

WOKINGHAM

METEOROLOGICAL

DATA

Wokingham Climatological Station, Emmbrook, Berkshire.

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

Monthly Means and Totals

SEPTEMBER 2026

Temperature (°C)		Anomaly		Rank in the past 145 years	
Mean maximum	22.5	+2.8		5th highest	
Mean minimum	12.6	+2.6		2nd highest	
Daily mean	17.6	+2.7		3rd highest	
Highest maximum	27.4		on 6th	Lowest maximum	17.8 on 8th
Highest minimum	19.1		on 30th	Lowest minimum	6.7 on 21st
Mean grass minimum	9.6	+2.9		Lowest grass minimum	2.5 on 26th
Mean earth @30 cm	18.4	+1.8		Earth @100 cm	18.5 +1.7
Frost duration (hrs)	0.0			Rain duration (hrs)	22.5
Rainfall total (mm)	24.1	45%		27th lowest	
Highest daily fall	8.5		on 7th	Highest rate mm/hr	28 on 4th
Number of: Dry days (<0.2mm)	21	Wet days (>0.9mm)	7	days ≥5mm	2
Sunshine total (hrs) 168.6	Daily mean 5.62	109%		Sunniest day	12.5 on 5th
N° days with: Air frost 0	Ground frost 0	Snow falling 0	Snow lying 0		
Thunder 0	Hail ≥5mm 0	Small hail/ice 0	Fog @09 0	Nil sun	0
Pressure MSL : Mean @09 GMT, mbar 1019.6	+2.9	Highest 1033.4	on 21st	Lowest 1006.3	on 8th
Relative humidity : Mean (%) 73.2	Lowest 26	on 6th	Water vapour (g/kg), mean at 09 and 15 GMT	9.4,	8.3
Overall mean wind speed (mph) 6.3	Windiest day 11.3	on 4th	Max gust 32	on 19th	
Wind direction (days) N 0 NE 1 E 1 SE 1 S 3 SW 12 W 11 NW 1					
Least windy day (mph) 2.2	on 21st	Calm; less than 0.5 mph (minutes)	n/a		

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

Notes:

Very Warm, Drier and Sunnier than Average.

Temperature: This September ends the phenomenal run of 4 record breaking months, being the first month since April to fail to produce a new record high mean temperature. However, this month's mean ranks 3rd highest in 145 years, only 0.4° below the record held jointly by 2006 and 2023, and is 3.3° above the long-term median. The mean maximum ranks 5th highest in 145 years, 1.1° below the record set as long ago as 1929, while the mean minimum ranks 2nd highest, 0.8° below the record set in 2006. The highest max is 2.8° above the median and the lowest max is 3.8° above its median and 5th highest in 114 years. The highest min is 3.8° above the median and is 2nd highest in 114 years while the lowest min is 3.8° above the median and 4th highest in 123 years. The highest min of 19.1° on the 30th is not only remarkable because it has been exceeded only once before in September, in 1949, but also because it occurred so late in the month, whereas in 1949 it occurred on the 5th. The mean and lowest grass min are both well above average. It would not be unusual to expect a ground frost in this month as 62% of Septembers in the past 51 years have had at least one, but this month was not one of them. Mean earth temperature at 1m depth is a new record high, and at 30cm depth is 2nd highest, 0.1° below the record set in 2023. Anomalies for daily max ranged from +9° on the 29th to -3° on the 8th, with only the 4th, 8th and 9th having negative values, and 8 days through the month having over +5°. Anomalies for daily min ranged from -3° on the 21st to +10° on the 30th, only 5 days through the month having negative values. **Rainfall:** This has been a dry September overall, with 66% of the month's total falling on the 7th/8th, and a 12 day dry spell ending on the 28th. It is the 4th driest September in this millennium, and the driest since 2014. Also the highest daily fall of 8.5 mm is lowest for the month since 2014, and is 11 mm below average. However, despite the month's total being 45% of average, the duration of rainfall is 65% of average, indicating there were many occasions when the rainfall was slight. There were no falls in the violent category and the highest rainfall rate was 28 mm/hr on the 4th, also there was no thunder or hail this month. **Sunshine:** This has been quite a sunny September, with 109% of average sunny hours, but the total is a lot closer to normal than the exceptionally high totals in July and August, which together produced a surplus of 263.5 hours of sun over the average, compared with the total sunshine for this September of 168.6 hours. There were no notable sunny periods this September, but a few sunny days were scattered through the month. Days having over 90% of the maximum were the 5th, 21st and 26th, and those with less than 10% were the 2nd, 4th, 13th and 19th. Overall 6 days had <3 hours, 15 had =>6 hours and 1 had =>12 hours. **Wind:** The overall mean wind speed of 6.3 mph is 0.5 mph above average. The speed on the month's windiest day is exactly average, but the highest gust is 6 mph below average. Daily mean speeds were fresh on the 3rd, 4th, and 17th to 19th, otherwise mostly moderate, but were mainly light from the 21st to 28th. Daily mean direction was generally between S and W, but was between W and N on the 9th, 20th and 23rd to 25th, between N and E on 28th, and between E and S on 24th and 29th.

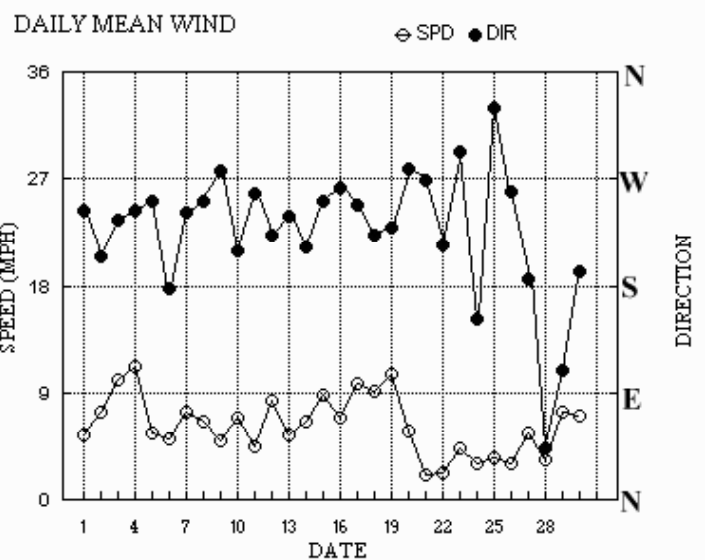
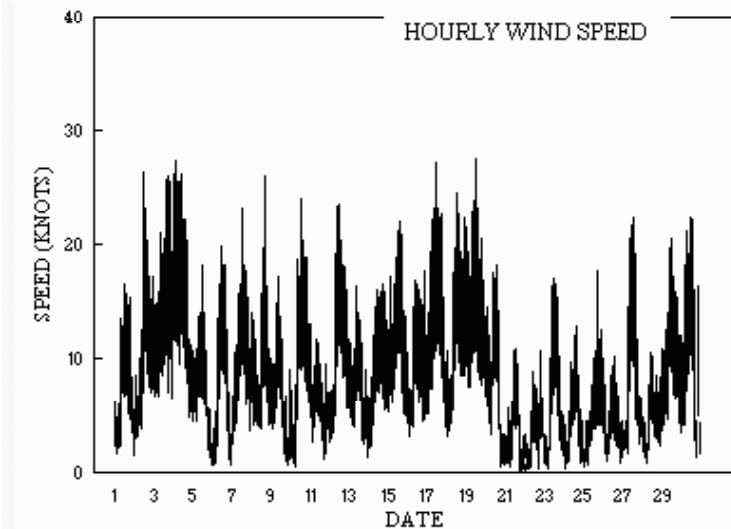
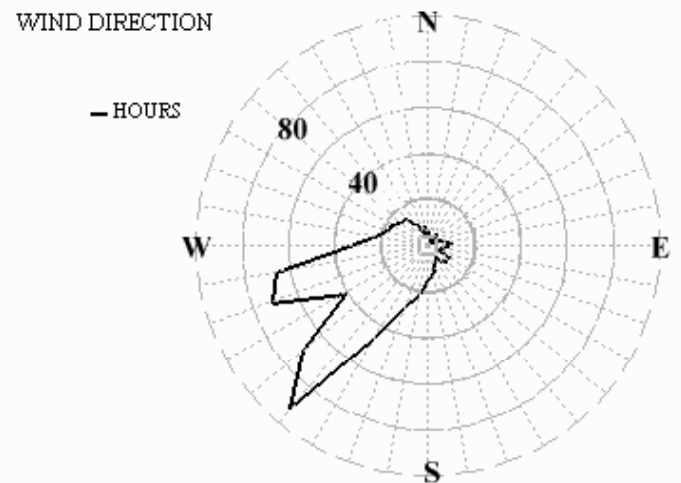
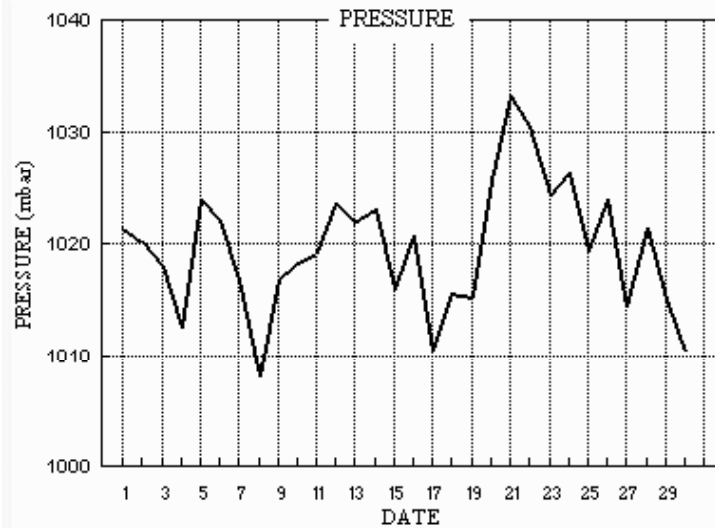
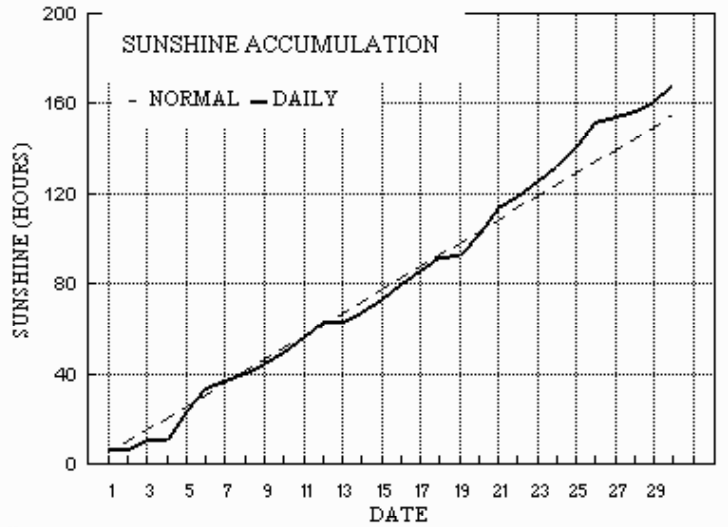
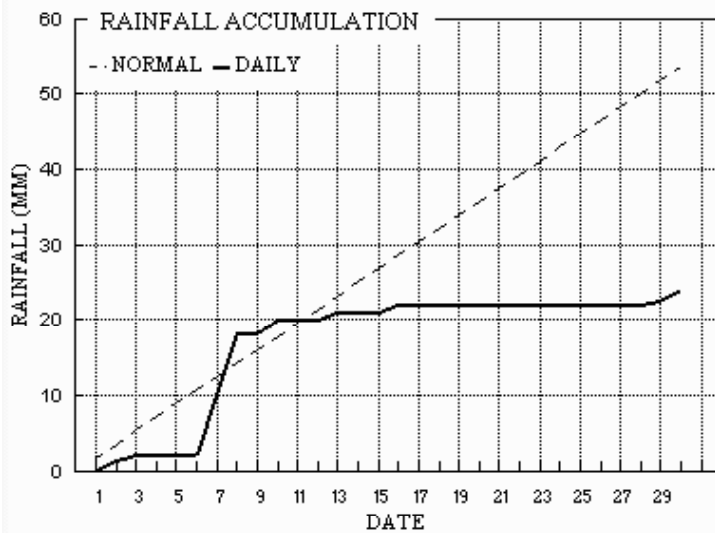
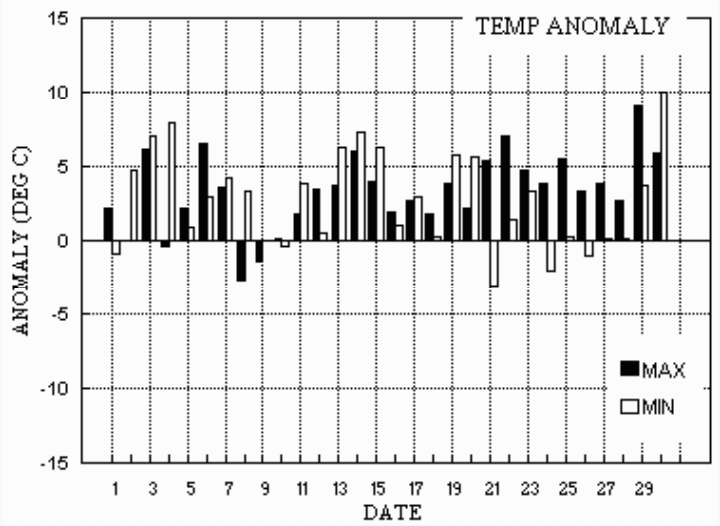
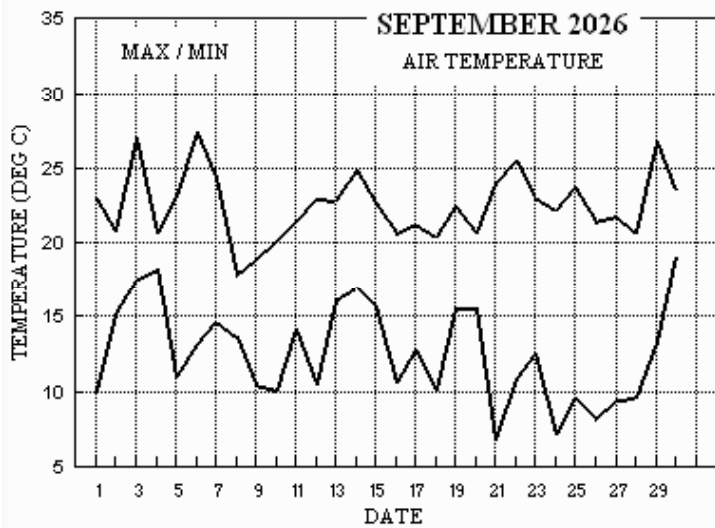
Table 1. Mean anomalies (max, min, rain, sun) for specified periods.

From the 1 st to the 10 th				From the 11 th to the 20 th				From the 21 st to the 30 th			
+1.6°	+3.0°	112%	97%	+3.1°	+4.0°	12%	100%	+5.2°	+1.3°	11%	129%

B J Burton FRMetS.

Hon. Met. Officer to Wokingham Town Council.

Wokingham climatological graphs for September 2026



Month: SEPTEMBER 2026

Date	Max C	Min C	Rain mm	Grass Min	30cm C	100cm C	Sun hrs	Frost hrs	pp09 mbar	Af Gf	Sf SI	Th Ha	Ic Fg	Vec ddd	mean ff	sp	Max gust ddd	gg	HHhh	High hr ddd	ff	HH	Rain hrs
1	23.0	9.9	0.1	7.5	19.6	19.7	7.2	0.0	1021.4	0	0	0	0	242	4.6	4.8	239	17	1210	257	8	14	0.1
2	20.8	15.2	1.3	13.4	19.5	19.5	0.1	0.0	1020.1	0	0	0	0	205	6.4	6.5	205	27	1210	205	11	13	1.6
3	27.0	17.4	0.9	16.4	19.5	19.4	3.5	0.0	1018.0	0	0	0	0	236	8.5	8.8	253	26	1705	256	12	17	1.0
4	20.6	18.2	0.0	17.5	20.1	19.3	0.5	0.0	1012.5	0	0	0	0	242	9.1	9.8	217	27	0325	215	13	03	0.0
5	23.1	11.0	tr	7.2	19.2	19.3	12.5	0.0	1023.9	0	0	0	0	252	4.6	4.9	275	18	1235	255	7	08	0.0
6	27.4	13.1	0.0	9.5	19.1	19.2	10.2	0.0	1022.0	0	0	0	0	178	4.2	4.6	214	20	1220	206	10	12	0.0
7	24.3	14.6	8.5	11.8	19.3	19.1	3.1	0.0	1016.8	0	0	0	0	241	6.0	6.4	240	23	1325	249	10	13	7.6
8	17.8	13.7	7.5	13.5	19.3	19.1	3.4	0.0	1008.1	0	0	0	0	250	4.7	5.7	263	26	1640	277	10	16	4.3
9	18.9	10.5	0.0	6.9	18.1	19.0	4.7	0.0	1016.8	0	0	0	0	277	3.6	4.4	286	17	0835	296	9	08	0.0
10	20.1	10.1	1.8	7.4	17.8	18.8	4.8	0.0	1018.3	0	0	0	0	210	5.9	6.1	212	24	1315	211	11	15	1.9
11	21.4	14.1	0.0	10.8	18.0	18.6	6.8	0.0	1019.1	0	0	0	0	257	3.1	3.9	211	13	0010	213	6	00	0.0
12	22.9	10.5	tr	7.1	18.1	18.5	6.5	0.0	1023.5	0	0	0	0	223	7.3	7.3	230	24	1110	225	11	11	0.1
13	22.8	16.1	1.1	15.5	18.6	18.4	0.3	0.0	1021.9	0	0	0	0	238	4.7	4.8	246	16	1035	249	8	10	2.2
14	24.8	17.0	tr	13.6	19.1	18.4	3.8	0.0	1023.0	0	0	0	0	213	5.7	5.8	209	17	1705	212	9	16	0.0
15	22.7	15.7	tr	13.7	19.4	18.5	6.4	0.0	1015.9	0	0	0	0	251	6.6	7.7	257	22	1435	263	11	14	0.0
16	20.6	10.6	1.0	6.2	18.8	18.6	6.8	0.0	1020.6	0	0	0	0	261	5.6	6.0	250	18	2015	261	8	13	0.7
17	21.3	12.8	0.0	9.5	18.2	18.6	5.4	0.0	1010.5	0	0	0	0	248	7.7	8.5	251	27	1245	256	13	12	0.0
18	20.4	10.1	tr	6.0	17.7	18.5	6.0	0.0	1015.5	0	0	0	0	223	7.8	8.0	237	25	1330	232	13	13	0.2
19	22.4	15.6	tr	14.4	17.9	18.3	1.0	0.0	1015.2	0	0	0	0	229	9.0	9.2	231	28	1135	233	13	11	0.3
20	20.6	15.5	0.0	13.2	18.3	18.2	8.8	0.0	1025.5	0	0	0	0	279	4.5	5.1	263	18	1310	286	8	11	0.0
21	23.9	6.7	0.0	3.1	17.6	18.2	11.8	0.0	1033.3	0	0	0	0	269	1.3	1.9	243	11	1435	279	4	14	0.0
22	25.5	10.8	0.0	7.5	17.5	18.1	5.6	0.0	1030.6	0	0	0	0	215	0.4	2.0	214	11	2000	204	4	20	0.0
23	23.1	12.5	0.0	8.4	18.1	18.0	6.6	0.0	1024.3	0	0	0	0	292	2.9	3.8	277	17	1110	298	9	14	0.0
24	22.2	7.1	0.0	3.0	17.6	18.0	6.8	0.0	1026.3	0	0	0	0	152	1.7	2.6	179	13	1720	181	6	17	0.0
25	23.7	9.5	0.0	5.5	17.3	18.0	8.6	0.0	1019.2	0	0	0	0	329	2.1	3.1	322	18	1815	324	7	18	0.0
26	21.4	8.2	0.0	2.5	17.7	17.9	10.8	0.0	1023.9	0	0	0	0	259	1.4	2.7	232	10	1405	313	5	00	0.0
27	21.8	9.4	tr	5.3	17.3	17.8	2.0	0.0	1014.4	0	0	0	0	185	3.6	5.0	194	23	1420	202	11	12	0.4
28	20.6	9.5	tr	5.4	17.2	17.8	2.6	0.0	1021.3	0	0	0	0	44	1.9	3.0	55	11	1205	23	5	13	0.2
29	26.8	13.2	0.5	8.2	17.3	17.7	4.6	0.0	1015.0	0	0	0	0	110	6.0	6.4	120	21	1245	120	11	12	0.6
30	23.4	19.1	1.4	17.8	18.0	17.6	7.4	0.0	1010.3	0	0	0	0	192	5.2	6.2	212	23	1250	212	10	13	1.3

Total 24.1 168.6 0.0 22.5

Mean 22.5 12.6 9.6 18.4 18.5 5.62 0.0 1019.6 233 3.9 5.5

Anom +2.8 +2.6 45% +2.9 +1.8 +1.7 109% +2.9

Daily mean 17.6 Pressure, abs highest = 1033.4 on 21

Anom +2.7 Pressure, abs lowest = 1006.3 on 8

Number of days with:

Air frost = 0 Ground frost = 0 Nil sun = 0

Snow falling = 0 Snow lying = 0 Thunder = 0

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

Abbreviations.

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

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

Grass min = Lowest overnight temperature at grass tip level.

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

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

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

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

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

Sp = 24 hour mean wind speed in knots.

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

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

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

Maximum daily rain rate in mm/hr

All temperatures in degrees Celsius.

Anomaly - Departure from the 1991 to 2020 climatological average

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 0900 GMT for SEPTEMBER 2026

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Ch	NCh	shs	NCh	shs	Date	Remarks
1	86	6	24	07	12	17.1	10.7	66	7.9	1021.4	2	007	03	2	2	2	8	5	3	1	81820	83366	85078			1	2Sc45 COTRA Cu hum
2	75	8	22	07	11	17.8	14.3	80	10.0	1020.1	2	009	60	6	2	3	8	4	7	/	81810	83635	87360			2	8As65 Cu fra/hum
3	84	7	25	08	15	20.8	16.0	74	11.2	1018.0	3	013	03	2	2	4	8	4	0	8	83818	87270			3	2Sc35 Cu hum	
4	86	8	27	08	17	18.7	15.8	83	11.1	1012.5	1	021	21	6	2	8	8	4	/	/	85815	84630	88650			4	Cu fra/hum
5	82	2	28	07	12	16.8	10.2	65	7.6	1023.9	1	013	03	0	0	1	1	5	0	1	81825					5	2Ci75 Cu hum El hz lyr
6	80	3	17	07	13	19.7	12.2	62	8.7	1022.0	7	012	01	1	1	1	0	9	4	1	81360	83080			6	COTRA El hz lyr	
7	81	7	23	07	14	21.2	15.5	70	10.9	1016.8	1	008	03	2	2	6	5	4	0	2	86618	87075			7		
8	56	8	21	04	07	14.5	14.0	97	10.0	1008.1	8	016	61	6	6	6	7	3	2	/	86706	88550			8		
9	84	3	31	09	16	15.4	9.1	66	7.1	1016.8	1	014	03	0	0	3	8	5	0	0	81825	83650			9	Cu hum	
10	80	4	21	06	09	14.4	10.2	76	7.7	1018.3	0	003	01	1	1	1	5	7	0	1	81650	84075			10	2Ci70 COTRA U/a cont	
11	84	5	28	05	08	17.3	14.6	84	10.2	1019.1	2	023	02	1	1	5	8	4	0	0	81812	85648			11	Cu fra/hum	
12	84	7	22	08	17	16.1	11.5	74	8.3	1023.5	0	006	03	1	1	7	5	7	3	/	87650				12	/Ac60	
13	86	7	25	06	11	19.9	17.5	86	12.3	1021.9	1	011	02	6	2	7	7	3	/	/	87709				13	/Sc50	
14	70	8	22	05	13	19.0	17.8	93	12.5	1023.0	1	009	02	2	2	8	6	3	/	/	87707	88710			14		
15	65	7	24	08	15	18.7	15.4	81	10.8	1015.9	6	005	02	2	2	7	6	3	3	/	87709				15	/Ac68	
16	86	1	28	07	13	16.3	10.8	70	8.0	1020.6	2	006	03	0	0	1	1	5	4	0	81825				16	1Ac58 Cu hum	
17	84	5	23	10	20	16.6	14.1	85	10.0	1010.5	5	009	01	6	2	3	7	4	3	8	83712	83272			17	1Sc20 1Ac68 Cs edge SE Halo22° part+parhelia	
18	68	7	24	07	12	15.6	10.2	70	7.7	1015.5	1	009	02	2	2	1	5	6	0	1	81640	87078			18	2Ci70 COTRA	
19	81	7	23	10	18	19.0	13.2	69	9.4	1015.2	2	015	03	2	2	3	8	4	7	8	81818	83650	85362		19	1Sc30 6Cs75 Cu fra/hum	
20	75	6	29	08	16	17.7	10.1	61	7.6	1025.5	2	029	03	2	2	2	2	5	3	6	82828	83366	85270		20	Cu med	
21	80	5	26	02	04	14.4	8.1	66	6.6	1033.3	0	007	02	2	2	1	0	9	4	1	81362	85080			21	COTRA Ci fib	
22	80	4	04	01	03	19.2	13.4	69	9.3	1030.6	1	004	03	0	0	4	5	7	0	0	84656				22		
23	68	2	23	05	09	18.5	14.0	75	9.8	1024.3	8	001	01	1	1	2	5	4	0	1	82615				23	1Ci75	
24	75	7	07	03	07	13.4	10.2	81	7.6	1026.3	8	001	03	2	2	7	0	9	7	9	87366				24	/Cc73 /Ci78	
25	57	6	33	03	05	17.2	14.5	84	10.1	1019.2	6	005	40	2	2	6	6	3	/	1	86708				25	1Ci75 Fog to NW in Loddon valley	
26	80	5	22	01	04	14.5	9.5	72	7.3	1023.9	1	010	02	2	2	0	0	9	0	1	85075				26	COTRA	
27	65	7	13	07	14	17.8	14.5	81	10.2	1014.4	7	019	03	2	2	6	5	4	3	/	86615	83368			27		
28	82	7	02	04	05	13.5	11.0	85	8.1	1021.3	1	013	03	2	2	2	9	0	7	8	82367	86270			28	/Ci75 COTRA Halo 22 part	
29	62	6	09	07	13	19.4	15.7	79	11.0	1015.0	8	007	01	2	2	3	5	4	0	1	81711	83650	85080		29	COTRA	
30	80	7	21	10	19	20.4	17.2	82	12.2	1010.3	2	021	21	6	2	7	8	4	3	/	81710	83815	85635		30	/Sc50 /Ac68 Cu med	

Mean vis = 33.5 km

Mean cloud = 5.7 72%

Mean wind speed = 6.2 kn

Mean gust = 12 kn

Mean TT = 17.4 °C

Mean TdTd = 13.0 °C

Mean RH = 76.2 %

Mean r = 9.4 g/kg

Mean PPP = 1019.6 mbar

See appendix 2 below for full code details

VV = Visibility code (Code FM12-4377)

N = Total cloud amount, oktas

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

ff = 10 minute mean wind speed, knots

gg = Highest gust in past hour, knots

TT = Air temperature at 1.2 m, deg Celsius

TdTd = Dew point temperature at 1.2 m, deg Celsius

RH = Relative humidity at 1.2 m

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

PPP = Air pressure reduced to sea level, mbar

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

ppp = 3 hr pressure tendency, tenths of mbar

ww = Present weather code (Code FM12-4677)

W1, W2 = Past weather code (Code FM12-4561)-

covers past 3 hours.

Nh = Amount of low cloud present, oktas

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

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

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

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

8 groups. 8 = indicator for cloud detail

N = Amount of cloud, oktas

C = Type of cloud (FM12-0500)

hshs= Height of cloud (FM12-1677)

Remarks : COTRA = persistent condensation trails present

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 1500 GMT for SEPTEMBER 2026

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Ch	shs	NCh	shs	NCh	shs	Date	Remarks
1	88	7	26	06	14	21.9	8.1	41	6.6	1019.6	7	008	03	2	2	3	4	6	6	6	81847	85357	85278			1	2Sc50 Cu med	
2	61	8	20	10	19	18.8	15.9	83	11.1	1017.5	7	012	21	6	2	8	5	3	/	/	86709	88618			2	jpNW&W vv30k ex p		
3	89	7	24	10	18	26.4	15.1	50	10.6	1015.9	8	014	02	2	2	3	2	6	0	1	83840	87075			3	1Cc70 Cu hum/med		
4	86	7	26	10	20	20.0	9.0	49	7.1	1015.5	1	013	02	2	2	1	1	6	7	/	81840	85365	87367		4	Cu hum Ac vir		
5	86	1	25	05	13	22.5	6.7	36	6.0	1024.1	8	001	02	0	0	1	1	7	0	1	81850				5	1Ci80 COTRA Cu hum El hz lyr		
6	82	6	18	07	17	25.5	8.1	33	6.6	1018.3	7	021	14	1	1	5	0	9	9	2	81365	83367	85369		6	/Ci75 Ac cas vir El hz lyr		
7	88	7	26	07	16	22.2	13.8	59	9.8	1015.7	8	012	03	2	2	1	4	6	7	8	81835	85467	87272		7	1Sc40 1Ac65 /Ci78 COTRA Cu hum Cs edge NW		
8	82	4	29	10	17	16.8	12.7	77	9.2	1007.4	3	006	21	6	1	3	8	5	4	0	81825	83633			8	1Sc56 2Ac64 Absent vv&cld est		
9	86	7	31	02	08	18.1	8.7	54	6.9	1018.0	0	000	02	2	2	7	8	6	/	/	82840	87650			9	Cu med		
10	86	7	21	11	16	19.1	11.4	61	8.3	1016.3	6	011	03	2	2	6	8	6	4	6	84830	83650	87275		10	1Ac62 Cu med Halo 22° part		
11	88	7	30	03	05	20.9	11.0	53	8.0	1021.1	2	007	02	2	2	7	8	6	/	/	81837	83645	86650		11	Cu med		
12	88	5	22	11	18	22.6	14.2	59	9.9	1021.3	6	011	02	2	2	3	5	6	8	5	81633	83640			12	2Ac62 3Cs75 COTRA Sc len Ac cas Cs edge NW		
13	60	8	25	05	12	20.7	19.7	94	14.1	1021.9	8	003	21	6	5	8	5	3	/	/	83706	86710	88620		13	jpE vv40k W		
14	86	5	22	07	14	23.8	18.0	70	12.7	1020.8	6	014	02	2	2	5	8	4	0	0	83818	83630			14	1Sc50 Cu med		
15	86	2	27	08	20	22.1	8.9	43	7.1	1015.1	5	000	01	1	1	2	4	7	0	0	82850				15	1Sc56 Cu hum El hz lyr SW		
16	89	5	29	07	12	20.0	7.4	44	6.3	1018.6	7	019	02	1	1	3	4	6	0	4	82848	83075			16	2Sc56 COTRA Cu hum Parheliion		
17	83	6	27	11	19	20.4	6.0	39	5.8	1010.1	1	001	02	1	1	4	4	7	0	1	81850	84656			17	3Ci73 Cu hum		
18	70	8	22	09	17	18.5	9.3	55	7.2	1014.0	8	008	21	6	2	2	8	6	7	/	81838	87360	88465		18	2Sc56 Cu hum		
19	65	8	23	08	21	20.9	15.7	72	11.0	1016.3	2	006	21	6	2	8	5	4	/	/	86618	88625			19	jp W-N vv40k ex p		
20	81	3	29	08	14	20.2	5.4	38	5.5	1028.1	2	009	01	1	1	1	0	9	4	2	81370	83075			20	Ci spi El hz lyr		
21	84	1	31	04	10	23.4	8.3	38	6.7	1030.4	7	016	02	0	0	1	0	9	4	0	81365				21			
22	84	7	36	02	05	24.9	13.1	48	9.2	1027.3	7	019	02	2	2	7	8	6	/	/	81835	83645	85656		22	Cu med		
23	89	5	30	08	14	22.8	10.6	46	7.8	1023.4	6	002	01	2	2	4	4	6	0	4	81839	84648			23	2Ci78 Cu med		
24	84	7	16	05	11	22.2	11.0	49	8.0	1022.9	7	021	01	2	2	1	4	6	0	1	81638	87075			24	COTRA Sc cugen Parheliion		
25	80	7	30	04	10	23.3	11.4	47	8.3	1017.2	6	011	02	2	2	1	4	6	0	2	81640	87075			25	COTRA Parheliion+U/a cont		
26	86	4	22	04	10	21.1	1.9	28	4.3	1021.9	8	013	03	1	1	2	0	9	3	1	82372	83078			26	COTRA Irilisation		
27	80	8	19	09	22	20.2	12.9	63	9.3	1011.4	6	010	03	2	2	7	8	5	7	/	81825	84645	88358		27	Cu hum		
28	88	7	06	04	08	19.5	8.2	48	6.7	1019.9	6	009	02	2	2	1	1	6	0	8	81845	87269			28	COTRA Cu hum		
29	82	7	13	08	15	23.9	14.9	57	10.5	1011.3	6	010	02	2	2	7	0	9	7	/	82358	85360	87363		29	Distant Cu tops SE		
30	81	4	22	08	18	22.6	10.1	45	7.6	1012.5	2	007	02	0	0	1	1	6	3	1	81843	83078			30	1Ac59 COTRA Cu hum El hz lyr		

Mean vis = 49.9 km

Mean cloud = 5.8 73%

Mean wind speed = 7.0 kn

Mean gust = 14 kn

Mean TT = 21.5 °C

Mean TdTd = 10.9 °C

Mean RH = 52.6 %

Mean r = 8.3 g/kg

Mean PPP = 1018.5 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	Hour	01-Sep	02-Sep	03-Sep	04-Sep	05-Sep	06-Sep	07-Sep	08-Sep	09-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep	16-Sep
Sunshine	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
Hourly	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
analysis	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
2026	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	0.13	0.07	0.00	0.00	0.35	0.00	0.21	0.00	0.25	0.00	0.20	0.19	0.00	0.00	0.00	0.00
	6	0.49	0.00	0.00	0.00	1.00	0.95	0.35	0.00	0.99	0.41	1.00	0.86	0.00	0.10	0.19	0.76
	7	0.99	0.00	0.00	0.00	1.00	1.00	0.62	0.00	1.00	0.66	0.97	0.97	0.00	0.04	0.96	1.00
	8	1.00	0.00	0.04	0.00	1.00	1.00	0.78	0.00	1.00	0.55	0.99	0.20	0.00	0.00	0.32	1.00
	9	1.00	0.00	0.07	0.01	1.00	1.00	0.00	0.00	0.92	1.00	0.97	0.07	0.00	0.00	0.00	0.85
	10	0.69	0.00	0.20	0.00	0.84	1.00	0.00	0.00	0.12	1.00	0.48	0.11	0.24	0.00	0.06	0.34
	11	0.86	0.00	0.12	0.00	1.00	1.00	0.02	0.00	0.00	0.57	0.28	0.68	0.02	0.41	0.30	0.26
	12	0.27	0.00	0.53	0.00	1.00	1.00	0.30	0.00	0.00	0.01	0.05	0.98	0.00	0.05	0.83	0.26
	13	0.26	0.00	0.37	0.00	1.00	1.00	0.28	0.00	0.08	0.04	0.23	0.47	0.00	0.15	0.95	0.23
	14	0.42	0.00	0.41	0.00	1.00	0.83	0.02	0.44	0.00	0.58	0.39	0.74	0.00	0.30	0.86	0.28
	15	0.07	0.00	0.35	0.00	1.00	0.00	0.29	0.98	0.00	0.00	0.32	0.66	0.00	0.94	0.67	0.69
	16	0.88	0.00	0.44	0.00	1.00	0.42	0.03	0.83	0.03	0.00	0.68	0.24	0.00	0.85	0.54	0.77
	17	0.16	0.00	0.89	0.00	1.00	0.84	0.18	0.91	0.25	0.00	0.16	0.32	0.00	0.98	0.74	0.39
	18	0.00	0.00	0.08	0.50	0.32	0.17	0.00	0.29	0.06	0.00	0.03	0.00	0.00	0.01	0.00	0.00
	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot		7.24	0.07	3.49	0.51	12.51	10.22	3.07	3.44	4.71	4.83	6.75	6.49	0.26	3.82	6.43	6.84
Hour		17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	Mean	
	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	6	0.00	0.50	0.00	0.00	0.80	0.59	0.00	0.00	0.00	0.65	0.31	0.00	0.00	0.00	0.00	0.33
	7	0.00	1.00	0.00	0.48	1.00	1.00	0.22	0.57	0.71	1.00	0.48	0.00	0.30	0.00	0.00	0.53
	8	0.44	1.00	0.48	0.49	1.00	1.00	1.00	0.00	0.77	1.00	0.27	0.00	0.43	0.00	0.00	0.53
	9	0.36	1.00	0.15	0.38	1.00	0.44	0.85	0.36	0.73	1.00	0.84	0.14	1.00	0.63	0.00	0.53
	10	0.23	0.90	0.36	0.60	1.00	0.42	1.00	0.27	1.00	1.00	0.05	0.29	1.00	0.58	0.00	0.46
	11	0.58	0.64	0.04	0.99	1.00	0.33	0.41	0.25	1.00	1.00	0.00	0.97	1.00	1.00	0.00	0.49
	12	0.45	0.79	0.00	1.00	1.00	0.00	0.30	0.98	1.00	1.00	0.02	0.31	0.84	0.98	0.00	0.46
	13	0.82	0.17	0.00	1.00	1.00	0.43	0.13	0.86	0.97	1.00	0.00	0.58	0.03	0.99	0.00	0.43
	14	0.82	0.00	0.00	0.92	1.00	0.46	0.36	0.88	0.93	1.00	0.00	0.02	0.00	0.96	0.00	0.45
	15	0.68	0.00	0.00	1.00	1.00	0.90	0.57	1.00	0.92	1.00	0.00	0.00	0.00	0.96	0.00	0.47
	16	0.64	0.00	0.00	1.00	1.00	0.04	1.00	0.80	0.62	0.90	0.00	0.00	0.00	1.00	0.00	0.46
	17	0.40	0.00	0.00	0.95	0.95	0.03	0.70	0.82	0.00	0.21	0.00	0.32	0.00	0.33	0.00	0.38
	18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	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		5.43	6.00	1.04	8.81	11.75	5.63	6.55	6.80	8.64	10.76	1.97	2.63	4.60	7.42	168.69	

September	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	17.26	23.0	1442	9.9	512	66.0	97.6	606	34.1	1446	10.0	7.5	9.5	1130	6.4	1446	1020.24	1021.6	905	1019.0	1656	0.0
2	17.91	20.6	1322	15.2	525	77.4	94.2	1758	63.8	1253	13.8	9.8	12.2	1749	6.9	423	1018.43	1020.4	44	1016.2	1846	1.4
3	21.54	27.0	1456	18.5	429	72.6	87.7	424	48.3	1403	16.1	11.3	12.1	2122	9.6	1709	1016.30	1018.1	900	1013.6	2359	0.0
4	18.40	20.6	1130	12.5	2354	72.1	94.3	719	47.4	1506	13.1	9.4	13.1	717	6.8	1507	1014.61	1020.0	2359	1010.1	610	0.9
5	16.59	23.1	1529	11.0	537	64.9	94.8	528	33.8	1531	9.0	7.0	8.0	758	5.7	1458	1023.50	1025.7	2331	1019.8	0	0.0
6	19.36	27.4	1406	13.1	128	61.4	86.3	548	25.7	1304	10.8	7.9	9.1	2242	5.8	1304	1020.42	1025.7	0	1016.2	2359	0.0
7	18.98	24.3	1334	14.6	242	70.5	92.3	311	48.7	1320	13.2	9.4	11.2	1153	7.7	2059	1015.80	1017.2	1042	1013.3	2354	0.0
8	14.72	17.8	1653	11.6	2348	82.5	97.9	836	52.2	1701	11.5	8.5	10.4	1217	6.4	1715	1009.77	1013.6	14	1006.3	1221	16.0
9	14.39	18.9	1355	10.5	442	72.0	91.3	447	51.6	1657	9.1	7.1	7.8	925	6.5	1657	1018.60	1019.2	2228	1012.7	1	0.0
10	15.31	20.1	1411	10.1	325	75.4	96.9	2319	47.8	1117	10.6	7.9	10.9	2359	6.3	957	1017.03	1018.8	12	1015.0	2357	1.1
11	17.43	21.4	1410	13.4	2324	76.4	98.4	439	46.4	1412	12.8	9.1	11.1	135	7.4	1412	1019.78	1024.1	2359	1014.8	14	0.7
12	17.24	22.9	1312	10.5	440	76.5	95.8	447	55.1	1311	12.8	9.1	10.9	2353	7.3	713	1022.50	1024.2	3	1020.7	1542	0.0
13	19.58	22.8	1050	17.8	2341	89.3	98.4	2359	66.7	1052	17.7	12.4	14.3	1451	10.9	4	1021.83	1022.9	2248	1020.6	601	1.1
14	19.77	24.8	1356	17.0	101	88.2	98.8	221	64.5	1357	17.6	12.3	13.5	1114	11.7	102	1021.38	1023.1	849	1018.5	2320	0
15	18.34	22.7	1351	14.4	2312	68.6	95.7	0	36.1	1545	11.8	8.7	11.9	59	5.9	1549	1016.41	1018.7	1	1014.9	1345	0
16	15.55	20.6	1254	10.6	540	67.8	95.0	551	39.5	1602	9.1	7.1	8.1	858	5.7	1614	1018.91	1020.9	923	1015.8	2358	0
17	16.06	21.3	1331	11.4	2358	66.8	94.3	658	34.8	1332	9.3	7.3	10.5	914	5.3	1538	1011.60	1016.0	0	1009.9	1243	1.0
18	15.40	20.4	1241	10.1	521	71.9	92.5	503	47.6	1244	10.0	7.6	9.5	2357	6.8	1032	1014.21	1015.7	816	1012.7	7	0
19	18.77	22.4	1058	16.7	2354	78.6	92.4	424	57.6	1058	14.9	10.4	11.5	1758	9.3	910	1016.00	1020.3	2356	1013.4	357	0
20	16.07	20.6	1416	8.4	2359	67.2	90.8	2359	32.3	1455	9.3	7.3	10.0	0	4.8	1455	1026.51	1032.5	2350	1020.0	8	0
21	15.00	23.9	1535	6.7	529	70.2	97.3	603	32.1	1215	8.5	6.8	8.4	2048	5.1	1215	1031.70	1033.4	804	1030.1	1622	0
22	18.52	25.5	1537	10.8	523	71.2	97.6	711	45.0	1537	12.6	8.9	10.3	1121	7.6	523	1028.61	1030.8	9	1026.1	2356	0
23	16.92	23.1	1109	9.2	2355	70.7	95.3	529	42.8	1043	11.2	8.1	10.0	845	6.3	2342	1024.90	1027.4	2216	1023.3	1338	0
24	14.35	22.8	1500	7.1	550	77.6	97.8	2359	47.3	1502	10.0	7.5	9.0	2219	5.9	547	1024.35	1027.0	150	1020.9	2355	0
25	16.67	23.7	1329	9.5	224	74.7	98.3	342	44.5	1538	11.6	8.4	10.5	835	7.1	224	1019.22	1021.2	2339	1017.2	1505	0
26	15.24	21.4	1348	8.2	633	61.7	97.8	713	26.1	1528	6.8	6.1	7.7	742	4.1	1637	1022.38	1024.0	843	1020.8	2353	0
27	15.43	21.8	1210	9.4	304	81.4	95.9	712	58.6	1220	12.1	8.8	11.8	1741	6.4	420	1015.05	1020.9	4	1011.4	1357	0
28	14.92	20.6	1346	9.5	603	76.5	98.0	645	43.3	1355	10.3	7.7	9.2	2357	6.3	1355	1019.90	1021.4	922	1017.6	0	0
29	20.41	26.8	1251	15.6	13	75.2	95.4	517	44.6	1251	15.5	10.9	12.4	2120	9.1	6	1013.29	1018.6	0	1008.6	2357	0
30	19.69	24.0	1242	14.1	2338	70.2	97.9	2358	40.0	1248	13.6	9.8	12.5	848	7.0	1551	1011.37	1015.6	2158	1007.2	511	1.9
Total																						24.1
Mean	17.19	22.54		11.91		73.2	95.22		45.28		11.83	8.69	10.58		6.93		1019.15	1021.97		1016.22		
Max	21.54	27.40		18.54		89.3	98.80		66.74		17.70	12.42	14.28		11.66		1031.70	1033.40		1030.10		
Min	14.35	17.83		6.67		61.4	86.30		25.73		6.78	6.11	7.73		4.07		1009.77	1013.57		1006.33		

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

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

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

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

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

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

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

Mean: The mean of the data under discussion, often the monthly mean of daily data. The mean is obtained by summation of the individual values and dividing by the number of values. The term 'daily mean' in respect of temperature is defined as $(\text{max} + \text{min}) / 2$. 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/wwwp1.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.