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 — SEPTEMBER 2025

Temperature (°C)		Anomaly	Rank in the past **144** years			
Mean maximum	19.5	-0.2	52nd highest			
Mean minimum	9.4	-0.6	69th highest			
Daily mean	14.4	-0.5	61st highest			
Highest maximum	26.7	on 19th	Lowest maximum	14.7	on	26th
Highest minimum	15.8	on 18th	Lowest minimum	1.7	on	23rd
Mean grass minimum	6.3	-0.4	Lowest grass minimum	-2.0	on	23rd
Mean earth @30 cm	16.2	-0.4	Earth @100 cm	16.8	0.0	
Frost duration (hrs)	0.0		Rain duration (hrs)	27.7		
Rainfall total (mm)	56.4	105 %	55th highest			
Highest daily fall	10.4	on 2nd	Highest rate mm/hr	115	on	1st
Number of: Dry days (<0.2mm)	17	Wet days (>0.9mm) 9	days ≥5mm	6		
Sunshine total (hrs)	187.0	Daily mean 6.23	121 %	Sunniest day	11.0	on 8th&25th
N° days with: Air frost	0	Ground frost 5	Snow falling 0	Snow lying 0		
Thunder	2	Hail ≥5mm 0	Small hail/ice 0	Fog @09 0	Nil sun 2	
Pressure MSL : Mean @09 GMT, mbar	1015.1	-1.6	Highest 1029.4	on 23rd	Lowest 992.9	on 3rd
Relative humidity : Mean (%)	80.9	Lowest 37	on 25th	Water vapour (g/kg), mean at 09 and 15 GMT	8.6,	8.2
Overall mean wind speed (mph)	6.4	Windiest day 15.3	on 15th	Max gust 43	on 20th	
Wind direction (days)	N 3	NE 3	E 1	SE 3	S 6	SW 13	W 1	NW 0
Least windy day (mph)	1.0	on 28th	Calm; less than 0.5 mph (minutes)	n/a		

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

Notes: **Very Sunny with Temperature Below Average and Rainfall Above Average**

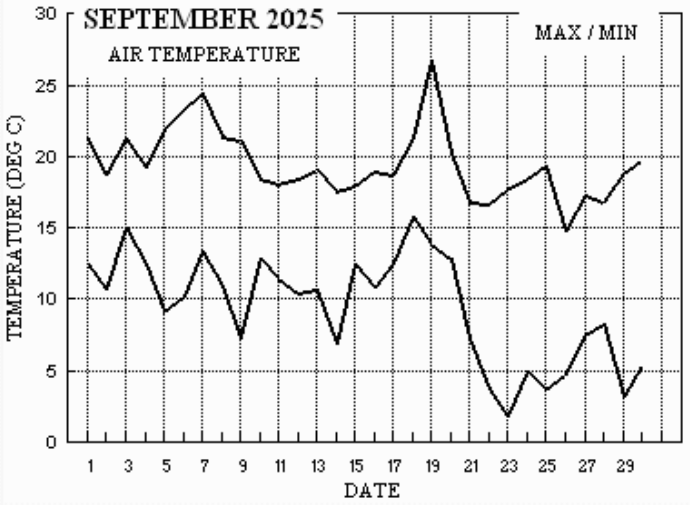
Temperature: The mean this September is 0.5° below average, and the first month since February to be below average. Despite the mean maximum being slightly below the current 30 year average, it is 0.5° above the 144 year median, while the mean minimum is equal to its median. The month's highest max is 2.1° above the median and the lowest max is 0.7°above its median. The highest min is 0.6° above the median while the lowest min is 1.2° below its median. The mean grass min is 0.4° below average and the month's lowest value is 1.5° below average. There were 3 more ground frosts than average, and the total of 5 this month is 2nd highest after 2018 since 1986. Earth temperature at 30 cm depth is a little below average, but at 1 m depth is exactly average. Anomalies or daily max were above +2° on the 6th, 7th, 18th, 19th and 30th, and exceeded -2° on the 2nd and 26th with extreme values of +8.1° on the 19th and -3.3° on the 26th. Anomalies for daily min were above +4° on the 3rd, 18th and 19th, and exceeded -5° on the 22nd, 23rd, 25th and 29th, with extreme values of +6.0° on 18th and -7.5° on 23rd. **Rainfall:** This is the first month since February this year to have above average rainfall, although the total of 56.4 mm is only 5 % above the current 30 year average, and is lowest for September since 2021. It is worth remembering that September 2024 here was the 2nd wettest after 1918 since before 1882. This month's highest daily fall of 10.4 mm is 5.6 mm below the long-term median, and in recent years is lowest since 2020. The month got off to a wet start, with an accumulated surplus of 23 mm by the 3rd, then a dry spell of 5 days reduced this to 14 mm on the 8th, but it was quite wet again up to the 14th with the surplus increasing to 28 mm by that date, though from then on it was mainly dry with a 9 day dry spell ending on the 25th, the surplus decreasing to 3 mm by the 30th. Thunder was heard on the 1st and 12th, and there were violent rain showers on the 1st and 3rd (115 mm/hr and 83 mm/hr resp.), and heavy rain showers on the 10th, 11th, 12th and 14th, but there was no hail. **Sunshine:** This has been a very sunny September with the daily mean of 6.23 hours, 21% above average. However, in this millennium 3 other Septembers have been sunnier, the last in 2020. The sunniest day with 11.0 hours is lowest since 2017, and before that 2001. There were 2 sunless day, which is about average. There was a scattering of sunny days having over 80 % of the maximum, including the 8th, 19th, 22nd, 25th and 30th, but the 14th, 17th, 18th and 26th had less than 10 %. Daily accumulation compared with normal was 3 hours in deficit by the 4th, then 12 hours in surplus by the 9th, increasing to 14 hours by the 18th, and to 34 hours by the 25th, with little further change at the end of the month. **Wind:** The mean speed this September is 0.7 mph above average and is highest since 2019, and before that 2011. The mean speed of 15.3 mph on the month's windiest day is highest for September since before 1988, and is 4.1 mph above average, while the highest gust of 43 mph is 5 mph above average. Daily mean speeds were strong on the 15th, fresh on the 3rd, 16th, 17th and 20th, otherwise mainly moderate until the 25th, then mostly very light, with a mean speed of 1.0 mph on the 28th equal lowest for the month in 38 years. Daily mean directions were mostly between S and W, except between W and N on the 21st and 29th, between N and E from 22nd to 26th, and between E and S on 2nd, 6th, 7th, 9th, 27th and 28th.

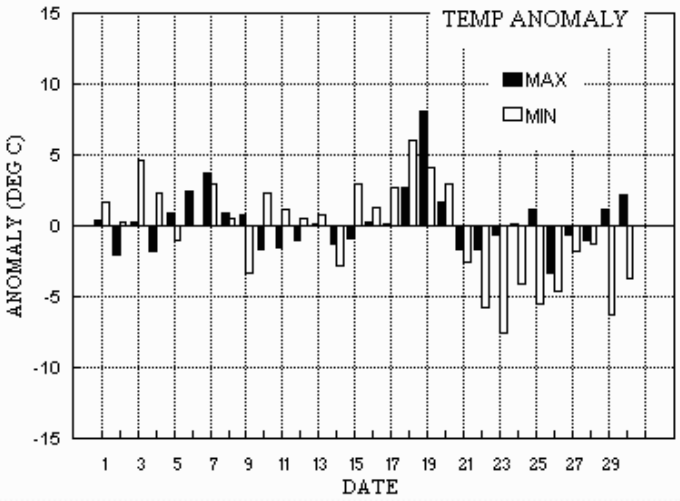
Table 1. Mean anomalies (max, min, rain, sun) for specified periods.

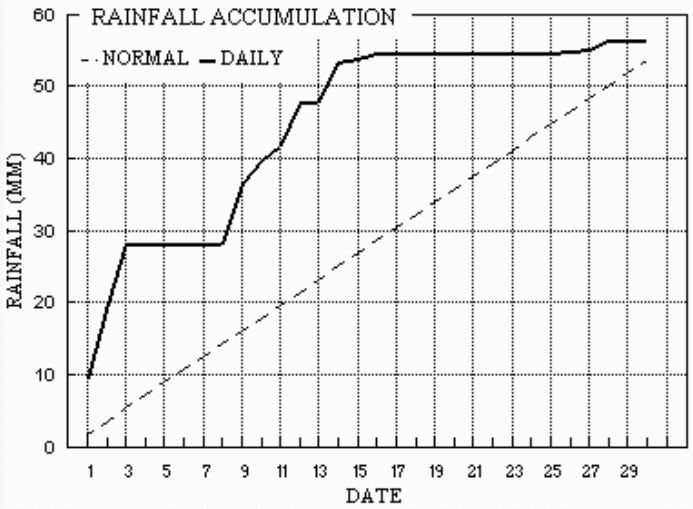
From the 1st to the 10th				From the 11th to the 20th				From the 21st to the 30th			
+0.4°	+1.0°	222%	120%	+0.8°	+1.9°	83%	105%	-0.5°	-4.3°	9 %	137%

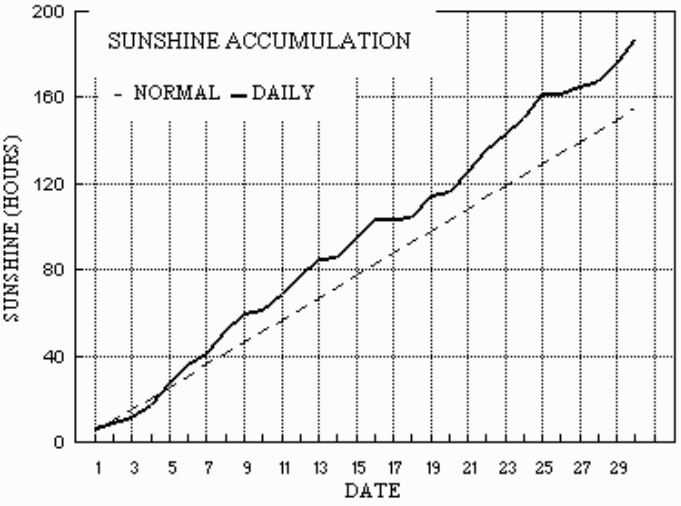
B J Burton FRMetS. Hon. Met. Officer to Wokingham Town Council.

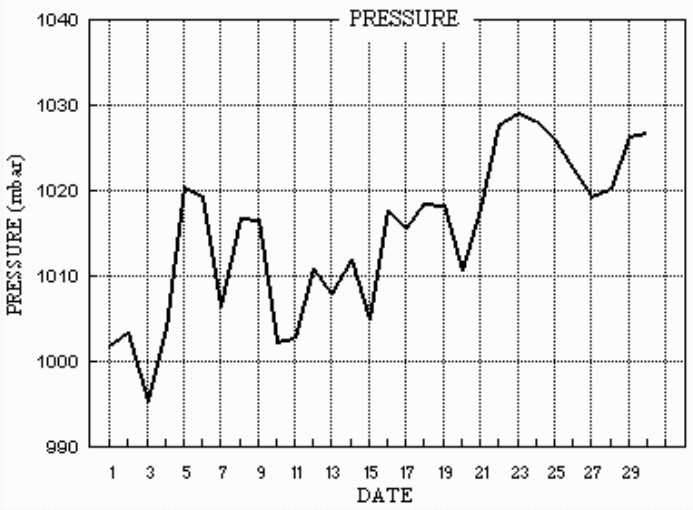
Wokingham climatological graphs for September 2025

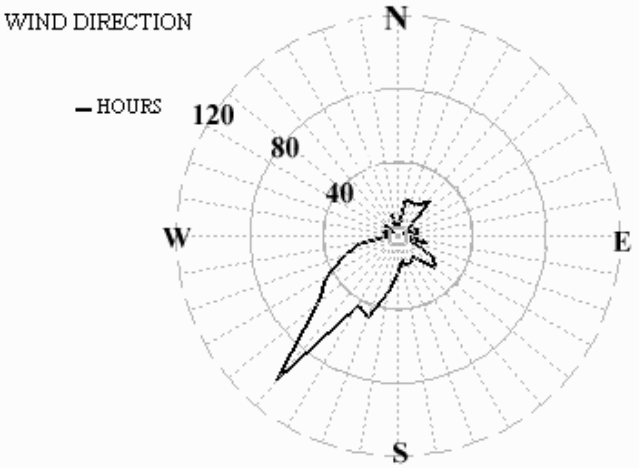


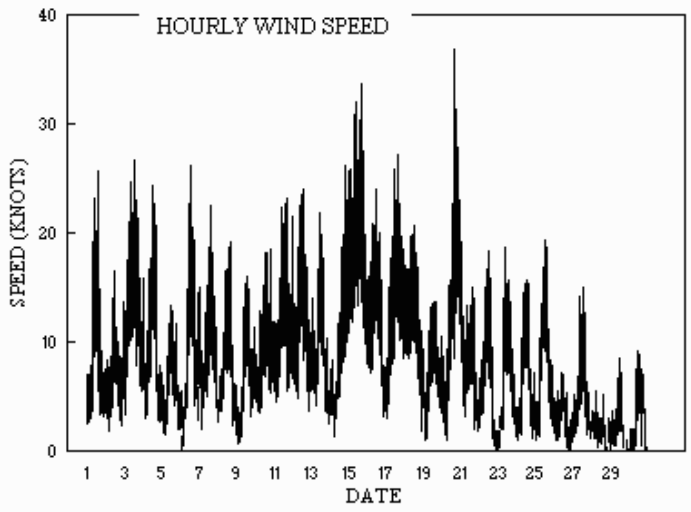


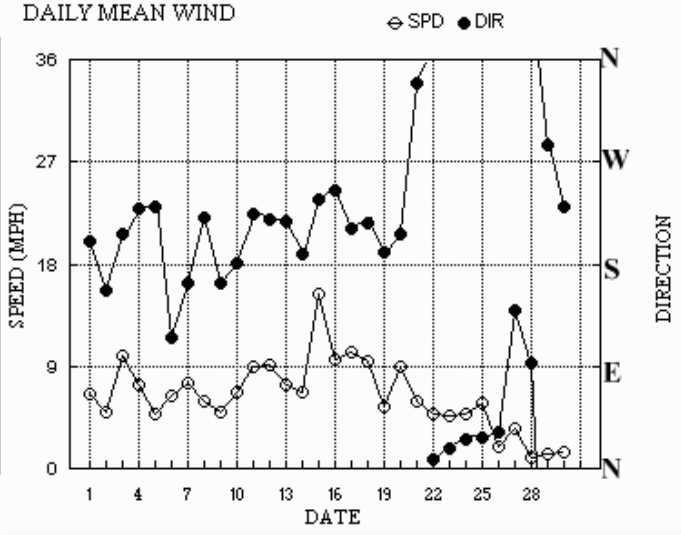












Daily meteorological data. Emmbrook, WOKINGHAM, Berkshire.

Month: SEPTEMBER 2025

Date	Max	Min	Rain	Grass	30cm	100cm	Sun	Frost	pp09	Af	Sf	Th	Ic	Vec mean			Max gust			High hr			Rain
	C	C	mm	Min	C	C	hrs	hrs	mbar	Gf	Sl	Ha	Fg	ddd	ff	sp	ddd	gg	HHhh	ddd	ff	HH	hrs
1	21.2	12.5	9.5	9.9	17.9	18.0	7.0	0.0	1001.9	0 0	0 0	1 0	0 0	200	5.2	5.7	208	26	1340	210	13	13	2.0
2	18.7	10.7	10.4	7.6	17.6	17.9	2.4	0.0	1003.5	0 0	0 0	0 0	0 0	157	3.7	4.4	121	17	1225	120	7	12	4.9
3	21.2	15.0	8.2	14.3	17.7	17.8	2.4	0.0	995.4	0 0	0 0	0 0	0 0	207	8.0	8.6	183	27	1235	189	12	12	3.1
4	19.2	12.5	0.1	10.7	17.8	17.7	6.4	0.0	1004.0	0 0	0 0	0 0	0 0	228	5.3	6.4	246	25	1305	253	12	13	0.3
5	21.9	9.1	0.0	5.6	17.5	17.6	9.5	0.0	1020.4	0 0	0 0	0 0	0 0	230	3.7	4.2	242	13	1140	246	8	11	0.0
6	23.3	10.1	0.0	7.1	17.6	17.6	8.9	0.0	1019.5	0 0	0 0	0 0	0 0	116	5.3	5.7	125	26	1415	126	11	12	0.0
7	24.4	13.3	tr	9.7	17.5	17.5	5.1	0.0	1006.5	0 0	0 0	0 0	0 0	163	4.6	6.5	193	23	1420	195	11	15	0.0
8	21.4	10.9	0.0	6.0	17.6	17.5	11.0	0.0	1016.9	0 0	0 0	0 0	0 0	221	5.1	5.1	211	19	1610	221	9	16	0.0
9	21.1	7.2	8.4	3.6	17.2	17.4	7.6	0.0	1016.6	0 0	0 0	0 0	0 0	164	3.6	4.4	214	16	1410	196	9	14	3.3
10	18.4	12.9	3.2	11.3	17.1	17.3	1.7	0.0	1002.4	0 0	0 0	0 0	0 0	181	4.4	5.9	233	19	2005	194	8	14	1.4
11	18.1	11.4	2.0	9.7	17.0	17.3	7.7	0.0	1002.9	0 0	0 0	0 0	0 0	224	7.8	7.9	223	23	1625	240	13	14	0.9
12	18.4	10.4	6.0	8.1	16.6	17.2	7.6	0.0	1010.9	0 0	0 0	1 0	0 0	219	7.8	8.0	212	24	1400	231	12	11	1.9
13	19.1	10.7	tr	9.1	16.2	17.0	7.8	0.0	1008.0	0 0	0 0	0 0	0 0	217	6.3	6.5	216	22	1210	220	12	12	0.0
14	17.5	6.8	5.7	3.5	15.9	16.9	1.1	0.0	1012.0	0 0	0 0	0 0	0 0	189	4.8	5.8	217	26	1940	212	11	19	3.5
15	17.9	12.4	0.3	11.4	15.8	16.7	8.8	0.0	1004.9	0 0	0 0	0 0	0 0	236	13.2	13.3	246	34	1700	237	17	14	0.4
16	19.0	10.8	0.8	8.0	15.8	16.6	8.8	0.0	1017.7	0 0	0 0	0 0	0 0	244	8.2	8.4	269	24	1110	250	12	12	1.7
17	18.7	12.5	tr	9.5	15.9	16.5	0.0	0.0	1015.6	0 0	0 0	0 0	0 0	211	8.8	9.0	225	27	1640	216	13	12	0.0
18	21.3	15.8	0.0	16.9	16.4	16.4	1.1	0.0	1018.5	0 0	0 0	0 0	0 0	216	8.2	8.3	220	21	1335	215	11	12	0.0
19	26.7	13.9	0.0	10.2	16.8	16.4	10.2	0.0	1018.3	0 0	0 0	0 0	0 0	191	4.5	4.8	185	14	1545	200	8	15	0.0
20	20.2	12.8	0.1	9.7	17.1	16.5	1.3	0.0	1010.7	0 0	0 0	0 0	0 0	207	7.2	7.9	192	37	1710	229	14	20	0.4
21	16.8	7.2	0.0	3.5	16.7	16.6	9.3	0.0	1018.0	0 0	0 0	0 0	0 0	338	4.0	5.3	265	23	0005	275	13	00	0.0
22	16.7	3.7	0.0	-1.6	15.7	16.6	10.3	0.0	1027.8	0 1	0 0	0 0	0 0	9	4.2	4.2	359	18	1240	22	9	10	0.0
23	17.7	1.7	0.0	-2.0	14.8	16.4	7.5	0.0	1029.2	0 1	0 0	0 0	0 0	19	3.7	4.1	29	19	1015	33	9	10	0.0
24	18.4	5.0	0.0	0.2	14.5	16.2	7.8	0.0	1028.2	0 0	0 0	0 0	0 0	27	3.8	4.2	30	16	1330	29	8	10	0.0
25	19.3	3.7	0.0	-0.8	14.2	16.0	11.0	0.0	1026.0	0 1	0 0	0 0	0 0	28	4.9	5.1	28	20	1430	44	10	10	0.0
26	14.7	4.7	0.2	-0.1	14.0	15.8	0.0	0.0	1022.6	0 1	0 0	0 0	0 0	33	1.1	1.7	67	7	1125	61	4	11	0.7
27	17.3	7.5	0.3	2.6	14.0	15.6	2.8	0.0	1019.5	0 0	0 0	0 0	0 0	139	2.7	3.2	181	15	1420	169	7	14	0.1
28	16.8	8.2	1.2	4.6	14.0	15.5	2.5	0.0	1020.2	0 0	0 0	0 0	0 0	94	0.4	0.9	132	6	0620	266	2	23	3.1
29	18.8	3.1	0.0	-0.3	13.8	15.3	8.6	0.0	1026.5	0 1	0 0	0 0	0 0	285	0.9	1.2	261	9	1310	285	4	14	0.0
30	19.7	5.3	tr	2.0	13.8	15.2	10.8	0.0	1026.9	0 0	0 0	0 0	0 0	231	1.2	1.3	259	9	1400	241	4	14	0.0
Total			56.4				187.0	0.0															27.7
Mean	19.5	9.4		6.3	16.2	16.8	6.23	0.0	1015.1					212	3.1	5.6							
Anom	-0.2	-0.6	105%	-0.4	-0.5	-0.0	121%		-1.7														

Daily mean 14.4 Pressure, abs highest = 1029.4 on 23

Anom -0.5 Pressure, abs lowest = 992.9 on 3

Number of days with:

Air frost = 0 Ground frost = 5 Nil sun = 2

Snow falling = 0 Snow lying = 0 Thunder = 2

Hail=>5mm = 0 Hail<5mm or ice = 0 Fog at 09GMT = 0

Abbreviations.

Max/min = highest and lowest air temperature at 1.2m in 24 hour period ending at 09 GMT

Rain = total rainfall and melted snowfall in 24 hour period ending at 09 GMT, millimetres. (Tr = trace, <.05mm).

Grass min = Lowest overnight temperature at grass tip level.

Sun = hours of bright sunshine, measured electronically. Frost = Number of hours with air temp below 0 deg C.

pp09 = Air pressure corrected to mean sea level at 0900 GMT, millibars.

Af = Air frost. Gf = Ground frost. Sf = Snow falling. Sl = Snow lying at 09 GMT.

Th = Thunder. Ha = Hail =>5mm. Ic = Hail <5mm or ice. Fg = Fog at 09 GMT.

Vec mean = 24 hour mean wind vector, ddd = direction in degrees from true north, ff = speed in knots.

Sp = 24 hour mean wind speed in knots.

Max gust = Highest gust in 24 hours, gg = speed in knots, HHhh = Time, hours and minutes, GMT.

High hr = Highest hourly mean wind, HH = hour commencing. Rain Hrs = Duration of rain, 24 hours to 09 GMT. Excludes snow/hail.

30cm and 100 cm are earth temperatures at those depths, read at 09 GMT.

Maximum daily rain rate in mm/hr

All temperatures in degrees Celsius.

Anomaly - Departure from the 1991 to 2020 climatological average

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 0900 GMT for SEPTEMBER 2025

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cm	Ch	NChshs	NChshs	NChshs	Date	Remarks
1	65	4	20	12	19	18.3	13.4	73	9.6	1001.9	0	000	15	8	1	2	9	4	6	3	81915	82818		1	Ac65 1Ci68 jp SE&SW VV30k ex p
2	60	7	13	05	10	16.0	14.0	88	10.0	1003.5	6	007	80	8	1	6	8	4	7	/	82815	85650	87358	2	Cu med
3	82	7	20	11	21	18.7	16.1	85	11.6	995.4	3	012	01	6	2	3	7	4	3	9	83712	85365	85170	3	1Sc20 COTRA
4	58	7	19	07	18	13.8	13.0	95	9.4	1004.0	3	007	60	6	2	7	5	4	7	/	84615	87635		4	/Ac57
5	88	1	26	05	09	16.4	12.8	79	9.1	1020.4	2	016	03	0	0	1	8	4	3	1	81818			5	1Sc56 1Ac65 1Ci75 Cu hum
6	72	7	12	07	12	17.3	13.8	80	9.7	1019.5	8	012	02	2	2	2	0	9	3	2	82369	87072		6	COTRA Parhelion
7	83	6	12	07	12	20.8	14.5	67	10.3	1006.5	6	021	02	2	2	1	0	9	4	1	81365	83172	86080	7	COTRA
8	86	1	23	06	11	16.4	10.9	70	8.1	1016.9	1	014	03	0	0	1	1	5	0	1	81823			8	1Ci75 Cu hum Cu con tops distant W&S
9	82	3	20	04	07	16.9	12.0	73	8.7	1016.6	8	002	03	0	0	1	2	5	6	3	81825	83080		9	1Ac65 1Ci72 COTRA Cu med Cb top distant S
10	58	7	23	04	11	14.8	14.2	96	10.1	1002.4	5	018	21	6	2	7	7	3	/	1	87706			10	/Sc56 /Ci75 COTRA jp NW&W vv30k ex p
11	70	5	23	08	17	15.1	11.3	78	8.4	1002.9	0	008	03	1	1	2	8	5	3	0	81820	83363		11	2Sc56 Cu med
12	82	1	23	10	20	14.9	10.3	74	7.8	1010.9	2	016	03	0	0	1	1	5	6	3	81825			12	1Ac65 1Ci70 Cu hum Cb top W&S
13	84	2	20	05	10	14.7	11.8	83	8.6	1008.0	8	001	03	1	1	1	8	4	6	3	81812			13	1Sc56 2Ac63 1Ci70 Cu hum Cb top S&SW
14	80	8	13	04	06	12.4	10.0	85	7.6	1012.0	8	009	03	2	2	8	0	9	2	/	88465			14	As vir
15	77	5	23	13	33	16.2	9.8	66	7.6	1004.9	2	017	03	1	1	5	1	5	0	0	85825			15	Cu hum
16	84	1	26	10	22	15.2	9.1	67	7.1	1017.7	1	018	03	0	0	1	1	5	0	1	81825			16	1Cc70 1Ci72 1Ci78 COTRA Cu hum
17	50	8	21	08	19	15.8	15.0	95	10.5	1015.6	6	008	50	5	2	8	5	3	/	/	87706	88610		17	
18	86	7	22	10	21	18.6	16.4	87	11.8	1018.5	2	013	01	2	2	7	5	3	/	/	87610			18	
19	72	4	14	05	11	18.7	16.1	85	11.3	1018.3	7	007	01	1	1	2	6	3	0	1	82708			19	1Cc72 2Ci80 COTRA Cc len
20	62	8	18	05	12	16.5	14.9	90	10.5	1010.7	8	003	02	2	2	7	5	4	2	/	85711	86622	88464	20	
21	86	1	36	06	12	12.1	6.8	70	6.1	1018.0	2	023	03	0	0	1	8	5	0	0	81825			21	1Sc50 Cu hum
22	86	0	02	07	15	11.8	6.3	69	5.8	1027.8	1	010	02	0	0	0	0	9	0	0				22	
23	86	5	03	08	15	12.3	5.7	64	5.6	1029.2	0	002	03	1	1	3	0	9	3	0	85363			23	
24	84	7	02	05	13	13.0	9.8	81	7.4	1028.2	0	001	03	1	1	7	8	4	/	/	81815	83640	86650	24	Cu hum
25	88	3	03	06	12	13.5	8.8	73	6.9	1026.0	8	002	02	0	0	1	8	6	0	1	81840	83080		25	1Sc50 COTRA Cu hum
26	84	7	01	02	04	12.0	8.3	78	6.7	1022.6	6	002	02	2	2	7	5	6	/	/	83642	87645		26	Cld break distant N
27	72	6	14	03	07	13.7	10.7	82	7.9	1019.5	4	000	01	2	2	5	8	5	0	1	81820	85650		27	/Ci74 Cu med
28	56	8	32	01	04	13.4	11.6	89	8.4	1020.2	3	011	81	2	2	8	8	4	/	/	83815	86635	88650	28	Cu med Shower mod
29	60	3	02	01	03	9.7	9.6	99	7.3	1026.5	1	007	10	0	0	0	0	9	0	1	83080			29	COTRA
30	80	1	20	01	02	11.1	10.3	95	7.7	1026.9	0	009	01	1	1	1	0	9	3	1	81366			30	1Ci75

Mean vis = 35.1 km
Mean cloud = 4.7 58%
Mean wind speed = 6.2 kn
Mean gust = 13 kn
Mean TT = 15.0 °C
Mean TdTd = 11.6 °C
Mean RH = 80.5 %
Mean r = 8.6 g/kg
Mean PPP = 1015.1 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 SEPTEMBER 2025

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cm	Ch	NChshs	NChshs	NChshs	Date	Remarks
1	58	6	21	05	22	15.2	14.1	93	10.0	1003.0	3	007	80	8	1	4	9	5	6	3	84925	81835	83362	1	1Ci70 Re pR VV60k W
2	62	7	11	06	11	17.6	16.5	93	11.7	1000.2	7	018	25	8	2	7	8	4	7	1	83812	83619	85630	2	/Ac58 /Ci75 Cu med jpSE vv50k ex p
3	60	7	20	11	24	20.5	15.3	72	11.0	994.8	3	012	16	2	2	6	8	5	6	/	84820	83635	85357	3	Cu con jpW
4	86	4	26	10	24	19.1	10.9	59	8.1	1007.3	2	026	15	1	1	4	4	6	9	1	82835			4	2Sc56 1Ac58 1Ci75 Cu med jpW
5	86	6	25	05	12	20.8	10.6	52	7.9	1020.7	7	002	03	1	1	2	4	6	0	5	82845	85078		5	1Sc56 2Cs75 Cu med Parhelion
6	88	6	14	08	27	22.7	9.1	42	7.2	1014.6	7	030	02	2	2	0	0	9	0	1	81176	86076		6	Cc len
7	82	7	20	10	24	22.8	15.9	65	11.2	1006.4	1	007	60	2	2	1	8	5	7	2	81825	85360	87365	7	1Sc50 /Ci72 Cu hum
8	86	3	22	06	16	21.1	10.3	50	7.7	1016.1	6	006	02	1	1	3	2	7	0	3	83850			8	1Ci72 1Ci78 Cu med Cb top distant NW
9	88	6	19	10	17	19.5	8.8	50	7.0	1013.9	6	011	03	2	2	2	2	6	5	1	82840	84368	85072	9	1Ac65 COTRA Cu med
10	62	8	19	06	19	16.6	14.4	87	10.3	999.8	6	012	25	8	2	7	8	4	2	/	83815	86656	88460	10	Cu med jp NW&SW
11	58	6	25	13	24	17.2	9.1	59	7.2	1003.3	2	005	16	8	1	3	9	6	6	3	81930	83835		11	2Ac62 1Ci68 jpW vv60k ex p
12	70	6	22	10	25	15.4	12.2	81	8.8	1011.2	0	007	25	9	8	2	9	6	6	3	81930	84070		12	1Cu35 1Sc50 2Ac62 Cb&jp all quads VV60k ex p
13	70	3	22	09	22	16.0	8.7	62	7.0	1007.8	0	005	15	1	1	1	9	6	6	3	81930	81835	83070	13	1Ac57 1Ac64 Cb&jp all quads VV70k ex p
14	50	8	14	06	13	15.0	14.7	98	10.4	1005.1	8	042	58	6	2	7	5	3	2	/	85706	87612	88556	14	
15	60	4	24	16	32	17.4	10.1	62	7.7	1006.6	2	010	15	8	1	2	3	5	6	3	81925	82835		15	1Sc56 1Ac60 1Ci68 1Ci75 COTRA jpW vv40k ex p
16	88	7	26	12	20	18.1	7.8	51	6.5	1018.9	3	001	03	2	2	3	4	6	0	6	81840	83650	87275	16	/Ci78 COTRA Cu hum U/a cont
17	82	8	21	12	24	18.3	16.1	87	11.3	1015.6	0	001	20	5	2	8	5	4	/	/	87610	88615		17	
18	88	7	23	11	19	20.8	16.4	76	11.5	1019.6	1	003	01	2	2	7	8	4	/	/	87819			18	1Sc40
19	84	1	21	07	13	26.0	13.8	47	9.8	1014.2	6	022	02	0	0	0	0	9	4	1	81370			19	1Ci80 COTRA
20	70	8	19	10	24	19.2	14.7	75	10.4	1005.8	8	022	21	6	2	7	8	5	7	8	82825	86635	87359	20	/Cs70 jpW&SW
21	88	3	03	07	13	16.5	4.2	44	5.1	1019.8	1	003	02	1	1	3	4	6	4	0	82845			21	2Sc56 1Ac68 Cu med Ac len
22	88	1	01	07	17	16.5	2.5	39	4.5	1027.0	8	004	01	1	1	1	4	7	0	0	81850			22	1Sc56 Cu med
23	82	7	02	07	17	17.1	6.9	51	6.1	1027.4	6	011	03	1	1	7	8	6	/	/	82843	83650	85656	23	Cu med jpE VV 60k ex p
24	88	5	04	07	17	17.8	4.7	42	5.2	1025.5	7	013	01	2	2	1	4	6	0	1	81848	84078		24	1Sc50 Cu hum Ci fib/unc
25	89	1	04	07	16	18.8	5.3	41	5.5	1023.0	7	014	01	0	0	1	1	7	0	1	81850			25	1Ci78 Cu hum
26	82	8	10	00	05	14.0	8.8	71	7.0	1021.0	7	007	02	2	2	8	8	5	/	/	81828	86643	88650	26	Cu hum
27	86	4	18	06	16	16.7	7.6	55	6.4	1018.4	7	009	02	1	1	2	8	6	7	0	82835	83366		27	1Sc50 Cu med
28	86	6	18	01	03	15.4	13.2	87	9.4	1021.1	3	004	01	5	6	6	8	3	/	/	81708	86812		28	1Sc50 Cu med
29	86	7	27	04	08	17.7	8.0	53	6.6	1024.8	6	009	03	1	1	1	4	6	4	6	81840	85275		29	1Sc45 1Ac68 3Ci80 COTRA Cu hum Parhelia
30	86	1	27	02	10	19.3	7.7	47	6.4	1025.7	8	006	02	0	0	1	4	6	3	1	81845			30	1Sc48 1Ac64 1Ci75 Cu hum

Mean vis = 44.0 km
Mean cloud = 5.4 67%
Mean wind speed = 7.7 kn
Mean gust = 18 kn
Mean TT = 18.3 °C
Mean TdTd = 10.6 °C
Mean RH = 63.0 %
Mean r = 8.2 g/kg
Mean PPP = 1014.0 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
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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)
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Cm = Type of medium cloud (Code FM12-0515)
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8 groups. 8 = indicator for cloud detail
N = Amount of cloud, oktas
C = Type of cloud (FM12-0500)
hshs= Height of cloud (FM12-1677)
Remarks : COTRA = persistent condensation trails present

Wokingham Sunshine Hourly analysis

2025

Hour	01-Sep	02-Sep	03-Sep	04-Sep	05-Sep	06-Sep	07-Sep	08-Sep	09-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep	16-Sep
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	0.46	0.33	0.00	0.00	0.39	0.00	0.19	0.23	0.19	0.02	0.00	0.10	0.00	0.00	0.00	0.00
6	1.00	0.78	0.00	0.32	1.00	0.19	1.00	1.00	1.00	0.01	0.70	0.91	0.55	0.76	0.92	0.74
7	0.61	0.59	0.00	0.39	1.00	0.24	1.00	1.00	1.00	0.00	1.00	1.00	0.02	0.34	0.96	1.00
8	0.70	0.01	0.43	0.03	1.00	0.34	0.92	1.00	1.00	0.01	0.33	1.00	0.82	0.00	0.66	1.00
9	0.72	0.00	0.12	0.26	1.00	0.43	0.64	1.00	0.98	0.30	0.66	0.81	0.74	0.00	0.72	0.97
10	0.00	0.00	0.00	0.47	1.00	0.96	0.13	0.74	0.94	0.70	0.75	0.53	0.50	0.00	0.41	0.67
11	0.77	0.00	0.00	0.62	0.95	0.56	0.16	0.81	0.70	0.38	0.56	0.81	0.42	0.00	0.54	0.50
12	0.83	0.05	0.12	0.65	1.00	0.94	0.00	0.84	0.53	0.28	0.15	0.37	0.76	0.00	0.36	0.97
13	0.94	0.04	0.39	0.46	0.58	0.95	0.26	0.96	0.43	0.00	0.68	0.00	0.83	0.00	0.57	0.62
14	0.05	0.13	0.26	0.39	0.30	1.00	0.00	0.86	0.74	0.00	0.89	0.58	0.35	0.00	0.93	0.80
15	0.55	0.19	0.00	0.48	0.74	1.00	0.00	0.58	0.05	0.00	0.48	0.39	1.00	0.00	0.74	0.20
16	0.23	0.15	0.26	0.98	0.52	1.00	0.04	0.93	0.00	0.00	0.39	0.50	0.88	0.00	1.00	0.77
17	0.01	0.07	0.41	1.00	0.00	1.00	0.41	0.91	0.00	0.00	1.00	0.55	0.83	0.00	0.93	0.57
18	0.10	0.00	0.42	0.39	0.00	0.33	0.36	0.16	0.00	0.00	0.08	0.02	0.13	0.00	0.02	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	**6.98**	**2.35**	**2.42**	**6.43**	**9.47**	**8.93**	**5.10**	**11.01**	**7.57**	**1.70**	**7.67**	**7.57**	**7.82**	**1.10**	**8.77**	**8.84**

Hour	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	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	0.06
6	0.00	0.00	0.07	0.00	0.64	0.67	0.62	0.46	0.36	0.00	0.00	0.00	0.60	0.57	0.50
7	0.00	0.00	0.56	0.00	1.00	1.00	1.00	0.95	1.00	0.00	0.00	0.00	1.00	1.00	0.59
8	0.00	0.01	0.79	0.00	1.00	1.00	1.00	0.37	1.00	0.00	0.12	0.00	1.00	1.00	0.55
9	0.00	0.00	1.00	0.00	0.99	1.00	1.00	0.21	0.91	0.00	0.64	0.00	1.00	1.00	0.57
10	0.00	0.00	1.00	0.02	0.66	0.84	1.00	0.86	0.96	0.00	0.33	0.00	1.00	1.00	0.52
11	0.00	0.00	1.00	0.07	0.37	0.86	0.89	0.47	0.99	0.00	0.00	0.00	1.00	1.00	0.48
12	0.00	0.00	1.00	0.03	0.52	0.83	0.85	0.54	1.00	0.00	0.00	0.00	0.97	1.00	0.49
13	0.00	0.00	1.00	0.05	0.80	0.24	0.60	0.45	1.00	0.00	0.41	0.00	1.00	1.00	0.48
14	0.00	0.19	1.00	0.19	0.75	0.96	0.40	0.70	1.00	0.00	0.82	0.31	0.96	1.00	0.52
15	0.00	0.19	1.00	0.03	0.61	1.00	0.11	1.00	1.00	0.00	0.41	0.63	0.11	1.00	0.45
16	0.00	0.34	1.00	0.28	1.00	1.00	0.00	1.00	1.00	0.00	0.12	0.87	0.00	1.00	0.51
17	0.00	0.31	0.75	0.62	0.98	0.93	0.01	0.83	0.80	0.00	0.00	0.68	0.00	0.27	0.46
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	0.07
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	**0.00**	**1.05**	**10.17**	**1.30**	**9.33**	**10.34**	**7.49**	**7.84**	**11.01**	**0.00**	**2.84**	**2.49**	**8.64**	**10.84**	**187.04**

SEPTEMBER 2025	T mn	Tx	Time	Tn	Time	RHmn	RH x	Time	RH n	Time	Tdmn	r mn	r x	Time	r n	Time	p mn	p x	Time	p n	Time	R tot
1	15.16	22.0	1354	11.7	2341	87.3	98.8	2357	54.9	1356	12.9	9.3	11.3	1524	7.8	1409	1003.04	1005.5	2226	1001.5	453	7.9
2	15.25	19.1	1526	10.7	531	92.1	99.4	644	80.1	1055	13.9	10.0	12.1	1442	7.9	531	1002.08	1005.3	7	999.5	1725	1.8
3	17.37	21.8	1322	14.8	2246	89.9	99.3	412	69.0	1327	15.6	11.2	12.7	551	9.7	2045	997.11	1003.8	2356	992.9	1248	10.9
4	15.38	19.9	1434	11.8	2333	80.5	98.7	632	54.0	1333	11.7	8.6	10.2	940	7.3	1251	1006.90	1014.8	2359	1002.7	615	3.4
5	15.81	22.8	1253	9.1	523	76.6	99.2	622	44.0	1214	11.1	8.1	9.2	917	7.0	1214	1019.86	1022.3	2056	1014.7	20	0.1
6	17.12	23.9	1253	10.1	455	73.1	99.6	725	38.1	1436	11.5	8.4	10.5	823	6.8	1440	1017.10	1022.2	24	1010.8	2354	0
7	18.81	25.2	1138	13.3	513	74.7	91.7	531	56.7	1138	14.1	10.0	12.4	1645	8.2	11	1008.66	1013.1	2359	1005.2	1223	0
8	15.79	22.1	1503	10.1	2355	74.2	99.1	638	42.8	1622	10.6	7.9	9.4	13	6.4	1622	1016.14	1018.1	2128	1012.9	1	0
9	14.99	21.8	1129	7.2	538	74.5	99.5	739	44.9	1433	9.9	7.5	9.1	750	6.2	1434	1014.59	1017.6	55	1008.9	2359	0
10	15.06	19.1	1111	12.3	2340	90.5	98.8	819	69.6	1106	13.5	9.7	11.1	933	8.0	38	1002.06	1009.1	0	998.0	1823	8.3
11	13.89	18.8	1152	11.4	345	78.6	97.1	2	54.2	1206	10.0	7.7	8.8	5	6.5	2029	1003.55	1006.9	2349	1001.3	0	1.3
12	13.06	19.2	1156	10.4	534	82.7	93.5	2148	53.3	1222	10.0	7.6	8.9	1323	6.8	1229	1010.16	1012.1	1404	1006.5	19	5.4
13	13.47	19.8	1335	8.9	2356	78.9	96.3	613	46.0	1341	9.6	7.4	8.8	900	6.5	1356	1008.89	1011.9	2355	1006.9	1327	0.3
14	13.15	17.5	1758	7.0	536	91.4	99.0	609	73.2	1150	11.7	8.7	12.3	1807	6.1	536	1007.75	1013.2	626	1000.6	2003	4.7
15	15.30	18.5	1206	12.8	2324	72.1	84.3	2356	57.0	1207	10.2	7.7	9.2	1226	7.0	1647	1006.23	1013.2	2357	1001.4	16	0.4
16	14.60	19.7	1401	10.8	535	71.1	90.7	556	47.8	1405	9.1	7.1	7.9	1023	6.3	1500	1017.74	1020.3	2309	1012.9	29	0
17	16.20	18.9	1222	12.5	33	91.7	98.2	455	82.2	1227	14.8	10.4	11.6	2308	7.9	0	1016.54	1020.0	6	1015.1	1219	0.6
18	18.48	21.9	1427	15.4	2314	87.0	96.7	2326	69.1	1603	16.2	11.3	12.4	1246	10.2	1615	1018.97	1021.6	2336	1016.5	330	0
19	19.15	27.3	1421	13.8	2341	79.3	99.4	633	44.3	1451	14.9	10.4	11.8	1022	9.3	1346	1016.93	1021.5	33	1013.8	1550	0.1
20	15.76	20.7	1313	12.2	2323	84.1	99.3	635	66.4	1316	12.9	9.3	11.3	1554	6.3	2353	1009.12	1014.6	0	1003.7	1656	0.2
21	11.22	17.3	1400	5.2	2351	69.8	96.5	2359	42.7	1440	5.6	5.6	6.8	1227	4.7	1635	1018.79	1025.1	2358	1010.0	2	0
22	9.30	17.1	1457	3.8	230	75.1	99.4	613	38.5	1459	4.4	5.1	6.5	951	4.2	1501	1027.30	1029.0	2241	1025.1	0	0
23	9.86	18.3	1338	1.7	546	78.7	99.9	642	49.3	1356	5.8	5.7	7.1	1336	4.2	546	1028.58	1029.4	809	1027.1	1519	0
24	11.06	19.2	1347	5.0	621	76.0	99.9	637	39.7	1502	6.3	5.9	7.8	1134	4.5	1745	1027.19	1028.7	7	1025.0	1554	0
25	11.00	19.8	1436	3.7	600	71.3	99.6	659	36.8	1507	5.1	5.4	7.1	803	4.3	1637	1025.01	1026.9	4	1022.7	1539	0
26	10.13	14.7	1245	4.7	303	86.6	99.4	2359	64.6	1253	7.8	6.5	8.0	1840	5.1	51	1022.06	1024.3	17	1020.6	2327	0.2
27	12.45	17.8	1425	8.4	2354	82.4	99.4	356	51.9	1456	9.2	7.2	8.3	716	6.2	1456	1019.42	1020.8	0	1018.2	1459	0
28	11.49	17.2	1526	5.9	2355	94.6	99.4	2355	74.9	1536	10.6	7.9	10.0	1355	5.6	2355	1021.07	1024.9	2359	1018.6	424	1.4
29	10.55	19.5	1327	3.1	554	83.8	100.0	558	45.7	1343	7.4	6.4	8.5	1022	4.6	554	1025.57	1026.6	840	1024.7	1458	0
30	12.02	20.2	1353	5.3	454	79.4	99.5	530	44.8	1505	7.9	6.5	7.9	946	5.4	454	1026.36	1027.4	2146	1025.4	319	0
Total																						47.0
Mean	14.10	20.02		9.10		80.9	97.72		54.55		10.49	8.01	9.64		6.57		1014.83	1018.34		1011.44		
Max	19.15	27.25		15.43		94.6	100.00		82.15		16.22	11.32	12.75		10.24		1028.58	1029.41		1027.07		
Min	9.30	14.74		1.75		69.8	84.27		36.82		4.42	5.11	6.51		4.19		997.11	1003.75		992.94		

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

Tmn = 00 to 24 GMT mean air temperature at 1.2 m, deg C
RHmn = 00-24 GMT mean relative humidity at 1.2 m, percent
TDmn = 00-24 GMT mean dew point at 1.2 m, deg C
rmn = 00-24 GMT mean humidity mixing ratio, g/kg
pmn = 00-24 GMT mean air pressure reduced to mean sea level, mbar
Time = hours and minutes in GMT of extreme values

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

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

Appendix 1.

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

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

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

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

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

a): The departure of a mean from the current climatological average.

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

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

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

Temperature: The terms cold/mild are used in the winter half year, and cool/warm in the summer half.
The term 'normal' is used when the individual mean (monthly, seasonal or annual) value is within 20 % of the median of all ranked values for that month/season/year.
Mild/warm: The value lies between 10 % and 30 % below the highest value in the ranked series.
Very mild/very warm: The value lies within 10 % of the highest value in the ranked series.
Cold/cool: The value lies between 10 % and 30 % above the lowest value in the ranked series.
Very cold/very cool: The value lies within 10 % of the lowest value in the ranked series.

Sunshine: The terms for sunshine are very sunny, sunny, normal, dull and very dull.
The definition of these terms follow the same rules as for temperature.

Rainfall: The terms for rainfall are very dry, dry, normal, wet and very wet.
The definition of the term 'normal' follows the same rule as for temperature and sunshine.
Wet: The value lies between 10 % and 30% of the highest value in the ranked series.
Very wet: The value lies within 10 % of the highest value in the ranked series.
Dry: The value lies between 10 % and 30 % above the lowest value in the ranked series.
Very dry: The value lies within 10 % of the lowest value in the ranked series.

Long-term: Mention may be made in the reports to the 'long-term'. The long-term record comprises a temperature/rainfall/sunshine data series compiled from records of various weather stations in the Wokingham area in the years prior to the establishment of the weather station at Emmbrook in 1976 together with data from this station.
In the case of monthly max, min and mean temperature and of rainfall total the series starts in 1882. For temperature extremes, the highest max and lowest min go back to 1904, and lowest max and highest min to 1913.

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

Month: Calendar month.
Season: Spring, March to May.
Summer, June to August
Autumn, September to November
Winter, December to February.
When discussing 'winter', if a single year is given this refers to the year in which the January/February fall.
Annual or Year: The calendar year, 1st January to 31st December.

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

Frost: An air frost day is recorded when the minimum temperature read at 0900 GMT on that day is –0.1°C or below. A ground frost day is recorded when the grass minimum temperature read at 0900 GMT on that day is –0.1 °C or lower.
Duration of air frost is defined as the number of minutes that the AWS one minute average temperature is below 0.0°C, and the day runs from midnight to midnight.

Snow: A day with snow falling is triggered if snow falls at any time in the 24 hours from midnight on that day. A day with snow lying is entered if there is at least 50% snow cover at the 0900 GMT observation.
Snow depth is the depth of undrifted snow. Snow that collects in the raingauge funnel is melted and the amount recorded as rainfall.

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

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

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

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

Dry spell: A dry spell is defined as a period of 5 or more consecutive dry days.
Dry day: A dry day is one with less than 0.2 mm of rainfall.
Rain day: A rain day is one with 0.2 mm or more of rainfall.
Wet day: A wet day is one having 1.0 mm or more of rainfall.

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

Appendix 2.

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

VV : Visibility.
Code figures 00 to 50 are in km and tenths e.g. 01 = 0.1 km = 100 m, 33 = 3.3 km, 50 = 5.0 km
Code figures 60 to 80. Subtract 50 to obtain visibility in km. e.g. 56 = 6 km, 65 = 15 km, 77 = 27 km.
Code figures 81 to 89. Subtract 50 and add 5 for every one above 80. e.g. 83 = 45 km, 86 = 60 km.
Code figure 89 = visibility above 70 km.

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

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

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

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

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

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

RH : Relative humidity at 1.2m, %.

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

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

a : Characteristic of pressure tendency during the past 3 hours.
Code figures 0 to 3, pressure higher than 3 hours ago, 5 to 8, pressure lower than 3 hours ago

Code figure 0 = Increasing then decreasing, pressure the same as or higher than 3 hours ago
1 = Increasing then steady or increasing more slowly
2 = Increasing steadily or unsteadily
3 = Decreasing or steady then increasing, or increasing then increasing more rapidly
4 = Steady, pressure the same as 3 hours ago
5 = Decreasing then increasing, pressure lower than 3 hours ago
6 = Decreasing then steady or decreasing more slowly
7 = Decreasing steadily or unsteadily
8 = Steady or increasing then decreasing, or decreasing then decreasing more rapidly

ppp : 3 hour pressure tendency in tenths of a millibar

ww : Present weather code figures, 00 to 99.

Present weather decode:
00 = Cloud development not observed or not observable
01 = Clouds generally dissolving or becoming less developed
02 = State of sky on the whole unchanged
03 = Clouds generally increasing or becoming more developed
04 = Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes.
05 = Haze, visibility reduced by extremely small dry particles (RH less than appx. 95 %)
06 = Widespread dust in suspension, not raised by the wind near the station at the time of the observation
07 = Dust or sand raised by the wind at or near the station at the time of the observation, but no well-developed dust whirls or sand whirls, and no duststorm or sandstorm seen: In marine environments, blowing spray at the station.
08 = Well-developed dust or sand whirls seen at or near the station during the preceding hour or at the time of the observation, but no duststorm or sandstorm.
09 = Duststorm or sandstorm within sight at the time of the observation, or at the station during the preceding hour

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

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

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

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

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

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

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

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

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

Hail includes large hail, small hail and snow pellets.

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

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

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

Cl : Type of low cloud

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

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

Cm : Type of medium cloud.

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

Ch : Type of high cloud

0 = No high cloud
1 = Cirrus in the form of filaments, strands or hooks, not progressively invading the sky.
2 = Dense cirrus, in patches or entangled sheaves, which usually do not increase and sometimes seem to be the remains of the upper part of a Cumulonimbus; or Cirrus with sproutings in the form of small turrets or battlements, or Cirrus having the appearance of cumuliform tufts
3 = Dense Cirrus, often in the form of an anvil, being the remains of the upper part of Cumulonimbus, or where the rest of the Cumulonimbus is below the horizon
4 = Cirrus in the form of hooks or filaments, or both, progressively invading the sky; they generally become denser as a whole
5 = Cirrus (often in bands converging towards one or two opposite points on the horizon) and Cirrostratus, or Cirrostratus alone; in either case they are progressively invading the sky, and generally growing denser as a whole, but the continuous veil does not reach 45 degrees above the horizon.
6 = Cirrus (often in bands converging towards one or two opposite points on the horizon) and Cirrostratus, or Cirrostratus alone; in either case they are progressively invading the sky, and generally growing denser as a whole; the continuous veil extends more than 45 degrees above the horizon, without the sky being totally covered
7 = Veil of Cirrostratus covering the celestial dome.
8 = Cirrostratus not progressively invading the sky and not completely covering the celestial dome
9 = Cirrocumulus alone, or accompanied by Cirrus or Cirrostratus, or both, but Cirrocumulus is predominant.
/ = Types of high cloud invisible owing to darkness, fog, blowing dust of sand or other similar phenomena, or more often because of the presence of a continuous layer of lower clouds.

8 Groups
N = Amount of cloud reported by C, okta.

C = Type of cloud
0 = Cirrus (Ci)
1 = Cirrocumulus (Cc)
2 = Cirrostratus (Cs)
3 = Altocumulus (Ac)
4 = Altostratus (As)
5 = Nimbostratus (Ns)
6 = Stratocumulus (Sc)
7 = Stratus (St)
8 = Cumulus (Cu)
9 = Cumulonimbus (Cb)
/ = Cloud type not visible owing to darkness, fog, duststorm, or other analogous phenomena.

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

00 to 50 = Height in hundreds of feet
51 to 55 Not used
56 to 80 = Subtract 50 to obtain cloud height in thousands of feet
81 to 88 = Height of cloud between 35000 and 70000 ft in 5000 ft steps.