

# 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

				DECEMBER 2025			
Temperature (°C)		Anomaly		Rank in the past 144 years			
Mean maximum	10.1	+1.6	12th highest				
Mean minimum	3.3	+1.0	33rd highest				
Daily mean	6.7	+1.3	21st highest				
Highest maximum	14.3	on 7th	Lowest maximum	1.7	on	31st	
Highest minimum	11.5	on 9th	Lowest minimum	-4.3	on	31st	
Mean grass minimum	1.4	+1.8	Lowest grass minimum	-7.0	on	31st	
Mean earth @30 cm	8.2	+1.3	Earth @100 cm	9.7			+0.4
Frost duration (hrs)	37.3		Rain duration (hrs)	50.8			
Rainfall total (mm)	55.2	85 %	56th lowest				
Highest daily fall	18.8	on 18th	Highest rate mm/hr	27	on	3rd	
Number of: Dry days (<0.2mm)	14	Wet days (>0.9mm)	11	days ≥5mm	3		
Sunshine total (hrs)	86.4	Daily mean	2.79	127%	Sunniest day	7.4	on 30th
N° days with: Air frost	8	Ground frost	14	Snow falling	0	Snow lying	0
Thunder	0	Hail ≥5mm	0	Small hail/ice	1	Fog @09	2
Pressure MSL : Mean @09 GMT, mbar	1015.3	-0.3	Highest	1035.3	on 27th	Lowest	992.1 on 6th
Relative humidity : Mean (%)	87.2	Lowest	52	on 25th	Water vapour (g/kg), mean at 09 and 15 GMT	5.5,	5.9
Overall mean wind speed (mph)	7.5		Windiest day	13.8	on 1st	Max gust	43 on 1st
Wind direction (days)	N 0	NE 8	E 3	SE 1	S 13	SW 5	W 0 NW 1
Least windy day (mph)	2.0	on 3rd	Calm; less than 0.5 mph (minutes)			n/a	

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

### Notes: Mild and Sunny with Rainfall Below Average.

**Temperature:** Much of the month had daytime temperatures above normal, values only dropping to near normal after the 22nd, then just one cold day on the 31st. While the mean maximum ranks 12th highest since before 1882, it is 3.2° below the record set in 2015, the mean minimum ranks only 33rd highest in the same period, and is 5.3° below the 2015 record. Compared with the long-term median the anomaly for mean temperature is +1.5°, but it is +2.1° for the mean maximum. The highest max is 1.1° above the median and the lowest max is 0.1° above its median. The highest min is 2.2° above the median while the lowest min is 0.7° above its median. The lowest grass min is 3.0° above average but is 2.9° below the equivalent value in December 2024. Earth temperature at 30 cm depth is well above average, but is closer to average at 1 m depth. Anomalies for daily max were above +5° from the 7th to 10th incl. and exceeded -5° on the 31st only, with extreme values of +5.9° on 9th and -5.9° on 31st. Anomalies for daily min were above +7° from the 8th to 10th incl. and exceeded -5° on the 31st only, with extreme values of +9.5° on the 9th and -5.9° on the 31st. There were two fewer days with air frost than average, and the duration of air frost was 43 % of average.

**Rainfall:** The total this December is 15 % below average, but this statistic is slightly misleading as there was plenty of rain until it became dry after the 21st. The total of 18.8 mm on the 18th made it the wettest December day since the 23rd in 2013. The number of dry days is 1 fewer than average but the total duration of rain is 88 % of average. There was no snow this December for the 3rd consecutive year, compared with the 50 year average of 2 days. Ice pellets fell during a heavy rain shower on the 3rd, but there was no thunder, and no falls with a rain rate in the violent category. A dry spell was unbroken on the 31st after 10 days. Rainfall accumulation compared with normal was 9 mm in surplus on the 8th, becoming zero by the 13th, but increasing to 15 mm on the 18th, becoming zero again on the 27th and ending the month with a deficit of 8 mm.

**Sunshine:** This has been a very sunny December, the 5th sunniest in this millennium, despite the number of days with nil sun being close to average. There were no notable sunny or dull episodes, but the 3 days to the 9th were sunless. Individual sunny days having over 80 % of the maximum were the 13th, 19th, 24th, 25th and 30th. Daily accumulation compared with normal was close to normal until the 9th, becoming a surplus of 11 hours on the 15th, increasing to 19 hours by the 25th where it remained until the 31st. Overall there were 18 days with <3 hours and 6 with =>6 hours.

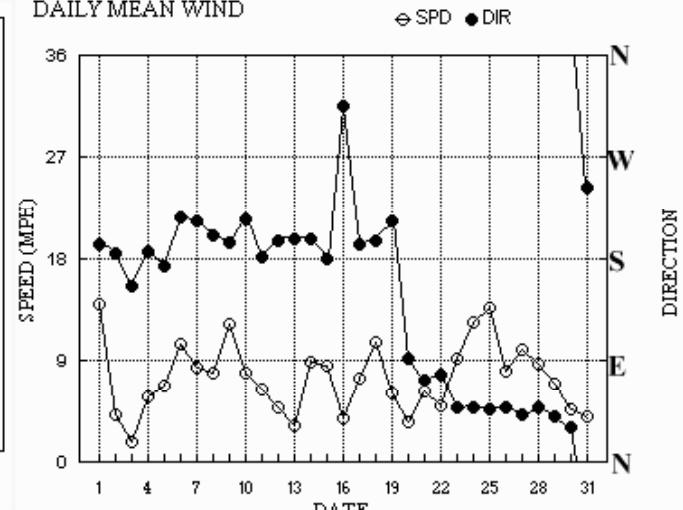
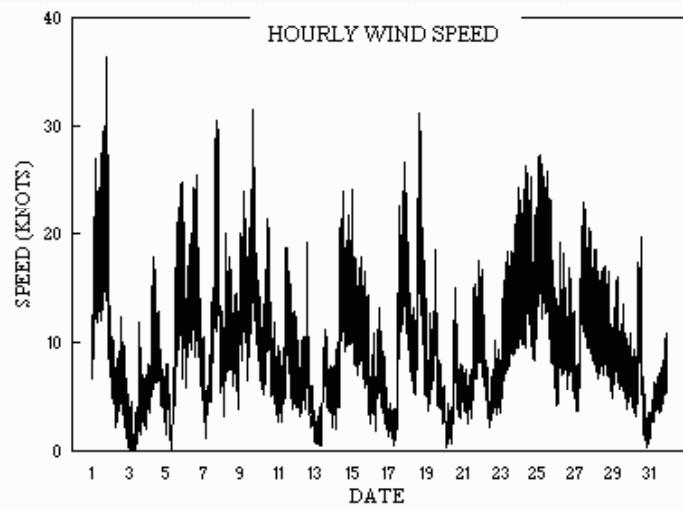
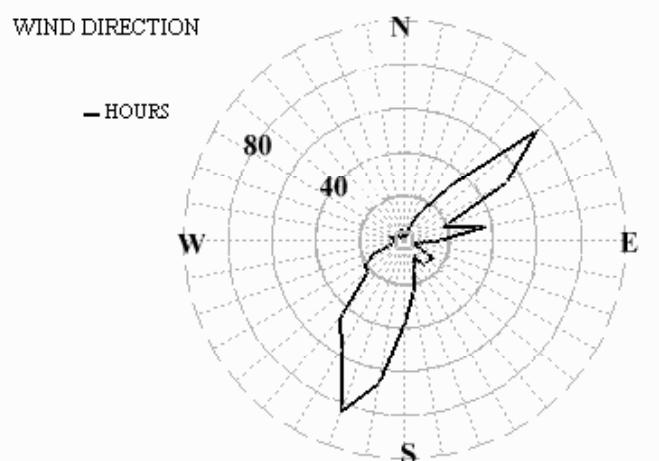
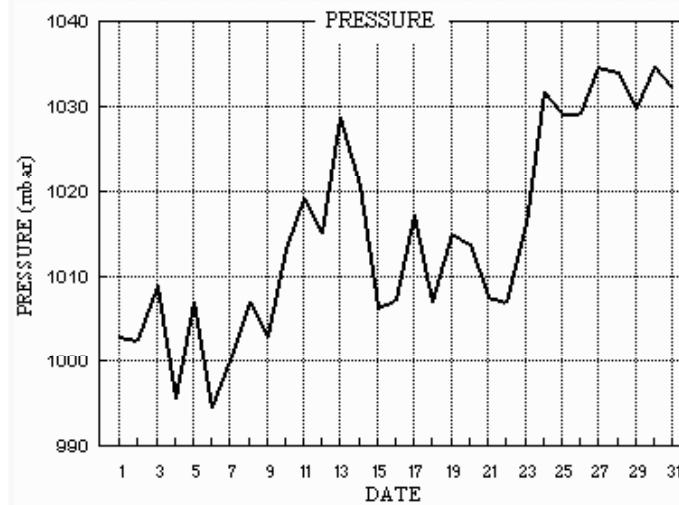
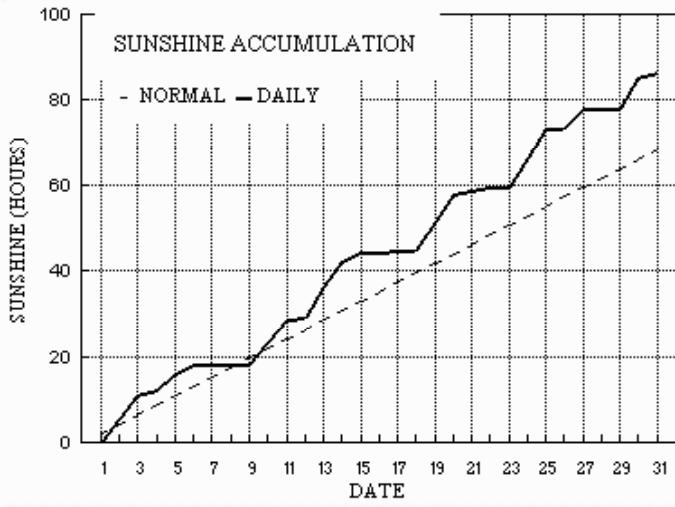
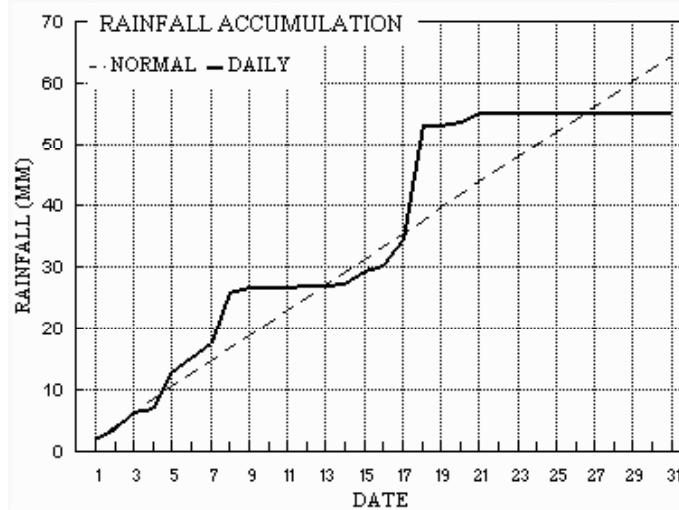
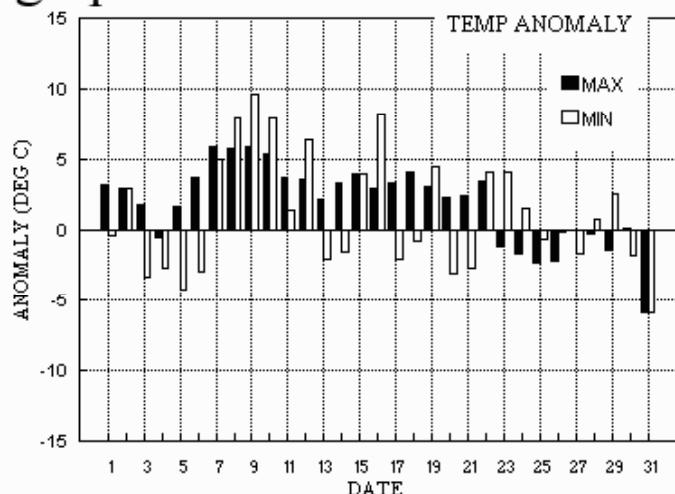
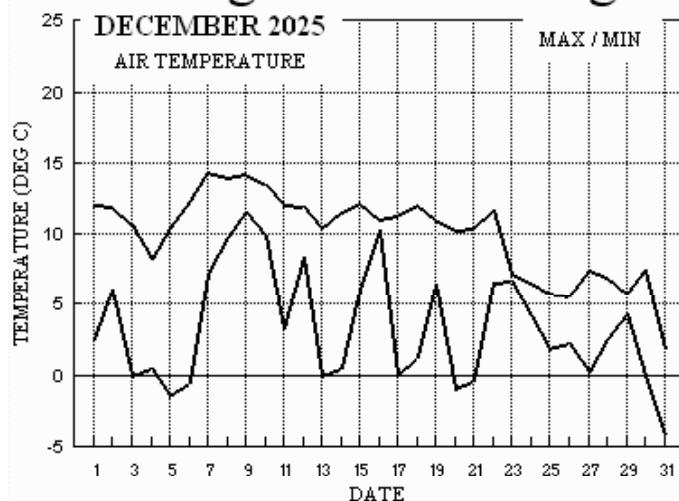
**Wind:** The overall mean speed of 7.5 mph is close to average. The mean speed of 13.8 mph on the month's windiest day is 1.2 mph below average, and the highest gust of 43 mph is 4 mph below average. Daily mean speed was strong on the 1st, fresh on the 6th, 7th, 9th, 14th, 17th, 18th, 24th and 25th, otherwise light or moderate. Daily mean direction was mainly S'ly from the 1st to the 19th, except NW'ly on 16th, and mainly NE'ly from the 20th to 31st, except for SW'ly on 31st.

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

From the 1 <sup>st</sup> to the 10 <sup>th</sup>				From the 11 <sup>th</sup> to the 20 <sup>th</sup>				From the 21 <sup>st</sup> to the 31 <sup>st</sup>			
+3.5°	+1.9°	128%	106%	+3.2°	+1.5°	131%	156%	-0.8°	+0.0°	6%	119%

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

# Wokingham climatological graphs for December 2025



Daily meteorological data.

Emmbrook, WOKINGHAM, Berkshire.

Month: DECEMBER 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 mean	Max gust			High		Rain hrs				
															0 1 0 0	0 0 0 0	1 1 0 0	0 0 1 1	155	1.2	1.7	202	12 0015	211
1	12.1	2.5	1.9	-0.3	8.2	10.3	0.0	0.0	1003.1	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	192	11.9	12.0	188	37	1845	191	17	18	2.0	
2	11.9	6.0	2.0	1.4	8.8	10.2	5.7	0.0	1002.7	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	184	3.5	3.7	212	12	0015	211	7	00	1.5	
3	10.7	-0.1	2.4	-3.0	8.6	10.2	5.5	0.4	1009.1	1 1 0 0	0 0 0 0	0 0 1 1	0 0 0 0	155	1.2	1.7	202	12	1400	191	5	14	2.3	
4	8.2	0.4	0.6	1.4	8.1	10.1	1.2	0.0	995.5	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	186	2.1	5.1	171	18	0800	245	8	14	1.8	
5	10.4	-1.5	6.1	-5.4	7.7	10.0	3.6	8.4	1007.0	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	173	5.3	5.8	172	25	2005	170	12	19	4.4	
6	12.3	-0.6	2.1	5.9	7.7	9.8	2.1	0.0	994.5	1 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	216	8.8	9.1	238	26	1530	225	12	12	3.1	
7	14.3	7.2	2.6	3.8	8.1	9.7	0.0	0.0	1000.0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	212	5.6	7.2	254	31	1815	250	17	18	2.5	
8	14.0	9.8	8.2	6.4	8.7	9.7	0.0	0.0	1007.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	200	6.8	6.9	206	20	0605	188	11	23	8.2	
9	14.2	11.5	0.7	10.3	9.3	9.8	0.0	0.0	1003.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	194	10.3	10.6	202	32	1540	209	15	16	1.5	
10	13.5	9.9	tr	5.8	9.6	9.9	5.2	0.0	1013.3	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	215	6.5	6.8	237	21	1140	245	11	13	0.0	
11	12.0	3.3	0.2	-1.2	9.2	10.0	5.5	0.0	1019.3	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	181	5.4	5.5	189	19	1200	185	10	12	0.3	
12	11.9	8.3	0.3	8.6	9.1	10.0	0.2	0.0	1015.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	195	2.5	4.2	246	19	1405	283	9	15	1.0	
13	10.4	-0.1	tr	-3.3	9.1	10.0	7.3	0.2	1028.7	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	197	2.7	2.9	217	11	1325	212	6	13	0.0	
14	11.5	0.5	0.1	-2.0	8.3	10.0	5.8	0.0	1020.6	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	196	7.7	7.7	195	24	1255	199	12	13	0.0	
15	12.2	6.0	2.1	6.8	8.4	9.9	2.3	0.0	1006.4	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	179	7.4	7.5	185	24	0010	189	12	00	2.8	
16	11.0	10.2	0.8	8.1	8.9	9.8	0.0	0.0	1007.4	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	314	1.2	3.4	343	13	1235	320	6	11	1.7	
17	11.3	0.0	4.4	-3.1	9.0	9.8	0.4	0.0	1017.3	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	192	6.0	6.4	193	27	2135	192	14	21	3.6	
18	12.0	1.2	18.8	8.1	8.7	9.8	0.0	0.0	1007.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	195	8.7	9.2	191	31	1655	195	16	17	8.1	
19	11.0	6.4	0.0	2.4	9.1	9.7	6.6	0.0	1015.2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	213	5.1	5.3	216	19	1210	226	10	12	0.0	
20	10.2	-1.0	0.5	-3.9	8.4	9.8	6.3	5.5	1013.8	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	92	2.8	3.1	115	15	1445	112	8	14	1.8	
21	10.4	-0.4	1.4	-0.9	7.8	9.7	1.0	0.0	1007.8	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	73	5.4	5.4	76	18	2155	82	9	22	4.1	
22	11.6	6.6	0.0	5.2	8.3	9.5	0.8	0.0	1007.0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	77	4.4	4.4	79	17	0145	79	8	00	0.0	
23	7.2	6.7	0.0	5.8	8.6	9.5	0.0	0.0	1016.2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	49	7.9	7.9	51	22	2200	46	11	20	0.0	
24	6.6	4.1	0.0	2.3	8.5	9.5	6.7	0.0	1031.8	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	49	10.6	10.8	65	26	1050	64	14	12	0.0	
25	5.8	1.9	0.0	-2.9	7.7	9.5	7.3	0.0	1029.1	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	47	11.6	11.8	38	28	0335	38	15	03	0.0	
26	5.6	2.2	0.0	-3.4	7.0	9.3	0.0	0.0	1029.1	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	48	6.9	7.0	42	19	0645	43	9	09	0.0	
27	7.5	0.2	tr	-4.6	7.0	9.1	4.4	0.0	1034.7	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	43	8.5	8.6	41	23	1110	42	14	11	0.0	
28	7.0	2.5	0.0	4.8	6.9	9.0	0.0	0.0	1034.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	48	7.6	7.6	40	19	0215	42	9	02	0.0	
29	5.8	4.3	tr	2.0	7.1	8.8	0.0	0.0	1029.9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	41	5.9	6.0	45	16	0830	43	8	05	0.1	
30	7.4	-0.1	0.0	-4.7	7.0	8.7	7.4	4.8	1034.7	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	31	4.0	4.0	40	20	1430	37	8	13	0.0	
31	1.7	-4.3	0.0	-7.0	6.2	8.7	1.1	18.0	1032.1	1 1 0 0	0 0 0 1	0 0 0 1	0 0 0 1	243	3.2	3.6	215	11	2315	235	6	19	0.0	
Total																						50.8		
Mean	10.1	3.3		1.4	8.2	9.7	2.79	1.2	1015.3						156	2	6.5							
Anom	+1.6	+1.0	85%	+1.8	+1.3	+0.4	127%		-0.3															
Daily mean	6.7									Pressure, abs highest =	1035.3	on 27												
Anom	+1.3									Pressure, abs lowest =	992.1	on 6												

Number of days with:

Air frost = 8      Ground frost = 14      Nil sun = 10  
 Snow falling = 0      Snow lying = 0      Thunder = 0  
 Hail=>5mm = 0      Hail<5mm or ice = 1      Fog at 09GMT = 2

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, &lt;.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 =&gt;5mm. Ic = Hail &lt;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 DECEMBER 2025

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	pppww	W1	W2	Nh	Cl	hCr	Cl	NChshs	NChshs	NChshs	NChshs	Date	Remarks
1	57	8	19	12	24	10.5	9.6	94	7.5	1003.1	7	019	61	6	6	7	7	3	2	/	85706	87710	88520	2	1Ci70 1Ci75 Cb tops S-SW Ci edge SE Parhelion
2	82	1	18	04	06	6.9	5.1	88	5.5	1002.7	1	024	02	0	0	1	0	9	6	3	81365			3	Cb tops S Fogbow Hoar/rime slt
3	02	1	35	01	02	0.4	0.4	100	3.9	1009.1	2	012	41	4	0	0	0	9	0	3	81070			4	
4	65	8	12	06	18	7.7	6.6	93	6.2	995.5	7	017	61	6	6	7	5	3	2	/	83709	87625	88550	5	Hoar mod. Parhelia+U/a cont
5	58	7	12	01	02	-0.6	-0.6	100	3.6	1007.0	0	002	10	2	2	1	5	6	7	1	81630	83366	87070	6	1Ac63
6	62	4	21	09	18	10.1	7.3	83	6.5	994.5	2	018	01	1	1	1	5	5	3	1	81628	83073		7	
7	30	8	13	05	09	10.9	10.4	97	7.9	1000.0	8	020	51	6	5	8	7	2	2	/	87703	88705		8	2Sc40 3Ac60 COTRA
8	75	7	20	07	16	12.2	10.3	88	7.8	1007.1	0	012	21	6	2	2	5	3	7	8	81709	83358	86273	9	
9	65	8	18	08	18	11.9	11.0	94	8.2	1003.1	6	011	61	6	6	7	7	3	2	/	87709	88530			
10	62	1	21	06	12	10.9	8.7	86	6.9	1013.3	2	020	03	0	0	1	8	4	0	1	81816			10	1Sc30 1Ci75 Cu fra/hum Parhelion
11	61	2	18	05	10	8.3	7.9	97	6.5	1019.3	8	008	01	0	0	1	6	3	0	1	81709			11	2Ci80 COTRA
12	70	8	14	04	10	10.8	8.9	88	7.0	1015.1	3	011	03	2	2	8	5	3	2	/	86709	88612		12	
13	65	1	24	01	03	0.5	0.4	99	3.8	1028.7	1	018	11	0	0	0	0	9	0	1	81075			13	Hoar mod
14	75	7	20	06	09	6.0	5.6	97	5.6	1020.6	8	005	02	2	2	1	0	9	3	1	81363	87081		14	COTRA
15	75	6	17	07	15	10.2	7.3	82	6.4	1006.4	6	004	02	2	2	6	5	4	0	0	85615	83640		15	
16	56	8	16	03	06	10.8	10.0	95	7.7	1007.4	2	026	60	6	2	7	5	3	2	/	82706	85612	87620	16	8Ns59
17	50	7	12	02	04	1.2	1.2	100	4.1	1017.3	0	003	40	1	1	7	0	9	7	/	83358	87463		17	COTRA Fog to NW
18	60	8	18	07	13	11.3	10.8	97	8.1	1007.1	6	010	50	5	2	8	5	2	2	/	87704	88620		18	
19	70	3	21	07	11	7.2	4.0	80	5.0	1015.2	1	024	01	1	1	0	0	9	0	1	81173	83076		19	
20	45	0	09	02	04	-0.4	-0.4	100	3.7	1013.8	7	010	10	0	0	0	0	9	0	0				20	Hoar mod. Cu con top S
21	20	7	08	04	07	6.6	6.5	99	6.0	1007.8	2	008	11	2	2	2	6	1	3	1	82702	83362	87072	21	COTRA
22	56	8	11	03	06	9.1	8.6	97	7.0	1007.0	2	020	10	2	2	7	5	5	7	/	87629			22	/Ac60
23	59	8	05	07	16	6.9	4.4	84	5.2	1016.2	2	020	05	2	2	8	6	4	2	/	88710			23	
24	75	5	05	09	21	4.1	-0.7	71	3.5	1031.8	1	031	01	2	2	5	5	5	0	1	85622			24	1Ci80 COTRA
25	84	0	04	14	25	2.5	-3.2	66	2.9	1029.1	7	005	02	0	0	0	0	9	0	0				25	Hoar slt
26	67	8	05	07	12	4.0	0.9	80	4.0	1029.1	0	010	02	2	2	8	5	4	2	/	88615			26	
27	82	1	03	10	16	2.5	0.2	85	3.8	1034.7	2	014	02	0	0	0	0	9	0	1	81081			27	COTRA Hoar mod
28	63	8	05	08	14	6.0	2.1	76	4.3	1034.1	3	003	02	2	2	8	5	5	2	/	88620			28	
29	80	8	06	07	16	4.7	0.8	76	4.0	1029.9	2	007	02	2	2	8	5	4	2	/	88618			29	
30	67	7	02	05	09	0.8	0.7	99	3.9	1034.7	2	020	02	2	2	1	5	6	0	1	81645	87081		30	1Ci80 COTRA Hoar slt
31	01	9	27	04	06	-0.8	-0.9	99	3.5	1032.1	8	003	49	4	1	9	/	/	/	/				31	Hoar+rime thk. Vis 120m

Mean vis = 15.7 km

Mean cloud = 5.5 69%

Mean wind speed = 5.8 kn

Mean gust = 12 kn

Mean TT = 6.2 °C

Mean TdTd = 4.6 °C

Mean RH = 90.0 %

Mean r = 5.5 g/kg

Mean PPP = 1015.3 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 DECEMBER 2025

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	hCr	Cl	NCh	shs	NCh	shs	NCh	shs	Date	Remarks
1	50	8	18	14	27	11.9	11.0	94	8.2	998.6	7	025	51	6	5	8	5	3	/	85707	87709	88615	1				
2	70	3	16	04	12	10.3	6.6	78	6.1	1003.0	5	000	15	1	1	1	9	5	3	81920	83068	2	1Cu025 1Sc045 1Ac120 jpNW vv50k ex p Parhelion				
3	62	5	18	03	12	9.0	6.1	82	5.9	1007.4	7	011	15	1	1	.5	9	5	4	82920	82825	3	1Sc401Ci68 1Ci80 jpSW&NW vv50k ex p				
4	81	6	25	08	13	7.4	5.0	85	5.5	997.4	2	018	01	6	2	1	1	4	7	2	81810	83361	86463	4	1Ac58 /Ci72 Cu fra Cu con top SW		
5	80	8	15	09	21	8.7	3.3	69	4.9	1000.6	8	042	03	2	2	1	5	4	7	/	81618	86458	88363	5			
6	70	5	23	09	17	11.1	8.3	83	6.9	997.8	2	019	25	8	1	3	8	4	6	1	82813		6	2Sc35 2Ac59 1Ci72 Cu med jpW			
7	84	8	22	12	28	14.4	13.4	94	9.7	996.8	6	012	21	6	2	8	5	3	/	82709	87611	88620	7				
8	60	8	21	05	13	12.7	11.3	91	8.3	1008.6	3	001	25	8	2	7	8	4	/	82810	85622	85650	8	/Cs72 Cu med jp SW&N			
9	61	8	19	14	25	13.8	11.7	87	8.6	1000.7	7	015	61	6	2	7	5	4	2	/	85618	87625	88540	9			
10	75	2	24	08	17	12.0	6.1	67	5.8	1017.5	2	022	01	1	1	2	4	5	0	0	82825	10	1Sc35 Cu hum Crepuscular rays				
11	80	7	17	07	16	10.6	6.9	78	6.2	1016.3	6	016	03	1	1	7	5	4	/	87615		11	/Ci75 COTRA				
12	70	7	28	09	19	10.4	8.3	87	6.8	1017.5	3	020	50	5	2	7	5	3	/	87608		12	Clearance W vv70k ex E				
13	80	7	21	05	11	9.6	6.1	79	5.8	1026.7	7	015	02	1	1	1	5	5	0	1	81620	83078	87081	13	COTRA		
14	88	6	19	10	19	10.3	6.3	76	5.9	1015.8	6	029	02	2	2	2	8	5	0	1	82822	86081	14	1Sc30 1Ci78 COTRA Cu hum			
15	50	8	16	08	15	11.1	8.0	81	6.7	1004.5	6	010	58	6	2	8	5	3	/	85709	87615	88640	15				
16	65	7	33	05	11	7.7	6.6	93	6.1	1011.8	3	022	21	6	5	7	5	3	2	/	82709	85620	87640	16	/As60 jpE Vis 60k NW Cld edge distant WNW		
17	80	7	19	10	23	9.8	7.1	83	6.2	1012.9	7	027	21	6	2	4	5	4	7	/	82715	83650	87358	17			
18	50	8	18	14	26	11.4	10.3	93	7.9	999.4	6	032	63	6	6	7	5	3	2	/	83709	87612	88520	18			
19	81	1	22	05	13	10.0	5.2	72	5.5	1017.0	1	005	02	0	0	1	4	5	0	0	81825	19	1Sc28 Cu hum				
20	81	2	12	09	15	8.8	4.6	75	5.3	1009.6	7	020	02	0	0	1	8	5	0	4	/	81827	20	1Sc50 2Ci80 COTRA Cu med Ci edge W			
21	62	8	06	06	12	9.6	8.7	94	7.0	1006.2	7	012	02	2	2	7	5	4	2	/	83709	83620	86650	21	8As60		
22	75	7	08	04	07	10.7	8.6	87	7.0	1007.8	5	002	02	2	2	1	4	4	7	1	81812	83368	87075	22	1Sc18 2Ac62 COTRA Cu hum		
23	61	8	03	09	15	7.0	4.0	81	5.0	1019.0	3	009	02	2	2	8	5	4	/	86615	88618		23				
24	84	1	05	10	21	4.3	-1.3	67	3.4	1032.9	5	001	01	0	0	1	5	5	0	0	81628		24				
25	85	0	05	12	24	4.2	-3.8	56	2.8	1027.2	5	008	02	0	0	0	0	9	0	0	/		25				
26	81	6	04	07	12	5.4	1.9	78	4.3	1029.2	2	007	01	2	2	6	5	4	/	86618		26					
27	82	7	04	12	20	6.7	3.1	78	4.6	1033.6	7	013	02	1	1	7	5	4	/	87618		27					
28	68	8	04	07	15	6.5	2.2	74	4.4	1031.1	6	017	02	2	2	8	5	4	/	88619		28					
29	80	8	03	07	13	5.3	0.9	73	4.0	1028.7	5	006	02	2	2	8	5	5	/	88621		29					
30	82	5	03	06	19	5.1	-0.3	68	3.6	1034.3	5	003	01	1	1	1	8	6	0	1	81830	85081	30	1Sc40 COTRA Cu fra			
31	56	3	22	03	07	1.0	0.9	99	4.0	1027.8	6	023	10	1	1	0	0	9	0	1	83080	31	COTRA Vis 12km ex NW				

Mean vis = 26.3 km

Mean cloud = 5.9 73%

Mean wind speed = 8.1 kn

Mean gust = 17 kn

Mean TT = 8.9 °C

Mean TdTd = 5.7 °C

Mean RH = 80.7 %

Mean r = 5.9 g/kg

Mean PPP = 1014.1 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

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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-Dec	02-Dec	03-Dec	04-Dec	05-Dec	06-Dec	07-Dec	08-Dec	09-Dec	10-Dec	11-Dec	12-Dec	13-Dec	14-Dec	15-Dec	16-Dec
Sunshine		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
Hourly		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
analysis		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
2025		3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		8	0.00	0.73	0.47	0.00	0.60	0.41	0.00	0.00	0.39	0.57	0.00	0.54	0.59	0.01	0.00	0.00
		9	0.00	0.88	1.00	0.00	0.71	0.86	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.63	0.00	0.00
		10	0.00	1.00	1.00	0.00	1.00	0.38	0.00	0.00	0.55	1.00	0.00	1.00	0.94	0.98	0.00	0.00
		11	0.00	1.00	1.00	0.00	0.97	0.07	0.00	0.01	0.00	0.77	0.85	0.00	1.00	0.39	0.48	0.00
		12	0.00	0.89	1.00	0.00	0.33	0.22	0.00	0.00	0.76	1.00	0.00	1.00	0.91	0.00	0.00	0.00
		13	0.00	0.63	0.76	0.00	0.00	0.02	0.00	0.00	0.00	0.53	1.00	0.01	1.00	1.00	0.14	0.00
		14	0.00	0.55	0.28	0.49	0.00	0.13	0.00	0.00	0.00	0.58	0.10	0.00	1.00	0.97	0.10	0.00
		15	0.00	0.00	0.00	0.72	0.00	0.01	0.00	0.00	0.00	0.59	0.00	0.16	0.72	0.02	0.00	0.00
		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	0.00	0.00
		17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot			<b>0.00</b>	<b>5.69</b>	<b>5.52</b>	<b>1.20</b>	<b>3.61</b>	<b>2.10</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>5.15</b>	<b>5.51</b>	<b>0.16</b>	<b>7.26</b>	<b>5.82</b>	<b>2.33</b>	<b>0.00</b>

	Hour	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec	31-Dec	Mean	
	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	8	0.36	0.00	0.26	0.49	0.04	0.00	0.00	0.00	0.47	0.00	0.46	0.00	0.00	0.49	0.00	0.22	
	9	0.00	0.00	0.65	1.00	0.53	0.00	0.00	0.92	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.46	
	10	0.00	0.00	1.00	1.00	0.47	0.03	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.46	
	11	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.40	
	12	0.00	0.00	1.00	0.89	0.00	0.00	0.00	1.00	1.00	0.00	0.87	0.00	0.00	1.00	0.00	0.38	
	13	0.00	0.00	1.00	0.79	0.00	0.54	0.00	1.00	1.00	0.00	0.05	0.00	0.00	1.00	0.15	0.34	
	14	0.00	0.00	1.00	0.99	0.00	0.27	0.00	0.99	1.00	0.00	0.00	0.00	0.00	1.00	0.14	0.31	
	15	0.00	0.00	0.74	0.11	0.00	0.00	0.00	0.82	0.81	0.00	0.00	0.00	0.00	0.90	0.80	0.21	
	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	0.00	0.00	
	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Tot		<b>0.36</b>	<b>0.00</b>	<b>6.64</b>	<b>6.26</b>	<b>1.04</b>	<b>0.84</b>	<b>0.00</b>	<b>6.72</b>	<b>7.28</b>	<b>0.00</b>	<b>4.39</b>	<b>0.00</b>	<b>0.00</b>	<b>7.39</b>	<b>1.07</b>	<b>86.38</b>

December 2025	T mn	T x	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	10.37	12.1	1853	7.1	0	91.0	95.9	1140	80.4	12	9.0	7.2	8.2	1445	5.0	0	1001.65	1011.9	0	995.1	2041	2.7
2	8.37	11.9	1209	4.1	2338	85.7	99.2	2358	69.3	1355	6.1	5.9	6.8	4	5.0	2338	1002.43	1006.2	2332	997.5	0	2
3	4.72	10.7	1259	-0.1	812	95.8	100.0	658	76.8	1302	4.1	5.1	7.1	1214	3.8	812	1007.19	1009.4	1024	1003.3	2358	1.7
4	5.99	8.2	1045	0.2	2358	92.2	98.8	2357	81.6	1526	4.8	5.4	6.5	1045	3.8	2358	998.97	1004.5	2358	994.5	1043	1.1
5	4.69	10.3	2318	-1.5	421	90.8	100.0	311	68.8	1511	3.2	4.9	7.3	2225	3.4	422	1001.68	1007.3	820	992.3	2346	4.2
6	10.11	12.3	1204	8.3	2358	83.8	93.7	208	75.8	1139	7.5	6.5	7.3	1403	5.7	2222	996.71	1003.7	2359	992.1	51	1.9
7	11.11	14.3	1507	7.2	240	89.8	98.1	1132	71.7	1924	9.4	7.5	9.6	1417	5.8	239	1001.18	1005.9	2359	996.2	1450	3.4
8	12.26	14.0	1245	10.0	31	88.6	96.3	2240	81.5	1359	10.4	7.8	8.7	2258	6.6	9	1007.88	1010.3	1938	1005.7	541	1.5
9	12.41	14.2	1214	10.7	2314	86.5	94.2	844	75.7	1336	10.2	7.8	8.8	1554	6.4	2250	1004.05	1008.6	2358	1000.3	1540	5.8
10	10.25	13.5	1131	5.8	2359	81.0	92.8	2359	63.9	1242	7.1	6.2	7.1	1040	5.2	2358	1015.62	1022.3	2312	1008.4	0	0
11	9.00	12.0	1247	3.3	637	87.8	98.8	717	73.6	1300	7.0	6.2	6.9	1015	4.6	637	1018.02	1022.1	0	1014.2	2358	0.2
12	9.44	11.9	1341	5.0	1925	90.5	97.6	1957	80.7	1556	8.0	6.6	7.9	1137	5.1	1923	1017.56	1025.5	2356	1013.6	333	0.4
13	5.22	10.4	1304	-0.1	814	92.3	99.8	817	72.9	1306	4.0	5.0	6.0	1128	3.7	814	1026.89	1029.2	1032	1024.8	2357	0.2
14	7.97	11.5	1302	1.4	218	86.2	99.4	313	70.7	1310	5.7	5.7	6.6	2035	4.1	218	1017.97	1024.9	17	1010.7	2359	0.1
15	10.81	12.2	1120	9.9	719	82.6	88.6	1539	74.4	1124	8.0	6.6	7.0	2357	6.3	836	1006.14	1010.9	8	1004.2	1602	0.1
16	8.34	11.6	436	1.1	2349	91.6	99.0	2352	81.4	437	7.0	6.3	7.7	904	4.0	2349	1009.62	1016.4	2359	1003.9	256	2.4
17	6.05	10.8	2224	-0.0	738	91.4	100.0	541	78.5	1929	4.7	5.3	7.1	2359	3.7	738	1014.18	1017.6	831	1008.5	2358	0.5
18	11.03	12.0	1751	10.1	0	93.1	97.2	619	81.8	2359	9.9	7.6	8.1	1735	6.4	2359	1004.22	1008.7	2	997.5	1749	18.1
19	7.55	11.0	1206	2.7	2322	81.8	98.6	2359	66.2	1222	4.6	5.2	6.3	0	4.5	2322	1015.13	1018.5	2050	1006.8	0	0
20	4.27	10.2	1236	-1.0	748	93.8	100.0	419	72.4	1427	3.3	4.9	6.6	1115	3.5	748	1011.76	1017.5	4	1006.6	2358	0.4
21	8.60	10.4	2227	5.2	506	97.5	99.0	518	93.0	1533	8.2	6.8	7.7	2227	5.4	506	1006.21	1008.0	1028	1003.6	2355	1.4
22	9.71	11.6	1237	8.0	2359	93.3	97.4	818	81.5	1425	8.7	7.0	7.5	125	6.3	2359	1007.55	1012.3	2350	1002.9	111	0.2
23	6.94	8.4	320	5.7	1945	85.2	96.8	222	77.8	2211	4.6	5.2	6.6	233	4.4	2219	1018.20	1025.7	2348	1012.0	44	0
24	4.55	6.6	1206	2.4	2019	72.6	81.5	21	59.5	1246	0.0	3.7	4.6	21	3.3	1525	1031.23	1033.9	1733	1025.5	2	0
25	3.29	5.8	1258	1.9	542	69.2	80.5	304	52.2	1310	-1.9	3.2	3.7	2240	2.7	1435	1028.42	1031.4	4	1026.6	1645	0
26	4.28	5.6	1412	2.8	215	80.5	87.4	2357	74.6	11	1.2	4.1	4.5	2235	3.5	11	1029.66	1032.9	2358	1028.0	609	0
27	4.65	7.5	1257	0.2	447	85.7	99.1	458	73.9	1152	2.4	4.4	5.1	2133	3.6	741	1034.18	1035.3	1022	1032.8	53	0.1
28	6.18	7.0	1142	5.1	2117	77.2	88.4	116	71.5	1127	2.5	4.4	5.1	59	4.1	2053	1032.36	1034.6	26	1029.5	2319	0
29	5.07	5.8	1853	4.3	554	78.1	94.3	2359	71.5	1316	1.6	4.2	5.0	2334	3.8	737	1029.52	1031.1	2354	1028.5	1426	0
30	2.35	7.4	1129	-2.7	2353	88.4	99.0	847	56.4	1353	0.4	3.8	5.1	45	2.9	2353	1033.88	1035.3	1042	1031.0	2	0.1
31	-1.28	1.1	1534	-4.3	547	97.8	99.8	1208	93.3	2359	-1.6	3.3	4.0	1448	2.6	547	1029.09	1034.7	8	1020.3	2359	0.1
																					48.6	

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.

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

## 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, 1<sup>st</sup> January to 31<sup>st</sup> 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  $-0.1^{\circ}\text{C}$  or below. A ground frost day is recorded when the grass minimum temperature read at 0900 GMT on that day is  $-0.1^{\circ}\text{C}$  or lower.

Duration of air frost is defined as the number of minutes that the AWS one minute average temperature is below  $0.0^{\circ}\text{C}$ , 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 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.