

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 2022

		Anomaly	Rank in the past	141	years				
Temperature (°C)									
Mean maximum	19.4	+1.3	12 th	highest					
Mean minimum	8.9	+1.2	3 rd	highest					
Daily mean	14.1	+1.2	5 th	highest					
Highest maximum	25.6	on 17 th	Lowest maximum	13.4	on 1 st				
Highest minimum	12.9	on 10 th	Lowest minimum	3.9	on 9 th				
Mean grass minimum	5.8	+1.3	Lowest grass minimum	-1.1	on 9 th				
Mean earth @30 cm	14.5	+0.7	Earth @100 cm	13.1	+1.0				
Frost duration (hrs)	0.0		Rain duration (hrs)	29.0					
Rainfall total (mm)	50.8	114%	56 th	highest					
Highest daily fall	10.9	on 15 th	Highest rate mm/hr	112	on 18 th				
Number of: Dry days (<0.2mm)	15	Wet days (>0.9mm)	12	days ≥5mm	4				
Sunshine total (hrs)	180.4	Daily mean	5.82	93%	Sunniest day	13.3	on 27 th		
N° days with: Air frost	0	Ground frost	1	Snow falling	0	Snow lying	0		
Thunder	2	Hail ≥5mm	0	Small hail/ice	2	Fog @09	0	Nil sun	1
Pressure MSL: Mean @09 GMT, mbar	1019.1	+2.6	Highest	1030.1	on 8 th	Lowest	1000.0	on 23 rd	
Relative humidity: Mean (%)	75.2	Lowest	34	on 8 th	Water vapour (g/kg), mean at 09 and 15 GMT	7.3,	7.2		
Overall mean wind speed (mph)	6.1	Windiest day	10.1	on 26 th	Max gust	31	on 25 th		
Wind direction (days)	N 3	NE 2	E 1	SE 0	S 4	SW 16	W 3	NW 2	
Least windy day (mph)	2.4	on 2 nd	Calm; less than 0.5 mph (minutes)	535					

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

Notes:

Very Mild with Above Average Rainfall and Below Average Sunshine

Temperature: May this year has been very mild, with the daily mean temperature highest since 2008 and 5th highest since before 1882. The mean maximum ranks 12th highest in the same period, but was exceeded as recently as 2020. The mean minimum, 3rd highest in 141 years, is highest since 1999, and is only 0.3° below the record set in 1964. The highest max is 0.2° above the median and the lowest max is 2.3° above its median. The highest min is 0.4° above the median while the lowest min is 2.4° above its median and is 2nd highest after 1999 in the past 119 years. Needless to say there was no air frost, not unusual in May, but there were 2 as recently as 2020. The mean grass min is highest since 2014, and the lowest grass min is highest since 2007. Earth temperature at 30 cm and 1 m depth are around 1° above average. Anomalies for daily max were above normal on all except 4 days, and were over +5° on the 6th, 9th, 14th, 17th and 22nd, and exceeded -3° on just the 30th, with extreme values of +8.1° on 17th and -3.1° on 30th. Anomalies for daily min were similarly mostly above normal, and above +5° on the 7th, 10th and 16th, and exceeded -3° on the 20th and 31st, with extreme values of +6.3° on 10th and -4.0° on the 30th. **Rainfall:** After a dry April, we received slightly above average rainfall in May. The total is 14% above the current 30 year average, and is 6.7 mm above the long-term median. In recent years, both 2021 and 2017 were wetter, but in this millennium 62% of Mays have been drier than this year's. The rainfall on the wettest day is 2.7 mm below the long-term median. Although there were 3 more dry days than in 2021, there were fewer than in any of the previous 6 Mays, and 3 fewer than average. Despite the above average total, rainfall duration was only 78% of average, attesting to the showery nature of much of this month's rain. Ice pellets fell on the 4th and 24th, and there was thunder on the 15th and 18th, with quite a spectacular lightning display on the latter date. Rainfall rate exceeded the violent threshold on the 4th, 18th, 24th and 31st, reaching 112 mm/hr at 2220 GMT on the 18th. Rainfall accumulation compared with normal was 19mm in deficit on the 13th, reducing to zero by the 15th, and remaining close to that until the 22nd, becoming a surplus of 5 mm by the 25th, reducing to zero on the 29th but ending the month with a 6 mm surplus. **Sunshine:** The total this May is 7% below average, though it was considerably more sunny than in May 2021. In this millennium, 12 Mays have been sunnier, and we have only to look back to 2020 to find the sunniest May on record, with nearly double the amount received this May. Up to the 15th, 6 days had >50% of the maximum, highest 82% on the 14th, and 7 had <20%. After the 15th, 7 days had >50%, highest 82% on the 27th, and 5 had <20%. Daily accumulation compared with normal was already 22 hours in deficit by the 4th and remained in deficit throughout the month, though the deficit did reduce to 9 hours by the 21st, and further to 4 hours by the 29th before increasing to 16 hours by the 31st. **Wind:** The mean speed this month is 0.5 mph below average. The mean speed on the windiest day is 2.1 mph below average and the month's highest gust is 8 mph below average and equal lowest for May with 2016 since 2004. Daily mean directions were between N and E on the 3rd, 7th, 8th, 15th, 28th and 29th, between E and S on the 17th, between W and N on the 5th and 27th, otherwise between S and W. Daily mean speeds were light or moderate except for very light on the 2nd and fresh on the 8th, 15th and 25th.

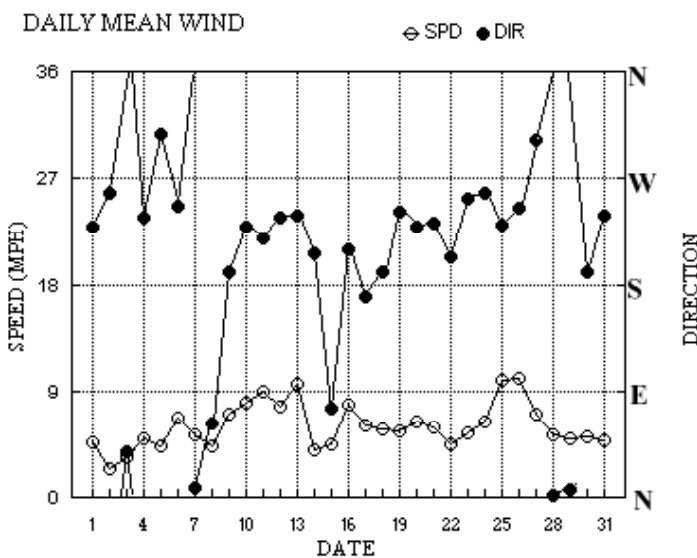
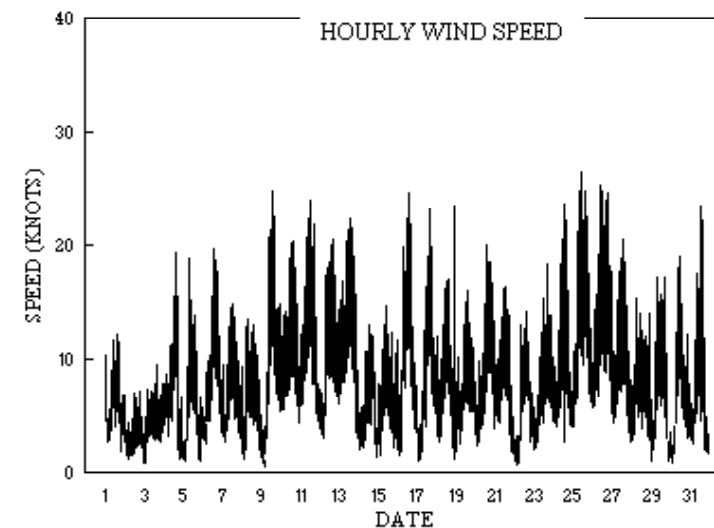
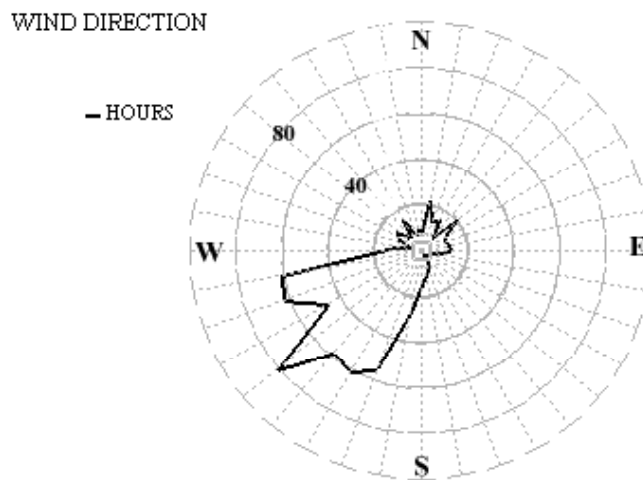
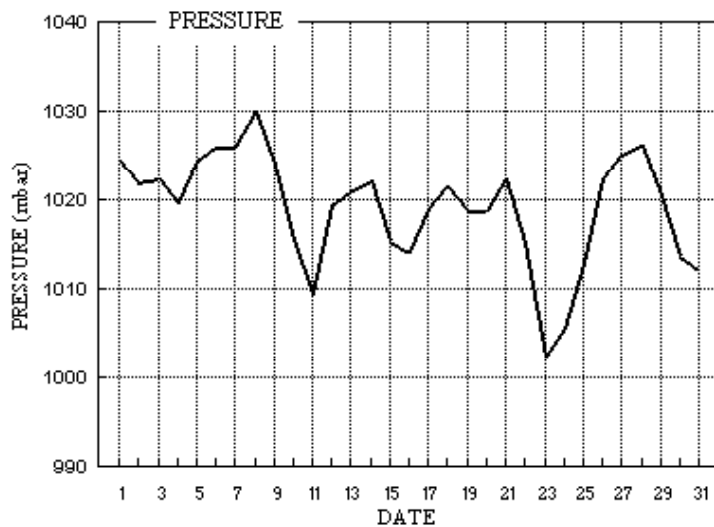
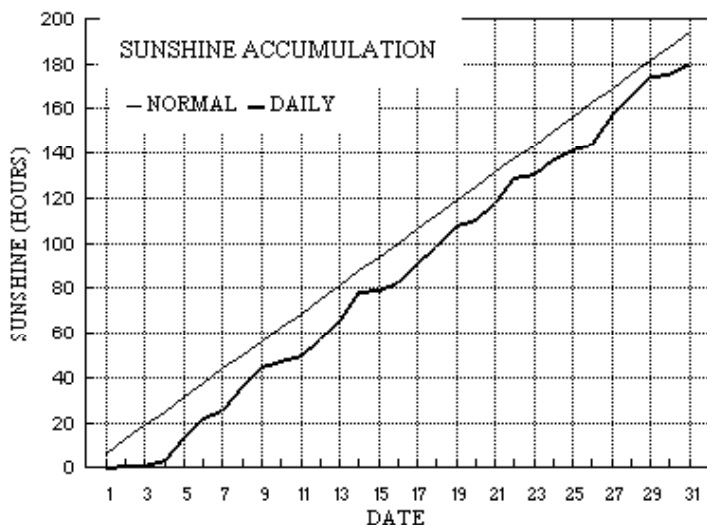
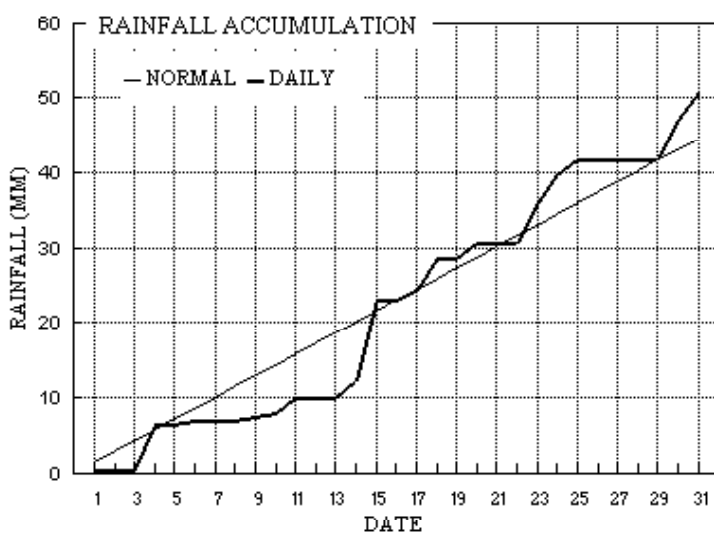
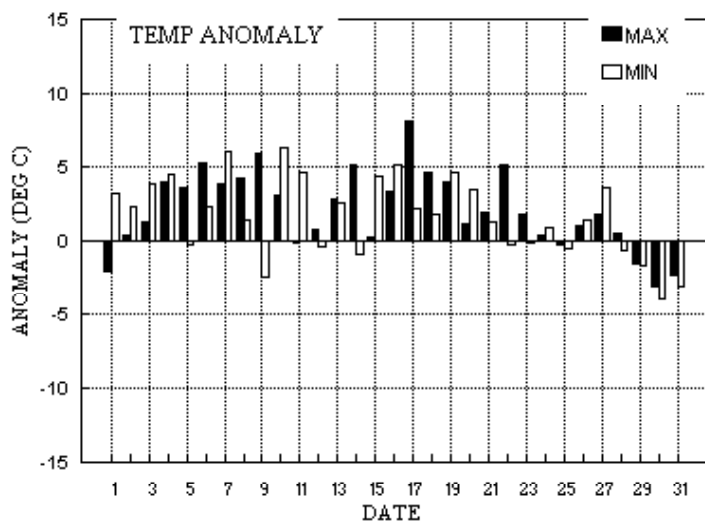
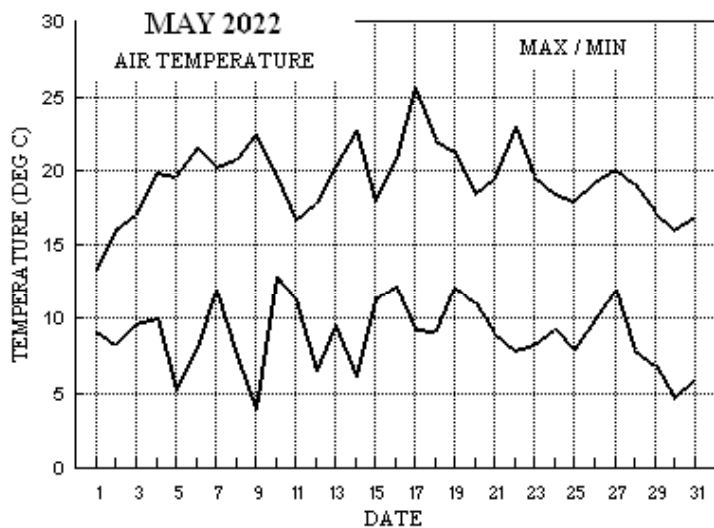
Table 1. Mean anomalies (max, min, rain, sun) for specified periods.

From the 1 st to the 10 th				From the 11 th to the 20 th				From the 21 st to the			
+3.0°	+2.7°	56%	76%	+3.0°	+2.7°	159%	101%	+0.5°	-0.3°	130%	102%

B J Burton FRMetS.

Hon. Met. Officer to Wokingham Town Council.

Wokingham climatological graphs for May 2022



Month: MAY 2022

Date	Max C	Min C	Rain mm	Grass Min	30cm C	100cm C	Sun hrs	Frost hrs	pp09 mbar	Af Gf	Sf Sl	Th Ha	Ic Fg	Vec ddd	mean ff	sp	Max gust ddd	gg	HHhh	High hr ddd	ff	Rain HH	hrs
1	13.4	9.2	0.5	5.6	12.2	11.3	0.0	0.0	1024.5	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	228	3.6	4.2	245	12 1451	241	7	15	2.9	
2	16.0	8.2	0.0	8.5	12.3	11.4	0.7	0.0	1021.9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	258	0.9	2.1	234	7 1727	324	3	18	0.0	
3	17.0	9.6	tr	8.0	12.7	11.5	0.7	0.0	1022.5	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	39	1.9	3.0	2	10 1551	172	4	22	0.0	
4	19.8	10.0	6.1	9.3	12.9	11.6	1.9	0.0	1019.7	0 0 0 0	0 0 0 0	0 0 1 0	0 0 0 0	236	3.2	4.4	265	20 1510	256	9	15	0.7	
5	19.6	5.2	0.0	0.8	12.8	11.7	10.4	0.0	1024.5	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	307	2.5	3.7	309	19 0844	322	8	08	0.0	
6	21.5	8.0	0.4	3.3	13.1	11.8	8.2	0.0	1026.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	246	5.6	5.8	252	20 1436	265	10	16	1.3	
7	20.2	11.9	0.0	11.0	13.7	12.0	3.2	0.0	1026.0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	8	2.2	4.6	3	15 1212	10	7	11	0.0	
8	20.8	7.5	0.0	2.1	13.8	12.1	11.1	0.0	1030.0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	63	3.6	3.8	65	14 0728	61	6	07	0.0	
9	22.4	3.9	0.5	-1.1	14.0	12.3	8.9	0.0	1024.0	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	191	5.4	6.2	226	25 1419	207	12	14	0.8	
10	19.6	12.9	0.5	10.3	14.3	12.5	2.4	0.0	1015.5	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	228	6.7	7.0	262	21 1610	255	10	13	0.5	
11	16.6	11.3	2.0	9.4	14.2	12.7	2.7	0.0	1009.4	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	219	7.5	7.9	204	24 1324	208	11	13	1.9	
12	17.8	6.5	0.0	1.8	13.7	12.8	7.5	0.0	1019.4	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	236	6.5	6.7	255	21 1613	253	10	15	0.0	
13	20.2	9.5	0.0	6.5	13.7	12.8	8.0	0.0	1020.9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	238	8.2	8.4	223	22 1418	233	11	12	0.0	
14	22.7	6.1	2.2	0.6	13.8	12.8	12.7	0.0	1022.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	207	3.1	3.6	187	13 1249	197	7	17	2.0	
15	17.9	11.3	10.9	6.4	14.4	12.9	0.9	0.0	1015.4	0 0 0 0	0 0 0 0	1 0 0 0	0 0 0 0	76	3.7	4.0	135	15 1102	127	6	10	6.5	
16	20.8	12.2	tr	9.7	14.6	13.1	3.1	0.0	1014.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	210	6.2	6.8	229	25 1443	210	12	14	0.0	
17	25.6	9.3	1.3	6.0	14.7	13.2	8.5	0.0	1018.9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	169	4.6	5.3	170	23 1550	159	11	15	0.6	
18	22.0	9.1	4.3	6.1	15.2	13.3	8.0	0.0	1021.5	0 0 0 0	0 0 0 0	1 0 0 0	0 0 0 0	191	4.3	5.1	237	24 2218	173	9	14	0.3	
19	21.2	12.2	tr	11.2	15.6	13.5	9.0	0.0	1018.8	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	242	4.3	5.0	275	16 1437	243	8	14	0.2	
20	18.5	11.1	1.9	10.0	15.7	13.7	2.5	0.0	1018.8	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	228	5.3	5.6	251	20 1422	209	10	17	2.4	
21	19.5	9.0	0.0	5.1	15.5	13.9	7.6	0.0	1022.3	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	232	5.0	5.2	241	16 1457	245	7	11	0.0	
22	22.9	7.9	0.0	4.9	15.5	14.0	11.4	0.0	1015.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	203	3.8	4.0	227	14 1528	211	7	16	0.0	
23	19.6	8.2	5.5	5.3	15.9	14.1	1.3	0.0	1002.5	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	252	4.3	4.8	280	18 1723	261	8	17	3.8	
24	18.4	9.3	3.8	8.8	15.6	14.2	7.2	0.0	1005.7	0 0 0 0	0 0 0 0	0 0 1 0	0 0 0 0	257	5.3	5.7	281	24 1352	260	9	12	0.3	
25	18.0	7.9	2.0	3.5	15.6	14.2	4.2	0.0	1012.9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	231	8.4	8.7	205	27 1106	249	13	16	0.8	
26	19.2	9.9	tr	7.7	15.3	14.3	1.9	0.0	1022.5	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	244	8.6	8.8	245	25 1050	254	12	17	0.3	
27	20.1	12.0	0.0	9.9	15.6	14.3	13.3	0.0	1025.2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	302	5.1	6.2	334	21 1352	297	8	15	0.0	
28	19.1	7.9	0.0	3.2	15.9	14.3	9.2	0.0	1026.2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	2	4.1	4.7	336	15 0634	342	7	06	0.0	
29	17.2	6.8	tr	2.1	15.7	14.4	8.3	0.0	1020.5	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	7	4.1	4.4	5	17 0913	12	7	09	0.0	
30	16.0	4.7	5.2	1.0	15.3	14.5	0.7	0.0	1013.7	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	191	4.1	4.4	194	19 1305	188	9	13	2.2	
31	16.9	5.9	3.7	2.7	14.9	14.5	4.9	0.0	1012.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	238	3.4	4.3	277	24 1536	246	7	12	1.5	
Total			50.8				180.4	0.0															29.0
Mean	19.4	8.9		5.8	14.5	13.1	5.82	0.0	1019.1					233	3.1	5.3							
Anom	+1.3	+1.2	114%	+1.3	+0.7	+1.0	93%			+2.6													

Daily mean 14.1 Pressure, abs highest = 1030.1 on 8

Anom +1.2 Pressure, abs lowest = 1000.0 on 23

Number of days with:

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

Abbreviations.

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

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

Grass min = Lowest overnight temperature at grass tip level.

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

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

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

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

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

Sp = 24 hour mean wind speed in knots.

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

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

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

Maximum daily rain rate in mm/hr

All temperatures in degrees Celsius.

Anomaly - Departure from the 1991 to 2020 climatological average

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 0900 GMT for MAY 2022

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	pppww	W1W2	NhCl	hCrCl	NChshs	NChshs	NChshs	Date	Remarks
1	63	8	28	05	09	12.7	5.1	60	5.4	1024.3	4 000	03	2 2	5 8 6 1 /	81830	85656	88458	1	Cu hum	
2	57	8	24	01	04	10.8	7.5	80	6.4	1021.9	2 007	05	2 2	8 8 4 / /	85810	87620	88645	2	Cu hum	
3	56	8	02	03	07	11.0	9.1	88	7.1	1022.5	2 009	05	2 2	8 6 3 / /	88709			3		
4	58	8	26	06	11	12.6	9.1	79	7.1	1019.7	0 001	60	6 2	3 5 4 7 /	83610	87358	88462	4	Pptn v slt	
5	72	7	34	07	19	12.6	8.3	75	6.7	1024.5	1 008	03	1 1	7 5 5 / 1	87621			5	/Ci75 COTRA	
6	65	7	24	04	10	14.1	8.9	71	7.0	1026.1	8 009	01	2 2	1 6 4 0 1	81715	87080		6	2Ci72 COTRA	
7	58	7	36	05	13	13.8	11.7	87	8.4	1026.0	2 008	21	6 5	7 5 3 / /	85709	87625		7	jpS	
8	68	3	03	05	11	12.7	8.4	75	6.7	1030.0	0 005	01	1 1	3 1 4 0 1	83818			8	1Ci80 COTRA	
9	81	7	17	06	12	16.7	6.8	52	6.1	1024.0	8 018	03	2 2	0 0 9 0 6	83275	87080		9	COTRA	
10	15	8	21	07	12	13.7	12.9	95	9.2	1015.5	4 000	58	6 5	8 5 2 / /	87705	88615		10		
11	58	8	21	08	20	13.1	9.7	80	7.5	1009.4	6 009	21	6 2	8 5 4 / /	81712	85622	88645	11	2Sc16	
12	84	5	24	09	17	15.0	6.6	57	6.0	1019.4	0 007	03	1 1	1 2 5 0 1	81828	85075		12	COTRA Cu med Halo 22° part+U/a cont	
13	68	7	23	10	20	13.5	9.2	75	7.1	1020.9	0 010	02	2 2	6 5 4 / 8	83618	84625	87280	13		
14	65	2	23	03	07	15.5	9.6	68	7.3	1022.1	0 002	03	1 1	2 1 4 3 0	82818			14	1Ac65 Cu hum	
15	62	7	08	07	13	15.8	12.9	83	9.2	1015.4	8 018	02	6 2	7 0 9 8 2	82359	84363	85365	15	/Ci77	
16	67	7	23	08	15	16.2	13.7	85	9.7	1014.1	1 025	01	2 2	7 5 3 / 1	86609	87623		16	/Ci75	
17	80	3	15	04	13	18.0	13.3	74	9.4	1018.9	0 000	03	1 1	1 1 4 8 0	81818	83365		17	Cu hum Ac cas vir	
18	72	7	22	05	13	16.2	11.4	73	8.3	1021.5	0 004	01	2 2	1 1 4 0 2	81818	87075		18	COTRA Cu fra Halo 22°	
19	77	5	26	04	08	15.9	11.7	76	8.5	1018.8	3 013	01	2 2	5 1 4 0 1	85815			19	2Ci75 Absent vv&cld est	
20	65	8	27	03	08	12.9	9.2	78	7.1	1018.8	6 008	61	6 2	3 8 4 7 /	81810	83650	86358	20	8As62 Cu med	
21	78	7	23	05	12	14.8	9.6	71	7.3	1022.3	0 002	03	2 2	1 1 5 7 2	81822	85365	87072	21	2Ac63 Cu fra	
22	84	2	16	06	12	18.6	9.1	54	7.2	1015.1	7 018	03	0 0	1 1 6 0 1	81832			22	2Ci80 COTRA Cu hum	
23	72	7	35	03	10	15.3	11.7	79	8.6	1002.5	7 020	03	2 2	6 8 4 / 2	83818	83635	86075	23	/Sc50 Cu med	
24	65	4	28	05	12	13.9	9.1	73	7.2	1005.7	1 018	25	8 1	4 9 4 6 3	81915	83818		24	2Sc50 1Ac62 1Ci68 jpS VV70k ex S	
25	62	8	22	11	22	13.5	9.6	77	7.4	1012.9	0 000	60	6 2	7 5 4 2 /	86615	83642	88550	25		
26	83	7	25	10	19	15.6	10.8	73	7.9	1022.5	2 010	02	2 2	7 5 5 / /	87620			26		
27	80	5	30	07	15	14.6	6.9	60	6.1	1025.2	1 009	02	1 1	3 5 5 0 1	83628	84080		27	COTRA	
28	84	2	36	05	10	14.1	6.5	60	5.9	1026.2	7 004	03	0 0	2 1 5 0 1	82827			28	1Ci75 COTRA Cu hum	
29	88	2	02	07	16	14.1	3.8	50	4.9	1020.5	7 012	03	1 1	1 8 6 0 4	81835			29	1Sc50 1Ci75 Cu hum	
30	84	7	21	08	13	13.7	8.1	69	6.7	1013.7	8 008	03	2 2	2 2 5 7 /	82825	87358		30	/Ac67 Cu med	
31	82	4	22	06	12	13.6	7.8	68	6.6	1012.1	4 000	03	1 1	4 8 5 3 1	82825	83650		31	1Ac63 1Ci70 Cu med/con	

Mean vis = 24.5 km

Mean cloud = 6.0 75%

Mean wind speed = 5.9 kn

Mean gust = 13 kn

Mean TT = 14.3 °C

Mean TdTd = 9.3 °C

Mean RH = 72.4 %

Mean r = 7.3 g/kg

Mean PPP = 1019.1 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 MAY 2022

Date	VV	N	dd	ff	gg	TT	TdTd	RH	r	PPP	a	pppww	W1W2	NhCl	hCrCl	NChshs	NChshs	NChshs	Date	Remarks						
1	65	8	24	08	12	12.9	6.7	66	6.0	1022.2	7	016	02	6	2	8	8	5	/ /	83825	85640	88650	1	Cu med		
2	68	7	27	03	05	14.6	5.9	56	5.7	1020.8	8	006	02	2	2	7	8	6	/ /	81830	87650		2	2Sc40 Cu med		
3	61	7	36	03	08	16.1	9.3	64	7.2	1020.7	8	014	02	2	2	4	8	5	3	/	82825	83650	87359	3	Cu med	
4	75	7	26	10	18	18.8	8.2	50	6.7	1017.7	7	011	15	1	1	4	8	6	6	/	82840	83656		4	4Ac62 Cu con jpN&NE vv50k ex p	
5	81	7	36	05	11	19.1	9.3	53	7.2	1024.2	6	003	03	1	1	2	8	6	0	6		82840	87272		5	1Sc45 COTRA Cu med
6	84	8	27	08	20	19.1	9.6	54	7.3	1024.4	6	007	03	2	2	1	1	6	0	7		81838	88275		6	2Ci71 Halo 22° part+U/a+L/a cont
7	85	6	35	05	11	18.0	10.1	60	7.6	1025.8	7	001	01	2	2	6	8	6	0	0		82832	85656		7	Cu med
8	80	3	05	05	13	20.7	8.0	44	6.6	1027.3	6	015	02	0	0	2	1	7	0	1		82850			8	2Ci80 Cu hum
9	75	8	21	11	25	22.1	11.5	51	8.3	1020.6	7	016	03	2	2	1	8	6	5	7		81838	88275		9	1Sc48 1Ac66 COTRA Cu hum U/a cont
10	84	5	25	09	20	18.4	8.7	53	6.9	1014.4	7	011	03	1	1	4	8	6	0	1		83842			10	2Sc50 2Ci80 COTRA Cu med
11	60	7	24	10	20	13.5	12.1	91	8.8	1007.7	6	004	61	6	6	7	8	3	7	/	82806	83615	87650	11	/Ac65 Cu med Front S Cld edge NW vv50k W	
12	88	7	25	08	16	16.8	7.2	53	6.2	1018.5	7	005	02	2	2	7	8	6	/ /	82842	83648	87656	12	Cu med		
13	81	4	24	11	22	19.9	8.6	48	6.9	1019.5	7	005	01	1	1	2	4	6	0	1		82640	83075		13	
14	80	2	23	06	11	21.7	8.9	44	7.0	1019.7	7	018	02	0	0	1	1	6	0	1		81845			14	2Ci80 COTRA Cu hum
15	58	8	04	04	10	14.4	13.9	97	9.9	1013.9	7	018	61	6	6	6	5	7	2	/	82650	86656	88558	15		
16	82	7	21	13	25	18.4	12.8	70	9.1	1016.2	0	006	03	8	2	7	8	4	/ /	81817	85822	86630	16	Cu fra/med		
17	84	5	16	11	19	25.2	9.9	38	7.5	1014.9	8	016	02	1	1	1	1	7	4	0		81850	84357		17	1Ac64
18	82	7	17	09	17	21.1	6.2	38	5.9	1018.3	6	017	03	2	2	1	0	9	7	6		81360	85272	87075	18	1Ac62 COTRA Halo 22°+U/a+L/a cont
19	84	6	24	06	16	19.9	8.3	47	6.7	1019.3	0	001	02	1	1	2	1	7	0	1		82850	86074		19	Absent vv&cld est
20	88	7	23	08	20	16.9	10.3	65	7.7	1017.4	8	005	03	1	1	7	8	5	/ /	84826	85635		20	Cu med		
21	83	6	24	07	16	19.0	8.1	49	6.6	1020.2	7	015	02	2	2	3	1	6	3	1		83845	85080		21	1Ac65 COTRA Cu hum
22	83	7	24	06	12	21.9	11.0	50	8.2	1010.3	7	021	03	1	1	1	1	6	8	1		81842	84360	85078	22	1Ac70 COTRA Cu hum Ac cas U/a+L/a cont
23	88	7	22	05	13	18.1	7.8	51	6.6	1000.5	7	012	02	2	2	4	8	6	3	2		83845	83363		23	2Sc56 4Ci70 Cu med
24	80	5	27	04	10	17.0	7.4	53	6.4	1007.5	1	008	15	8	1	4	9	6	6	3		81930	83848		24	1Sc56 1Ac62 1Ci70 Cb cap jpNE&SE VV80k ex p
25	80	7	24	10	21	16.4	14.1	86	9.9	1013.1	0	005	21	6	5	7	8	4	/ /	82813	85630		25	3Sc50 Cu med VV50k ex E		
26	88	7	24	10	22	18.1	12.3	69	8.8	1021.6	6	006	02	2	2	7	5	5	/ 1		87626			26	/Ci75	
27	82	1	30	09	17	19.5	5.6	40	5.6	1024.8	7	003	02	0	0	1	1	6	0	1		81848			27	1Ci75 1Ci81
28	89	6	36	06	13	17.6	5.2	44	5.4	1023.8	7	014	02	2	2	6	8	6	6	0		82848	85656		28	1Ac57 Cu med
29	89	6	33	06	15	15.9	4.3	46	5.1	1017.6	7	018	02	8	2	4	8	6	6	0		82844	83656	85358	29	Cu med
30	40	7	18	06	15	12.1	8.6	79	6.9	1012.7	5	005	80	8	2	7	8	4	7	/		81813	83820	87650	30	/Ac63 Cu fra/med
31	70	5	27	05	11	16.1	9.3	64	7.3	1011.9	0	002	25	8	2	3	9	6	6	3		82930			31	1Cu35 2Sc50 2Ac58 2Ci68 jpN&NW vv50k ex p

Mean vis = 39.4 km

Mean cloud = 6.1 77%

Mean wind speed = 7.3 kn

Mean gust = 16 kn

Mean TT = 18.0 °C

Mean TdTd = 9.0 °C

Mean RH = 57.2 %

Mean r = 7.2 g/kg

Mean PPP = 1017.7 mbar

See appendix 2 below for full code details

VV = Visibility code (Code FM12-4377)

N = Total cloud amount, oktas

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

ff = 10 minute mean wind speed, knots

gg = Highest gust in past hour, knots

TT = Air temperature at 1.2 m, deg Celsius

TdTd = Dew point temperature at 1.2 m, deg Celsius

RH = Relative humidity at 1.2 m

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

PPP = Air pressure reduced to sea level, mbar

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

ppp = 3 hr pressure tendency, tenths of mbar

ww = Present weather code (Code FM12-4677)

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

Nh = Amount of low cloud present, oktas

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

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

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

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

8 groups. 8 = indicator for cloud detail

N = Amount of cloud, oktas

C = Type of cloud (FM12-0500)

hshs= Height of cloud (FM12-1677)

Remarks : COTRA = persistent condensation trails present

Wokingham Sunshine Hourly analysis 2022	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
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.39	0.27	0.00	0.00	0.42	0.00	0.00	0.50	0.00	0.13	0.00	0.10
5	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.04	1.00	0.49	0.07	0.10	0.00
6	0.00	0.00	0.00	0.00	1.00	0.13	0.00	0.00	1.00	0.00	0.02	1.00	0.04	0.43	0.00	0.06
7	0.00	0.00	0.00	0.00	0.84	0.43	0.00	0.20	1.00	0.00	0.00	1.00	0.00	1.00	0.10	0.08
8	0.00	0.00	0.00	0.00	0.09	1.00	0.00	0.84	1.00	0.00	0.00	0.99	0.00	0.99	0.13	0.00
9	0.00	0.00	0.00	0.00	0.10	1.00	0.06	1.00	0.97	0.00	0.00	0.81	0.00	1.00	0.26	0.06
10	0.00	0.00	0.00	0.00	0.74	1.00	0.05	1.00	0.80	0.00	0.00	0.36	0.00	1.00	0.00	0.18
11	0.00	0.66	0.00	0.17	0.57	1.00	0.31	1.00	0.19	0.00	0.00	0.31	0.23	1.00	0.00	0.66
12	0.00	0.00	0.00	0.68	0.98	1.00	0.00	1.00	0.33	0.81	0.00	0.27	0.92	1.00	0.00	0.21
13	0.00	0.00	0.20	0.16	0.99	1.00	0.03	1.00	0.72	0.57	0.00	0.11	0.98	1.00	0.00	0.23
14	0.00	0.00	0.00	0.34	0.52	0.36	0.01	0.96	0.97	0.21	0.00	0.07	0.87	1.00	0.00	0.39
15	0.00	0.00	0.01	0.07	0.50	0.00	0.87	0.85	0.43	0.34	0.00	0.01	1.00	1.00	0.00	0.19
16	0.00	0.00	0.42	0.03	0.75	0.00	0.57	0.98	0.00	0.49	0.39	0.18	1.00	1.00	0.00	0.69
17	0.00	0.00	0.06	0.31	0.71	0.00	0.96	1.00	0.02	0.00	0.91	0.82	1.00	1.00	0.00	0.25
18	0.00	0.00	0.00	0.07	0.94	0.00	0.34	1.00	0.00	0.00	0.83	0.08	1.00	0.95	0.27	0.02
19	0.00	0.00	0.00	0.06	0.25	0.00	0.00	0.24	0.00	0.00	0.54	0.00	0.46	0.16	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot	0.00	0.67	0.70	1.88	10.38	8.20	3.20	11.07	8.85	2.42	2.73	7.49	8.00	12.73	0.87	3.14

	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	0.15	0.60	0.22	0.00	0.40	0.45	0.00	0.00	0.05	0.50	0.01	0.33	0.36	0.00	0.00	0.16
5	0.00	1.00	0.35	0.00	0.54	1.00	0.39	0.00	0.21	0.92	0.44	1.00	0.86	0.00	0.02	0.37
6	0.30	0.44	0.00	0.00	0.49	1.00	0.26	0.30	0.00	0.30	0.68	1.00	1.00	0.00	0.04	0.31
7	1.00	0.04	0.00	0.00	0.81	1.00	0.12	0.29	0.00	0.00	0.68	1.00	1.00	0.00	0.78	0.37
8	0.90	0.80	0.74	0.00	0.01	1.00	0.00	0.37	0.00	0.00	0.69	0.85	0.96	0.02	0.97	0.40
9	0.38	1.00	0.29	0.00	0.00	0.94	0.00	0.41	0.00	0.00	0.97	0.59	0.85	0.03	0.20	0.35
10	0.88	1.00	0.58	0.00	0.04	0.99	0.00	0.50	0.00	0.03	1.00	0.38	0.12	0.15	0.13	0.35
11	0.80	1.00	1.00	0.00	0.07	1.00	0.00	0.51	0.00	0.05	1.00	0.16	0.29	0.02	0.50	0.40
12	0.53	0.56	0.70	0.64	0.33	1.00	0.00	0.96	0.00	0.00	1.00	0.34	0.08	0.09	0.31	0.44
13	0.90	0.41	0.19	0.31	0.74	0.66	0.06	0.31	0.00	0.08	1.00	0.33	0.01	0.20	0.00	0.39
14	1.00	1.00	0.93	0.62	0.69	0.04	0.31	0.71	0.11	0.01	1.00	0.29	0.13	0.00	0.62	0.42
15	1.00	0.15	0.85	0.04	0.71	0.93	0.14	0.07	0.39	0.02	1.00	0.45	0.63	0.00	0.28	0.38
16	0.57	0.00	0.92	0.01	0.39	0.34	0.00	0.39	0.93	0.01	1.00	0.14	0.44	0.00	0.38	0.39
17	0.00	0.00	0.98	0.01	0.71	0.58	0.00	1.00	0.96	0.00	1.00	0.58	0.67	0.21	0.13	0.45
18	0.02	0.00	1.00	0.06	0.94	0.28	0.00	0.67	1.00	0.00	1.00	0.98	0.52	0.00	0.16	0.39
19	0.07	0.00	0.23	0.75	0.78	0.19	0.00	0.65	0.53	0.00	0.78	0.77	0.42	0.00	0.42	0.24
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	8.49	7.99	8.98	2.45	7.64	11.38	1.27	7.16	4.18	1.92	13.26	9.17	8.34	0.72	4.93	180.20

MAY 2022	T mn	Tx	Time	Tn	Time	RHmn	RH x	Time	RH n	Time	Tdmn	r mn	r x	Time	r n	Time	p mn	p x	Time	p n	Time	R tot
1	10.87	13.4	1344	8.5	2350	75.6	96.5	2246	58.1	920	6.6	6.0	6.9	1234	5.2	944	1023.40	1026.0	0	1021.7	2357	0.6
2	11.56	16.0	1137	8.2	422	78.9	96.8	429	51.9	1138	7.8	6.5	7.1	1055	5.7	1504	1021.28	1022.0	829	1020.4	1629	0
3	12.34	17.0	1602	9.6	413	80.0	91.5	124	58.9	1603	8.9	7.0	7.9	1337	6.5	317	1021.15	1022.7	915	1019.7	1718	0
4	12.61	19.8	1443	7.5	2339	82.5	99.4	2350	46.7	1444	9.4	7.3	9.4	1735	6.2	1236	1019.41	1021.9	2358	1017.1	1556	5.8
5	12.85	19.6	1650	5.2	319	77.8	99.9	409	48.8	1547	8.6	6.9	8.1	1249	5.4	319	1024.23	1026.2	2232	1021.8	0	0
6	13.94	21.5	1303	8.0	323	75.2	98.0	336	40.7	1319	9.2	7.1	8.1	1131	6.3	1319	1025.47	1027.1	603	1024.1	1533	0.4
7	14.81	20.2	1529	11.5	2343	78.0	94.9	308	49.8	1610	10.7	7.9	8.9	1526	7.0	1610	1025.82	1028.9	2359	1023.9	233	0
8	13.41	20.8	1459	7.0	2358	69.1	97.7	456	34.5	1419	7.1	6.2	7.6	1019	5.1	1419	1028.38	1030.1	815	1026.2	1809	0
9	14.55	22.4	1359	3.9	423	69.1	97.5	537	46.8	1355	8.4	6.9	8.5	1300	4.8	423	1022.51	1027.7	4	1017.2	2350	0
10	15.03	19.6	1556	12.1	1114	74.0	95.1	920	48.4	1614	10.2	7.7	9.5	1004	6.4	1354	1014.76	1017.4	8	1012.1	2358	1.1
11	12.73	16.6	1707	8.7	2350	83.9	93.3	1445	66.2	1749	10.0	7.7	9.2	1614	6.4	2255	1010.70	1016.4	2358	1007.6	1308	2.2
12	12.49	17.8	1302	6.5	444	71.0	96.8	449	43.2	1304	6.9	6.1	7.2	840	5.1	945	1018.62	1019.9	2218	1016.3	2	0
13	13.93	20.2	1451	8.8	2356	69.7	86.9	2354	47.1	1529	8.2	6.7	7.7	1430	6.0	2334	1020.27	1022.0	2209	1019.1	344	0
14	14.66	22.7	1531	6.1	315	69.1	96.8	328	39.8	1532	8.4	6.8	8.1	1215	5.5	315	1020.60	1022.4	738	1018.6	1726	0
15	13.93	17.9	933	11.3	430	90.6	97.8	2335	66.2	1041	12.4	8.9	10.5	1642	6.9	201	1014.67	1018.7	0	1010.1	2330	11.2
16	15.59	20.8	1120	12.2	148	83.2	99.1	311	59.5	1120	12.6	9.0	11.0	1059	8.1	1828	1014.67	1018.8	2359	1009.2	332	1.6
17	17.21	25.6	1438	9.3	345	74.6	99.0	443	37.5	1439	11.7	8.5	10.5	1155	7.1	1057	1016.99	1019.2	813	1013.1	1734	1.1
18	16.03	22.0	1405	9.1	437	70.9	98.3	2357	35.0	1419	9.9	7.6	9.7	2310	5.2	1542	1018.60	1022.1	911	1014.1	2147	3.8
19	16.01	21.2	1417	12.2	429	72.0	98.6	137	38.7	1807	10.3	7.8	9.7	58	5.3	1824	1018.57	1021.0	2047	1014.8	128	0
20	13.24	18.5	1432	9.2	2338	80.0	93.0	1038	58.1	1434	9.8	7.5	8.6	1236	6.1	2134	1018.84	1021.0	2357	1016.9	1624	1.8
21	13.95	19.5	1417	9.0	351	71.7	96.5	2357	45.1	1549	8.4	6.8	7.9	1316	5.9	1716	1020.80	1022.6	829	1018.9	2357	0
22	15.45	22.9	1513	7.9	438	69.3	98.5	508	39.0	1332	9.0	7.1	8.4	1537	6.2	1704	1012.94	1018.9	1	1007.4	2357	0
23	13.39	19.6	1453	8.2	328	74.9	94.5	2359	48.9	1453	8.7	7.1	8.7	845	6.2	1723	1002.74	1007.5	2	1000.0	1610	2.1
24	12.78	18.4	1258	9.0	2359	74.5	97.2	444	44.3	1334	7.9	6.7	9.0	1439	5.3	1731	1006.78	1012.5	2359	1002.2	35	6.2
25	13.01	18.0	1629	7.9	136	80.1	95.0	1425	59.6	1644	9.5	7.4	10.0	1437	5.9	48	1014.08	1019.3	2356	1012.2	1152	1.8
26	14.94	19.2	1341	9.9	335	78.3	94.5	345	62.0	1332	11.0	8.1	9.2	1439	7.0	316	1021.76	1023.4	2311	1019.1	0	0
27	15.29	20.1	1608	8.8	2338	63.5	95.3	255	37.1	1615	7.7	6.5	9.0	204	4.9	1615	1024.87	1027.2	2220	1022.8	23	0
28	13.07	19.1	1547	7.9	248	62.1	83.6	248	40.5	1550	5.7	5.6	6.8	1118	4.8	1844	1025.03	1027.2	0	1022.7	1843	0
29	11.37	17.2	1659	5.6	2350	63.4	91.9	2354	40.6	1641	4.3	5.1	6.2	1657	4.6	1605	1019.31	1023.2	1	1016.2	2328	0
30	10.14	16.0	1052	4.7	222	83.0	97.4	2359	56.6	1024	7.2	6.3	7.4	1510	5.0	217	1013.52	1016.4	4	1011.8	1754	4.9
31	10.70	16.9	1202	5.9	344	84.0	98.9	429	52.3	1307	7.8	6.6	8.0	1202	5.6	1311	1012.74	1015.8	2359	1011.3	1309	3.3
Total																						47.9
Mean	13.61	19.37		8.37		75.2	95.81		48.44		8.85	7.07	8.54		5.86		1018.50	1021.47		1015.75		
Max	17.21	25.56		12.17		90.6	99.90		66.20		12.57	9.01	10.99		8.07		1028.38	1030.14		1026.22		
Min	10.14	13.44		3.90		62.1	83.60		34.45		4.28	5.11	6.21		4.62		1002.74	1007.48		1000.02		

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

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

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

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

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 2022

Temperature (°C)		Rank in the past 141 years							
Mean maximum	16.3 (+1.5)	4 th highest							
Mean minimum	5.3 (+0.1)	20 th highest							
Daily mean	10.8 (+0.8)	5 th highest							
Rainfall total (mm)	105.7 (79%)	34 th lowest							
Sunshine total (hours)	543.7 (111%)								
N° of: Dry days	61 (+6)	Wet days	21 (-5)						
Days with: Air frost	8 (-2)	Ground frost	34 (-1)	Snow falling	2 (-1)	Snow lying	0 (0)		
Thunder	3 (-1)	Hail ≥5mm	0 (-1)	Small hail/ice	4 (-1)	Fog @09 GMT	1 (0)	Nil sun	9 (0)
Air pressure MSL : Mean @09 GMT (mbar)	1019.5 (+3.5)								

Departure from 1991 to 2020 average shown in brackets.

Notes: **Very Mild and Dry with Sunshine Above Average**
Temperature: The mean maximum, ranking 4th highest in 141 years, was exceeded as recently as 2020, also in 2011. The mean minimum, with its much lower ranking, has been exceeded 10 times in this millennium, the last in 2018. The resulting daily mean, ranking 5th highest since 1882, is 0.4° below the record set in 2017, with the 3 other higher ranking springs in 2020, 2011 and 2007. Before we assume that cold springs are no longer a threat, just look back 9 years to 2013 to find the 9th coldest spring in 141 years. Each of this spring's months has a positive anomaly for both the daily mean and mean maximum, but for the mean minimum, April was negative and March zero, only May being positive. The season's highest max was 25.6° on the 17th May, 0.2° above the median, and the lowest max was 7.2° on the 5th March, 2.7° above its median. The highest min was 12.9° on the 10th May, 0.3° above the median, and the lowest min was -3.9° on the 3rd April, 0.3° above its median. The mean grass min was 2.0°, 0.5° above average, and the lowest was -8.0° on the 3rd April. Mean earth temperature at 30 cm depth was 11.1° anomaly +0.9°, and at 1m depth, 10.4° anomaly +0.6°. The duration of air frost was 41.0 hours, 74% of average. **Rainfall:** This has been a fairly dry spring, with just 79% of the average rainfall. In recent years, 2020 was much drier, and in this millennium 5 other springs have also been drier than this year's. Rainfall in March was close to average, and in May it was a little above average, but in April we had less than one third of average. The 1st March was the wettest day with 14.0 mm, and it also had the longest duration at 15.6 hours. There were 2 dry spells in March, 6 and 11 days, and a long dry spell of 19 days in April, but there were none in May. Notably, the rainfall total from 9th April to 3rd May was only 0.9 mm. There was a notable fall of Saharan dust with the rainfall on the 16th March leaving quite a thick orange deposit. Snow fell on the 31st March and 1st April, but not enough to lay. Snow pellets were observed on 31st March and 8th April, and ice pellets (small hail) on the 4th and 24th May. Thunder occurred on the 6th April, 15th and 18th May. The highest rainfall rate was 112 mm/hr on 18th May, and rates over 50 mm/hr were also recorded on 6th April and 4th, 24th and 31st May. Estimated soil moisture deficit showed that unirrigated shallow rooted plants suffered stress after the last week in April, and an index of spring stress gave a value of 122, average 73. **Sunshine:** This has been a reasonably sunny spring overall, the sunshine total being 111% of average. In the last 10 years, only 2015 and 2020 have had sunnier springs. The 21st April was the sunniest day with 13.6 hours, and April was the sunniest month, daily mean 6.25 hours, then May with 5.82 hours and March with 5.67 hours, March 17th to 25th was notably sunny, 10 day mean 10.95 hours, also the 7 days to 21st April, mean 10.7 hours/day. Conversely, the 5 days to 5th March had a total of only 0.5 hours. Overall this spring there were 30 days with <3 hours, 47 with =>6 hours, 27 with =>9 hours and 7 with =>12 hours. **Wind:** The mean speed this spring was 6.2 mph, 0.8 mph below average and lowest since 2004. The 7th April was the windiest day, mean 15.7 mph, and the highest gust of 52 mph was also on that day. The 24th March was the least windy day, mean 2.2 mph, and there were 2535 minutes of calm in this season. Daily mean direction/number of days; N,12 NE,21 E,6 SE,8 S,10 SW,23 W,8 NW,4. Compared with average, winds from between N and SE combined were 9.7% more frequent at the expense of those from W and NW combined, 7.5% less frequent. **Pressure:** This season's highest pressure was 1043.4 mbar on the 18th March, equal highest for spring with 1998 since 1990. The lowest was 984.4 mbar on the 7th April giving a span of 59.0 mbar, 6.3 mbar above average. **Humidity:** The overall mean relative humidity was 74.6% and the lowest was 16% on the 17th April. This is the lowest spring value since 2013 (13%), and is the 3rd lowest for any season in the past 25 years. The mean water vapour content per kg of air was 6.1 g at 0900 GMT and 5.8 g at 1500 GMT. **March:** Sunny with average rainfall. Mild by day but average by night. Notable fall of Saharan dust on 16th. Highest wind gust lowest for the month since 2000. Highest pressure is highest for March since 1998. **April:** Mean temperature and sunshine above average. Very dry. Mean max ranks 8th highest in 141 years but mean min is 71st highest. Only 0.4 mm of rain in 22 days after the 8th. Mean wind speed of 15.7 mph on 7th is equal highest for any April day since 1994. Relative humidity 16% on 17th lowest for April in past 25 years. **May:** Very mild with above average rainfall and below average sunshine. Mean temperature highest since 2008 and 5th highest in 141 years. Mean min highest since 1999 and 3rd highest in 141 years. Lowest min 2nd highest in 119 years. Spectacular lightning display on 18th. Highest gust equal lowest for May since 2004.

Month	Mean Max	Anom	Mean Min	Anom	Rain mm	Anom	Sun hrs	Anom	Mean Wind mph	Max gust	Mean pressure	Anom
March	13.4°	+1.8°	3.2°	0.0°	40.1	97%	175.9	140%	6.2	36	1022.9	+7.3
April	16.2°	+1.4°	3.8°	-0.9°	14.8	31%	187.4	110%	6.4	52	1016.5	+1.5
May	19.4°	+1.3°	8.9°	+1.2°	50.8	114%	180.4	93%	6.1	31	1019.1	+2.6

Appendix 1.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Month: Calendar month.

Season: Spring, March to May.

Summer, June to August

Autumn, September to November

Winter, December to February.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Appendix 2.

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

VV : Visibility.

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

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

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

Code figure 89 = visibility above 70 km.

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

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

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

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

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

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

RH : Relative humidity at 1.2m, %.

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

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

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

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

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

1 = Increasing then steady or increasing more slowly

2 = Increasing steadily or unsteadily

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

4 = Steady, pressure the same as 3 hours ago

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

6 = Decreasing then steady or decreasing more slowly

7 = Decreasing steadily or unsteadily

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

ppp : 3 hour pressure tendency in tenths of a millibar

ww : Present weather code figures, 00 to 99.

Present weather decode:

00 = Cloud development not observed or not observable

01 = Clouds generally dissolving or becoming less developed

02 = State of sky on the whole unchanged

03 = Clouds generally increasing or becoming more developed

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Hail includes large hail, small hail and snow pellets.

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

Code figures:

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

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

Cl : Type of low cloud

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

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

Cm : Type of medium cloud.

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

Ch : Type of high cloud

0 = No high cloud

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

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

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

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

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

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

7 = Veil of Cirrostratus covering the celestial dome.

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

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

/ = Types of high cloud invisible owing to darkness, fog, blowing dust of sand or other similar phenomena, or more often because of the presence of a continuous layer of lower clouds.

8 Groups

N = Amount of cloud reported by C, okta.

C = Type of cloud

0 = Cirrus (Ci)

1 = Cirrocumulus (Cc)

2 = Cirrostratus (Cs)

3 = Altocumulus (Ac)

4 = Altostratus (As)

5 = Nimbostratus (Ns)

6 = Stratocumulus (Sc)

7 = Stratus (St)

8 = Cumulus (Cu)

9 = Cumulonimbus (Cb)

/ = Cloud type not visible owing to darkness, fog, duststorm, or other analogous phenomena.

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

00 to 50 = Height in hundreds of feet

51 to 55 Not used

56 to 80 = Subtract 50 to obtain cloud height in thousands of feet

81 to 88 = Height of cloud between 35000 and 70000 ft in 5000 ft steps.