	015	21	6	2	7	5	2	7	/	85703	86628	87650			14	/Ac62	
15	60	8	04	06	12	12.4	11.8	96	8.6	1008.6	5	002	20	5	2	8	5	3	/	/	87706	88615				15		
16	88	7	04	07	15	9.4	4.4	71	5.2	1012.7	3	005	01	2	2	7	5	5	7	/	83626	85638	87357			16		
17	81	1	35	05	12	7.1	1.2	66	4.1	1024.9	3	009	02	0	0	1	4	5	0	0	81827					17	1Sc35 Cu hum	
18	84	7	22	05	11	7.0	3.4	78	4.8	1014.1	7	035	15	1	1	3	8	4	8	/	81815	83656	87358			18	1Sc25 Cu hum Ac cas vir jpN	
19	86	7	33	10	22	5.0	0.4	72	3.9	1011.5	2	017	02	1	1	7	8	5	4	0	85824	86530				19	1Ac62 Cu hum	
20	88	7	32	07	16	4.0	-2.0	65	3.3	1016.1	3	009	14	1	1	7	8	5	/	/	81825	86630				20	/Sc50 Cu hum Sc vir	
21	75	5	27	02	07	5.4	0.2	69	3.8	1028.1	3	003	03	1	1	0	0	9	0	4	83078	83081				21	COTRA Parhelia Hoar slt in shade	
22	58	8	18	09	17	7.3	6.4	94	5.9	1014.1	7	031	62	6	5	7	7	3	2	/	83707	87710	88535			22		
23	86	1	25	08	20	9.4	2.9	64	4.7	998.1	6	012	02	0	0	1	4	6	0	8	81833					23	1Sc40 1Cs78 Cu med Cs edge S	
24	65	7	32	06	13	7.1	3.7	79	5.0	994.4	2	029	15	8	2	7	8	4	/	/	82815	87630				24	Cu hum jpNW	
25	89	6	32	05	12	7.0	2.3	72	4.5	1016.7	2	015	00	2	1	6	5	5	0	0	86623					25		
26	83	7	21	05	11	6.5	0.6	66	3.9	1021.7	7	015	03	1	1	2	0	9	5	4	82357	85072				26	/Ci80 COTRA Parhelia	
27	65	8	21	09	15	13.1	11.8	92	8.6	1012.4	7	013	50	5	2	8	7	3	/	/	87706	88710				27		
28	75	6	22	09	20	12.2	6.9	70	6.2	1009.2	5	015	03	1	1	3	8	5	0	2	81828	83638	85076			28	COTRA Cu hum	
29	86	4	27	08	16	9.0	5.7	80	5.8	1001.1	2	017	01	8	1	2	8	4	7	1	82815	83072				29	1Sc25 1Ac59 Cu med U/a cont	
30	88	2	24	06	14	7.5	2.0	68	4.4	1015.2	2	003	02	0	0	2	4	6	0	4	81830					30	2Sc45 1Ci80 Cu med Ci edge distant W	

Mean vis = 37.9 km

Mean cloud = 5.9 74%

Mean wind speed = 6.5 kn

Mean gust = 15 kn

Mean TT = 11.0 °C

Mean TdTd = 6.9 °C

Mean RH = 76.6 %

Mean r = 6.5 g/kg

Mean PPP = 1010.0 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

Wokingham	Hour	01-Nov	02-Nov	03-Nov	04-Nov	05-Nov	06-Nov	07-Nov	08-Nov	09-Nov	10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov	16-Nov	
Sunshine Hourly analysis 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	7	0.18	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8	0.99	0.63	0.00	0.30	0.00	0.00	0.00	0.00	0.00	1.00	0.25	0.00	0.26	0.76	0.00	0.00	0.00
	9	1.00	0.96	0.01	0.81	0.12	0.00	0.02	0.27	0.98	0.02	0.01	0.20	0.53	0.00	0.00	0.00	0.00
	10	0.97	0.96	0.01	0.90	0.00	0.00	0.00	0.36	0.98	0.00	0.28	0.00	0.13	0.00	0.00	0.00	0.00
	11	0.98	0.90	0.00	0.00	0.13	0.00	0.00	0.99	0.14	0.00	0.01	0.34	0.60	0.00	0.00	0.00	0.00
	12	0.91	0.81	0.04	0.53	0.04	0.00	0.34	0.99	0.03	0.00	0.08	0.42	0.99	0.00	0.03	0.00	0.00
	13	0.16	0.85	0.23	0.84	0.00	0.39	0.47	0.65	0.00	0.00	0.00	0.30	1.00	0.00	0.42	0.00	0.00
	14	0.14	0.93	0.21	0.26	0.00	0.07	0.11	0.91	0.00	0.00	0.00	0.58	0.86	0.00	0.10	0.00	0.00
	15	0.00	0.67	0.00	0.21	0.00	0.00	0.00	0.97	0.00	0.10	0.05	0.31	0.15	0.00	0.00	0.00	0.00
	16	0.00	0.16	0.00	0.00	0.12	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	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	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	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	0.00
Tot		5.33	6.89	0.51	3.93	0.41	0.46	0.95	5.17	3.36	0.38	0.43	2.40	5.00	0.00	0.55	0.00	
	Hour	17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov	26-Nov	27-Nov	28-Nov	29-Nov	30-Nov	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		
	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		
	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		
	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		
	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		
	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	7	0.15	0.00	0.00	0.12	0.11	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.03		
	8	1.00	0.00	0.00	1.00	1.00	0.00	0.06	0.24	1.00	0.97	0.00	0.00	0.00	0.87	0.34		
	9	1.00	0.09	0.00	1.00	1.00	0.00	0.94	0.14	0.80	1.00	0.12	0.25	0.00	1.00	0.41		
	10	1.00	0.08	0.00	0.83	1.00	0.00	1.00	0.00	0.80	1.00	0.00	0.44	0.00	1.00	0.39		
	11	1.00	0.16	0.04	0.77	1.00	0.00	1.00	0.00	0.18	1.00	0.00	0.90	0.00	1.00	0.37		
	12	1.00	0.99	0.79	0.27	1.00	0.00	1.00	0.00	0.83	1.00	0.00	0.91	0.00	1.00	0.47		
	13	1.00	0.89	0.37	0.19	1.00	0.00	1.00	0.00	0.37	1.00	0.00	0.95	0.00	1.00	0.44		
	14	0.71	0.48	0.25	0.24	1.00	0.00	0.97	0.00	0.82	1.00	0.00	0.48	0.55	0.99	0.39		
	15	0.95	0.00	0.21	0.23	0.93	0.00	0.69	0.00	0.70	0.08	0.00	0.13	0.26	0.66	0.24		
	16	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	0.01		
	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	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		
	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		
	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		
	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		
	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		
Tot		7.81	2.71	1.65	4.66	8.04	0.00	6.66	0.38	5.52	7.05	0.12	4.06	0.80	7.52	92.72		

NOVEMBER 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	11.83	16.2	1240	6.4	2356	83.9	98.2	1901	56.2	1239	9.0	7.2	9.4	110	5.8	2350	1002.09	1007.1	2331	997.0	43	4.7
2	8.60	12.7	1220	5.5	202	84.0	98.5	226	57.0	1352	5.9	5.8	7.0	857	5.0	1304	1008.74	1013.9	2128	1004.6	631	0.8
3	13.66	16.3	1304	8.2	0	84.1	91.9	856	72.7	1305	11.0	8.1	8.9	1554	5.8	0	1012.42	1013.8	2	1011.1	601	0.1
4	14.50	16.8	1249	13.4	1827	83.1	95.6	1845	68.9	1254	11.6	8.5	9.3	2150	7.7	1352	1010.40	1013.0	106	1007.7	2029	0.5
5	15.17	17.3	1140	13.7	2356	78.4	87.7	154	67.3	1212	11.4	8.4	9.1	136	7.8	2350	1007.06	1008.8	225	1005.1	2259	0.2
6	14.72	17.7	1348	10.8	2300	87.2	99.0	2315	75.7	1350	12.6	9.1	10.4	1150	7.9	3	1005.56	1006.8	1936	1004.4	426	0.5
7	13.26	16.5	1256	11.3	234	94.7	99.7	839	70.0	1342	12.4	8.9	10.2	1008	7.6	1342	1005.24	1006.7	17	1003.8	1311	1.1
8	10.77	15.6	1249	5.2	2359	88.1	99.1	2358	61.7	1406	8.7	7.0	9.3	44	5.4	2359	1013.33	1017.9	2209	1006.4	3	0
9	9.67	14.0	1051	3.3	317	91.2	100.0	757	76.0	1410	8.2	6.8	8.9	1015	4.7	317	1014.49	1017.8	45	1008.9	2358	3.5
10	11.32	13.7	1036	7.4	2359	94.6	98.4	750	87.5	1047	10.5	7.9	9.1	1154	6.2	2359	1005.24	1009.1	0	1002.3	1354	4.9
11	12.16	15.6	1252	6.5	246	89.6	98.8	409	76.5	1255	10.4	7.9	9.0	2357	5.9	246	1004.87	1007.4	50	1002.4	2303	2.8
12	13.82	17.2	1229	12.0	2040	88.0	96.1	254	75.1	1234	11.8	8.7	9.4	1226	7.9	1946	1002.97	1004.0	941	1001.9	2326	1.6
13	14.24	17.6	1231	12.8	2132	86.5	99.3	2326	65.7	1505	11.9	8.7	9.4	2342	7.7	1503	1005.81	1008.3	1123	1001.7	53	5.3
14	13.17	14.3	1433	11.7	2348	99.6	99.8	2131	98.9	2225	13.1	9.4	10.1	1433	8.5	2348	1000.94	1004.8	0	997.9	1507	6.6
15	11.44	14.6	1358	9.2	743	97.8	99.9	1202	85.4	1401	11.1	8.2	9.9	1234	7.2	745	1007.99	1010.0	2242	1004.0	0	0.1
16	8.80	10.3	1106	5.3	2322	82.2	98.4	500	66.5	2125	5.8	5.8	7.4	6	4.0	2225	1012.70	1016.9	2355	1009.6	113	0.2
17	4.36	8.1	1230	-1.4	2358	81.4	99.9	2354	61.6	1244	1.3	4.1	4.5	327	3.3	2358	1023.05	1027.1	2135	1016.7	0	0
18	3.05	7.3	1230	-2.4	423	90.9	100.0	434	72.8	1213	1.6	4.3	5.2	1754	3.1	400	1017.33	1026.3	0	1007.9	2353	0.2
19	3.50	5.6	1234	-0.2	2353	83.0	98.5	934	68.5	1606	0.8	4.1	5.1	428	2.9	2358	1009.76	1014.6	2339	1004.5	416	4.2
20	1.29	4.4	1443	-1.6	746	73.7	83.7	749	62.5	1145	-2.9	3.0	3.4	1441	2.7	410	1016.21	1020.9	2358	1014.2	311	0.1
21	1.03	6.1	1256	-2.0	702	87.5	99.0	2241	65.8	1252	-0.9	3.5	3.9	1109	3.1	702	1026.46	1029.0	1856	1020.9	0	0.1
22	5.73	7.9	1921	-0.3	8	90.8	98.7	2347	76.0	611	4.3	5.2	6.2	1921	3.5	8	1017.12	1026.9	1	1008.4	2352	5.5
23	7.36	10.2	1240	4.4	2251	85.8	99.8	340	61.2	1426	5.0	5.5	7.2	831	4.5	1426	1000.21	1008.7	0	995.5	2359	3
24	6.05	7.4	1126	4.4	342	85.1	95.4	858	73.5	1430	3.7	5.0	5.8	1126	4.4	2349	995.04	1005.5	2355	989.7	822	1
25	4.66	7.1	1256	1.5	2356	81.3	92.6	2359	71.9	1451	1.7	4.3	4.6	1158	3.8	2350	1014.81	1021.9	2356	1005.3	4	0
26	3.75	9.7	2359	-2.7	738	87.1	100.0	921	60.8	1402	1.6	4.3	7.3	2359	3.0	757	1021.67	1024.8	915	1016.6	2357	1
27	12.06	13.5	1308	9.7	0	92.8	98.5	228	85.9	1305	10.9	8.1	8.9	2158	7.3	0	1014.00	1016.8	0	1012.1	1653	0.4
28	10.13	12.7	1155	8.4	638	85.5	95.4	159	69.1	1514	7.8	6.5	7.4	0	6.0	1514	1011.15	1013.7	240	1007.6	2359	0.1
29	8.55	11.3	304	3.9	2103	87.7	94.9	1048	79.1	1508	6.6	6.2	7.7	1116	4.5	2036	1002.68	1007.7	0	998.4	1053	4.5
30	5.16	8.5	1250	1.8	801	79.8	90.4	529	65.6	1226	1.9	4.3	5.0	2324	3.7	800	1013.05	1015.3	1515	1006.8	3	0
Total																						53.0
Mean	9.13	12.21		5.53		86.8	96.91		71.18		6.96	6.49	7.63		5.36		1010.08	1014.18		1005.78		
Max	15.17	17.73		13.66		99.6	100.00		98.90		13.10	9.42	10.36		8.52		1026.46	1028.96		1020.89		
Min	1.03	4.39		-2.70		73.7	83.69		56.22		-2.94	3.03	3.42		2.69		995.04	1003.97		989.75		

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

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

AUTUMN 2025

Temperature (°C)				Rank in the past 144 years			
Mean maximum		15.7	(+0.2)	23rd highest			
Mean minimum		8.1	(+0.8)	7th highest			
Daily mean		11.9	(+0.5)	10th highest			
Rainfall total (mm)		165.9	(82%)	54th lowest			
Sunshine total (hours)		361.6	(104%)				
N° of:							
Dry days		43	(-5)	Wet days		31	(0)
Days with: Air frost		6	(-1)	Ground frost		14	(-7)
				Snow falling		1	(0)
Thunder		2	(-1)	Snow lying		0	(0)
Hail ≥5mm		0	(0)	Thunder		2	(-1)
Small hail/ice		0	(-1)	Hail ≥5mm		0	(0)
Fog @09 GMT		1	(-2)	Small hail/ice		0	(-1)
Nil sun		14	(+1)	Fog @09 GMT		1	(-2)
Air pressure MSL : Mean @09 GMT (mbar)		1013.5	(-1.4)	Nil sun		14	(+1)

Departure from 1991 to 2020 average shown in brackets.

Notes: **Very Mild, Sunny, Rainfall Below Average.**

Temperature: The mean this autumn, while in the very mild category, is 1.6° below the record set in 2006. The mean maximum is 2.0° below the record set in that year, but the mean minimum is only 1.3° below its record, also set in 2006. It is notable that of the 14 mildest autumn seasons in the past 144 years, only 2, 1995 and 1949, have not occurred in this millennium. While part of the reason is likely to be global climate change, the Wokingham environment has become, and still is becoming, more urbanised, which will also undoubtedly tend to raise our local temperatures, especially but not exclusively, by night. An illustration of this can be seen in the change in the 30 year average maximum and minimum temperatures between 1910 to 1940 and 1996 to 2025, +0.76° and +1.02° respectively. The seasonal temperature trend this autumn was normal, with September the warmest month, mean 14.4° and November the coldest, mean 9.2°, but compared with average November had the largest anomaly, +1.4°, and a cooler than average September had -0.5°, with the October mean anomaly at +0.5°. However, the mean maximum for both September and October was below average (-0.2° and -0.3° respectively), while in November the anomaly was +1.3°. The season's warmest day was the 19th Sep, 26.7°, 2.1° above its median, and the coldest day was 20th Nov, mean 4.4°, 0.2° below the median. The mildest night was 18th Sep, 15.8°, 0.4° above the median while the coldest night was 26th Nov, -2.7°, 1.0° above its median. The mean grass minimum was 5.4°, 1.2° above average and the lowest was -6.6° on the 26th November. The mean earth temperature at 30 cm depth was 13.5°, anomaly +0.3°, and at 1 m depth it was 14.5°, anomaly 0.0°. The first ground frost of the winter half year was on the 22nd September after 121 frost free days, and the first air frost was on the 18th November after 233 frost free days.

Rainfall: This has been quite a dry autumn overall with the rainfall total only 82 % of average. However, there was a drier autumn as recently as 2021, and there have been 7 other drier ones in this millennium. The wettest month was November, 59.6 mm, then September with 56.4 mm, then October with 49.9 mm, but compared with average, September was the only month to exceed the average, having 105 %, with 80 % for November and 68 % for October. The season's wettest day was the 19th Oct with 12.2 mm, which is an especially low value, 14.8 mm below the average and equal lowest with 1990 since 1985. Despite the below average rainfall total, the number of dry days is 6 fewer than average. There were 3 dry spells, 5 days to the 8th Sep, 9 days to the 25th Sep and 8 days to the 11th Oct. The 15 day period to the 18th Oct had 13 dry days and a total of only 0.8 mm, also the 15 days to the 1st Oct had 12 dry days and a total of 1.8 mm. The duration of rain was 130.0 hours, which is 89 % of average. The highest rainfall rate was 115 mm/hr on the 1st Sep, but the only other day to have violent rainfall (50 mm/hr or more) was the 3rd Sep. Thunder was heard on the 1st and 12th Sep but there was no hail this autumn. Soil moisture deficit, which reached a maximum of 351 mm on the 23rd Aug, the highest value since 1995, recovered slowly through the autumn, but was still over 260 mm at the end of Nov, and is unlikely to return to field capacity before the Spring unless we have a very wet winter. Unirrigated shallow rooted plants would have suffered stress until the end of October. **Sunshine:** This has been a sunny autumn overall though the total is only 4% above average, and it was not as sunny as recent autumns of 2023 and 2022. September was the sunniest month, daily mean 6.23 hours, 121 % of average, then November with 3.10 hours, 118 % of average, then a dull October, mean 2.63 hours, 71% of average. The 25th Sep was the sunniest day with 11.0 hours. The number of days with nil sun is close to average. Notably sunny periods include the 7 days to the 25th Sep, mean 8.2 hours per day, but at the other extreme, the 7 days to the 19th Oct had 6 sunless days and a total of only 0.1 hours sunshine. Overall there were 45 days with <3 hours and 30 with ≥6 hours. **Wind:** The overall mean wind speed this autumn was 6.3 mph, 0.2 mph above average. The windiest day was the 15th September, mean speed 15.3 mph, and the windiest hour was at 11 GMT on the 4th October, mean 23.0 mph. The highest gust of 44 mph was also on that day. The least windy day was the 28th September, mean speed 1.0 mph. Daily mean direction/number of days: N,6 NE,9 E,4 SE,7 S,19 SW,31 W,10 NW,5. Compared with average, winds from S and SW combined were 5.9% more frequent, while winds from E were 2.8% less frequent, also from W to N combined were 5.0 % less frequent. **Pressure:** The season's highest MSL pressure was 1035.6 mbar on 11th October, and the lowest was 977.1 mbar on 23rd October, span 58.5 mbar, average 56.0 mbar. **Humidity:** The overall mean relative humidity was 83.8% and the lowest value was 37 % on the 25th September. The mean water vapour content per kg of air was 7.6 g at 0900 GMT and 7.3 g at 1500 GMT, both values close to average. **September:** Very sunny with temperature below, and rainfall above, average. First month since February with below average temperature and ditto for above average rainfall. Number of ground frosts 2nd highest since 1986. Sunshine 21% above average. Daily mean wind speed of 15.3 mph on the 15th is the windiest for the month since before 1988. **October:** Very dull with mean temperature above, and rainfall below, average. Mean daily temperature range equal lowest since 1976. Lowest min is 5th highest in 122 years. Driest since 2017. Dullest October in this millennium, daily mean sun lowest since 1982. **November:** Very mild and very sunny with rainfall below average. Mean temperature 7th highest in 144 years. Highest min is 4th highest in 113 years. Despite the rainfall total being only 80 % of average there were 5 fewer dry days than average. Snow fell on the 19th. The month's highest gust is equal lowest for November since before 1988.

Month	Mean Max	Anom	Mean Min	Anom	Rain mm	Anom	Sun hrs	Anom	Mean Wind mph	Max gust	Mean pressure	Anom
Sep	19.5°	-0.2°	9.4°	-0.6°	56.4	105%	187.0	121%	6.4	43	1015.1	-1.6
Oct	15.2°	-0.3°	8.9°	+1.4°	49.9	68%	81.6	71%	6.0	44	1015.2	+0.7
Nov	12.4°	+1.3°	6.1°	+1.7°	59.6	80%	93.0	118%	6.4	32	1010.1	-3.4

Other reports can be seen on page 1 of <http://www.woksat.info/www.html>

B J Burton FRMetS.

Hon. Met. Officer to Wokingham Town Council.

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 $(\text{max} + \text{min}) / 2$. 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/wwwp1.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 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.