

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

MAY 2020

Temperature (°C)		Anomaly		Rank in the past	139	years	
Mean maximum	20.8	+3.3		* Highest *			
Mean minimum	6.7	-0.8		59th highest			
Daily mean	13.7	+1.2		12th highest			
Highest maximum	27.2	on 20 th		Lowest maximum	13.8		on 11 th
Highest minimum	15.4	on 22 nd		Lowest minimum	-1.0		on 12 th
Mean grass minimum	2.9	-1.4		Lowest grass minimum	-4.8		on 12 th
Mean earth @30 cm	14.4	+0.9		Earth @100 cm	13.0		
Frost duration (hrs)	3.3			Rain duration (hrs)	1.5		
Rainfall total (mm)	3.4	7 %		* Lowest *			
Highest daily fall	3.2	on 1 st		Highest rate mm/hr	50		on 1 st
Number of: Dry days (<0.2mm)	29	Wet days (>0.9mm)	1	days ≥5mm	0		
Sunshine total (hrs)	343.2	Daily mean	11.07	184 %	Sunniest day	15.5	on 31 st
N° days with: Air frost	2	Ground frost	7	Snow falling	0	Snow lying	0
Thunder	1	Hail ≥5mm	1	Small hail/ice	0	Fog @09	0
				Fog @09	0	Nil sun	0
Pressure MSL : Mean @09 GMT, mbar	1022.2	+6.3	Highest	1036.8	on 26 th	Lowest	996.4
							on 1 st
Relative humidity : Mean (%)	63.2	Lowest	19	on 20 th	Water vapour (g/kg), mean at 09 and 15 GMT	6.4,	5.5
Overall mean wind speed (mph)	6.1	Windiest day	13.4	on 23 rd	Max gust	40	on 10 th
Wind direction (days)	N 3	NE 11	E 0	SE 1	S 2	SW 8	W 4
						NW 2	
Least windy day (mph)	2.6	on 8 th	Calm; less than 0.5 mph (minutes)	978			

Anomaly = departure from 1981 to 2010 average (degrees C, percent and mbar).

Notes: **A Record Breaking May. Highest Mean Maximum, Highest Sunshine, Lowest Rainfall.**

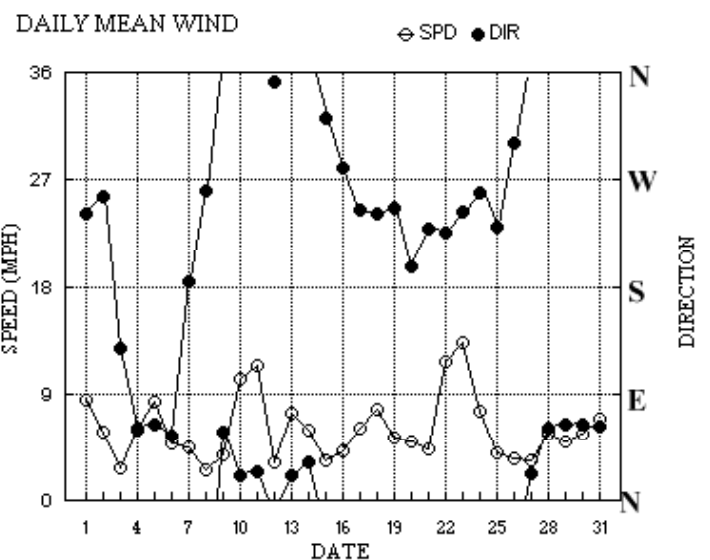
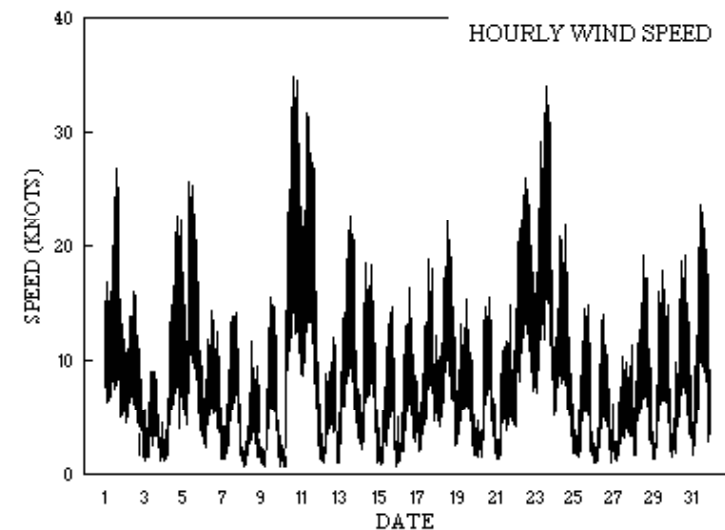
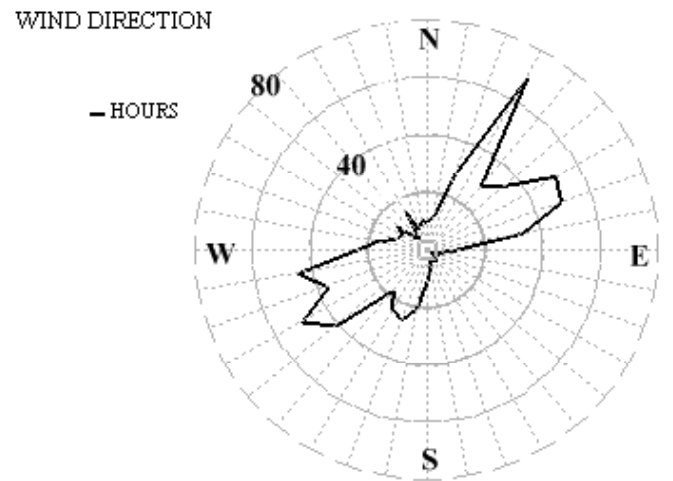
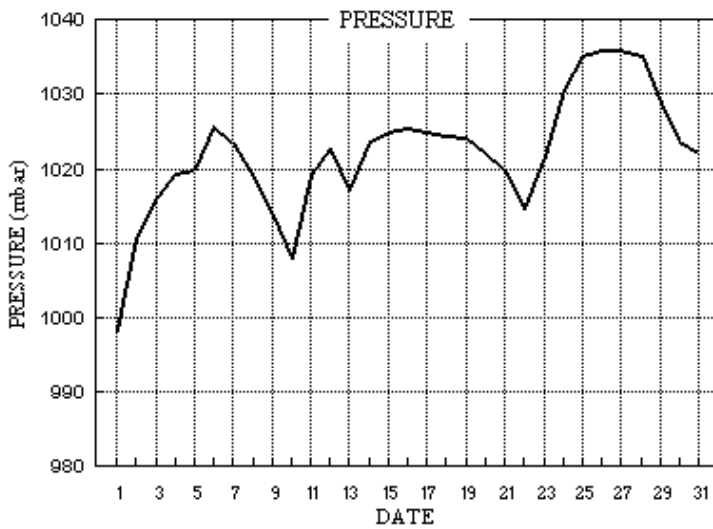
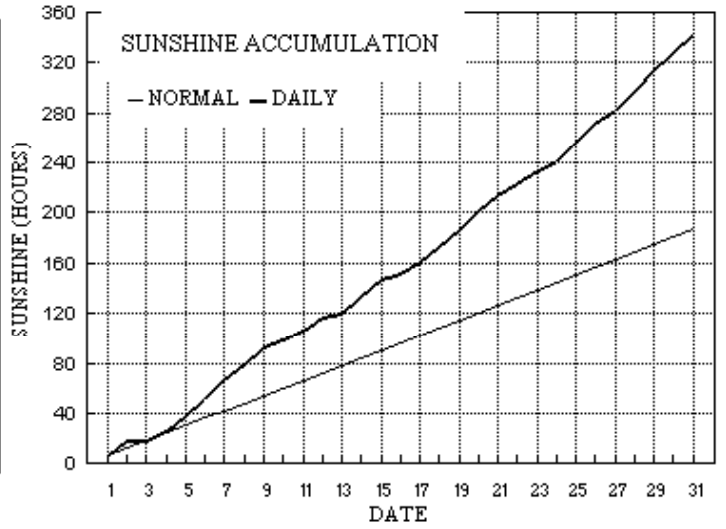
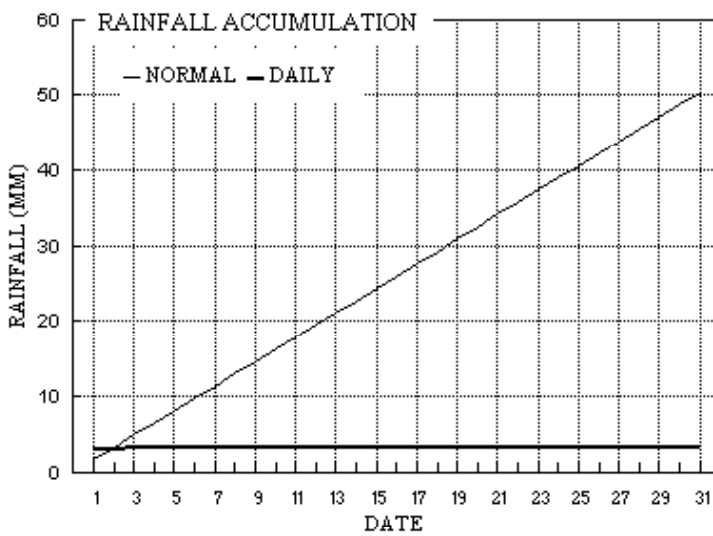
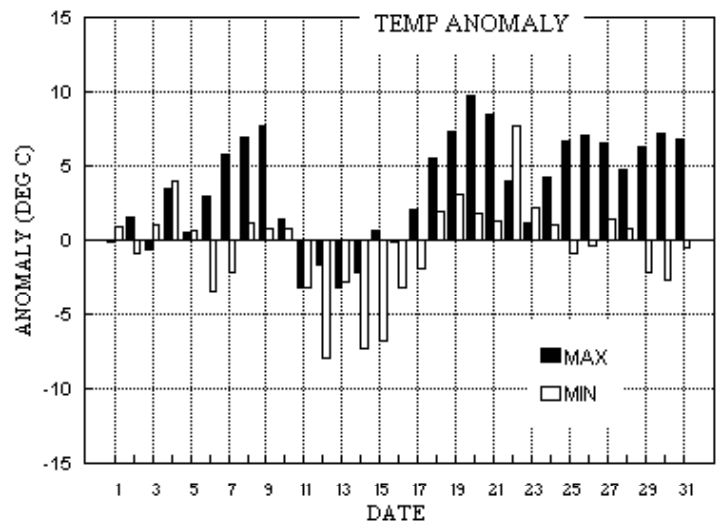
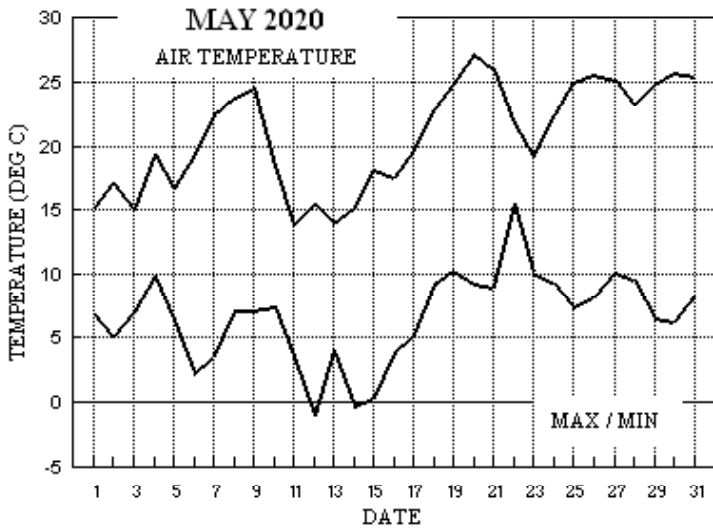
Temperature: This May has been remarkable for its prolonged spells of warm, sunny days, both early in the month and after the 17th. The resulting mean maximum is highest in 139 years, 3.3° above average and 0.3° above the previous highest in 1989. However, clear skies lead to both sunny days and cool nights, the mean minimum ending up 0.8° below average. The resulting mean daily temperature range of 14.1° is 4.1° above average and is 0.8° higher than in any other May in the past 45 years. The highest max is 1.8° above the median and the lowest max is 2.8° above its median. The highest min is 2.9° above the median and 3rd highest in 108 years while the lowest min is 1.5° below its median. The mean grass min is 1.4° below average, and there was 1 more ground frost than average. Air frost is not uncommon in this month, this being the 14th May in the past 45 years to have had at least one. Earth temperatures at both 30cm and 1m depth are well above average. Anomalies for daily max exceeded +5° on 7th to 9th, 18th to 21st and 25th to 31st, with a peak value of +9.7° on the 20th. A cool snap from 11th to 17th saw anomalies of -3.2° on 11th and 13th. Anomalies for daily min ranged from +7.6° on the 22nd to -8.0° on the 12th, and exceeded -5° on the 12th, 14th and 15th. **Rainfall:** This is the driest May here in the past 139 years, just 3.4 mm, 7 % of the average, 3.2 mm of which fell during a thunderstorm on the 1st. Apart from 0.2 mm on the 3rd, the rest of the month was dry. The number of dry days, 29, is also a record for May, the previous highest being 27 in 1905. The thunderstorm on the 1st also produced 8 mm dia. hail, and the rainfall rate reached 50 mm/hr. The duration of measurable rain this month, just 1.5 hours, can be compared to the May average of 36.4 hours. Soil moisture deficit was high, with shallow rooted unirrigated plants suffering severe stress after mid-month. **Sunshine:** Again, records tumbled for this parameter this month, with a sunshine total 146 hours above average, making it the sunniest May since before 1908. It is also the 2nd sunniest month of any name in that period after July 1911. This May is remarkable for the sheer number of almost cloudless days, 15 having over 80 % of the maximum sunshine, and 8 over 90 %, with only 5 days having less than 50 %. Overall there was 1 day with <3 hours, 27 with =>6 hours, 22 with =>9 hours, 16 with =>12 hours and 5 with =>15 hours. **Wind:** The mean wind speed is 0.6 mph below average, but is highest since 2016. The highest gust is close to average. Daily mean direction was mainly NE'ly from 4th to 14th and after the 27th, mainly SW'ly from 17th to 25th, otherwise W'ly on 1st, 2nd, 8th and 16th, NW'ly on 15th and 26th, and SE'ly on 3rd and 7th. Speeds were light or moderate, but increased to fresh on the 10th, 11th, 22nd and 23rd. **Humidity:** The mean relative humidity is lowest for May in the past 23 years, and 2nd lowest for any month after 61.0 % in July 2018.

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			
+2.9°	+0.3°	21%	164%	+1.5°	-2.6°	0 %	171%	+5.7°	+0.7°	0 %	213%

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

Wokingham climatological graphs for May 2020



Month: MAY 2020

Date	Max C	Min C	Rain mm	Grass Min	30cm C	100cm C	Sun hrs	Frost hrs	pp09 mbar	Af Gf	Sf Sl	Th Ha	Ic Fg	Vec mean ddd ff sp	Max gust ddd gg HHhh	High hr ddd ff HH	Rain hrs						
1	15.2	6.8	3.2	5.4	11.9	11.7	7.0	0.0	998.3	0 0 0 0	1 1 0 0	0 0 0 0	242	7.0	7.4	294	27	1346	256	11	17	1.2	
2	17.1	5.0	tr	2.0	12.1	11.6	11.3	0.0	1010.6	0 0 0 0	0 0 0 0	0 0 0 0	255	4.4	5.1	269	16	1116	292	7	08	0.0	
3	15.1	7.0	0.2	2.5	12.5	11.7	0.1	0.0	1016.0	0 0 0 0	0 0 0 0	0 0 0 0	128	2.0	2.5	154	9	0902	162	4	08	0.3	
4	19.4	9.9	0.0	9.4	12.7	11.7	7.7	0.0	1019.3	0 0 0 0	0 0 0 0	0 0 0 0	60	5.3	5.3	62	23	1611	71	9	17	0.0	
5	16.6	6.4	0.0	2.8	13.2	11.8	11.8	0.0	1019.9	0 0 0 0	0 0 0 0	0 0 0 0	65	7.2	7.3	63	26	0808	68	12	11	0.0	
6	19.3	2.2	0.0	-3.1	12.9	12.0	14.7	0.0	1025.7	0 1 0 0	0 0 0 0	0 0 0 0	55	4.1	4.3	65	15	1154	52	7	12	0.0	
7	22.4	3.6	0.0	-1.2	13.0	12.1	14.1	0.0	1023.4	0 1 0 0	0 0 0 0	0 0 0 0	184	2.6	3.9	195	14	1728	197	8	17	0.0	
8	23.8	7.2	0.0	3.7	13.8	12.3	13.1	0.0	1018.8	0 0 0 0	0 0 0 0	0 0 0 0	260	0.5	2.3	177	12	1311	222	5	13	0.0	
9	24.6	7.2	0.0	2.5	14.5	12.4	13.6	0.0	1013.8	0 0 0 0	0 0 0 0	0 0 0 0	58	3.0	3.3	49	16	1227	48	6	13	0.0	
10	18.5	7.4	0.0	3.0	14.6	12.6	5.4	0.0	1007.9	0 0 0 0	0 0 0 0	0 0 0 0	22	8.7	8.9	25	35	1606	23	16	14	0.0	
11	13.8	3.6	0.0	1.0	13.3	12.8	7.6	0.0	1019.2	0 0 0 0	0 0 0 0	0 0 0 0	24	9.8	9.9	17	32	0855	24	15	08	0.0	
12	15.4	-1.0	0.0	-4.8	12.6	12.8	10.4	2.6	1022.6	1 1 0 0	0 0 0 0	0 0 0 0	352	2.3	2.8	322	12	1628	1	5	18	0.0	
13	14.0	4.1	0.0	-0.2	13.3	12.7	4.1	0.0	1017.2	0 1 0 0	0 0 0 0	0 0 0 0	22	6.3	6.5	15	23	1311	21	10	13	0.0	
14	15.2	-0.3	0.0	-4.5	13.0	12.7	13.4	0.7	1023.8	1 1 0 0	0 0 0 0	0 0 0 0	32	4.9	5.2	62	19	0837	15	9	15	0.0	
15	18.1	0.3	0.0	-3.8	13.0	12.6	12.5	0.0	1025.0	0 1 0 0	0 0 0 0	0 0 0 0	321	2.7	3.0	313	15	1610	319	6	17	0.0	
16	17.5	3.9	0.0	-1.1	13.3	12.6	4.7	0.0	1025.5	0 1 0 0	0 0 0 0	0 0 0 0	279	3.0	3.7	289	17	1415	302	6	14	0.0	
17	19.6	5.2	0.0	0.6	13.4	12.6	9.4	0.0	1025.0	0 0 0 0	0 0 0 0	0 0 0 0	244	5.2	5.3	263	19	1416	249	9	18	0.0	
18	22.9	9.2	0.0	7.1	13.9	12.7	12.9	0.0	1024.4	0 0 0 0	0 0 0 0	0 0 0 0	242	6.6	6.7	239	22	1246	230	10	13	0.0	
19	24.9	10.3	0.0	7.6	14.5	12.8	12.8	0.0	1024.2	0 0 0 0	0 0 0 0	0 0 0 0	246	4.4	4.7	263	15	1349	266	6	06	0.0	
20	27.2	9.3	0.0	4.7	15.3	13.0	15.4	0.0	1022.1	0 0 0 0	0 0 0 0	0 0 0 0	197	4.2	4.3	220	16	1521	198	8	16	0.0	
21	26.0	9.0	tr	3.9	15.6	13.3	12.6	0.0	1020.0	0 0 0 0	0 0 0 0	0 0 0 0	228	2.5	3.8	182	15	1854	193	6	18	0.0	
22	21.7	15.4	0.0	15.1	16.3	13.6	8.1	0.0	1014.5	0 0 0 0	0 0 0 0	0 0 0 0	225	9.8	10.1	219	26	1323	235	13	12	0.0	
23	19.2	10.1	tr	8.4	16.1	13.8	10.5	0.0	1021.7	0 0 0 0	0 0 0 0	0 0 0 0	243	11.3	11.6	250	34	1537	259	16	13	0.0	
24	22.5	9.3	0.0	7.1	15.6	14.0	8.0	0.0	1030.6	0 0 0 0	0 0 0 0	0 0 0 0	259	6.0	6.6	301	22	1316	249	10	06	0.0	
25	25.0	7.5	0.0	1.8	15.7	14.1	15.3	0.0	1035.3	0 0 0 0	0 0 0 0	0 0 0 0	231	3.2	3.5	313	15	1704	223	6	18	0.0	
26	25.6	8.2	0.0	3.3	16.2	14.2	14.8	0.0	1036.1	0 0 0 0	0 0 0 0	0 0 0 0	301	2.0	3.1	316	14	1350	242	6	10	0.0	
27	25.1	10.1	0.0	5.6	16.7	14.3	11.3	0.0	1036.1	0 0 0 0	0 0 0 0	0 0 0 0	23	2.1	3.0	64	11	2326	136	5	21	0.0	
28	23.2	9.5	0.0	5.0	16.9	14.5	15.4	0.0	1035.1	0 0 0 0	0 0 0 0	0 0 0 0	62	4.8	4.9	65	19	1441	60	8	16	0.0	
29	24.8	6.6	0.0	1.4	17.0	14.7	15.5	0.0	1028.8	0 0 0 0	0 0 0 0	0 0 0 0	65	4.1	4.4	56	18	1316	55	7	13	0.0	
30	25.7	6.2	0.0	0.6	17.1	14.9	14.2	0.0	1023.8	0 0 0 0	0 0 0 0	0 0 0 0	64	4.8	5.0	79	19	1700	74	9	17	0.0	
31	25.5	8.3	0.0	2.7	17.3	15.0	15.5	0.0	1022.2	0 0 0 0	0 0 0 0	0 0 0 0	63	5.9	6.0	60	24	1117	71	10	11	0.0	
Total			3.4				343.2	3.3															1.5
Mean	20.8	6.7		2.9	14.4	13.0	11.07	0.1	1022.2					325	0.7	5.3							
Anom	+3.3	-0.8	7%	-1.4	+0.9	+1.2	184%		+6.3														
Daily mean		13.7																					
Anom		+1.2																					

Number of days with:

Air frost = 2 Ground frost = 7 Nil sun = 0
Snow falling = 0 Snow lying = 0 Thunder = 1
Hail=>5mm = 1 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.

Anom = Departure from 1981-2010 climatological average.

All temperatures in degrees Celsius.

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 0900 GMT for MAY 2020

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Cf	NCh	shs	NCh	shs	NCh	shs	Date	Remarks
1	77	6	25	08	16	11.0	6.9	76	6.3	998.3	2	011	03	1	1	4	2	5	7	0	84817	83359					1	Cu con	
2	86	1	32	07	14	11.9	3.7	57	4.9	1010.6	1	016	03	0	0	1	1	6	0	8	81830						2	1Cs75 Cu hum Cs edge SW	
3	82	7	17	05	08	12.3	5.0	61	5.4	1016.0	2	004	21	6	2	7	8	5	/	/	81825	87650					3	1Sc45 Cu fra Ppnt v slt	
4	82	6	07	07	14	15.1	7.9	62	6.5	1019.3	1	008	01	2	2	1	8	5	0	1	81825	86075					4	1Sc56 Cu hum	
5	80	6	07	11	26	13.1	5.8	61	5.7	1019.9	1	004	01	2	2	1	1	5	0	8	81828	84272					5	/Ci75 Cu hum. Halo 22 part	
6	72	0	06	05	10	12.5	6.8	68	6.0	1025.7	0	002	02	0	0	0	0	9	0	0							6		
7	65	6	14	03	06	15.6	5.2	50	5.4	1023.4	8	009	03	1	1	1	5	6	0	1	81643	86080					7	COTRA	
8	80	7	36	02	04	17.1	7.7	54	6.5	1018.8	7	008	03	2	2	1	0	9	8	8	81365	86272					8	/Ci75 Halo 22 +u/a cont	
9	59	2	04	05	08	19.2	9.9	55	7.6	1013.8	8	010	05	0	0	0	0	9	0	1	82080						9	COTRA	
10	60	5	01	11	21	18.5	9.8	57	7.6	1007.9	3	005	05	2	2	2	0	8	8	1	81357	84075					10	2Ac62	
11	82	6	02	16	32	8.7	0.2	55	3.8	1019.2	2	009	03	1	1	5	1	6	0	1	85838						11	2Ci75 Cu hum ra	
12	86	1	02	03	09	9.7	0.1	51	3.8	1022.6	8	015	02	0	0	1	2	6	0	1	81830						12	1Ci80 COTRA Cu dist N	
13	84	5	02	08	19	9.8	2.9	62	4.6	1017.2	8	002	01	2	2	5	8	5	0	1	84827						13	2Sc50 1Ci75 Cu hum	
14	86	3	06	08	19	10.9	3.0	58	4.6	1023.8	0	001	03	0	0	3	2	6	0	0	83833						14	Cu med	
15	82	1	26	03	07	13.7	6.1	60	5.8	1025.0	0	006	03	0	0	1	1	6	0	1	81830						15	1Ci75 Cu hum	
16	88	7	32	04	11	13.1	3.7	53	4.9	1025.5	0	000	01	2	2	3	8	6	3	1	81830	83656	87080				16	1Ac65 COTRA Cu hum	
17	81	7	22	05	09	13.6	7.2	65	6.2	1025.0	3	003	03	2	2	1	1	5	3	/	81825	87360					17	Cu hum	
18	88	3	23	08	14	16.3	8.8	61	6.9	1024.4	2	001	02	0	0	1	0	9	4	2	81365	83075					18	1Ci80 COTRA	
19	88	3	24	06	11	17.7	11.0	65	8.1	1024.2	1	003	01	1	1	1	5	4	4	1	81615	83080					19	1Sc56 1Ac62 COTRA	
20	84	5	18	04	08	21.1	10.9	52	8.0	1022.1	8	003	02	1	1	0	0	9	0	1	81075	85081					20	COTRA	
21	86	1	29	04	11	20.7	10.5	52	7.8	1020.0	0	003	01	1	1	1	0	9	8	1	81365						21	1Ci70 Ac cas	
22	80	7	23	13	22	17.1	10.2	64	7.7	1014.5	2	020	02	6	2	2	2	5	1	8	82827	83465	87270				22	Cu med	
23	78	5	25	11	29	16.1	6.0	51	5.7	1021.7	2	009	03	1	1	5	2	6	0	1	85838						23	1Ci70 C u med	
24	72	7	27	08	18	15.9	9.1	64	7.0	1030.6	1	015	01	2	2	5	8	5	3	2	85827	85075					24	1Sc35 1Ac65 Cu hum Halo 22° part	
25	86	1	16	02	05	18.7	8.4	51	6.7	1035.3	0	000	02	0	0	0	0	9	0	1	81080						25	COTRA	
26	86	4	29	03	10	20.4	8.4	46	6.7	1036.1	8	003	02	0	0	1	0	9	4	1	81358	83080					26	1Ac62 1Ci82 COTRA	
27	82	7	16	02	07	19.7	10.7	56	7.8	1036.1	0	000	01	2	2	2	5	7	0	1	82650	86080					27	COTRA	
28	80	6	05	06	13	17.1	10.2	64	7.6	1035.1	8	009	01	2	2	1	1	5	0	1	81825	86080					28	COTRA Cu fra	
29	80	2	05	04	11	19.4	9.0	51	7.0	1028.8	7	007	02	0	0	0	0	9	0	1	82081						29	COTRA	
30	68	1	03	04	09	18.0	11.1	64	8.1	1023.8	7	005	02	1	1	0	0	9	0	1	81081						30	COTRA	
31	81	0	05	05	12	20.7	10.5	52	7.8	1022.2	8	004	02	0	0	0	0	9	0	0							31		

Mean vis = 40.0 km

Mean cloud = 4.1 52%

Mean wind speed = 6.2 kn

Mean gust = 13 kn

Mean TT = 15.6 °C

Mean TdTd = 7.3 °C

Mean RH = 58.0 %

Mean r = 6.4 g/kg

Mean PPP = 1022.2 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 MAY 2020

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	pppww	W1W2	NhCl	hCrCl	NChshs	NChshs	NChshs	Date	Remarks					
1	60	7	26	12	25	12.9	5.3	60	5.6	1000.7	2	019	80	9	8	3	9	5	6	81925	83830	85358	1	Cu con vv 50k ex p	
2	84	3	29	05	13	15.2	3.4	45	4.8	1012.2	2	006	02	0	0	3	4	6	0	83848			2	1Sc50 Cu hum	
3	84	8	15	03	08	13.9	7.0	63	6.2	1015.9	5	001	21	6	2	8	5	6	/ /	84635	88640		3	Pptn v slt	
4	80	5	06	08	15	16.8	7.2	53	6.2	1019.3	7	003	03	1	1	5	8	6	0	82842	84656		4	1Ci75 Cu med	
5	86	2	08	09	20	16.0	2.1	39	4.4	1020.6	8	002	01	1	1	1	0	9	7	8	81368			5	2Cs72 1Ci75
6	81	1	08	06	13	18.9	2.7	34	4.5	1024.3	8	010	02	0	0	1	1	7	0	81850			6	Cu hum	
7	80	6	20	07	14	21.9	9.8	46	7.4	1020.1	7	020	03	1	1	2	8	7	0	82850	85080		7	1Sc56 Cu med	
8	82	3	04	02	08	22.3	8.8	42	7.0	1015.9	8	016	03	0	0	1	2	7	0	81850	83075		8	COTRA Cu med	
9	68	6	08	05	14	24.5	8.0	35	6.7	1010.2	7	018	02	2	2	1	1	7	0	81850	86078		9	1Cs72 COTRA Cu hum U/a cont	
10	80	8	02	16	32	10.2	6.4	77	5.9	1012.9	2	023	02	2	2	8	5	4	/ /	88615			10		
11	84	5	03	11	27	12.6	0.7	44	3.9	1020.8	2	013	02	2	2	5	4	7	0	82850	84650		11	Cu hum	
12	86	3	01	03	10	13.5	-1.3	36	3.4	1018.7	7	015	02	1	1	3	4	7	0	81850	83656		12	1Ci80 COTRA Cu hum	
13	84	5	04	09	19	13.1	-2.0	35	3.3	1017.1	0	000	02	2	2	5	4	7	0	81850	85656		13	1Ci80 COTRA	
14	86	1	02	07	16	14.5	0.4	38	3.9	1021.7	6	016	01	0	0	1	4	7	0	81850			14	1Sc50 Cu hum	
15	86	4	30	05	14	17.3	4.3	42	5.1	1023.8	8	007	01	2	2	1	4	7	0	81850	84080		15	1Sc50 COTRA Cu hum	
16	88	6	32	08	17	16.2	3.3	42	4.7	1023.6	7	012	02	2	2	5	4	7	0	82850	84656	85078	16	Cu hum	
17	83	6	25	08	19	19.4	7.2	45	6.2	1023.2	7	008	02	2	2	1	1	6	4	81845	86080		17	2Ac60 COTRA Cu hum	
18	89	6	26	08	19	22.4	4.9	32	5.3	1023.0	8	005	02	1	1	1	0	9	4	81360	86080		18	1Ci75 COTRA Ci flo Ac len	
19	88	3	27	06	12	24.6	11.5	44	8.4	1022.3	7	006	02	0	0	1	1	7	0	81850	83080		19	COTRA Cu hum	
20	88	3	22	08	14	26.9	5.8	26	5.7	1019.6	7	012	02	0	0	0	0	9	0	83081			20	COTRA	
21	86	6	28	05	10	25.3	5.5	28	5.6	1018.3	6	011	03	1	1	1	1	7	0	81856	86281		21	1Ci80 Cu hum	
22	72	5	24	11	24	20.5	7.2	42	6.3	1016.1	2	005	02	1	1	3	2	7	4	83850			22	2Ac65 2Ci73 COTRA Cu med	
23	82	2	25	15	32	17.6	3.9	40	4.9	1023.5	3	017	02	8	1	1	8	7	0	81850			23	1Sc56 1Ci72 Cu med	
24	83	2	27	08	19	22.5	8.2	40	6.6	1031.0	2	001	02	1	1	2	8	7	0	82850			24	1Sc56 1Ci75 Cu med	
25	86	1	24	06	14	24.8	4.5	27	5.1	1033.5	7	009	02	0	0	1	2	8	0	81857			25	1Ci80 Cu med	
26	86	7	31	06	11	25.2	5.4	28	5.4	1034.8	7	007	02	2	2	1	1	7	4	81856	87080		26	1Ac57 COTRA Cu hum	
27	84	5	33	03	07	23.7	11.4	46	8.2	1033.9	6	010	01	1	1	4	8	7	0	83850			27	2Sc56 2Ci80 COTRA Cu med	
28	86	5	05	07	19	23.0	3.5	28	4.8	1031.4	7	018	02	2	2	0	0	9	0	85081			28	COTRA	
29	84	1	05	07	16	24.6	3.3	25	4.7	1025.0	6	019	02	0	0	0	0	9	0	81081			29	COTRA	
30	84	1	06	08	17	25.4	4.5	26	5.2	1020.9	6	014	02	0	0	1	1	8	0	81857			30	1Ci81 COTRA Cu hum	
31	84	1	09	09	23	25.0	6.2	30	5.8	1021.1	7	007	02	0	0	1	1	8	0	81857			31	Cu hum	

Mean vis = 48.7 km
 Mean cloud = 4.1 51%
 Mean wind speed = 7.5 kn
 Mean gust = 17 kn
 Mean TT = 19.7 °C
 Mean TdTd = 5.1 °C
 Mean RH = 39.9 %
 Mean r = 5.5 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	2020	Hour01-May	02-May	03-May	04-May	05-May	06-May	07-May	08-May	09-May	10-May	11-May	12-May	13-May	14-May	15-May	16-May
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	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	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	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	0.00
4	0.04	0.28	0.00	0.00	0.00	0.00	0.26	0.24	0.20	0.37	0.00	0.45	0.57	0.00	0.63	0.63	0.00
5	0.70	1.00	0.00	0.01	0.00	0.00	1.00	1.00	0.97	1.00	0.94	1.00	1.00	0.00	1.00	1.00	0.00
6	0.08	1.00	0.06	0.00	0.05	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
7	0.63	1.00	0.00	0.73	0.34	1.00	1.00	1.00	1.00	0.96	0.88	1.00	0.11	0.97	1.00	1.00	0.05
8	0.27	1.00	0.00	1.00	0.94	1.00	1.00	1.00	0.85	1.00	1.00	0.60	1.00	0.45	0.86	1.00	1.00
9	0.45	1.00	0.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.18	1.00	0.31	0.21	0.95	0.80
10	0.33	0.94	0.00	0.37	1.00	1.00	1.00	0.78	1.00	1.00	0.54	0.74	0.97	0.21	0.52	0.45	0.47
11	0.67	0.83	0.00	0.46	1.00	1.00	1.00	1.00	0.96	1.00	0.00	0.19	0.67	0.12	0.66	0.37	0.27
12	0.50	0.55	0.00	0.53	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.34	0.42	0.07	0.94	0.15	0.33
13	0.80	0.80	0.00	0.17	1.00	1.00	1.00	0.89	1.00	0.96	0.00	0.40	0.72	0.37	0.99	0.56	0.27
14	0.41	0.42	0.00	0.55	1.00	1.00	1.00	0.94	0.86	0.97	0.00	0.30	0.45	0.57	1.00	0.74	0.34
15	0.06	0.38	0.00	0.61	1.00	1.00	1.00	1.00	0.93	1.00	0.00	0.25	0.71	0.31	1.00	1.00	0.09
16	0.69	0.52	0.00	0.52	1.00	1.00	1.00	1.00	0.84	0.35	0.00	0.54	0.29	0.39	1.00	1.00	0.15
17	0.60	0.50	0.00	0.70	1.00	1.00	1.00	1.00	0.39	0.67	0.00	0.27	0.01	0.14	1.00	1.00	0.54
18	0.79	0.82	0.00	0.93	1.00	1.00	1.00	1.00	0.67	1.00	0.00	0.20	0.08	0.53	1.00	1.00	0.20
19	0.02	0.30	0.00	0.07	0.47	0.39	0.21	0.38	0.28	0.00	0.00	0.27	0.47	0.48	0.65	0.63	0.16
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot	7.04	11.32	0.06	7.65	11.80	14.65	14.05	13.07	13.61	5.43	7.62	10.36	4.06	13.44	12.48	4.68	

	Hour17-May	18-May	19-May	20-May	21-May	22-May	23-May	24-May	25-May	26-May	27-May	28-May	29-May	30-May	31-May	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	0.35	0.00	0.00	0.57	0.14	0.00	0.52	0.00	0.51	0.51	0.00	0.49	0.50	0.44	0.49	0.26
5	1.00	0.14	0.00	1.00	0.68	0.00	1.00	0.52	1.00	1.00	0.70	1.00	1.00	0.18	1.00	0.67
6	0.78	0.99	0.20	1.00	0.90	0.00	1.00	0.51	1.00	1.00	1.00	1.00	1.00	0.59	1.00	0.71
7	0.00	1.00	0.82	1.00	0.87	0.00	0.77	0.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.75
8	0.00	1.00	1.00	1.00	1.00	0.00	0.56	0.12	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80
9	0.26	1.00	1.00	1.00	1.00	0.67	0.51	0.31	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80
10	0.50	1.00	1.00	1.00	1.00	0.73	0.49	0.53	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.76
11	0.95	1.00	1.00	1.00	1.00	0.82	0.36	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.75
12	0.09	1.00	1.00	1.00	1.00	0.96	0.50	0.82	1.00	1.00	0.60	1.00	1.00	1.00	1.00	0.70
13	0.15	0.98	1.00	1.00	1.00	0.77	0.87	0.84	1.00	1.00	0.01	1.00	1.00	1.00	1.00	0.73
14	0.92	1.00	1.00	1.00	1.00	0.76	0.67	0.58	1.00	1.00	0.16	1.00	1.00	1.00	1.00	0.73
15	1.00	1.00	1.00	1.00	1.00	0.81	0.67	0.79	1.00	1.00	0.53	1.00	1.00	1.00	1.00	0.75
16	1.00	1.00	1.00	1.00	1.00	0.92	0.76	0.26	1.00	1.00	0.74	1.00	1.00	1.00	1.00	0.74
17	1.00	0.74	1.00	1.00	0.87	0.63	0.88	0.45	1.00	1.00	0.90	1.00	1.00	1.00	1.00	0.72
18	0.97	1.00	1.00	1.00	0.00	0.76	0.97	0.86	0.99	1.00	1.00	1.00	1.00	1.00	1.00	0.77
19	0.39	0.09	0.76	0.85	0.17	0.24	0.00	0.60	0.76	0.34	0.74	0.90	0.99	0.99	1.00	0.44
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	0.04	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	9.37	12.94	12.77	15.43	12.63	8.06	10.51	8.00	15.26	14.85	11.35	15.39	15.49	14.19	15.52	343.10

MAY 2020	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	10.01	15.2	1234	7.1	2303	77.8	93.7	518	51.1	1442	6.1	5.9	7.5	1133	5.0	1503	1000.15	1006.0	2331	996.4	59	4.3
2	10.82	17.1	1424	5.0	456	67.5	92.8	504	40.2	1345	4.4	5.2	5.9	1153	4.5	1145	1011.17	1015.5	2358	1005.7	1	0
3	11.30	14.4	1412	7.2	1	76.8	94.0	510	49.2	1057	7.1	6.3	7.5	1810	4.7	1057	1015.94	1017.4	2357	1014.9	412	0.2
4	12.73	19.4	1440	7.2	2347	71.1	95.0	422	45.6	1227	7.2	6.3	7.4	1539	4.4	2153	1019.16	1021.9	2036	1016.9	209	0
5	10.69	16.6	1348	5.1	2358	63.9	91.2	337	29.8	1412	3.4	4.8	6.1	1005	3.3	1412	1021.07	1025.0	2358	1019.2	513	0
6	10.98	19.3	1519	2.2	402	66.8	97.4	500	30.5	1554	4.2	5.1	6.9	1208	4.1	1554	1025.16	1026.2	2332	1024.0	1631	0
7	13.64	22.4	1408	3.6	400	65.8	98.3	550	39.7	1034	6.4	5.9	8.1	1548	4.7	400	1022.26	1026.1	3	1019.5	1732	0
8	15.61	23.8	1529	7.2	440	64.5	93.1	445	35.4	1311	8.2	6.8	8.7	1144	5.6	837	1017.48	1020.4	14	1014.9	1634	0
9	15.86	24.6	1424	7.2	441	63.8	98.2	530	30.2	1532	7.8	6.6	8.8	1131	4.7	1900	1012.07	1015.6	1	1008.5	2352	0
10	10.41	18.7	835	4.8	2350	74.1	94.9	458	52.2	826	5.8	5.9	8.6	1036	3.2	2308	1011.37	1018.0	2358	1006.9	438	0
11	7.52	13.8	1353	1.4	2359	57.9	90.2	2357	35.3	1354	-0.6	3.6	4.6	1240	3.2	1400	1020.38	1024.9	2359	1017.3	111	0
12	7.94	15.4	1519	-1.0	418	63.8	97.5	514	33.5	1352	0.6	3.9	5.3	1406	3.2	1157	1020.64	1024.9	12	1016.5	1911	0
13	8.20	14.0	1515	1.8	2359	63.2	90.5	305	34.2	1437	1.1	4.1	5.4	1027	2.9	1650	1018.03	1022.3	2359	1016.5	142	0
14	7.89	15.2	1355	-0.3	430	63.4	97.4	455	33.7	1357	0.5	3.9	4.8	1147	3.3	1238	1022.92	1024.1	949	1021.3	1609	0
15	9.93	18.1	1510	0.3	409	67.2	97.6	500	37.4	1345	3.2	4.7	5.9	1014	3.7	359	1024.31	1025.4	2359	1023.2	1628	0
16	11.67	17.5	1411	3.9	143	63.1	94.2	157	38.1	1211	4.2	5.1	5.8	1409	4.2	1022	1024.51	1025.7	750	1022.9	1832	0
17	13.06	19.6	1521	5.2	436	64.3	95.1	510	40.9	1724	5.9	5.7	7.0	1405	4.7	1904	1024.10	1025.1	828	1022.7	1603	0
18	15.75	22.9	1521	9.2	437	60.8	89.7	444	29.2	1558	7.3	6.3	7.3	1108	4.8	1558	1023.84	1024.9	630	1022.6	1606	0
19	17.74	24.9	1517	10.3	220	64.2	87.8	2358	39.0	1336	10.3	7.7	9.1	1528	6.2	9	1023.21	1024.6	6	1021.7	1711	0
20	18.46	27.2	1418	9.3	428	58.5	97.5	447	19.3	1611	8.2	6.7	8.9	944	3.9	1611	1021.05	1023.1	26	1019.1	1733	0
21	18.65	26.0	1616	9.0	321	55.5	96.5	349	24.5	1617	8.0	6.7	8.5	1151	5.0	1625	1018.47	1020.6	732	1013.7	2355	0
22	17.13	21.7	1257	11.5	2343	58.6	82.7	2344	36.6	1344	8.5	6.9	9.0	601	5.2	12	1015.48	1020.0	2356	1011.7	328	0
23	13.86	19.2	1343	10.1	407	59.5	83.9	255	30.6	1319	5.5	5.6	6.9	1145	4.0	1319	1023.02	1028.3	2351	1019.7	0	0
24	15.77	22.5	1459	9.3	312	62.9	87.2	401	38.1	1412	8.2	6.6	7.7	1027	5.7	4	1030.78	1034.4	2351	1027.9	50	0
25	16.90	25.0	1527	7.5	424	58.6	97.1	507	25.3	1532	7.2	6.2	7.7	1026	4.7	1512	1034.47	1035.8	817	1032.9	1819	0
26	17.89	25.6	1454	8.2	409	61.4	93.8	429	21.8	1526	9.0	7.0	8.9	2157	4.1	1526	1035.40	1036.8	732	1034.0	1750	0
27	18.11	25.1	1528	10.1	408	62.7	90.2	409	40.6	1211	10.3	7.6	9.0	1208	6.6	502	1035.05	1036.6	653	1033.1	1721	0
28	16.10	23.2	1409	9.5	426	57.7	93.5	411	26.3	1559	6.5	6.0	8.1	927	4.1	1748	1033.23	1036.1	523	1030.4	1801	0
29	16.04	24.8	1401	6.6	359	54.3	94.2	432	20.8	1434	5.2	5.5	7.8	911	3.8	1434	1027.13	1030.8	7	1023.9	1829	0
30	16.52	25.7	1400	6.2	348	55.7	92.5	444	24.8	1402	6.4	6.0	8.5	935	4.0	17	1022.81	1025.3	119	1020.3	1757	0
31	17.45	25.5	1359	8.3	425	53.3	87.6	426	24.7	1157	6.7	6.1	8.4	909	4.8	1157	1022.21	1023.7	2255	1021.0	1502	0
Total																						4.5
Mean	13.70	20.78		6.22		63.2	93.07		34.15		5.90	5.83	7.42		4.40		1021.84	1024.69		1019.34		
Max	18.65	27.21		11.52		77.8	98.30		52.17		10.34	7.69	9.07		6.61		1035.40	1036.75		1034.02		
Min	7.52	13.80		-0.99		53.3	82.70		19.29		-0.58	3.60	4.59		2.95		1000.15	1006.02		996.40		

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

WOKINGHAM METEOROLOGICAL DATA

Wokingham Climatological Station, Emmbrook, Berkshire.

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

Seasonal Means and Totals

SPRING 2020

Temperature (°C)							Rank in the past 139 years		
Mean maximum	17.1	(+2.8)					2 nd highest		
Mean minimum	4.7	(-0.3)					40 th highest		
Daily mean	10.9	(+1.3)					3 rd highest		
Rainfall total (mm)	84.8	(59%)					17 th highest		
Sunshine total (hours)	785.9	(165%)							
N° of:									
	Dry days	70 (+18)		Wet days	17 (-11)				
Days with:	Air frost	13 (+2)	Ground frost	39 (+4)	Snow falling	2 (-2)	Snow lying	0 (0)	
Thunder	1 (-4)	Hail ≥5mm	1 (-1)	Small hail/ice	3 (-2)	Fog @09 GMT	0 (-1)	Nil sun	3 (-6)
Air pressure MSL : Mean @09 GMT (mbar)	1019.2 (+3.6)								

Departure from 1981 to 2010 average shown in brackets.

Notes: **Very Mild. Dry. New Record Sunshine.**

Temperature: The mean maximum this spring season is just 0.3° below the record holder, 1893. The mean minimum, though, is 1.6° below the record held jointly by 1998 and 2017. The daily mean ranks equal 3rd highest with 2007, and is 0.3° below the record set in 2017. In this millennium only the spring of 2013 has had a mean below the median, with 11 springs since 1998 being in the top 10 %. The mean daily temperature range of 12.4° is highest for spring in the past 44 years, 3.1° above average. The seasons highest temperature was 27.2° on the 20th May, 1.8° above the median, while the lowest max was 5.6° on the 5th March, 1.1° above its median. The highest min was 15.4° on the 22nd May, 2.8° above the median and 3rd highest in 108 years, while the lowest min was -2.7° on the 1st April, 1.5° above its median. The mean grass min was 1.1°, 0.5° below average and the lowest grass min was -7.1° on the 23rd March. Mean earth temperature at 30 cm depth was 11.1°, 0.9° above average, and at 1 m depth the mean of 10.4° has a similar anomaly. Anomalies for daily max were generally within +/- 5° throughout March, though for daily min there were a couple of mild nights near mid-month with anomalies over +5°, and in the final week cold nights saw anomalies exceed -5°. For April, 2 warm spells dominated, the 5th to 12th with anomalies for daily max over +10°, and 19th to 24th, anomalies near or over +5°. For May, anomalies for daily max reached over +5° between 7th and 9th, and again between 18th and 31st, but cold nights between 12th and 15th had anomalies exceeding -5°.

Rainfall: This has been a dry spring season with only 59% of the average rainfall, driest since 2015 and in this millennium only 3 springs have been drier. The wettest day was the 17th April, 13.2 mm, the only fall over 10 mm this season. None of the months had more than the average rainfall, but in March and April the deficit was quite small. However, May was the driest on record with just 7 % of the average, pulling the seasonal total into the dry category. This spring has been characterised by long dry episodes, and even in March, which had quite a wet start, there was no rain after the 19th, and only 1.2 mm in the following 28 days. After a single fall of 13.2 mm on the 17th April, there were 9 more dry days before 5 wet ones spanning the end of the month, after which, apart from 0.2 mm on the 3rd May, it was completely dry. A dry spell of 16 days ended on the 4th April, one of 10 days on the 15th April, one of 9 days on the 26th April, and one of 28 days unbroken on the 31st May. Thunder occurred on the 1st May, hail >5 mm also on that day, and small hail (ice pellets) on the 8th and 12th March, also sleet showers on the 29th and 30th March. The highest rainfall rate was 50 mm/hr on both the 8th March and 1st May. Soil moisture deficit increased significantly through the dry May, leading to severe stress for unirrigated plants from mid-May onwards. An index of severe stress for this spring season gives a value of 254, average 67, but it was higher in the springs of 2011, 1997 and 1990.

Sunshine: This has been a remarkably sunny spring, not only a new record, but 138 hours more sun than the previous highest in 1990. In fact, the daily mean of 8.54 hr this spring is not only higher than the summer average of 6.22 hrs, but is also more than in all but 3 summers in the past 113 years. Each of the season's months had well above the average sunshine, ranging from 145 % in March to 184 % in May. There were several remarkable runs of sunny days, 21st to 27th March, mean 11.6 hr/day, 19th to 26th April, 13.1 hr/day and 17th to 31st May, mean 12.2 hr/day. Overall there were 17 days with <3 hours, 59 with =>6 hours, 48 with =>9 hours, 31 with =>12 hours and 5 with =>15 hours. **Wind:** The mean speed of 6.8 mph is slightly below average. The 29th March was the windiest day, mean 15.1 mph, and the highest gust of 44 mph was also on that day. The 8th May was least windy, mean 2.6 mph, and there were 2259 minutes of calm. Daily mean direction/number of days: N,7 NE,38 E,2 SE,4 S,7 SW,22 W,9 NW,3. Compared with average, NE winds were 19.4% more frequent, at the expense of S and SW combined, -6.2%, W, NW and N combined, -10.1 %, and E, -3.5%. This is the most NE'ly spring in the past 33 years.

Humidity: The overall mean relative humidity was 69.2% and the lowest was 19 % on the 20th May. The mean water vapour content per kg of air was 5.7 g at 0900 GMT and 5.2 g at 1500 GMT. **Pressure:** The season's highest MSL pressure was 1040.5 mbar on 29th March and the lowest was 984.2 mbar on the 2nd March, a span of 56.3 mbar, 3.6 mbar above average. **March:** Mean temperature and rainfall near average, very sunny, quite windy at times. Changeable and rather wet until mid-month then dry and often sunny. **April:** Very mild by day. Record sunshine and plenty of dry weather. Mean temperature 3rd highest in 139 years. Mean daily temperature range highest in 45 years. Most of the month's rain fell on just 5 days, the rest being dry. Sunniest in over 100 years. **May:** Record breaking month, highest mean maximum, highest sunshine, lowest rainfall. Highest min 3rd highest in 108 years. Rain just 7 % of average. 29 dry days a new May record. Sunshine 146 hours above average in the sunniest May since before 1908, and 2nd sunniest month of any name after July 1911.

Month	Mean	Anom	Mean	Anom	Rain	Anom	Sun	Anom	Mean	Max	Mean	Anom
	Max		Min		mm		hrs		Wind mph	gust	pressure	
March	12.1°	+0.9°	2.7°	-0.5°	41.8	91%	177.2	145%	8.9	44	1017.3	+1.7
April	18.3°	+4.3°	4.6°	+0.2°	39.6	82%	265.5	161%	5.4	36	1018.1	+3.1
May	20.8°	+3.3°	6.7°	-0.8°	3.4	7%	343.2	184%	6.1	40	1022.2	+6.3

B J Burton FRMetS.

Hon. Met. Officer to Wokingham Town Council.

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

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

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

Mean: The mean of the data under discussion, often the monthly mean of daily data. The mean is obtained by summation of the individual values and dividing by the number of values. The term 'daily mean' in respect of temperature is defined as '(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 or 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.