

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

MARCH 2022

Temperature (°C)		Anomaly	Rank in the past 141 years						
Mean maximum	13.4	+1.8	11 th highest						
Mean minimum	3.2	0.0	34 th highest						
Daily mean	8.3	+0.9	14 th highest						
Highest maximum	20.3	on 23 rd	Lowest maximum	7.2	on 5 th				
Highest minimum	8.3	on 11 th	Lowest minimum	-2.0	on 21 st				
Mean grass minimum	0.3	+0.5	Lowest grass minimum	-6.7	on 8 th				
Mean earth @30 cm	8.2	+0.9	Earth @100 cm	8.1	+0.4				
Frost duration (hrs)	16.1		Rain duration (hrs)	48.5					
Rainfall total (mm)	40.1	97 %	70 th highest						
Highest daily fall	14.0	on 1 st	Highest rate mm/hr	15	on 16 th				
Number of: Dry days (<0.2mm)	21	Wet days (>0.9mm)	5	days ≥5mm	3				
Sunshine total (hrs)	175.9	Daily mean	5.67	140 %	Sunniest day	11.8	on 26 th		
N° days with: Air frost	3	Ground frost	18	Snow falling	1	Snow lying	0		
Thunder	0	Hail ≥5mm	0	Small hail/ice	1	Fog @09	1	Nil sun	7
Pressure MSL: Mean @09 GMT, mbar	1022.9	+7.3	Highest	1043.4	on 18 th	Lowest	1000.3	on 11 th	
Relative humidity: Mean (%)	78.1	Lowest	24	on 24 th	Water vapour (g/kg), mean at 09 and 15 GMT	5.4,	5.1		
Overall mean wind speed (mph)	6.2	Windiest day	12.3	on 13 th	Max gust	36	on 13 th		
Wind direction (days)	N 4	NE 10	E 3	SE 7	S 4	SW 1	W 0	NW 2	
Least windy day (mph)	2.2	on 24 th	Calm; less than 0.5 mph (minutes)	1090					

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

Notes:

Sunny with Average Rainfall. Mild by day but Average by Night.

Temperature: The daily mean of 8.3° has been exceeded in only 3 Marches in this millennium. While the mean maximum is 1.8° above average the mean minimum was exactly average, indicating an enhanced daily range of 10.2°, highest since 2014. There have been 6 Marches since 2003 when this range has been exceeded, but none between 1973 and 2002. The highest max is 3.6° above the median while the lowest max is 2.5° above its median. The highest min is 0.5° below the median while the lowest min is 2.0° above its median. The lowest grass min is 2.3° above average. Earth temperatures are above average, but only by 0.4° at 1 m depth. Anomalies for daily max were above +5° on the 15th, 18th, 19th and 21st to 26th, also the 28th, and exceeded -3° on the 30th and 31st, with extreme values of +8.8° on 23rd and -4.0° on the 31st. Anomalies for daily min were above +4° on the 1st, 10th and 11th, and exceeded -4° on the 8th and 21st, with extreme values of +5.1° on the 11th and -5.2° on the 21st. **Rainfall:** The total for this March indicates a normal month, just 3 % below average, but the number of dry days is 4 above average. The highest daily fall has not been exceeded in March since 2016. The 2 days with 10 mm or more is most for March since 2016, and 26 out of the past 47 have not had any such days. The duration of measurable rain is 109 % of average. There were 2 dry spells, one of 6 days ended on the 10th and of 11 days on the 27th, in fact only 1.1 mm of rain fell after the 16th. There was a notable fall of Saharan dust in the rainfall on the 16th, leaving an orange coloured deposit on objects as they dried. There were no rainfall rates exceeding the violent category and there was no thunder, but a few snow flakes fell together with rain on the 31st, and there were several showers of snow pellets also on that day. Rainfall accumulation compared with normal started the month 13mm in surplus after the month's wettest day, but by the 10th this had decreased to 6 mm, but then increased to 17 mm by the 16th, thereafter decreasing steadily to be in deficit by 1 mm on the 31st. **Sunshine:** The total this March is 5th highest in this millennium, but was bettered as recently as 2020. However, at 140 % of average, we certainly can't complain. The month got off to a dull start with only 0.5 hours in the first 5 days. Although there was some improvement after that, it was the outstanding 10 day period commencing the 17th that led to the month's surplus sunshine. These 10 days produced a total of 109.5 hours, which is 87 % of the average for the whole of March. Each day delivered at least 80 % of the maximum, and 5 had over 90 %. For the month as a whole, there were 2 more sunless days than average. Overall there were 10 days with <3 hours, 15 with =>6 hours and 10 with =>9 hours. Daily accumulation compared with normal showed a deficit of 20 hours by the 5th which decreased to 7 hours by the 16th, becoming a surplus of 60 hours by the 26th, decreasing to 50 hours by the 31st. **Wind:** The mean speed this March is 1.4 mph below average and is lowest for this month since 2012. The highest gust is 10 mph below average and is lowest for March since 2000. It was a predominantly NE'ly month, with the more usual SW'ly direction on only 3 days. Daily mean winds were light until the 4th then moderate or fresh until the 13th, then light or moderate, increasing fresh on the 31st. Directions were between E and S on the 3rd, 8th to 12th, and 21st to 23rd, between S and W on 13th, 14th and 17th, between W and N on 4th and 16th, otherwise between N and E. **Pressure:** The month's highest value, 1043.4 mbar on 18th is highest for March since 1998.

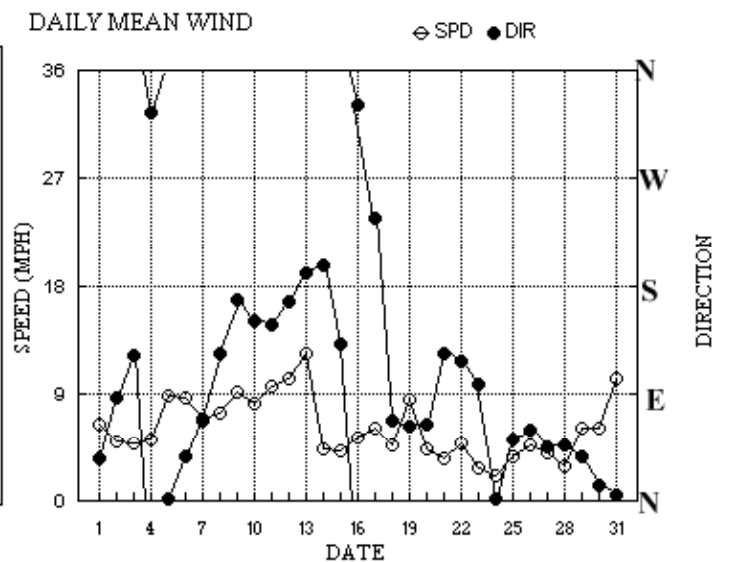
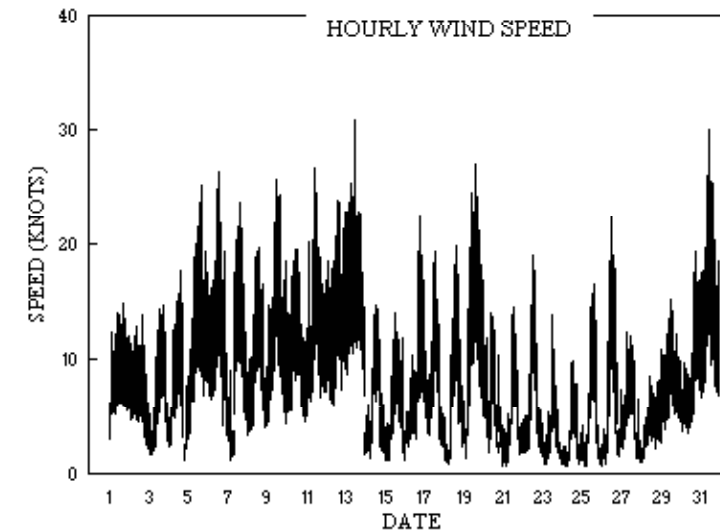
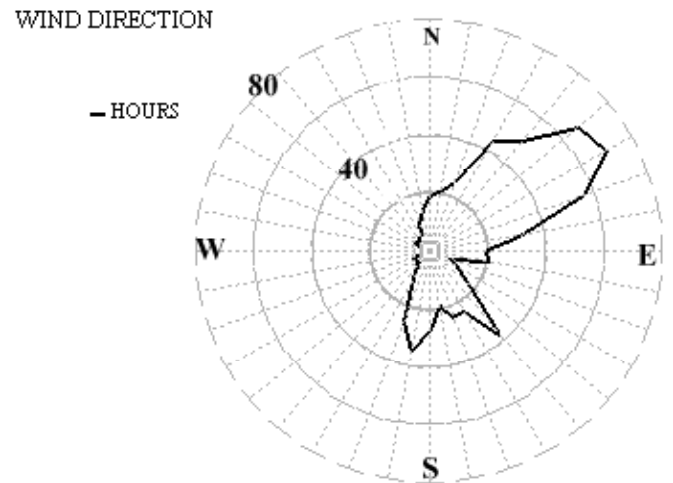
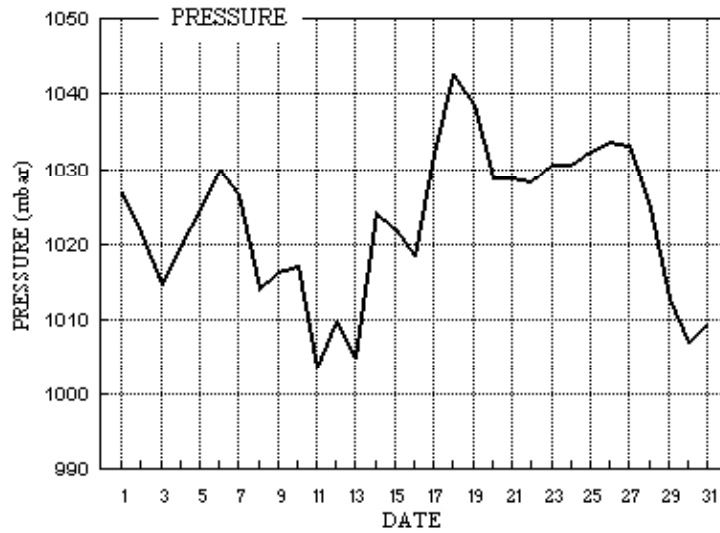
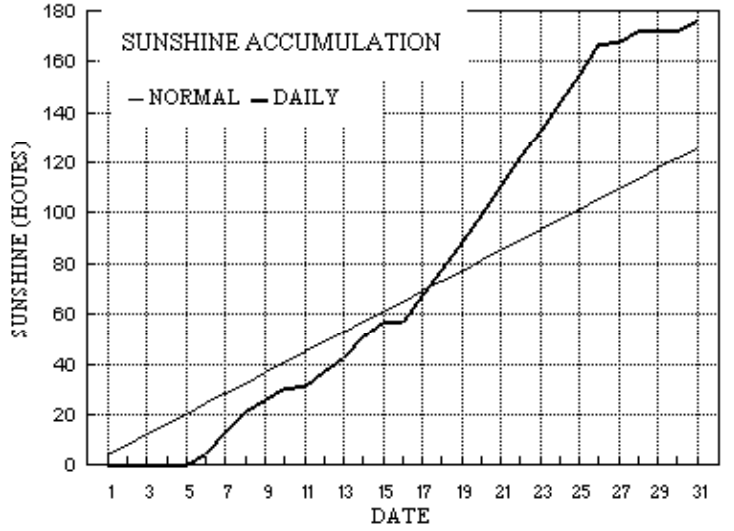
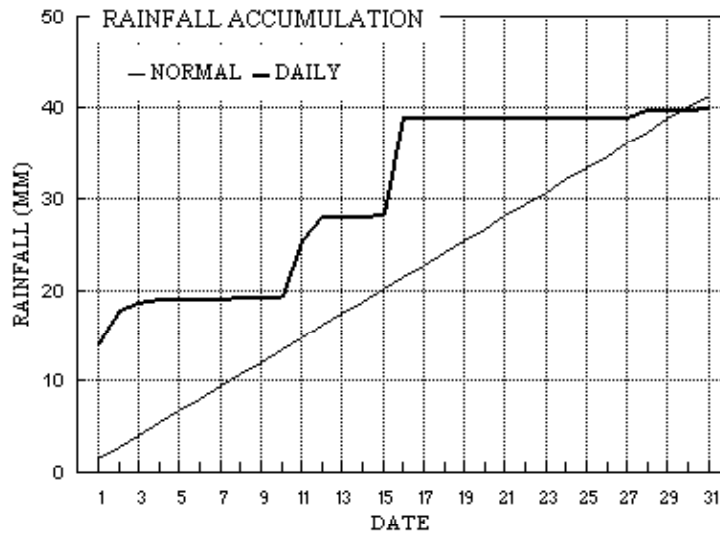
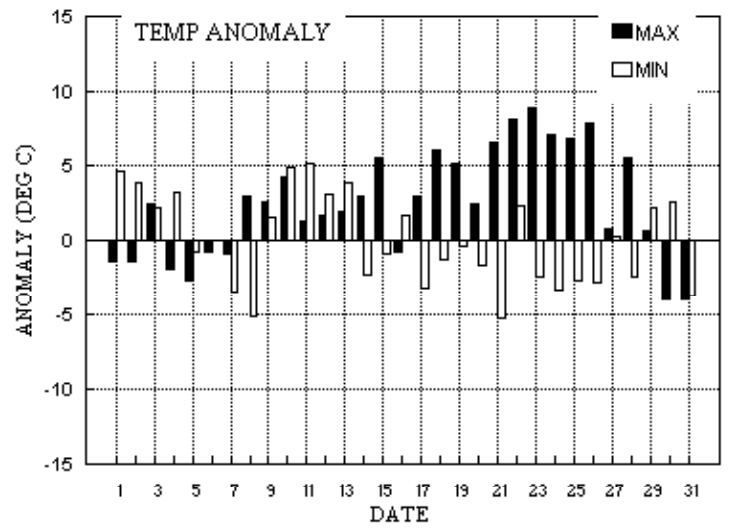
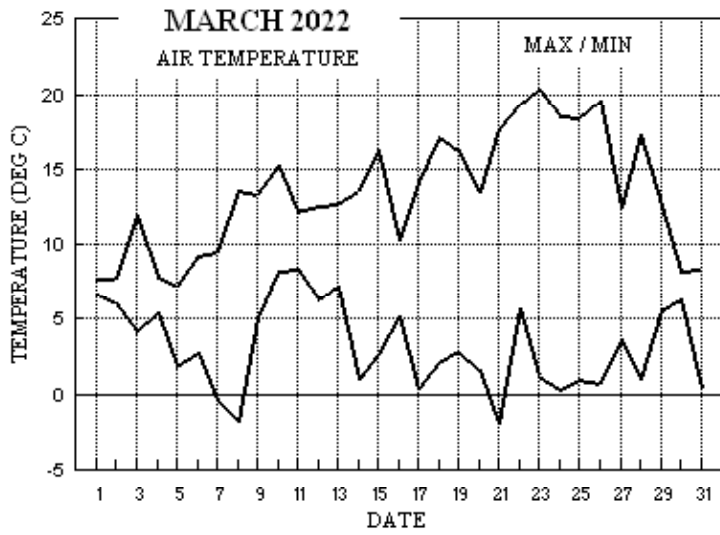
Table 1. Mean anomalies (max, min, rain, sun) for specified periods.

From the 1 st to the 10 th				From the 11 th to the 20 th				From the 21 st to the 31 st			
+0.3°	+1.1°	143%	75%	+2.9°	+0.4°	148%	171%	+4.0°	-1.4°	7%	171%

B J Burton FRMetS.

Hon. Met. Officer to Wokingham Town Council.

Wokingham climatological graphs for March 2022



Daily meteorological data.

Emmbrook, WOKINGHAM, Berkshire.

Month: MARCH 2022

Date	Max C	Min C	Rain mm	Grass Min	30cm C	100cm C	Sun hrs	Frost hrs	pp09 mbar	Af Gf	Sf Sl	Th Ha	Ic Fg	Vec ddd	mean ff	sp	Max gust ddd	gg	HHhh	High hr ddd	ff	Rain HH	hrs
1	7.7	6.7	14.0	7.0	6.9	7.2	0.0	0.0	1026.9	0	0	0	0	36	4.9	5.6	57	15	1701	40	7	12	15.5
2	7.7	6.0	3.9	6.4	7.4	7.3	0.0	0.0	1021.6	0	0	0	0	87	4.3	4.4	97	14	1657	63	6	00	7.7
3	11.9	4.2	0.7	1.9	7.5	7.4	0.0	0.0	1014.6	0	0	0	0	122	3.4	4.2	133	15	1718	133	8	17	3.1
4	7.8	5.4	0.4	5.7	7.8	7.5	0.5	0.0	1019.9	0	0	0	0	324	3.5	4.5	330	18	1407	342	7	14	1.1
5	7.2	1.8	0.1	-1.8	7.5	7.6	0.0	0.0	1024.5	0	1	0	0	2	7.5	7.7	5	25	1602	5	11	16	1.0
6	9.3	2.7	0.0	-0.3	7.2	7.7	4.3	0.0	1029.8	0	1	0	0	37	7.4	7.5	58	26	1304	48	10	15	0.0
7	9.5	-0.5	0.0	-4.8	7.1	7.7	8.0	1.8	1026.5	1	1	0	0	68	5.9	6.1	60	24	1526	67	11	15	0.0
8	13.6	-1.9	0.1	-6.7	6.7	7.7	8.6	7.6	1014.2	1	1	0	0	123	5.7	6.5	142	20	1459	149	11	15	0.2
9	13.3	5.0	tr	2.4	6.8	7.6	4.3	0.0	1016.3	0	0	0	0	168	7.4	7.9	173	26	1133	189	12	12	0.1
10	15.2	8.2	0.0	2.1	7.4	7.6	4.8	0.0	1017.2	0	0	0	0	151	6.8	7.1	174	20	1037	150	10	16	0.0
11	12.2	8.3	6.2	5.4	8.0	7.7	0.8	0.0	1003.7	0	0	0	0	148	7.9	8.4	127	27	1035	137	12	10	5.2
12	12.6	6.3	2.8	4.2	8.1	7.8	6.4	0.0	1009.8	0	0	0	0	167	8.3	8.9	162	24	1434	178	13	14	3.6
13	12.7	7.2	0.0	5.9	8.3	7.9	4.8	0.0	1004.9	0	0	0	0	190	10.6	10.7	189	31	1157	181	13	11	0.0
14	13.6	1.0	tr	-2.4	8.5	8.0	8.4	0.0	1024.2	0	1	0	0	197	3.5	3.9	228	15	1236	210	8	12	0.0
15	16.3	2.6	0.2	-1.0	8.3	8.1	6.4	0.0	1022.0	0	1	0	0	132	2.7	3.7	142	14	1335	159	7	13	0.5
16	10.3	5.2	10.6	2.3	8.6	8.2	0.0	0.0	1018.4	0	0	0	0	330	1.9	4.6	292	23	1943	300	9	17	7.8
17	14.1	0.3	0.0	-3.6	8.4	8.3	10.4	0.0	1032.0	0	1	0	0	236	4.9	5.3	239	20	1324	236	9	11	0.0
18	17.1	2.1	0.0	-1.5	8.4	8.3	9.8	0.0	1042.7	0	1	0	0	67	3.6	4.0	83	20	1552	65	9	16	0.0
19	16.2	2.9	0.0	-1.2	8.5	8.4	11.6	0.0	1038.5	0	1	0	0	63	7.3	7.4	55	27	1427	59	12	14	0.0
20	13.5	1.6	0.0	-3.4	8.5	8.4	10.5	0.0	1028.8	0	1	0	0	65	2.9	3.8	72	14	1002	45	7	11	0.0
21	17.6	-2.0	0.0	-5.5	8.2	8.5	11.1	6.7	1028.9	1	1	0	0	123	2.2	3.2	106	15	1427	159	8	11	0.0
22	19.3	5.7	0.0	1.5	8.3	8.5	11.4	0.0	1028.5	0	0	0	0	117	3.1	4.2	172	19	1235	158	9	15	0.0
23	20.3	1.2	0.0	-2.6	8.7	8.5	10.5	0.0	1030.6	0	1	0	0	98	1.4	2.4	153	14	1220	124	6	12	0.0
24	18.6	0.3	0.0	-3.1	8.9	8.5	11.6	0.0	1030.7	0	1	0	0	2	1.0	1.9	329	10	1425	358	4	14	0.0
25	18.4	0.9	0.0	-3.0	8.9	8.6	10.8	0.0	1032.4	0	1	0	0	52	3.0	3.2	80	17	1639	57	7	13	0.0
26	19.5	0.7	0.0	-3.1	8.9	8.7	11.8	0.0	1033.7	0	1	0	0	59	4.0	4.1	99	22	1326	58	10	12	0.0
27	12.4	3.7	0.1	-1.1	9.3	8.8	1.2	0.0	1033.1	0	1	0	0	46	3.5	3.5	60	13	0749	41	6	12	0.0
28	17.2	0.9	0.8	-2.3	8.8	8.8	4.2	0.0	1024.8	0	1	0	0	47	2.4	2.5	20	9	1213	44	4	11	1.1
29	12.6	5.5	tr	6.9	9.6	8.9	0.0	0.0	1012.8	0	0	0	0	37	5.2	5.3	30	15	1245	32	7	14	0.3
30	8.2	6.3	tr	6.6	10.0	8.9	0.0	0.0	1007.0	0	0	0	0	14	5.2	5.4	30	20	2031	23	10	20	0.4
31	8.4	0.3	0.2	-1.0	9.5	9.1	3.7	0.0	1009.4	0	1	1	0	5	8.8	9.0	345	30	1243	8	12	11	0.9
Total			40.1				175.9	16.1															48.5
Mean	13.4	3.2		0.3	8.2	8.1	5.67	0.5	1022.9					87	2	5.4							
Anom	+1.8	-0.0	97%	+0.5	+0.9	+0.4	140%		+7.3														
Daily mean		8.3																					
Anom		+0.9																					

Number of days with:
 Air frost = 3 Ground frost = 18 Nil sun = 7
 Snow falling = 1 Snow lying = 0 Thunder = 0
 Hail=>5mm = 0 Hail<5mm or ice = 1 Fog at 09GMT = 1

Abbreviations.
 Max/min = highest and lowest air temperature at 1.2m in 24 hour period ending at 09 GMT
 Rain = total rainfall and melted snowfall in 24 hour period ending at 09 GMT, millimetres. (Tr = trace, <.05mm).
 Grass min = Lowest overnight temperature at grass tip level.
 Sun = hours of bright sunshine, measured electronically. Frost = Number of hours with air temp below 0 deg C.
 pp09 = Air pressure corrected to mean sea level at 0900 GMT, millibars.
 Af = Air frost. Gf = Ground frost. Sf = Snow falling. Sl = Snow lying at 09 GMT.
 Th = Thunder. Ha = Hail =>5mm. Ic = Hail <5mm or ice. Fg = Fog at 09 GMT.
 Vec mean = 24 hour mean wind vector, ddd = direction in degrees from true north, ff = speed in knots.
 Sp = 24 hour mean wind speed in knots.
 Max gust = Highest gust in 24 hours, gg = speed in knots, HHhh = Time, hours and minutes, GMT.
 High hr = Highest hourly mean wind, HH = hour commencing. Rain Hrs = Duration of rain, 24 hours to 09 GMT. Excludes snow/hail.
 30cm and 100 cm are earth temperatures at those depths, read at 09 GMT.
 Maximum daily rain rate in mm/hr
 All temperatures in degrees Celsius.
 Anomaly - Departure from the 1991 to 2020 climatological average

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 0900 GMT for MARCH 2022

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Ch	shs	NChs	hshs	NChshs	Date	Remarks
1	57	8	02	07	13	6.7	6.3	97	5.8	1026.9	1	014	51	6	5	8	7	3	/	/	85706	88708			1	
2	35	8	10	04	13	6.3	5.9	97	5.7	1021.6	1	004	61	6	5	7	7	2	2	/	87705	88520			2	
3	35	8	14	04	08	7.7	6.6	93	6.0	1014.6	0	002	05	2	2	7	6	2	7	/	87705				3	/Ac60
4	65	8	31	06	13	5.6	4.2	91	5.1	1019.9	2	020	61	6	6	7	5	3	2	/	83709	87612	88525		4	
5	80	8	36	09	19	5.8	2.4	79	4.5	1024.5	2	013	60	6	2	8	5	4	/	/	87619	88635			5	
6	77	7	03	08	15	5.0	0.4	72	3.8	1029.8	1	013	02	2	2	7	8	5	/	/	81825	84635	87645		6	Cu hum
7	80	5	05	07	13	5.5	1.8	77	4.3	1026.5	8	006	03	2	2	5	8	4	0	0	82818	84633			7	Cu med
8	58	0	12	07	14	4.9	0.5	73	3.9	1014.2	7	001	05	0	0	0	0	9	0	0					8	Hoar slt in shade
9	78	7	19	10	20	9.3	5.8	79	5.7	1016.3	1	006	21	6	2	7	5	4	/	/	87613				9	
10	70	2	17	10	17	11.4	7.1	75	6.2	1017.2	0	005	01	6	1	2	8	4	3	1	81818				10	1Sc40 2Sc56 1Ac58 1Ci75 Cu hum
11	70	8	15	12	20	10.4	6.5	77	6.1	1003.7	7	016	03	2	2	6	5	4	2	/	81615	85650	88561		11	2Sc30
12	75	5	17	09	18	8.9	5.8	81	5.7	1009.8	2	034	15	1	1	4	3	4	6	3	81915	83820			12	1Sc40 1Ac62 1Ci68 jpW
13	70	4	17	08	20	9.5	7.1	85	6.3	1004.9	1	015	03	6	1	2	2	4	0	1	82813	83075			13	Cu fra/med
14	70	6	22	03	06	7.5	6.1	91	5.8	1024.2	2	028	02	2	2	2	0	9	7	1	81361	85070			14	2Ac65
15	59	3	11	04	08	8.3	7.2	93	6.2	1022.0	8	015	05	0	0	1	0	9	4	9	81365	83174			15	COTRA Distrail in Cc
16	40	8	08	03	08	9.2	8.4	95	6.8	1018.4	1	003	21	6	2	8	7	3	/	/	87707	88708			16	
17	82	0	21	05	08	6.9	3.5	79	4.8	1032.0	2	024	02	0	0	0	0	9	0	0					17	
18	12	6	07	03	05	7.1	7.0	99	6.0	1042.7	2	002	28	4	1	6	6	1	0	0	86702				18	VV100m at 0800
19	63	0	06	10	20	10.4	4.1	65	5.0	1038.5	7	007	02	0	0	0	0	9	0	0					19	
20	65	1	04	02	08	7.4	2.7	72	4.5	1028.8	8	002	03	0	0	1	1	5	0	0	81820				20	Cu hum
21	50	5	01	03	05	5.6	1.9	77	4.3	1028.9	1	007	05	1	1	1	0	9	3	1	81359	83078			21	2Ci74 COTRA Sky turbid
22	45	3	05	04	06	12.8	7.7	71	6.4	1028.5	2	005	05	1	1	1	5	7	0	1	81656	83080			22	COTRA Sky turbid
23	38	0	02	02	05	10.6	6.6	76	5.9	1030.6	1	008	05	0	0	0	0	9	0	0					23	
24	56	0	18	01	02	9.1	3.7	69	4.9	1030.7	0	005	05	0	0	0	0	9	0	0					24	
25	35	2	04	02	05	9.6	4.0	68	4.9	1032.4	2	008	05	0	0	0	0	9	0	1	82075				25	COTRA
26	58	0	05	06	12	10.3	4.0	63	4.9	1033.7	1	005	05	0	0	0	0	9	0	0					26	
27	08	8	04	05	12	7.1	6.7	97	5.9	1033.1	1	005	46	4	1	8	6	1	/	/	88702				27	
28	12	8	07	03	05	5.7	5.6	99	5.6	1024.8	7	009	28	4	2	8	6	1	/	/	88702				28	
29	56	8	03	05	12	8.3	6.1	86	5.8	1012.8	7	003	05	6	2	7	5	7	7	/	87656				29	/Ac61
30	38	8	04	04	08	6.8	5.1	89	5.5	1007.0	8	002	05	2	2	8	6	3	/	/	88709				30	
31	62	7	01	11	21	2.9	-0.0	81	3.8	1009.4	1	014	83	8	1	7	8	4	3	/	85811	86615			31	/Ac62 Cu med

Mean vis = 12.7 km

Mean cloud = 4.9 61%

Mean wind speed = 5.7 kn

Mean gust = 12 kn

Mean TT = 7.8 °C

Mean TdTd = 4.9 °C

Mean RH = 82.1 %

Mean r = 5.4 g/kg

Mean PPP = 1022.9 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 MARCH 2022

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Ch	NCh	shs	NCh	shs	NCh	shs	Date	Remarks
1	56	8	04	07	13	7.4	6.7	95	6.0	1025.6	8	014	60	6	5	8	5	3	/	/	86707	88610					1	
2	40	8	09	05	11	6.8	6.1	95	5.8	1019.4	7	017	63	6	6	6	7	3	2	/	86706	88520					2	
3	80	8	14	07	13	11.0	6.9	76	6.2	1014.1	6	003	15	2	2	8	5	4	/	/	87618	88625					3	jpW vv50k ex p
4	83	7	34	08	18	7.7	3.7	76	4.9	1020.6	3	002	02	6	2	7	8	4	/	/	82818	87625					4	Cu hum
5	82	8	36	09	21	6.7	2.8	76	4.6	1024.5	6	006	21	6	2	8	5	5	/	/	87620	88625					5	
6	82	5	05	11	21	9.3	0.7	55	3.9	1028.4	7	011	02	2	2	5	4	6	0	0	83835	83640					6	Cu hum
7	80	0	06	10	22	8.5	-1.6	49	3.3	1021.1	7	034	02	0	0	0	0	9	0	0	0	0	0	0	0	7		
8	65	3	14	11	20	13.2	2.1	47	4.4	1012.4	5	006	03	0	0	3	5	7	0	0	83656						8	Sc len
9	81	4	17	10	20	11.5	4.5	62	5.2	1015.3	8	004	03	1	1	2	8	5	5	5	82826						9	1Sc35 1Ac65 2Cs75 Cu hum
10	81	4	15	09	17	13.7	6.8	63	6.1	1014.5	7	021	03	1	1	4	8	5	0	0	82828	83645					10	1Sc35 Cu med
11	57	8	16	09	20	9.7	8.6	93	7.0	1000.6	5	008	63	6	6	6	7	3	2	/	86708	88540					11	
12	81	4	18	14	24	12.2	2.4	51	4.5	1008.7	7	015	02	8	1	2	1	6	0	1	82835	83080					12	COTRA Cu hum
13	81	7	18	10	19	12.7	4.7	58	5.3	1006.3	2	006	01	2	2	2	8	5	3	8	82829	87275					13	1Sc40 1Ac65 COTRA Cu med
14	86	5	20	08	12	12.4	5.1	61	5.4	1024.8	7	003	15	8	2	5	8	5	0	1	82829	83650					14	1Ci75 Cu med jp SW&E
15	82	7	13	06	11	15.1	4.5	49	5.2	1019.2	7	016	02	2	2	1	4	6	3	8	81840	87272					15	1Sc45 1Ac68 COTRA Cu hum U/a cont+parhelia+czen arc
16	13	8	27	03	07	9.7	9.2	97	7.2	1015.8	5	009	63	6	6	7	7	1	2	/	87702	88512					16	
17	86	2	24	08	18	13.3	3.4	51	4.7	1033.0	2	001	03	0	0	1	8	6	0	0	81840						17	1Sc50 Cu hum Sc len
18	82	1	07	09	16	16.8	4.8	45	5.2	1041.8	6	012	02	0	0	1	4	6	0	0	81645						18	
19	78	0	06	12	27	15.3	3.4	45	4.7	1033.7	7	031	02	0	0	0	0	9	0	0	0	0	0	0	0	19		
20	65	2	19	04	11	10.5	-1.2	44	3.4	1026.0	6	011	02	0	0	2	4	7	0	0	81850						20	1Sc56 Cu hum
21	63	1	15	07	15	17.5	2.3	36	4.4	1026.7	7	013	02	0	0	1	0	9	3	1	81359						21	1Ci75
22	75	1	15	09	18	19.0	3.2	35	4.7	1027.2	7	009	02	0	0	1	2	7	0	1	81850						22	1Ci75 Cu med
23	70	1	07	05	11	19.8	3.1	33	4.6	1028.5	7	014	02	0	0	1	4	8	0	0	81857						23	1Sc57 Sky turbid
24	63	1	29	03	10	18.2	-1.1	27	3.4	1028.5	7	015	02	0	0	1	4	8	0	0	81857						24	1Sc57 Sky turbid
25	62	3	06	07	16	18.2	4.0	39	5.0	1030.6	8	014	02	1	1	1	4	7	0	1	81850	83075					25	1Sc56 Cu hum Sky turbid
26	67	0	08	08	19	19.1	2.0	32	4.3	1031.4	7	016	02	0	0	0	0	9	0	0	0	0	0	0	0	26		
27	65	7	05	05	11	11.7	8.6	81	6.8	1030.5	7	016	01	2	2	7	5	4	/	/	87611						27	
28	59	8	07	03	07	16.5	7.4	55	6.4	1019.7	7	031	05	1	1	8	0	9	7	/	81359	83362	88465				28	
29	60	8	04	06	14	10.6	6.6	76	6.0	1010.4	7	013	05	2	2	8	5	4	/	/	87616						29	/Sc50
30	50	8	36	04	11	7.9	4.3	78	5.2	1005.2	7	012	05	2	2	8	5	4	/	/	88615						30	
31	70	5	04	09	26	3.9	-0.9	71	3.6	1011.1	3	006	27	8	1	5	9	5	0	3	81920	83830					31	2Sc56 1Ci66 jpE&S vv60k ex p Past snow pell

Mean vis = 24.5 km

Mean cloud = 4.6 57%

Mean wind speed = 7.6 kn

Mean gust = 16 kn

Mean TT = 12.4 °C

Mean TdTd = 4.0 °C

Mean RH = 59.7 %

Mean r = 5.1 g/kg

Mean PPP = 1021.1 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

Wokingham Sunshine Hourly analysis 2022	Hour	01-Mar	02-Mar	03-Mar	04-Mar	05-Mar	06-Mar	07-Mar	08-Mar	09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar	16-Mar
	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	0.16	0.00	0.06	0.24	0.11	0.00	0.15	0.03	0.00
	7	0.00	0.00	0.00	0.00	0.00	0.01	0.37	1.00	0.00	0.63	0.00	0.95	0.26	1.00	0.81	0.00
	8	0.00	0.00	0.00	0.00	0.00	0.01	0.56	1.00	0.13	0.99	0.00	0.67	0.88	1.00	1.00	0.00
	9	0.00	0.00	0.00	0.00	0.00	0.48	0.20	1.00	0.13	0.88	0.00	0.12	0.82	1.00	1.00	0.00
	10	0.00	0.00	0.00	0.00	0.00	0.84	0.22	1.00	0.70	0.61	0.00	0.45	0.26	1.00	0.40	0.00
	11	0.00	0.00	0.00	0.00	0.00	0.67	0.90	1.00	0.48	0.12	0.00	0.25	0.08	0.96	0.16	0.00
	12	0.00	0.00	0.00	0.00	0.00	0.03	1.00	1.00	0.39	0.40	0.00	0.98	0.04	0.62	0.83	0.00
	13	0.00	0.00	0.00	0.00	0.00	0.28	1.00	1.00	0.69	0.32	0.00	0.34	0.03	0.14	0.82	0.00
	14	0.00	0.00	0.00	0.00	0.00	0.50	1.00	1.00	0.49	0.72	0.00	0.57	0.60	0.59	0.49	0.00
	15	0.00	0.00	0.00	0.00	0.00	0.67	1.00	0.41	0.96	0.04	0.00	0.89	0.88	0.47	0.84	0.00
	16	0.00	0.00	0.00	0.00	0.00	0.31	1.00	0.00	0.38	0.06	0.17	0.82	0.40	0.51	0.00	0.00
	17	0.00	0.00	0.00	0.49	0.00	0.51	0.71	0.00	0.00	0.00	0.36	0.27	0.50	0.99	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		0.00	0.00	0.00	0.49	0.00	4.30	7.95	8.56	4.34	4.83	0.76	6.41	4.75	8.42	6.37	0.00

Hour	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar	29-Mar	30-Mar	31-Mar	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	0.07	0.00
6	0.58	0.00	0.58	0.60	0.42	0.33	0.47	0.56	0.55	0.71	0.00	0.00	0.00	0.00	0.57	0.20
7	1.00	0.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.02	0.45
8	1.00	0.75	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.52
9	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.61	0.00	0.00	0.10	0.53
10	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.49	0.55
11	0.86	1.00	1.00	0.76	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.36	0.50
12	0.77	0.91	1.00	0.73	1.00	1.00	1.00	1.00	0.89	1.00	0.00	1.00	0.00	0.00	0.34	0.51
13	0.85	1.00	1.00	1.00	1.00	1.00	0.79	1.00	0.48	1.00	0.00	0.58	0.00	0.00	0.38	0.47
14	0.89	1.00	1.00	0.65	1.00	1.00	1.00	1.00	0.69	1.00	0.00	0.00	0.00	0.00	0.18	0.50
15	0.70	1.00	1.00	0.82	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.18	0.51
16	1.00	1.00	1.00	1.00	1.00	1.00	0.35	1.00	1.00	1.00	0.01	0.00	0.00	0.00	0.34	0.43
17	0.76	1.00	1.00	1.00	0.72	1.00	0.84	1.00	1.00	1.00	0.96	0.00	0.00	0.00	0.71	0.48
18	0.00	0.11	0.04	0.02	0.00	0.10	0.00	0.05	0.15	0.10	0.26	0.00	0.00	0.00	0.00	0.03
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	10.39	9.78	11.61	10.52	11.14	11.43	10.45	11.61	10.76	11.81	1.23	4.18	0.00	0.00	3.73	175.89

March 2022	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	7.16	9.3	4	6.4	2044	96.8	98.1	2339	94.1	1442	6.7	6.0	7.0	4	5.8	2048	1025.52	1027.4	1058	1023.5	2358	12.4
2	6.11	7.3	1118	4.6	2036	96.1	98.3	158	93.5	2016	5.5	5.6	5.9	1118	4.9	2036	1020.34	1023.7	0	1016.8	2350	8.1
3	7.88	11.9	1410	4.2	144	91.0	97.4	232	72.2	1411	6.4	6.0	7.0	1149	4.9	20	1014.94	1017.0	2	1013.7	1547	0.1
4	6.17	8.0	4	1.8	2149	88.8	97.6	2219	74.2	1412	4.4	5.2	6.4	4	4.1	2149	1019.71	1022.3	2346	1016.4	101	1
5	5.56	7.2	1444	4.0	2340	81.5	90.6	2016	72.2	1545	2.6	4.5	5.0	2015	4.2	654	1024.43	1027.5	2349	1022.1	8	0.2
6	4.82	9.3	1317	1.2	2351	71.2	86.3	2354	49.6	1318	-0.1	3.7	4.3	1	3.3	1331	1028.74	1030.0	1023	1027.3	21	0
7	3.79	9.5	1246	-0.5	459	73.0	95.9	713	46.9	1506	-0.9	3.5	4.4	844	2.9	2344	1023.78	1029.1	9	1017.9	2357	0
8	5.89	13.6	1429	-1.9	324	69.9	91.9	725	45.1	1431	0.4	4.0	5.5	2359	2.8	323	1014.26	1018.0	0	1011.9	1406	0
9	9.68	13.3	1410	7.4	0	76.1	91.8	559	56.0	1429	5.5	5.6	6.3	552	5.0	1319	1015.82	1017.2	2122	1014.6	354	0.1
10	11.46	15.2	1330	8.2	315	72.3	82.2	650	59.9	1423	6.6	6.0	6.6	1309	5.2	310	1015.14	1017.5	753	1010.0	2358	0
11	9.62	12.2	1134	8.3	545	85.1	93.5	2218	69.2	1138	7.2	6.4	7.0	1555	5.8	542	1003.94	1010.1	4	1000.3	1358	5.1
12	8.95	12.6	1408	6.3	622	78.4	92.6	627	51.3	1500	5.2	5.5	6.5	1115	4.5	1452	1007.61	1010.5	1009	1004.1	1	1.8
13	9.21	12.7	1537	4.2	2351	80.6	96.4	2358	56.9	1532	5.9	5.8	6.5	843	4.9	2351	1007.01	1015.2	2359	1003.1	527	1.6
14	6.70	13.6	1208	1.0	700	84.5	99.1	715	53.7	1208	4.0	5.0	5.9	937	4.0	700	1023.39	1026.9	2211	1015.1	0	0
15	8.94	16.3	1302	2.6	509	79.1	98.6	741	45.2	1316	5.0	5.4	6.3	2042	4.4	509	1021.61	1026.0	0	1018.7	1616	0
16	7.98	10.3	1122	5.2	137	93.4	97.4	1540	85.1	2356	7.0	6.2	7.3	1359	4.7	2359	1018.60	1024.6	2359	1015.3	1359	10
17	7.47	14.1	1411	0.3	631	74.7	95.5	645	47.7	1411	2.9	4.6	5.8	1038	3.6	620	1032.21	1038.9	2354	1024.6	0	0.1
18	8.72	17.1	1321	2.1	623	78.5	99.0	901	45.4	1504	4.7	5.2	7.0	937	4.2	623	1041.76	1043.4	1130	1038.8	1	0
19	9.08	16.2	1306	2.9	407	67.9	97.2	452	40.4	1506	2.9	4.6	5.6	1220	3.5	1957	1036.33	1041.9	6	1031.6	2359	0
20	6.65	13.5	1325	0.5	2357	64.6	92.2	2358	34.2	1317	-0.1	3.7	4.7	1000	2.8	1557	1027.94	1031.7	5	1025.3	1625	0
21	7.51	17.6	1444	-2.0	534	71.7	97.3	614	35.3	1449	1.8	4.3	5.5	1724	3.1	534	1027.87	1028.9	837	1026.3	1626	0
22	11.86	19.3	1230	5.1	2358	63.2	89.0	710	28.9	1611	4.2	5.1	6.7	1040	3.6	1724	1028.06	1029.2	2131	1026.6	1554	0
23	9.82	20.3	1509	1.2	600	66.8	96.7	712	25.5	1334	2.7	4.5	6.6	1128	3.5	1334	1029.62	1030.8	947	1028.1	1545	0
24	9.11	18.6	1428	0.3	544	63.2	96.2	654	24.2	1430	0.9	4.0	5.2	1047	3.0	1532	1029.92	1031.0	2349	1028.2	1541	0
25	8.98	18.4	1239	0.9	543	68.4	94.4	516	33.7	1527	2.7	4.5	5.8	1152	3.7	606	1031.52	1032.9	2359	1030.1	1622	0
26	9.80	19.5	1334	0.7	602	68.0	96.3	620	30.8	1456	3.1	4.7	5.9	1307	3.7	602	1032.64	1033.8	829	1031.0	1558	0
27	7.23	12.4	1534	2.5	2354	90.7	97.7	2208	76.9	1535	5.8	5.6	6.9	1532	4.4	2343	1031.39	1033.6	12	1028.4	2359	0
28	9.07	17.2	1323	0.9	236	82.0	99.7	939	50.4	1422	5.8	5.7	7.0	1240	3.9	236	1022.17	1028.4	3	1016.2	2354	0.1
29	9.14	12.6	1202	7.2	611	83.9	93.0	546	67.6	1145	6.5	6.0	6.6	1158	5.6	301	1011.71	1016.3	0	1008.9	2329	0.8
30	6.47	8.2	1655	3.0	2351	85.0	92.2	632	75.8	1622	4.1	5.1	5.6	1	3.8	2256	1006.57	1008.9	2	1004.2	1656	0.1
31	2.98	8.4	1219	0.3	606	73.2	87.5	625	41.5	1316	-1.5	3.4	4.0	1046	2.7	1320	1010.57	1015.1	2338	1006.9	14	0.3
Total																						41.8
Mean	7.87	13.40		2.87		78.1	94.57		54.29		3.80	5.01	6.02		4.09		1022.10	1025.41		1018.90		
Max	11.86	20.30		8.27		96.8	99.70		94.10		7.19	6.35	7.27		5.81		1041.76	1043.36		1038.77		
Min	2.98	7.16		-1.96		63.2	82.20		24.17		-1.51	3.41	3.96		2.66		1003.94	1008.94		1000.28		

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

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

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

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

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

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

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

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

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

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

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

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

Temperature: The terms cold/mild are used in the winter half year, and cool/warm in the summer half. The term 'normal' is used when the individual mean (monthly, seasonal or annual) value is within 20 % of the median of all ranked values for that month/season/year.

Mild/warm: The value lies between 10 % and 30 % below the highest value in the ranked series.

Very mild/very warm: The value lies within 10 % of the highest value in the ranked series.

Cold/cool: The value lies between 10 % and 30 % above the lowest value in the ranked series.

Very cold/very cool: The value lies within 10 % of the lowest value in the ranked series.

Sunshine: The terms for sunshine are very sunny, sunny, normal, dull and very dull.

The definition of these terms follow the same rules as for temperature.

Rainfall: The terms for rainfall are very dry, dry, normal, wet and very wet.

The definition of the term 'normal' follows the same rule as for temperature and sunshine.

Wet: The value lies between 10 % and 30% of the highest value in the ranked series.

Very wet: The value lies within 10 % of the highest value in the ranked series.

Dry: The value lies between 10 % and 30 % above the lowest value in the ranked series.

Very dry: The value lies within 10 % of the lowest value in the ranked series.

Long-term: Mention may be made in the reports to the 'long-term'. The long-term record comprises a temperature/rainfall/sunshine data series compiled from records of various weather stations in the Wokingham area in the years prior to the establishment of the weather station at Emmbrook in 1976 together with data from this station.

In the case of monthly max, min and mean temperature and of rainfall total the series starts in 1882. For temperature extremes, the highest max and lowest min go back to 1904, and lowest max and highest min to 1913.

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

Month: Calendar month.

Season: Spring, March to May.

Summer, June to August

Autumn, September to November

Winter, December to February.

When discussing 'winter', if a single year is given this refers to the year in which the January/February fall.

Annual or Year: The calendar year, 1st January to 31st December.

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

Frost: An air frost day is recorded when the minimum temperature read at 0900 GMT on that day is -0.1°C or below. A ground frost day is recorded when the grass minimum temperature read at 0900 GMT on that day is -0.1°C or lower.

Duration of air frost is defined as the number of minutes that the AWS one minute average temperature is below 0.0°C , and the day runs from midnight to midnight.

Snow: A day with snow falling is triggered if snow falls at any time in the 24 hours from midnight on that day. A day with snow lying is entered if there is at least 50% snow cover at the 0900 GMT observation.

Snow depth is the depth of undrifted snow. Snow that collects in the raingauge funnel is melted and the amount recorded as rainfall.

Hail: A day of hail is recorded if hailstones 5 mm or more in diameter are observed or recorded on the hail pad in a 24 hour period starting at midnight.

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

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

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

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

Dry spell: A dry spell is defined as a period of 5 or more consecutive dry days.

Dry day: A dry day is one with less than 0.2 mm of rainfall.

Rain day: A rain day is one with 0.2 mm or more of rainfall.

Wet day: A wet day is one having 1.0 mm or more of rainfall.

Appendix 2.

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

VV : Visibility.

Code figures 00 to 50 are in km and tenths e.g. 01 = 0.1 km = 100 m, 33 = 3.3 km, 50 = 5.0 km

Code figures 60 to 80. Subtract 50 to obtain visibility in km. e.g. 56 = 6 km, 65 = 15 km, 77 = 27 km.

Code figures 81 to 89. Subtract 50 and add 5 for every one above 80. e.g. 83 = 45 km, 86 = 60 km.

Code figure 89 = visibility above 70 km.

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

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

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

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

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

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

RH : Relative humidity at 1.2m, %.

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

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

a : Characteristic of pressure tendency during the past 3 hours.

Code figures 0 to 3, pressure higher than 3 hours ago, 5 to 8, pressure lower than 3 hours ago

Code figure 0 = Increasing then decreasing, pressure the same as or higher than 3 hours ago

1 = Increasing then steady or increasing more slowly

2 = Increasing steadily or unsteadily

3 = Decreasing or steady then increasing, or increasing then increasing more rapidly

4 = Steady, pressure the same as 3 hours ago

5 = Decreasing then increasing, pressure lower than 3 hours ago

6 = Decreasing then steady or decreasing more slowly

7 = Decreasing steadily or unsteadily

8 = Steady or increasing then decreasing, or decreasing then decreasing more rapidly

ppp : 3 hour pressure tendency in tenths of a millibar

ww : Present weather code figures, 00 to 99.

Present weather decode:

00 = Cloud development not observed or not observable

01 = Clouds generally dissolving or becoming less developed

02 = State of sky on the whole unchanged

03 = Clouds generally increasing or becoming more developed

04 = Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes.

05 = Haze, visibility reduced by extremely small dry particles (RH less than appx. 95 %)

06 = Widespread dust in suspension, not raised by the wind near the station at the time of the observation

07 = Dust or sand raised by the wind at or near the station at the time of the observation, but no well-developed dust whirls or sand whirls, and no duststorm or sandstorm seen: In marine environments, blowing spray at the station.

08 = Well-developed dust or sand whirls seen at or near the station during the preceding hour or at the time of the observation, but no duststorm or sandstorm.

09 = Duststorm or sandstorm within sight at the time of the observation, or at the station during the preceding hour

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

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

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

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

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

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

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

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

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

Hail includes large hail, small hail and snow pellets.

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

Code figures:

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

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

Cl : Type of low cloud

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

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

Cm : Type of medium cloud.

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

Ch : Type of high cloud

0 = No high cloud

1 = Cirrus in the form of filaments, strands or hooks, not progressively invading the sky.

2 = Dense cirrus, in patches or entangled sheaves, which usually do not increase and sometimes seem to be the remains of the upper part of a Cumulonimbus; or Cirrus with sproutings in the form of small turrets or battlements, or Cirrus having the appearance of cumuliform tufts

3 = Dense Cirrus, often in the form of an anvil, being the remains of the upper part of Cumulonimbus, or where the rest of the Cumulonimbus is below the horizon

4 = Cirrus in the form of hooks or filaments, or both, progressively invading the sky; they generally become denser as a whole

5 = Cirrus (often in bands converging towards one or two opposite points on the horizon) and Cirrostratus, or Cirrostratus alone; in either case they are progressively invading the sky, and generally growing denser as a whole, but the continuous veil does not reach 45 degrees above the horizon.

6 = Cirrus (often in bands converging towards one or two opposite points on the horizon) and Cirrostratus, or Cirrostratus alone; in either case they are progressively invading the sky, and generally growing denser as a whole; the continuous veil extends more than 45 degrees above the horizon, without the sky being totally covered

7 = Veil of Cirrostratus covering the celestial dome.

8 = Cirrostratus not progressively invading the sky and not completely covering the celestial dome

9 = Cirrocumulus alone, or accompanied by Cirrus or Cirrostratus, or both, but Cirrocumulus is predominant.

/ = Types of high cloud invisible owing to darkness, fog, blowing dust 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.