

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

APRIL 2020

Temperature (°C)	Anomaly	Rank in the past	139	years					
Mean maximum	18.3	+4.3	4 th highest						
Mean minimum	4.6	+0.2	35 th highest						
Daily mean	11.5	+2.3	3 rd highest						
Highest maximum	24.7	on 12 th	Lowest maximum	10.3 on 1 st					
Highest minimum	10.1	on 6 th	Lowest minimum	-2.7 on 1 st					
Mean grass minimum	0.8	+0.1	Lowest grass minimum	-6.8 on 1 st					
Mean earth @30 cm	11.1	+1.2	Earth @100 cm	10.1					
Frost duration (hrs)	7.4		Rain duration (hrs)	31.7					
Rainfall total (mm)	39.6	82%	65 th lowest						
Highest daily fall	13.2	on 17 th	Highest rate mm/hr	20 on 30 th					
Number of: Dry days (<0.2mm)	23	Wet days (>0.9mm)	5	days ≥5mm	4				
Sunshine total (hrs)	265.5	Daily mean	8.85	161 %	Sunniest day	14.0	on 26 th		
N° days with: Air frost	2	Ground frost	14	Snow falling	0	Snow lying	0		
Thunder	0	Hail ≥5mm	0	Small hail/ice	1	Fog @09	0	Nil sun	1
Pressure MSL: Mean @09 GMT, mbar	1018.1	+3.1	Highest	1030.8	on 7 th	Lowest	992.3	on 30 th	
Relative humidity: Mean (%)	69.1	Lowest	22	on 12 th	Water vapour (g/kg), mean at 09 and 15 GMT	5.9,	5.5		
Overall mean wind speed (mph)	5.4	Windiest day	11.4	on 13 th	Max gust	36	on 20 th		
Wind direction (days)	N 1	NE 18	E 0	SE 2	S 4	SW 2	W 2	NW 1	
Least windy day (mph)	3.0	on 8 th	Calm; less than 0.5 mph (minutes)	999					

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

Notes: **Very Mild by Day, Record Sunshine, Plenty of Dry Weather.**

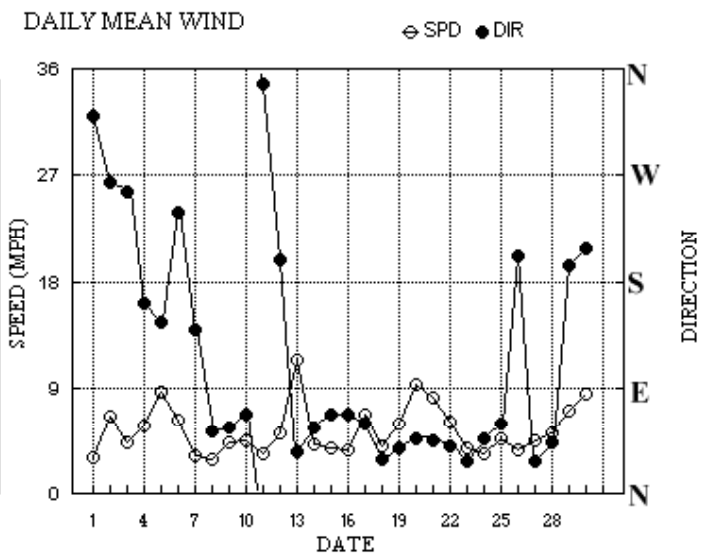
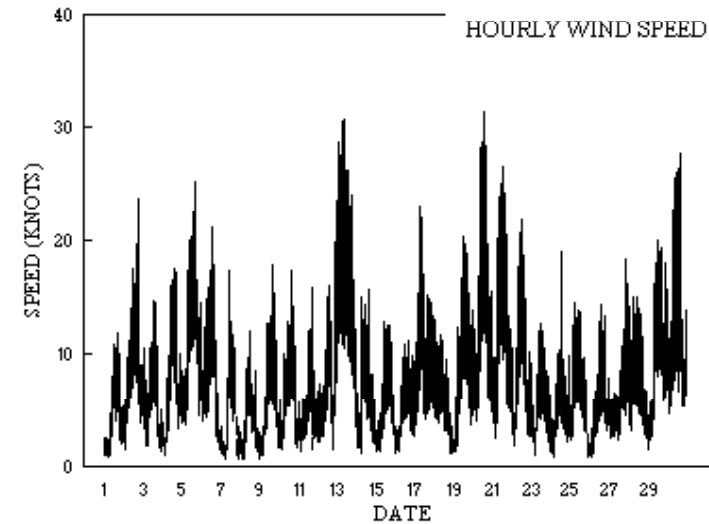
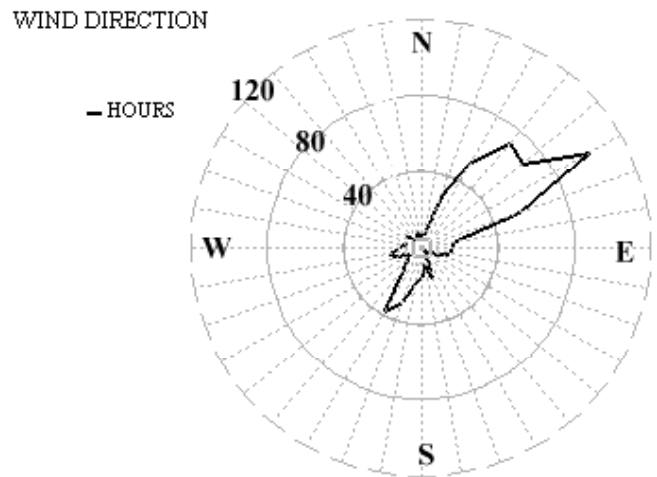
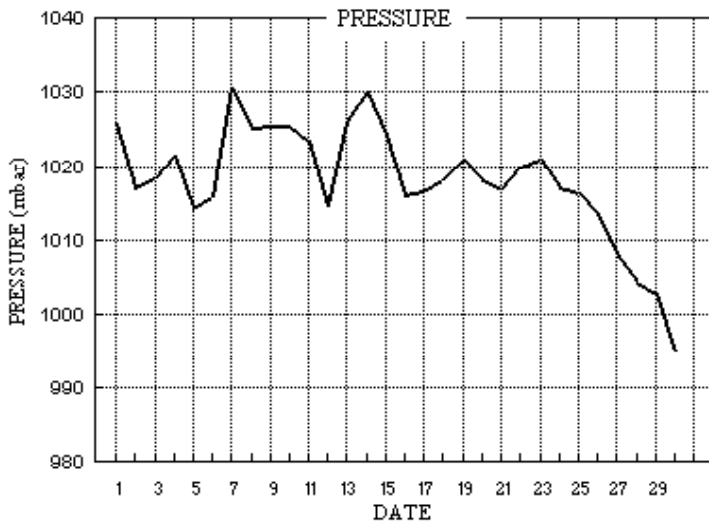
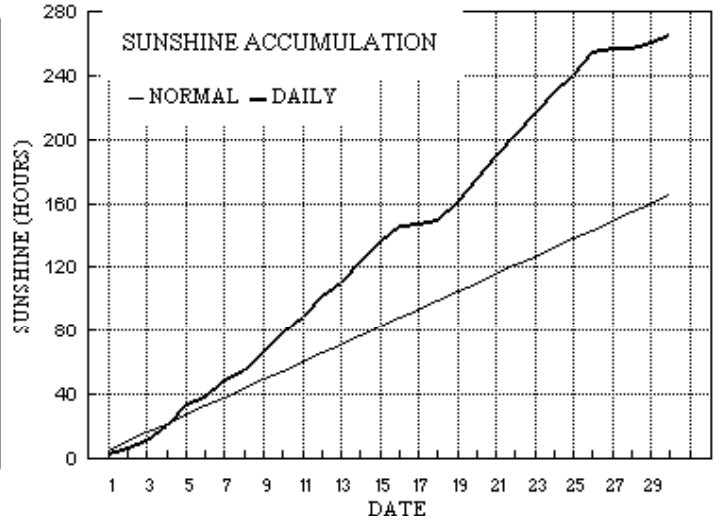
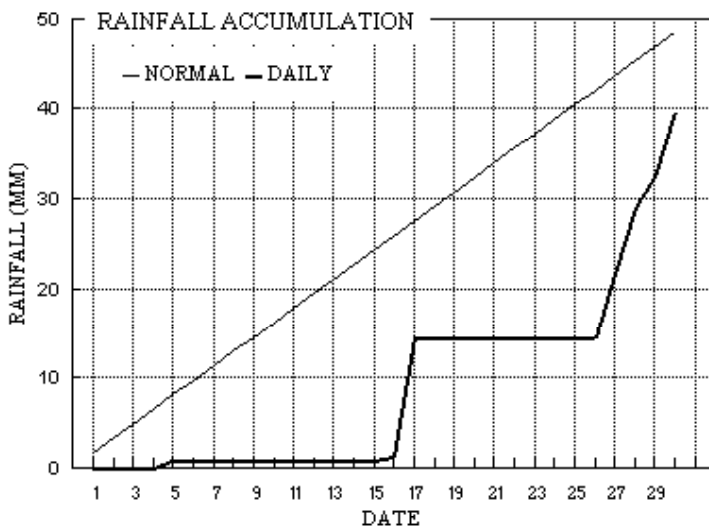
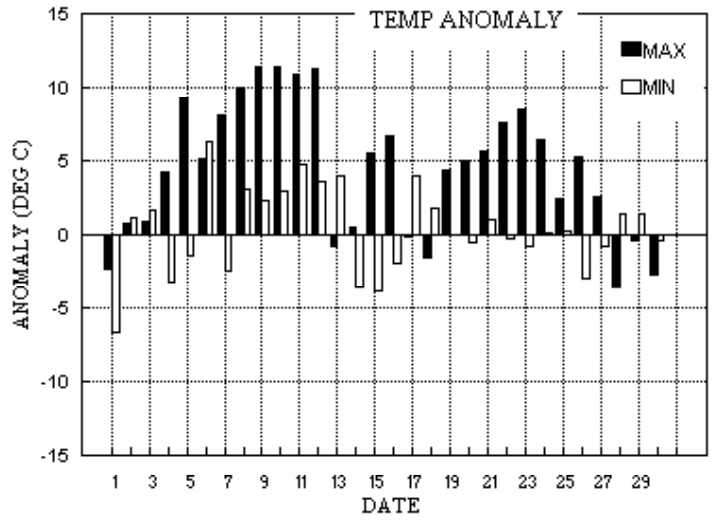
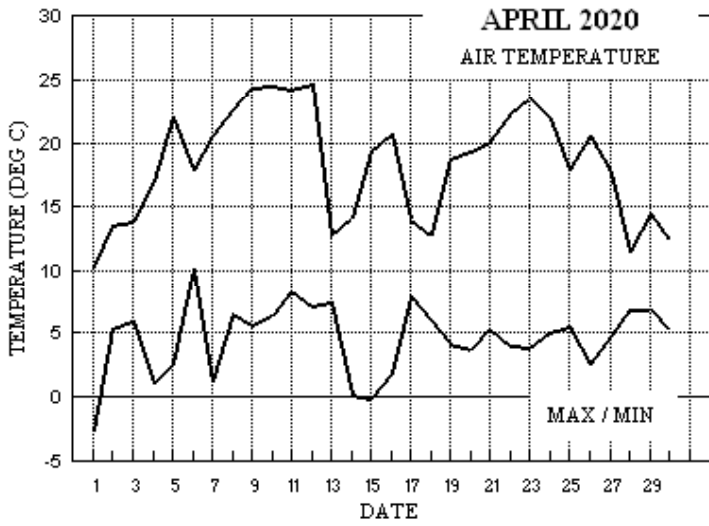
Temperature: The mean temperature this April ranks 3rd highest in 139 years, with only the Aprils of 2011 and 2007 being milder. The mean maximum ranks 4th highest and is 1.2° below the record set in 2011. The mean minimum, however, is 2.5° below the record set in 2018 and ranks only 35th highest. The mean daily temperature range of 13.7° is a new April record for the past 45 years, and 2nd highest for any month after 14.0° in July 2018. The highest max is 3.8° above the median and the lowest max is 2.3° above its median. The highest min is 0.3° above the median while the lowest min is 0.8° below its median. The mean and lowest grass min are close to average. Earth temperature at 30cm and 1m depth are well above average. The duration of air frost is about half the average. Anomalies for daily max were above normal on all but 6 days, and were over +5° from the 5th to 12th, 15, 16th, 20th to 24th and 26th, and were over +10° from the 8th to 12th. Extreme anomalies were +11.5° on the 9th and -3.6° on the 28th. Anomalies for daily min were generally closer to normal, ranging from +6.3° on the 6th to -6.6° on the 1st, and were above normal on 16 days. **Rainfall:** This has been a predominantly dry month, with 5 more dry days than average, and 3 dry spells, 16 days ending on the 4th, 10 days on the 15th and 9 days on the 26th. However, the total is only 18% below average, thanks to 13.2 mm on the 17th and a total of 25.2 mm over the final 4 days. Daily accumulation compared to normal was 25 mm in deficit by the 16th, decreasing to 14 mm on the 17th, increasing to 28 mm by the 26th, but ending the month only 9 mm in deficit. There was no snow or thunder this month, but small hail (ice pellets) fell on the 30th. There were no violent rain showers, but rainfall rate reached 20 mm/hr on the 30th. **Sunshine:** This April has seen more sunshine than any other in this area in over 100 years. The total of 265.5 hours is 102 hours above the average for the past 45 years. The daily mean of 8.85 hours has been exceeded only 23 times for any month in the past 112 years, 4 times in May, 8 in June, 10 in July and 1 in August. The previous highest April daily mean was 8.20 hours in 1912, and more recently, 8.09 hours in 2007. There were 2 outstandingly sunny episodes, 9th to 16th, daily mean 11.29 hours, and 19th to 26th, daily mean 13.12 hours, and overall there were 11 days having over 90% of the maximum. Daily accumulations compared with normal, slightly in deficit on the 3rd was in surplus by the 5th, increasing to 48 hours surplus by the 16th and over 100 hours by the 26th. Overall there were 3 days with <3 hours, 19 with =>6 hours, 16 with =>9 hours and 12 with =>12 hours. **Wind:** The mean speed this April is 1.4 mph below average, and is equal lowest with 2007 and 1997 since before 1988. The highest gust is 5 mph below average but is lowest only since 2017. Daily mean direction was mostly NE'ly, except NW'ly on 1st backing SE'ly by 7th, N'ly on 11th, S'ly on 12th, 26th, 29th and 30th. Speeds were light or moderate throughout, except for fresh on the 13th and 20th. **Miscellaneous:** The mean cloud amount at 0900 GMT and 1500 GMT, 55 % and 51 % respectively, are new record lows for April in the past 25 years.

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

From the 1 st to the 10 th				From the 11 th to the 20 th				From the 21 st to the 30 th			
+5.9°	+0.4°	4%	145%	+4.2°	+0.8°	85%	174%	+3.1°	-0.1°	155%	163%

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

Wokingham climatological graphs for April 2020



Month: APRIL 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	Rain HH hrs										
1	10.3	-2.7	tr	-6.8	7.7	8.2	3.5	7.3	1025.9	1	1	0	0	0	0	319	2.2	2.7	328	12	1614	334	6	16	0.0		
2	13.6	5.4	tr	4.5	7.7	8.2	3.6	0.0	1017.0	0	0	0	0	0	0	263	5.5	5.7	266	24	1721	268	10	17	0.0		
3	13.9	5.9	0.0	2.8	8.1	8.2	5.6	0.0	1018.3	0	0	0	0	0	0	255	3.4	3.8	310	15	1326	271	6	12	0.0		
4	17.0	1.0	0.0	-3.3	8.4	8.3	8.7	0.0	1021.4	0	1	0	0	0	0	162	4.1	5.0	151	18	1552	149	9	15	0.0		
5	22.0	2.6	0.7	-3.0	8.7	8.4	12.6	0.0	1014.3	0	1	0	0	0	0	145	6.9	7.6	152	25	1633	154	11	17	1.1		
6	17.8	10.1	0.0	8.6	9.2	8.5	5.2	0.0	1015.8	0	0	0	0	0	0	238	4.6	5.5	207	21	1338	256	9	12	0.0		
7	20.5	1.2	0.0	-3.4	9.6	8.7	11.1	0.0	1030.6	0	1	0	0	0	0	140	1.8	2.8	178	17	1114	145	7	11	0.0		
8	22.6	6.6	0.0	2.3	10.0	8.9	5.6	0.0	1025.3	0	0	0	0	0	0	53	2.3	2.6	66	12	1101	61	6	11	0.0		
9	24.4	5.7	0.0	1.1	10.6	9.1	11.4	0.0	1025.5	0	0	0	0	0	0	56	3.8	3.9	68	18	1659	63	9	17	0.0		
10	24.6	6.4	0.0	1.2	11.0	9.4	12.6	0.0	1025.5	0	0	0	0	0	0	67	3.7	3.9	62	18	1629	68	8	16	0.0		
11	24.3	8.3	0.0	3.7	11.5	9.6	9.9	0.0	1023.4	0	0	0	0	0	0	347	0.8	3.0	340	16	1602	305	5	16	0.0		
12	24.7	7.2	tr	1.8	11.9	9.9	12.7	0.0	1014.5	0	0	0	0	0	0	199	2.3	4.5	21	20	2244	29	8	22	0.0		
13	12.8	7.5	0.0	6.1	12.1	10.1	8.3	0.0	1026.1	0	0	0	0	0	0	36	9.8	9.9	34	31	0941	37	12	10	0.0		
14	14.1	0.1	0.0	-4.6	11.7	10.4	13.4	0.0	1030.0	0	1	0	0	0	0	57	3.2	3.7	21	16	1551	61	6	08	0.0		
15	19.3	-0.1	0.0	-4.3	11.3	10.5	13.5	0.1	1024.3	1	1	0	0	0	0	67	3.2	3.4	58	13	1109	61	6	16	0.0		
16	20.7	1.8	0.5	-2.8	11.3	10.5	8.5	0.0	1016.0	0	1	0	0	0	0	67	2.9	3.2	66	11	1646	63	5	17	0.3		
17	14.0	7.9	13.2	4.2	11.5	10.5	1.3	0.0	1016.7	0	0	0	0	0	0	59	5.8	5.8	59	23	0751	59	9	07	8.9		
18	12.8	5.9	0.0	5.2	11.3	10.5	2.2	0.0	1018.2	0	0	0	0	0	0	30	3.3	3.5	43	13	0001	35	5	01	0.0		
19	18.7	4.2	0.0	-0.6	11.3	10.6	12.4	0.0	1020.8	0	1	0	0	0	0	39	5.1	5.2	21	20	1310	43	8	13	0.0		
20	19.3	3.7	0.0	-1.2	11.6	10.6	13.7	0.0	1018.0	0	1	0	0	0	0	47	7.9	8.1	62	31	1434	61	13	14	0.0		
21	20.1	5.3	0.0	0.6	11.9	10.7	13.9	0.0	1016.8	0	0	0	0	0	0	46	7.0	7.1	26	27	1436	60	11	13	0.0		
22	22.3	4.1	0.0	-1.3	12.1	10.8	13.6	0.0	1019.8	0	1	0	0	0	0	40	5.1	5.3	35	22	1332	59	9	12	0.0		
23	23.5	3.9	0.0	-1.7	12.3	11.0	13.4	0.0	1020.9	0	1	0	0	0	0	28	3.1	3.4	26	13	1134	40	6	10	0.0		
24	21.8	5.0	0.0	-0.1	12.7	11.1	13.3	0.0	1017.1	0	1	0	0	0	0	47	2.9	3.0	13	19	1318	75	5	22	0.0		
25	17.9	5.5	0.0	-0.2	12.9	11.3	10.7	0.0	1016.4	0	1	0	0	0	0	60	3.8	4.1	63	15	0510	63	7	05	0.0		
26	20.5	2.5	0.0	-1.8	12.9	11.4	14.0	0.0	1013.5	0	1	0	0	0	0	202	2.9	3.2	129	14	1449	201	6	19	0.0		
27	17.7	4.8	7.2	0.2	13.0	11.6	3.1	0.0	1008.2	0	0	0	0	0	0	28	1.2	3.9	71	19	2206	69	8	22	7.0		
28	11.5	6.9	7.3	7.8	13.1	11.7	0.0	0.0	1004.3	0	0	0	0	0	0	44	4.3	4.5	66	16	0042	70	6	00	9.1		
29	14.5	6.9	3.5	7.3	12.5	11.7	3.3	0.0	1002.7	0	0	0	0	0	0	194	5.3	6.1	159	20	1245	217	10	17	3.1		
30	12.4	5.2	7.2	2.6	12.3	11.7	4.4	0.0	995.0	0	0	0	0	1	0	208	7.0	7.4	242	28	1719	186	12	10	2.2		
Total			39.6				265.5	7.4																		31.7	
Mean	18.3	4.6		0.8	11.1	10.1	8.85	0.2	1018.1							62	1.6	4.7									
Anom	+4.3	+0.2	82%	+0.1	+1.2	+0.9	161%																			+3.1	
Daily mean		11.5							Pressure, abs highest =																		1030.8 on 7
Anom		+2.3							Pressure, abs lowest =																		992.3 on 30

Number of days with:

Air frost = 2 Ground frost = 14 Nil sun = 1
 Snow falling = 0 Snow lying = 0 Thunder = 0
 Hail=>5mm = 0 Hail<5mm or ice = 1 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 APRIL2020

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Ci	NCh	shs	NCh	shs	NCh	shs	Date	Remarks
1	75	3	29	02	05	6.2	-0.1	64	3.7	1025.9	8	008	03	0	0	3	5	6	0	0	83645						1		
2	84	7	30	06	12	9.8	4.6	70	5.2	1017.0	6	007	03	1	1	7	8	5	/	/	82822	87645					2	Cu hum	
3	83	7	28	05	10	9.0	3.4	68	4.8	1018.3	3	011	03	2	2	7	8	5	/	/	82825	83640	87648				3	Cu med	
4	56	8	17	04	09	7.7	6.5	92	5.9	1021.4	0	006	05	4	1	8	6	2	/	/	85704	88705					4		
5	81	1	14	08	17	14.6	3.7	48	4.9	1014.3	8	014	03	0	0	0	0	9	0	4	81075						5	Ci edge W	
6	72	7	26	07	14	11.7	8.9	83	7.1	1015.8	2	040	21	6	2	7	8	4	/	1	86813						6	2Sc25 /Ci70 Cu hum	
7	80	6	02	03	05	12.2	8.9	80	6.9	1030.6	0	003	02	1	1	0	0	9	0	1	81075	86080					7	COTRA	
8	61	7	04	04	09	14.0	6.8	62	6.1	1025.3	8	001	02	2	2	7	0	9	7	/	87360						8		
9	40	2	01	04	06	15.2	9.3	68	7.2	1025.5	2	006	05	0	0	0	0	9	0	1	82080						9	Sky turbid	
10	50	2	05	04	08	14.8	7.2	69	7.1	1025.5	8	001	05	0	0	0	0	9	0	1	82080						10	COTRA Sky turbid	
11	58	2	05	03	05	15.0	9.1	68	7.1	1023.4	4	000	05	1	1	1	0	9	8	1	81358						11	1Ac60 2Ci80 COTRA Ac flo Sky turbid	
12	56	5	20	04	07	17.4	9.1	58	7.1	1014.5	7	020	05	1	1	4	0	9	8	1	84362						12	2Ci80 COTRA Ac cas	
13	75	7	05	10	24	8.3	1.0	60	4.0	1026.1	2	028	01	2	2	7	5	5	7	/	87628	85361					13		
14	82	1	06	06	13	8.5	-0.3	54	3.6	1030.0	0	001	03	1	1	1	5	6	0	1	81635						14	1Ci80 COTRA	
15	59	3	10	03	07	10.7	2.3	56	4.4	1024.3	8	010	05	0	0	0	0	9	0	1	81075	83081					15		
16	50	6	04	04	07	11.5	6.2	70	5.9	1016.0	8	003	05	2	2	1	0	9	3	2	81368	86075					16	U/a cont	
17	68	7	05	09	20	12.3	7.6	73	6.4	1016.7	1	001	15	2	2	1	5	7	8	/	81650	84360	85362				17	1Ac58 Ac cas jpSW	
18	65	8	05	04	11	7.7	7.0	95	6.2	1018.2	3	011	21	6	2	8	5	3	/	/	86708	88612					18		
19	75	1	02	07	12	10.7	6.3	74	5.9	1020.8	0	004	01	1	1	1	5	6	8	0	81645						19	1Ac62 Ac cas N	
20	81	1	06	09	19	13.3	5.0	57	5.4	1018.0	8	008	02	0	0	0	0	9	0	1	81075						20	Ci distant SW	
21	81	2	06	11	21	14.1	4.4	52	5.2	1016.8	4	000	02	0	0	0	0	9	0	1	82075						21		
22	65	1	04	06	14	14.6	6.9	60	6.1	1019.8	0	003	02	0	0	0	0	9	0	1	81075						22		
23	62	3	02	05	08	14.2	6.8	61	6.1	1020.9	0	002	02	0	0	0	0	9	0	1	83080						23		
24	64	2	03	03	07	14.3	7.4	63	6.3	1017.1	8	002	01	1	1	0	0	9	0	1	82080						24	Sky turbid	
25	60	3	06	06	13	11.8	6.7	71	6.1	1016.4	0	005	01	1	1	3	5	4	0	0	83612						25		
26	70	1	21	02	07	13.9	5.3	56	5.5	1013.5	4	000	02	0	0	1	0	9	3	1	81360						26	1Ci80	
27	61	8	30	04	06	11.7	7.4	75	6.4	1008.2	4	000	03	2	2	7	5	6	7	/	85635	87650					27	/Ac60	
28	65	8	04	06	14	7.0	6.6	97	6.1	1004.3	4	000	61	6	6	8	5	3	/	/	83707	86612	88620				28		
29	70	7	16	07	13	11.3	7.2	76	6.4	1002.7	8	016	03	1	1	4	8	4	5	/	83815	85362					29	2Sc56 Cu hum	
30	60	7	17	04	23	8.7	7.5	92	6.5	995.0	8	008	25	8	1	5	9	4	7	2	82915	82820	86360				30	2Sc50 /Ci70 jpW vv 30k exW	

Mean vis = 19.4 km

Mean cloud = 4.4 55%

Mean wind speed = 5.3 kn

Mean gust = 12 kn

Mean TT = 11.7 °C

Mean TdTd = 6.0 °C

Mean RH = 69.1 %

Mean r = 5.9 g/kg

Mean PPP = 1018.1 mbar

See appendix 2 below for full code details

VV = Visibility code (Code FM12-4377)

N = Total cloud amount, oktas

dd = Direction from which wind is blowing, tens of degrees true

ff = 10 minute mean wind speed, knots

gg = Highest gust in past hour, knots

TT = Air temperature at 1.2 m, deg Celsius

TdTd = Dew point temperature at 1.2 m, deg Celsius

RH = Relative humidity at 1.2 m

r = Humidity mixing ratio at 1.2 m, g/kg

PPP = Air pressure reduced to sea level, mbar

a = Characteristic of pressure tendency (Code FM12-0200)

ppp = 3 hr pressure tendency, tenths of mbar

ww = Present weather code (Code FM12-4677)

W1, W2 = Past weather code (Code FM12-4561)- covers past 3 hours.

Nh = Amount of low cloud present, oktas

Cl = Type of low cloud (Code Fm12-0513)

h = Height of low cloud (Code FM12-1600)

Cm = Type of medium cloud (Code FM12-0515)

Ch = Type of high cloud (Code FM12-0509)

8 groups. 8 = indicator for cloud detail

N = Amount of cloud, oktas

C = Type of cloud (FM12-0500)

hshs= Height of cloud (FM12-1677)

Remarks : COTRA = persistent condensation trails present

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 1500 GMT for APRIL 2020

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Cl	NCh	shs	NCh	shs	NCh	shs	Date	Remarks
1	84	8	30	03	11	8.6	-0.4	53	3.6	1022.0	7	018	02	2	2	8	8	6	/	/	82840	88648					1	Cu hum	
2	84	7	25	11	16	12.1	4.8	61	5.3	1014.5	7	012	03	2	2	7	8	6	/	/	85832	87640					2	Cu med	
3	82	4	24	05	15	13.7	1.4	43	4.2	1018.0	8	005	02	1	1	2	1	6	0	1	82848	83080					3	Cu hum	
4	86	3	16	08	16	16.7	2.3	38	4.5	1018.8	7	014	01	0	0	1	1	7	0	1	81850	83080					4	COTRA Cu hum	
5	84	4	17	11	20	20.3	2.6	31	4.6	1010.7	6	014	02	0	0	1	0	9	3	2	81368	84075					5	COTRA Halo 22° part	
6	82	6	25	09	17	17.2	4.5	43	5.2	1020.0	1	020	03	1	1	6	8	7	6	0	82850	85656					6	2Ac57 Cu med	
7	81	6	14	03	12	19.5	4.0	36	5.0	1027.1	7	017	02	1	1	1	1	7	3	1	81856	85075					7	2Ac69 Cu hum	
8	61	5	11	03	07	21.6	7.4	40	6.3	1022.6	7	017	01	2	2	5	0	8	4	0	81357	85360					8		
9	62	3	06	06	13	22.0	9.9	46	7.5	1023.2	6	011	03	0	0	1	2	7	6	1	81856						9	1Ac57 2Ci75 Cu med COTRA	
10	75	1	09	05	13	23.9	7.9	36	6.6	1022.0	7	019	02	0	0	1	1	7	0	1	81856						10	1Ci80 COTRA Cu hum	
11	67	2	32	05	12	23.7	5.6	31	5.6	1020.4	7	016	03	0	0	1	2	7	6	1	81856						11	1Ac65 1Ci75 Cu con	
12	70	6	21	07	16	23.9	4.8	29	5.3	1011.1	7	013	02	1	1	1	2	8	6	1	81857	85080					12	2Ac63 Cu con	
13	80	1	04	09	25	12.5	-0.1	42	3.7	1026.7	8	002	02	0	0	1	5	6	0	0	81640						13		
14	80	0	04	04	13	13.2	-0.4	39	3.6	1026.8	7	019	02	0	0	0	0	9	0	0							14		
15	72	1	04	05	13	19.1	1.6	31	4.2	1019.6	8	025	02	0	0	0	0	9	0	1	81080						15	COTRA	
16	59	7	11	04	09	19.2	6.7	44	6.1	1014.8	7	009	21	6	2	7	0	8	8	/	83357	87365					16	Ac cas	
17	59	8	04	05	11	11.0	9.6	91	7.4	1015.7	8	010	61	6	2	7	5	6	7	/	81645	87650	88357				17		
18	58	7	01	05	10	11.4	8.1	80	6.6	1018.4	4	000	05	2	2	7	5	4	/	/	87615						18		
19	82	1	06	08	19	18.6	4.7	40	5.3	1018.2	8	016	02	0	0	0	0	9	0	1	81075						19	Ci SW	
20	80	1	07	14	31	19.0	3.2	35	4.8	1014.4	7	020	02	0	0	0	0	9	0	1	81075						20	Ci SSW	
21	81	2	04	09	27	19.7	4.6	37	5.2	1015.4	7	009	02	0	0	0	0	9	0	1	82072						21	COTRA	
22	75	2	05	07	19	21.9	4.9	33	5.3	1018.2	8	008	02	0	0	0	0	9	0	1	82080						22	COTRA	
23	67	5	04	04	10	22.7	5.2	32	5.4	1017.4	7	019	03	1	1	0	0	9	0	1	85072						23	U/a cont	
24	67	1	36	04	10	21.7	5.6	35	5.6	1014.1	7	014	03	0	0	1	1	7	0	0	81856						24	Cu hum Sky turbid	
25	80	1	05	05	11	17.0	5.3	46	5.5	1013.9	7	016	02	0	0	1	0	9	3	0	81360						25		
26	84	1	19	05	14	20.0	3.3	33	4.8	1010.1	8	019	02	0	0	1	1	7	3	1	81856						26	1Ac60 1Ci80 Cu hum	
27	59	6	03	04	09	16.9	9.3	61	7.3	1006.2	8	013	05	8	2	2	8	6	7	/	81835	86360					27	2Sc56 Cu hum	
28	58	8	04	04	14	8.2	7.8	97	6.6	1004.1	6	001	61	6	6	7	7	2	2	/	85704	87706	88520				28		
29	83	8	25	10	19	13.3	7.1	66	6.3	999.2	5	009	25	8	6	1	8	5	7	/	81822	83368	88469				29	1Sc35 Cu med	
30	58	7	23	07	27	8.2	6.7	90	6.2	992.7	3	001	80	8	2	2	9	3	2	/	81708	81915	87540				30	1Cu20 2Sc30 vv40k W pRho 1446	

Mean vis = 27.7 km
 Mean cloud = 4.1 51%
 Mean wind speed = 6.3 kn
 Mean gust = 15 kn
 Mean TT = 17.2 °C
 Mean Td = 4.9 °C
 Mean RH = 47.3 %
 Mean r = 5.5 g/kg
 Mean PPP = 1015.9 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
 Td = 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	Hour	01-Apr	02-Apr	03-Apr	04-Apr	05-Apr	06-Apr	07-Apr	08-Apr	09-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	15-Apr	16-Apr
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	0.00	0.00	0.00	0.00	0.00	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	0.10	0.00	0.00	0.20	0.35	0.00	0.33	0.00	0.16	0.22	0.00	0.30	0.00	0.59	0.73	0.61	
6	1.00	0.00	0.03	0.11	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	
7	1.00	0.78	0.45	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	
8	1.00	0.68	0.03	0.00	1.00	0.01	1.00	0.00	1.00	1.00	0.94	1.00	0.00	1.00	1.00	1.00	
9	0.33	0.00	0.00	0.12	1.00	0.71	1.00	0.06	1.00	1.00	1.00	1.00	0.03	1.00	1.00	1.00	
10	0.02	0.45	0.24	0.78	1.00	0.93	1.00	0.04	1.00	1.00	0.93	1.00	0.49	1.00	1.00	0.77	
11	0.00	0.22	0.24	0.85	1.00	0.78	0.88	0.55	1.00	1.00	0.99	1.00	1.00	1.00	1.00	0.24	
12	0.00	0.00	0.36	0.99	1.00	0.27	1.00	0.63	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.10	
13	0.00	0.00	0.73	1.00	1.00	0.50	1.00	0.12	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	
14	0.00	0.35	0.94	1.00	1.00	0.27	1.00	0.81	0.68	0.92	0.58	0.99	1.00	1.00	1.00	0.00	
15	0.00	0.00	0.77	1.00	1.00	0.19	1.00	1.00	0.20	0.99	1.00	1.00	1.00	1.00	1.00	0.20	
16	0.00	0.10	0.67	1.00	1.00	0.41	0.64	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88	
17	0.00	0.75	0.84	1.00	1.00	0.57	0.28	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
18	0.00	0.21	0.25	0.63	0.28	0.58	0.00	0.41	0.31	0.49	0.50	0.38	0.75	0.82	0.81	0.68	
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	3.45	3.57	5.55	8.69	12.63	5.22	11.13	5.62	11.35	12.61	9.93	12.67	8.27	13.41	13.54	8.47	

Hour	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr	29-Apr	30-Apr	Mean
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.08	0.00	0.00	0.19	0.01
5	0.39	0.00	0.03	0.86	0.93	0.90	0.83	0.44	0.00	1.00	0.08	0.00	0.00	0.87	0.33
6	0.59	0.00	0.41	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.01	0.00	0.98	0.60	0.59
7	0.11	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.97	0.24	0.62
8	0.07	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.54	1.00	0.00	0.00	0.34	0.01	0.62
9	0.06	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.12	0.01	0.61
10	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.01	0.00	0.66
11	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.05	0.00	0.00	0.14	0.66
12	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.64
13	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.01	0.00	0.00	0.02	0.65
14	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.45	0.00	0.00	0.07	0.67
15	0.00	0.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.00	0.01	0.28	0.69
16	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.59	0.47	0.79
17	0.05	0.83	1.00	1.00	1.00	1.00	0.89	1.00	1.00	1.00	0.49	0.00	0.22	0.73	0.79
18	0.06	0.18	0.91	0.88	0.92	0.72	0.66	0.83	1.00	0.92	0.00	0.00	0.00	0.82	0.50
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.01
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot	1.33	2.20	12.35	13.74	13.85	13.61	13.38	13.27	10.70	13.98	3.13	0.00	3.25	4.44	265.36

APRIL 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	4.47	8.8	1259	-2.7	534	71.0	96.7	631	46.8	1326	-0.8	3.5	4.2	2038	2.9	535	1024.02	1029.2	14	1019.8	2354	0
2	9.11	13.6	1431	5.4	137	69.1	86.8	2322	48.9	1118	3.6	4.9	5.6	1419	4.0	351	1016.39	1020.0	0	1014.0	1601	0
3	8.63	13.9	1539	2.7	2359	70.0	92.9	607	41.2	1540	3.0	4.7	5.6	658	3.9	1509	1018.10	1020.4	2359	1015.8	31	0
4	9.02	17.0	1337	1.0	523	67.0	97.5	752	30.9	1738	2.1	4.4	6.5	1029	3.1	1738	1019.81	1021.6	754	1018.2	2359	0
5	13.33	22.0	1321	2.6	554	54.4	91.4	331	28.2	1349	3.1	4.7	6.0	959	4.1	551	1012.91	1018.3	1	1009.5	1904	0
6	12.61	17.8	1404	4.5	2348	66.7	93.7	751	37.1	1327	6.0	5.9	8.1	552	4.3	1312	1017.96	1028.0	2348	1009.5	137	0.6
7	11.00	20.5	1424	1.2	537	66.9	97.5	609	32.7	1425	4.0	5.0	6.0	1536	3.9	537	1028.48	1030.8	755	1026.2	1655	0
8	13.90	22.6	1446	6.6	242	69.2	92.5	409	38.8	1451	7.7	6.5	8.6	1541	5.4	239	1024.46	1027.2	2	1022.3	1610	0
9	14.18	24.4	1353	5.7	543	69.1	97.7	616	36.0	1410	7.8	6.5	8.6	1314	5.4	2322	1024.55	1026.1	2313	1022.9	1539	0
10	14.53	24.6	1341	6.4	419	66.6	93.1	534	31.1	1538	7.5	6.4	7.9	1138	5.3	326	1024.20	1026.0	646	1021.7	1634	0
11	15.62	24.3	1347	8.3	158	63.8	91.1	420	26.0	1333	7.7	6.5	8.1	1141	4.7	1333	1021.82	1024.0	9	1019.4	2345	0
12	15.72	24.7	1406	7.2	521	60.8	94.7	528	22.4	1544	6.7	6.1	8.1	1038	4.1	1544	1014.43	1019.6	0	1010.7	1607	0
13	8.65	12.8	1352	2.9	2240	62.8	85.7	517	40.6	1517	1.7	4.3	6.4	0	3.2	2326	1025.66	1030.4	2231	1017.8	3	0
14	7.03	14.1	1559	0.1	529	62.0	89.4	554	35.0	1456	-0.3	3.6	4.5	1316	3.2	1459	1028.37	1030.4	140	1026.1	1820	0
15	9.49	19.3	1533	-0.1	507	63.7	97.1	554	25.2	1346	1.6	4.2	5.4	1210	3.2	1346	1022.04	1026.4	12	1017.6	1752	0
16	11.40	20.7	1559	1.8	532	68.4	97.0	556	37.6	1626	5.1	5.5	7.2	1640	4.1	358	1016.04	1018.4	1	1014.2	1642	0
17	9.93	14.0	1223	7.2	2359	82.0	94.1	1631	60.8	1234	6.9	6.2	7.5	1449	4.9	2120	1016.46	1017.9	16	1014.7	1804	4.3
18	8.59	12.8	1657	5.9	334	90.5	98.1	725	72.6	1638	7.0	6.2	6.9	1612	5.4	0	1018.13	1020.8	2355	1015.8	253	10.2
19	10.81	18.7	1453	4.2	512	70.6	99.2	532	34.6	1559	4.8	5.3	6.8	1245	4.3	1728	1020.03	1021.7	640	1017.6	1604	0
20	11.38	19.3	1353	3.7	449	61.3	94.5	453	32.7	1505	3.3	4.8	5.8	1352	3.9	1856	1017.10	1020.3	6	1013.9	1600	0
21	12.50	20.1	1410	5.3	505	58.2	84.8	511	32.5	1556	3.8	5.0	6.0	1232	4.1	1730	1016.64	1018.9	2325	1015.1	1449	0
22	13.18	22.3	1446	4.1	447	61.0	96.2	539	28.0	1612	4.7	5.3	6.7	1054	4.5	1612	1019.33	1021.2	2324	1017.8	1548	0
23	13.82	23.5	1355	3.9	453	63.7	97.9	612	27.7	1420	5.9	5.8	7.2	1214	4.8	1420	1019.19	1021.4	635	1016.6	1806	0
24	13.45	21.8	1526	5.0	507	63.6	94.9	534	32.3	1151	5.8	5.7	6.8	1522	4.9	1151	1015.75	1018.0	10	1013.0	1736	0
25	11.11	17.9	1511	5.3	2359	71.9	96.5	441	38.7	1616	5.7	5.7	7.0	1102	4.8	1620	1014.91	1016.7	817	1012.7	1815	0
26	11.85	20.5	1513	2.5	502	64.0	98.3	611	30.9	1603	4.1	5.1	6.2	1138	4.3	1605	1011.85	1014.5	3	1009.0	1759	0
27	11.77	17.7	1543	4.8	324	73.0	92.4	410	53.4	1543	6.9	6.2	7.5	1435	4.9	323	1007.38	1009.8	25	1005.6	1616	0
28	7.88	10.1	39	6.9	901	95.4	98.1	2335	75.5	33	7.2	6.3	6.6	1445	5.8	34	1004.55	1006.2	0	1003.8	750	15.1
29	10.17	14.5	1603	7.0	31	82.7	98.4	145	57.1	1610	7.2	6.4	8.1	1345	5.2	1842	1001.02	1005.4	14	996.1	2324	2.3
30	8.54	12.4	1125	5.2	404	84.2	93.7	1326	62.1	1826	6.0	5.9	7.4	1401	5.0	1832	995.03	996.8	2347	992.3	1437	8.6
Total																						41.1
Mean	11.12	18.23		4.16		69.1	94.40		39.90		4.86	5.42	6.77		4.39		1017.22	1020.21		1014.32		
Max	15.72	24.70		8.28		95.4	99.20		75.50		7.80	6.53	8.59		5.80		1028.48	1030.82		1026.23		
Min	4.47	8.83		-2.68		54.4	84.80		22.37		-0.78	3.55	4.18		2.94		995.03	996.75		992.31		

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

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.