

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 2011

Temperature (°C / °F)			Anomaly	Rank in the past 130 years			
Mean maximum	18.6	65.5	+1.1	19 th highest			
Mean minimum	7.8	46.0	+0.3	21 st highest			
Daily mean	13.2	55.8	+0.7	18 th highest			
Highest maximum	24.4	75.9	on 6 th	Lowest maximum	15.5	59.9	on 15 th
Highest minimum	13.9	57.0	on 8 th	Lowest minimum	-0.8	30.6	on 4 th
Mean grass minimum	4.6	40.3	+0.3	Lowest grass minimum	-5.3	22.5	on 4 th
Mean earth @30 cm	14.3	57.7	+0.8	Earth @100 cm	13.2	55.8	
Frost duration (hrs)	0.6			Rain duration (hrs)	19.6		
Rainfall total (mm / in)	29.0	1.14	58 %	32 nd lowest			
Highest daily fall	13.0	0.51	on 7 th				
Number of: Dry days (<0.2mm)	24	Wet days (>0.9mm)	5	days ≥5mm	2		
Sunshine total (hrs)	213.7	Daily mean	6.89	112 %	Sunniest day	14.1	on 2 nd
N ^o days with: Air frost	1	Ground frost	6	Snow falling	0	Snow lying	0
Thunder	1	Hail ≥5mm	0	Small hail/ice	0	Fog @09	0
Pressure MSL : Mean @09 GMT, mbar	1018.2	+2.3	Highest	1029.2	on 24 th	Lowest	1005.1 on 26 th
Relative humidity : Mean (%)	66.3	Lowest	15	on 3 rd	Water vapour (g/kg), mean at 09 and 15 GMT		
Overall mean wind speed (mph)	7.6	Windiest day	11.9	on 22 nd	Max gust	40	on 23 rd
Wind direction (days)	N 0	NE 2	E 1	SE 3	S 4	SW 13	W 8
Least windy day (mph)	3.1	on 19 th	Calm; less than 0.5 mph (minutes)		200		

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

Notes:

Warm.

Dry.

Sunshine Above Normal.

Temperature: The mean temperature this May is 0.7° above the 30 year climatological average, and is 1.4° above the long-term median. However, the distribution of temperature throughout the month was uneven, warm only for the first week, then close to normal. The highest max is 1.0° below the median and lowest for May since 2004. The lowest max though is 4.5° above the median and is highest since 1940. The highest min is 1.4° above the median while the lowest min is 1.3° below the median. Earth temperatures are about 1° above normal. The number of frosts, both air and ground, are close to average. The duration of air frost, just 0.6 hours this month, is near average, though 24 of the past 32 Mays have had none. **Rainfall:** Another month with a deficit of rainfall, the 3rd in a row. The total is 14.9 mm below the long-term median, but May 2010 was 9 mm drier. The number of dry days is 6 above average, and is equal highest with 2010 since 1991. The duration of measurable rain is 18 hours below average. A long 31 day dry spell ended on the 5th, and another of 9 days ended on the 16th. There was thunder early on the 7th, but no hail this month. A violent rain shower on the 26th gave a rain rate of 123 mm/hr at 1339 GMT. **Sunshine:** This has been the sunniest May since 1998 and was reasonably sunny overall, though as with temperature, the sunniest period was in the first week, with the first 4 days averaging 84 % of the maximum, while only 4 days reached 80 % in the rest of the month. Overall there were 11 days with <3 hours, 15 with =>6 hours, 13 with =>9 hours and 7 with => 12 hours. **Humidity:** The relative humidity fell to an unusually low value of 15 % on the 3rd, the lowest value since before 2000. Professor Manley, an expert on the British climate, wrote in 1952 that humidities below 20 % are very rare in England. **Commentary: From the 1st to the 10th ;** This period was the warmest of the month, with anomalies for daily max between +7.8° on the 6th and +0.6° on the 3rd. Although anomalies for daily min reached +7.4° on the 8th, an isolated cold night on the 4th gave an anomaly of -6.3°. Dry until the 6th, then two wet days giving a total of 20.4 mm, compared with a total of 12.8 mm for the previous two months. It was very sunny until the 4th, then rather variable. Winds were mainly moderate, NE'yly to the 3rd, gradually veering SW'yly by the 10th. **From the 11th to the 31st :** Temperatures generally fluctuated about the normal, with anomalies for daily max between +2.9° on the 21st and -2.2° on the 15th. Anomalies for daily min were more variable, ranging from +5.1° on the 18th to -5.7° on the 25th. Odd rainy days were scattered throughout this period, with wet days on the 18th, 26th and 30th. Sunshine was relatively poor until the 18th, then above normal to the 25th, but poor again thereafter. Winds were between W'yly and SW'yly, mostly moderate, but fresh on the 22nd, 26th, 28th and 29th, and strong on the 23rd.

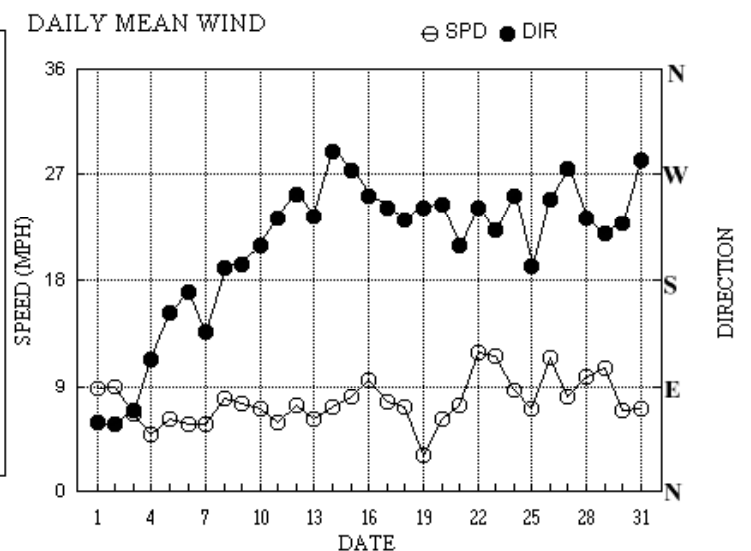
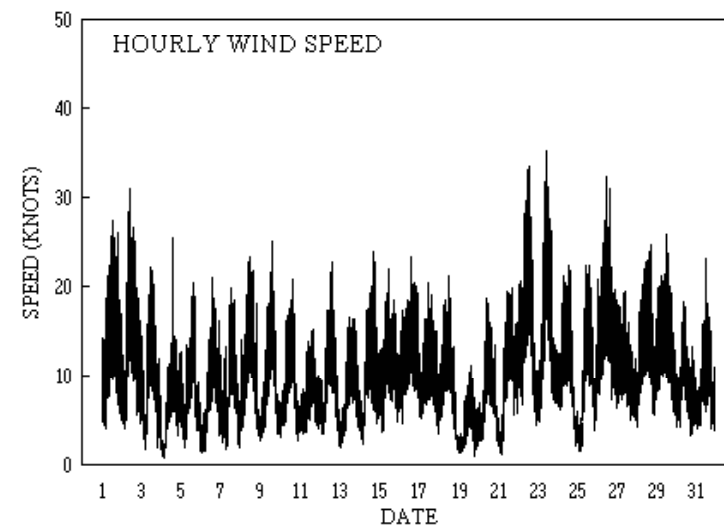
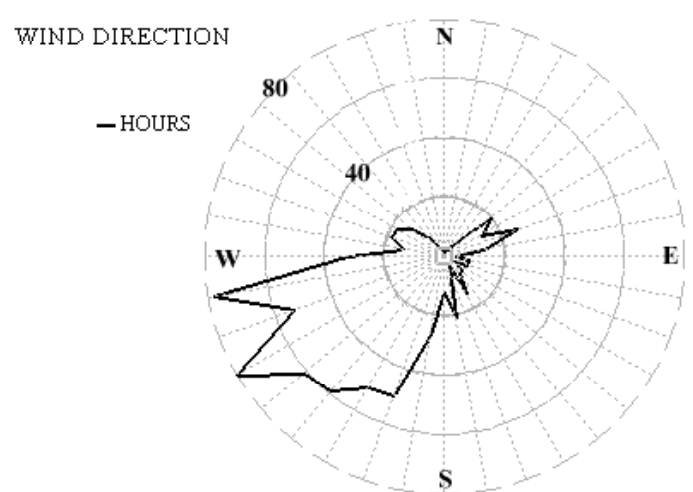
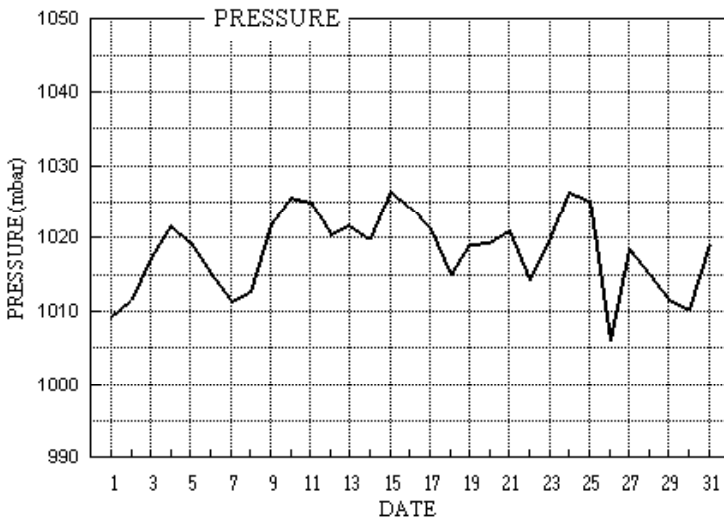
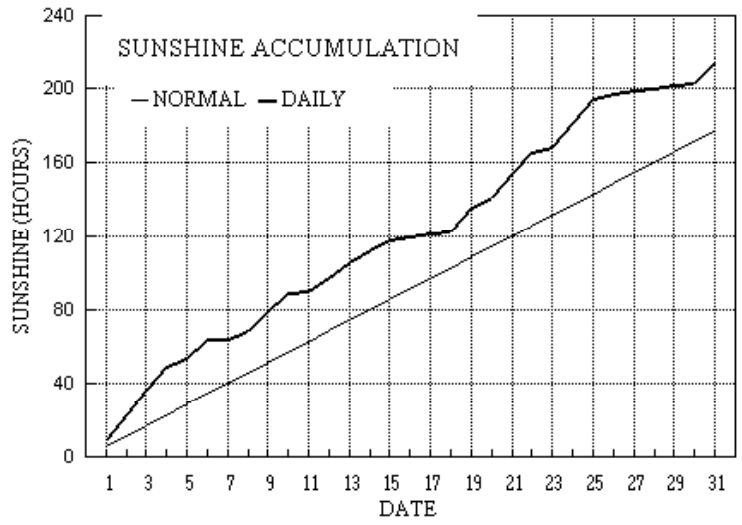
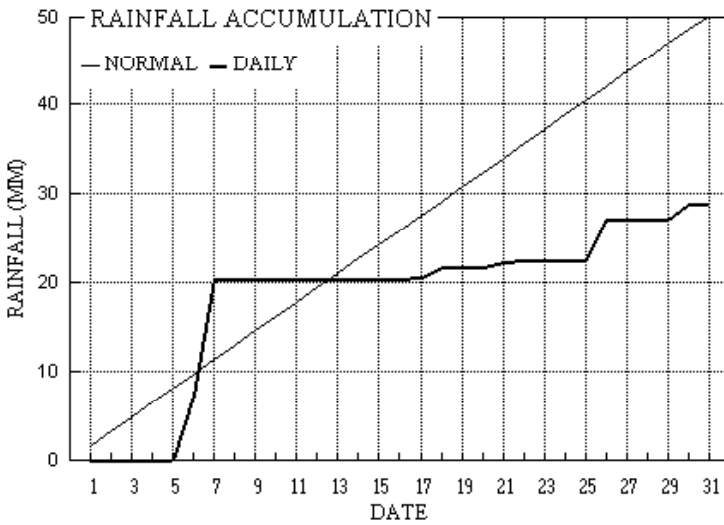
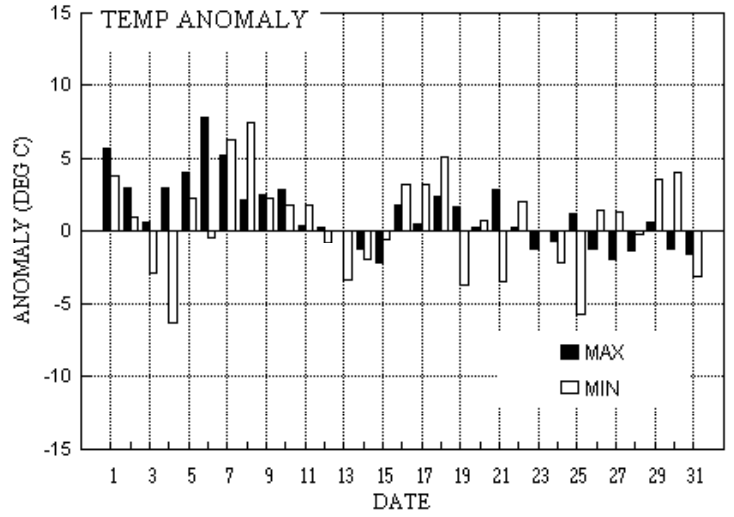
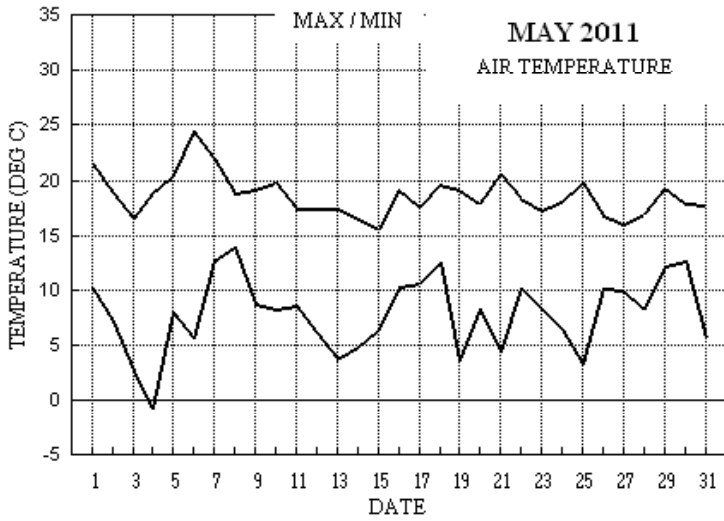
Table 1. Mean anomalies (max, min, rain, sun) for specified periods.

From the 1 st to the 10 th				From the 11 th to the 20 th				From the 21 st to the 31 st			
+3.7°	+1.5°	129%	145%	+0.4°	+0.3°	7%	85%	-0.4°	-0.2°	45%	107%

B J Burton FRMetS.

Hon. Met. Officer to Wokingham Town Council.

Wokingham Climatological Graphs for May 2011



Month: MAY 2011

Date	Max C	Min C	Rain mm	Grass Min	30cm C	100cm C	Sun hrs	Frost hrs	pp09 mbar	Af Gf	Sf Sl	Th Ha	Ic Fg	Vec mean ddd ff sp	Max gust ddd gg HHhh	High hr ddd ff HH	Rain hrs						
1	21.5	10.1	0.0	8.4	14.0	12.4	9.3	0.0	1009.2	0 0 0 0	0 0 0 0	0 0 0 0	59	7.5	7.6	55	27	1329	65	12	16	0.0	
2	18.8	7.1	0.0	2.8	13.9	12.5	14.1	0.0	1011.6	0 0 0 0	0 0 0 0	0 0 0 0	57	7.7	7.8	56	31	1005	65	12	09	0.0	
3	16.5	2.7	0.0	-1.2	13.7	12.6	13.2	0.0	1017.3	0 1 0 0	0 0 0 0	0 0 0 0	69	5.4	5.7	118	22	1129	73	9	13	0.0	
4	18.9	-0.8	0.0	-5.3	13.3	12.6	13.2	0.6	1021.7	1 1 0 0	0 0 0 0	0 0 0 0	113	3.5	4.2	106	26	1432	154	7	17	0.0	
5	20.4	7.9	0.0	4.2	13.5	12.6	4.3	0.0	1019.3	0 0 0 0	0 0 0 0	0 0 0 0	152	4.2	5.3	172	21	1411	197	10	14	0.0	
6	24.4	5.6	7.4	2.5	13.6	12.6	9.7	0.0	1015.2	0 0 0 0	0 0 0 0	0 0 0 0	170	4.2	4.9	205	21	1443	164	9	15	3.4	
7	22.0	12.6	13.0	11.3	14.3	12.7	0.7	0.0	1011.3	0 0 0 0	1 0 0 0	0 0 0 0	136	4.2	4.9	161	20	1249	147	8	12	8.7	
8	18.8	13.9	tr	13.6	14.8	12.8	4.0	0.0	1012.6	0 0 0 0	0 0 0 0	0 0 0 0	190	6.5	6.8	213	23	1208	202	10	11	0.0	
9	19.2	8.7	0.1	4.2	14.7	13.0	10.9	0.0	1021.6	0 0 0 0	0 0 0 0	0 0 0 0	193	6.3	6.5	206	25	1420	203	11	13	0.1	
10	19.7	8.3	tr	3.5	14.7	13.1	9.4	0.0	1025.6	0 0 0 0	0 0 0 0	0 0 0 0	209	5.8	6.1	189	21	1604	216	10	16	0.0	
11	17.4	8.6	tr	4.4	14.7	13.2	1.1	0.0	1025.0	0 0 0 0	0 0 0 0	0 0 0 0	233	4.9	5.1	218	15	1741	228	8	17	0.0	
12	17.5	6.1	tr	0.6	14.5	13.3	8.1	0.0	1020.5	0 0 0 0	0 0 0 0	0 0 0 0	253	6.1	6.3	303	23	1520	259	10	13	0.0	
13	17.5	3.8	0.0	-0.7	14.2	13.3	8.3	0.0	1021.7	0 1 0 0	0 0 0 0	0 0 0 0	234	5.1	5.4	219	17	1257	230	8	14	0.0	
14	16.5	4.9	tr	0.7	14.2	13.3	5.9	0.0	1019.8	0 0 0 0	0 0 0 0	0 0 0 0	289	5.8	6.2	285	24	1755	315	10	13	0.0	
15	15.5	6.4	tr	3.4	13.8	13.3	5.4	0.0	1026.7	0 0 0 0	0 0 0 0	0 0 0 0	273	6.5	7.0	289	22	1106	305	9	10	0.0	
16	19.2	10.3	0.0	7.9	13.7	13.3	2.1	0.0	1024.3	0 0 0 0	0 0 0 0	0 0 0 0	252	8.2	8.3	251	24	1523	253	11	19	0.0	
17	17.6	10.6	0.2	8.9	14.1	13.3	1.7	0.0	1021.2	0 0 0 0	0 0 0 0	0 0 0 0	241	6.6	6.7	257	21	1252	247	9	12	0.7	
18	19.6	12.5	1.0	11.7	14.4	13.3	1.3	0.0	1014.9	0 0 0 0	0 0 0 0	0 0 0 0	231	6.0	6.2	219	21	1214	229	9	08	0.9	
19	19.2	3.6	0.0	-1.0	14.2	13.3	12.6	0.0	1019.0	0 1 0 0	0 0 0 0	0 0 0 0	242	2.0	2.7	260	11	1557	257	5	17	0.0	
20	17.9	8.3	0.0	3.7	14.7	13.4	5.8	0.0	1019.4	0 0 0 0	0 0 0 0	0 0 0 0	245	5.2	5.4	271	19	1055	262	8	12	0.0	
21	20.5	4.3	0.7	-0.5	14.5	13.5	13.1	0.0	1020.9	0 1 0 0	0 0 0 0	0 0 0 0	209	6.2	6.3	210	20	1753	215	10	18	0.6	
22	18.3	10.1	0.1	7.7	14.9	13.5	10.9	0.0	1014.3	0 0 0 0	0 0 0 0	0 0 0 0	242	9.9	10.3	247	34	1449	254	15	14	0.0	
23	17.3	8.3	tr	4.3	14.7	13.6	2.6	0.0	1020.0	0 0 0 0	0 0 0 0	0 0 0 0	222	9.8	10.0	212	35	1109	214	17	10	0.0	
24	18.0	6.4	0.0	3.4	14.3	13.7	13.4	0.0	1026.3	0 0 0 0	0 0 0 0	0 0 0 0	251	7.2	7.4	266	23	1312	257	11	08	0.0	
25	19.7	3.2	tr	-1.9	14.4	13.7	13.1	0.0	1025.1	0 1 0 0	0 0 0 0	0 0 0 0	191	6.0	6.1	154	23	1116	203	11	12	0.0	
26	16.8	10.1	4.7	6.6	14.8	13.7	2.3	0.0	1005.9	0 0 0 0	0 0 0 0	0 0 0 0	248	8.9	9.9	245	33	1250	239	14	12	1.5	
27	16.1	9.9	tr	9.0	14.7	13.7	2.0	0.0	1018.3	0 0 0 0	0 0 0 0	0 0 0 0	275	6.4	6.9	304	20	1115	303	9	09	0.0	
28	17.0	8.3	tr	6.4	14.4	13.8	0.8	0.0	1014.9	0 0 0 0	0 0 0 0	0 0 0 0	233	8.4	8.5	260	25	1702	253	13	17	0.1	
29	19.3	12.1	tr	10.6	14.4	13.8	2.5	0.0	1011.6	0 0 0 0	0 0 0 0	0 0 0 0	220	9.0	9.1	224	26	1302	226	12	13	0.0	
30	17.9	12.6	1.7	11.3	15.0	13.8	0.2	0.0	1010.3	0 0 0 0	0 0 0 0	0 0 0 0	228	4.6	6.0	200	19	0946	223	9	11	3.5	
31	17.7	5.6	0.1	1.9	14.6	13.8	11.7	0.0	1019.2	0 0 0 0	0 0 0 0	0 0 0 0	282	5.4	6.1	281	23	1258	313	10	12	0.1	
Total			29.0				213.7	0.6						229	3.9	6.6							19.6
Mean	18.6	7.8		4.6	14.3	13.2	6.89	0.0	1018.2														
Anom	+1.1	+0.3	58%		+0.8	+1.4	112%		+2.3														
Daily mean		13.2																					
Anom		+0.7																					

Number of days with:

Air frost = 1 Ground frost = 6 Nil sun = 0
 Snow falling = 0 Snow lying = 0 Thunder = 1
 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. Sl = Snow lying at 09 GMT.
 Th = Thunder. Ha = Hail =>5mm. Ic = Hail <5mm or ice. Fg = Fog at 09 GMT.
 Vec mean = 24 hour mean wind vector, ddd = direction in degrees from true north, ff = speed in knots.
 Sp = 24 hour mean wind speed in knots.
 Max gust = Highest gust in 24 hours, gg = speed in knots, HHhh = Time, hours and minutes, GMT.
 High hr = Highest hourly mean wind, HH = hour commencing. Rain Hrs = Duration of rain, 24 hours to 09 GMT. Excludes snow/hail.
 30cm and 100 cm are earth temperatures at those depths, read at 09 GMT.
 Anom = Departure from 1981-2010 climatological average.
 All temperatures in degrees Celsius.

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 0900 GMT for May 2011

Date	VV	N	dd	ff	gg	TT	Td	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Cl	NCh	shs	NCh	shs	NCh	shs	Date	Remarks
1	75	4	06	08	21	16.4	6.5	52	5.8	1009.2	0	003	02	0	0	0	0	9	0	2	84075						1	COTRA	
2	82	2	06	11	29	14.8	0.4	37	3.9	1011.6	2	001	01	1	1	0	0	9	0	1	82080						2	COTRA Elevated haze lyr	
3	77	7	08	08	18	11.2	1.8	52	4.2	1017.3	1	010	02	2	2	3	1	6	0	1	83835	87075				3	COTRA Cu hum U/a cont		
4	65	5	09	04	11	12.7	3.4	53	4.7	1021.7	4	000	02	1	1	0	0	9	0	1	81075	85080				4	COTRA		
5	62	7	14	05	13	13.6	5.3	57	5.5	1019.3	7	004	02	2	2	6	0	9	7	8	81358	86360	87278			5	COTRA		
6	66	8	21	05	11	18.4	7.5	49	6.5	1015.2	8	003	01	2	2	5	0	9	7	7	81360	85363	88272			6	COTRA Halo 22°		
7	50	7	07	02	07	15.2	14.5	96	10.2	1011.3	6	012	21	6	2	4	7	3	7	2	81706	83710	87362			7	2Cu30 /Ci70 Cu med		
8	84	6	19	07	16	16.0	12.0	77	8.6	1012.6	2	022	03	6	2	4	8	5	7	0	84820					8	1Sc60 2Ac60 Cu med		
9	73	4	19	07	14	16.1	9.7	66	7.2	1021.6	1	007	03	1	1	4	2	5	0	0	84825					9	Cu med		
10	75	4	21	07	15	15.2	8.0	62	6.6	1025.6	2	008	03	0	0	4	2	5	0	0	84825					10	Cu hum/med		
11	62	7	24	07	13	13.1	9.9	81	7.7	1025.0	0	001	50	5	2	7	8	4	/ /	82712	85815	87650			11	3Sc40 Cu med			
12	75	3	27	07	15	14.4	5.1	54	5.4	1020.5	2	003	03	0	0	3	8	6	0	0	82830					12	1Sc50 Cu med Sc len		
13	77	7	24	06	12	14.4	7.2	62	6.1	1021.7	8	003	03	2	2	1	2	5	0	1	81825	87075				13	COTRA Cu med Halo 22°		
14	84	3	31	08	17	13.1	4.6	56	5.1	1019.8	2	005	03	0	0	3	8	6	0	0	83830					14	1Sc45 Cu med		
15	80	6	30	08	18	12.8	3.8	54	4.9	1026.7	1	010	03	1	1	4	1	6	3	1	83830	84075				15	2Ac65 Absent vv&cld est		
16	75	7	27	08	18	15.6	9.1	65	7.1	1024.3	3	002	03	2	2	1	1	5	7	8	81825	85360	87272			16	Absent vv&cld est		
17	75	7	25	07	15	15.1	9.1	67	7.0	1021.2	2	001	03	2	2	7	8	5	3	1	83825	87628				17	/Ac63 /Ci80 COTRA Cu hum		
18	86	7	22	10	20	14.8	10.9	77	8.0	1014.9	5	003	02	5	2	7	5	4	/ /	87615						18			
19	75	2	03	01	06	13.7	6.4	61	5.9	1019.0	1	006	03	0	0	1	1	5	0	1	81825					19	2Ci80 COTRA Cu hum Ci edge SE		
20	80	4	27	05	13	14.5	6.5	58	6.1	1019.4	1	005	03	0	0	4	8	6	0	0	84830					20	1Sc40 Cu med		
21	84	4	23	07	17	17.1	7.6	53	6.6	1020.9	8	008	03	0	0	1	1	6	0	1	81832	84080				21	COTRA Cu hum		
22	75	6	24	11	28	13.9	6.0	59	5.6	1014.3	1	011	03	1	1	6	8	5	3	1	86828					22	1Sc40 1Ac68 2Ci72 Cu med		
23	70	7	22	13	26	14.8	7.1	60	6.1	1020.0	8	014	02	2	2	4	1	5	7	1	84828	83365	86075			23	1Ac68 COTRA Cu hum		
24	80	7	25	10	21	13.2	3.7	52	4.9	1026.3	2	018	03	2	2	2	1	6	0	1	82835	87080				24	COTRA Cu hum		
25	82	2	20	08	15	15.9	3.2	43	4.7	1025.1	8	024	03	0	0	1	0	9	3	2	81366					25	2Ci72 COTRA		
26	65	7	23	12	23	13.4	8.5	72	7.0	1005.9	7	007	21	6	2	7	5	5	/ /	81620	85625	87650			26	3Sc35			
27	80	7	30	08	19	11.7	6.6	71	6.0	1018.3	2	016	02	2	2	7	8	5	/ /	86820	87640				27	Cu hum/med			
28	86	7	23	09	20	13.3	8.5	73	6.7	1014.9	7	010	01	6	2	6	5	4	7	/	86618	87358				28			
29	84	6	21	10	21	16.6	9.9	65	7.6	1011.6	8	002	02	2	2	6	8	5	3	1	81825	85628				29	2Sc35 1Sc56 2Ac62 /Ci75 COTRA Cu fra		
30	62	8	19	07	17	14.5	12.2	86	8.8	1010.3	6	007	50	5	2	8	6	3	/ /	88708						30			
31	84	2	31	08	16	11.8	4.8	62	5.2	1019.2	2	021	03	0	0	2	2	5	0	0	82825					31	Cu med Elevated hz lyr		

Mean vis = 30.0 km

Mean cloud = 5.5 69%

Mean wind speed = 7.5 kn

Mean gust = 17 kn

Mean TT = 14.4 °C

Mean Td = 7.1 °C

Mean RH = 62.3 %

Mean r = 6.3 g/kg

Mean PPP = 1018.2 mbar

See appendix 2 below for full code details

VV = Visibility code (Code FM12-4377)

N = Total cloud amount, oktas

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

ff = 10 minute mean wind speed, knots

gg = Highest gust in past hour, knots

TT = Air temperature at 1.2 m, deg Celsius

Td = Dew point temperature at 1.2 m, deg Celsius

RH = Relative humidity at 1.2 m

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

PPP = Air pressure reduced to sea level, mbar

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

ppp = 3 hr pressure tendency, tenths of mbar

ww = Present weather code (Code FM12-4677)

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

covers past 3 hours.

Nh = Amount of low cloud present, oktas

Cl = Type of low cloud (Code FM12-0513)

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

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

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

8 groups. 8 = indicator for cloud detail

N = Amount of cloud, oktas

C = Type of cloud (FM12-0500)

hshs = Height of cloud (FM12-1677)

Remarks : COTRA = persistent condensation

trails present.

Weather observations. Emmbrook, Wokingham, Berkshire.

Observations at 1500 GMT for May 2011

Date	VV	N	dd	ff	gg	TT	Td	RH	r	PPP	a	ppp	ww	W1	W2	Nh	Cl	h	Cr	Ch	shs	NChs	hshs	NChshs	Date	Remarks
1	75	7	07	11	26	18.7	3.8	37	5.3	1009.0	2	001	02	2	2	1	0	9	8	2	81359	87075			1	COTRA Ac cas Halo 22° part
2	84	2	06	09	24	17.0	0.5	33	4.1	1010.8	6	002	02	0	0	1	1	7	0	1	81856			2	2Ci80 COTRA Cu hum	
3	86	1	07	09	19	15.4	-6.1	22	2.5	1017.4	3	004	02	0	0	1	1	8	0	1	81857			3	1Ci80 COTRA Forest fire SE	
4	75	6	17	05	26	17.9	-3.1	24	3.0	1020.1	8	007	02	1	1	1	1	7	3	1	81856	86080		4	1Ac68 1Ci75 COTRA	
5	66	8	19	09	21	19.3	7.0	45	6.2	1017.9	6	007	02	2	2	2	8	6	0	7	82848	88275		5	COTRA Cu med Halo 22°	
6	77	7	20	08	21	24.1	5.2	29	5.3	1013.5	6	012	01	2	2	2	0	9	3	1	82362	87075		6	COTRA	
7	80	8	15	06	17	20.9	10.4	51	7.8	1009.1	7	011	02	2	2	5	0	9	8	7	82360	84365	88275	7	COTRA Ac cas vir	
8	84	3	19	12	21	18.4	6.6	46	5.9	1015.5	1	008	03	1	1	3	2	6	7	2	83840			8	1Ac68 1Ci72 Cu med	
9	81	2	20	10	25	18.9	6.8	45	6.2	1021.2	2	002	01	8	1	2	2	6	3	0	82845			9	1Ac65 Cu med	
10	80	6	22	08	18	19.1	6.5	44	5.9	1024.8	6	006	03	1	1	2	8	7	0	1	82850	85073		10	1Sc56 Cu med	
11	86	7	26	07	15	16.2	5.9	50	5.6	1022.4	7	016	01	8	2	7	8	6	/	8	81840	87656		11	2Sc50 /Cs72 Cu hum/med Sc edge NW	
12	75	5	26	10	21	16.4	5.4	48	5.6	1020.5	3	002	15	1	1	5	8	6	0	0	83845	83656		12	Cu med jpWNW vv60k ex p	
13	82	7	24	08	15	16.6	6.3	51	6.1	1019.0	7	013	01	2	2	2	8	6	0	8	82845	87269		13	1Sc56 Cu med 22° halo part U/a&L/a cont	
14	84	7	31	11	20	15.3	2.7	43	4.6	1020.4	1	003	02	2	2	3	2	7	3	1	83850	86357		14	/Ci75 Absent vv&cld est	
15	75	8	26	08	17	13.8	5.1	56	5.4	1025.8	8	008	60	6	2	8	5	6	/	/	88640			15	Absent vv&cld est	
16	80	7	25	10	23	17.6	8.9	57	7.0	1022.6	5	010	02	2	2	1	1	6	7	2	81835	84362	86072	16	1Ac60 3Ac65 Cu hum Ac len	
17	86	8	22	08	17	15.9	10.4	70	7.7	1019.8	8	009	02	2	2	8	8	5	/	/	81825	84828	88635	17	Cu hum	
18	59	8	24	08	19	17.9	12.0	68	8.7	1013.4	5	008	60	6	2	8	5	5	/	/	81620	86625	88635	18		
19	80	2	20	02	11	18.0	3.8	39	4.9	1017.8	7	010	02	0	0	2	1	7	0	0	82850			19	Cu hum	
20	84	7	24	08	16	16.4	6.3	51	5.8	1019.6	1	002	01	2	2	7	8	6	/	/	81840	83650	87656	20	Cu hum/med	
21	83	2	23	10	21	19.8	6.5	42	5.9	1017.6	7	015	02	0	0	1	4	6	4	1	81848			21	1Sc50 1Ac65 2Ci80 COTRA Cu hum	
22	78	4	26	14	34	17.6	2.8	37	4.8	1017.7	2	018	01	1	1	2	2	7	0	1	82850	83080		22	COTRA Cu hum/med	
23	75	8	21	13	28	15.5	9.4	67	7.3	1017.6	7	013	03	2	2	8	5	5	/	/	81625	86630	88635	23		
24	81	4	27	10	20	16.7	1.8	37	4.2	1027.1	5	002	02	1	1	2	1	7	0	1	82850	83080		24	COTRA Cu hum	
25	84	7	20	07	22	18.9	-0.2	28	3.7	1019.1	8	033	03	1	1	1	0	9	3	5	81368	86075		25	2Cs70 COTRA U/a cont	
26	65	7	25	12	27	15.9	11.1	73	8.2	1006.8	1	010	25	8	2	7	9	5	/	/	82920	83825	83650	26	jpE vv 50k exE	
27	84	7	27	08	15	14.1	4.0	51	4.9	1019.4	8	001	02	2	2	7	8	6	/	2	81838	83650	87656	27	/Ci75 Cu med	
28	60	8	23	10	22	15.0	9.6	70	7.4	1013.0	8	010	15	2	2	8	5	4	/	/	81715	87620	88635	28	jpNW	
29	82	5	22	11	25	19.3	11.8	62	8.6	1011.7	0	003	01	2	2	5	8	5	0	0	82825	85630		29	Cu hum	
30	45	8	31	06	13	12.8	11.4	91	8.4	1009.9	3	004	58	6	5	7	7	2	2	/	83705	86708	88520	30		
31	84	4	33	09	16	15.8	1.3	37	4.3	1022.2	2	012	02	0	0	3	2	7	6	0	83850			31	1Ac58 Cu med	

Mean vis = 34.8 km

Mean cloud = 5.8 73%

Mean wind speed = 8.9 kn

Mean gust = 20 kn

Mean TT = 17.3 °C

Mean TdTd = 5.6 °C

Mean RH = 48.5 %

Mean r = 5.8 g/kg

Mean PPP = 1017.5 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-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
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 analysis		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
	2011	4	0.00	0.20	0.10	0.24	0.00	0.00	0.00	0.00	0.33	0.23	0.00	0.33	0.51	0.59	0.48	0.00
		5	0.45	1.00	0.95	1.00	0.00	0.00	0.00	0.01	1.00	0.06	0.00	1.00	1.00	1.00	1.00	0.00
		6	1.00	1.00	1.00	1.00	0.15	0.47	0.00	0.07	1.00	0.73	0.00	0.74	1.00	1.00	1.00	0.10
		7	1.00	1.00	0.72	1.00	0.07	0.91	0.00	0.69	0.98	0.78	0.00	0.91	1.00	0.99	0.98	0.19
		8	1.00	1.00	0.46	1.00	0.00	0.92	0.00	0.33	0.58	0.46	0.00	0.85	1.00	0.63	0.68	0.16
		9	1.00	1.00	0.68	1.00	0.31	1.00	0.61	0.34	0.96	0.24	0.02	0.32	0.95	0.07	0.75	0.00
		10	0.95	1.00	0.92	1.00	0.85	0.12	0.09	0.03	0.70	0.78	0.00	0.01	0.82	0.07	0.46	0.00
		11	1.00	1.00	1.00	1.00	0.67	0.45	0.00	0.11	0.17	0.18	0.00	0.04	0.66	0.56	0.00	0.00
		12	1.00	1.00	1.00	1.00	0.01	1.00	0.00	0.19	0.39	0.85	0.00	0.52	0.04	0.17	0.00	0.00
		13	0.99	1.00	1.00	1.00	0.08	1.00	0.01	0.42	0.78	0.41	0.00	0.54	0.00	0.17	0.00	0.05
		14	0.61	0.99	1.00	1.00	0.00	1.00	0.02	0.45	0.88	0.65	0.00	0.29	0.03	0.32	0.00	0.14
		15	0.30	1.00	1.00	1.00	0.55	0.91	0.00	0.98	0.76	1.00	0.00	0.49	0.77	0.20	0.00	0.88
		16	0.00	1.00	1.00	1.00	0.76	1.00	0.00	0.01	0.80	1.00	0.86	0.57	0.21	0.02	0.00	0.00
		17	0.00	1.00	1.00	1.00	0.57	0.93	0.00	0.05	0.89	1.00	0.25	0.68	0.05	0.00	0.00	0.44
		18	0.00	0.92	1.00	0.06	0.23	0.00	0.00	0.28	0.47	0.92	0.00	0.44	0.29	0.00	0.00	0.00
		19	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.04	0.22	0.13	0.00	0.38	0.00	0.11	0.00	0.19
		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			9.32	14.11	13.16	13.23	4.26	9.70	0.73	4.00	10.92	9.42	1.14	8.12	8.33	5.91	5.36	2.13

	Hour	17-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	0.13	0.00	0.59	0.02	0.49	0.00	0.00	0.44	0.55	0.15	0.00	0.00	0.00	0.00	0.55	0.19
	5	0.00	0.05	1.00	0.61	1.00	0.86	0.12	1.00	1.00	0.01	0.00	0.00	0.00	0.00	1.00	0.49
	6	0.61	0.13	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.35	0.00	0.00	0.29	0.00	1.00	0.60
	7	0.91	0.12	1.00	1.00	1.00	0.99	0.07	1.00	1.00	0.14	0.00	0.00	0.25	0.00	1.00	0.64
	8	0.01	0.03	1.00	0.68	1.00	0.29	0.30	0.87	1.00	0.00	0.00	0.00	0.35	0.00	0.90	0.50
	9	0.06	0.04	0.67	0.25	0.98	0.01	0.43	0.88	1.00	0.01	0.00	0.00	0.06	0.23	0.51	0.46
	10	0.01	0.01	0.60	0.39	0.64	0.54	0.76	0.85	1.00	0.03	0.08	0.00	0.04	0.01	0.29	0.42
	11	0.00	0.07	0.67	0.19	0.69	0.57	0.24	0.70	1.00	0.29	0.02	0.00	0.00	0.01	0.73	0.39
	12	0.00	0.04	0.59	0.00	0.85	0.65	0.13	0.76	0.99	0.45	0.00	0.00	0.00	0.00	0.64	0.40
	13	0.00	0.22	0.68	0.06	0.24	0.83	0.21	0.59	0.99	0.12	0.00	0.00	0.01	0.00	0.77	0.39
	14	0.00	0.10	0.80	0.00	0.67	0.91	0.00	0.84	1.00	0.54	0.05	0.00	0.66	0.00	0.50	0.43
	15	0.00	0.00	1.00	0.30	1.00	0.96	0.00	0.80	0.88	0.02	0.31	0.00	0.31	0.00	0.52	0.51
	16	0.00	0.00	1.00	0.47	1.00	1.00	0.00	1.00	0.01	0.02	0.14	0.22	0.46	0.00	0.57	0.46
	17	0.00	0.00	1.00	0.69	1.00	0.98	0.00	1.00	0.82	0.08	0.39	0.41	0.02	0.00	0.90	0.49
	18	0.00	0.20	1.00	0.11	1.00	1.00	0.00	1.00	0.44	0.07	0.64	0.17	0.00	0.00	1.00	0.36
	19	0.00	0.31	0.00	0.05	0.52	0.28	0.34	0.70	0.42	0.00	0.34	0.00	0.00	0.00	0.85	0.17
	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		1.73	1.31	12.60	5.82	13.08	10.87	2.61	13.43	13.11	2.31	1.97	0.80	2.46	0.24	11.72	213.97

May 2011	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	14.38	21.6	1237	9.6	2359	51.7	69.2	318	32.0	1445	4.17	5.16	6.8	1059	3.7	1957	1009.42	1011.6	2346	1008.0	341	0.0
2	11.67	18.6	1212	5.1	2352	53.3	80.0	330	28.9	1007	1.65	4.32	5.3	1210	3.0	1811	1011.88	1014.7	2340	1010.3	1515	0.0
3	9.22	16.3	1409	3.3	310	55.4	92.8	520	15.3	1527	-0.95	3.64	5.5	713	1.6	1527	1017.34	1020.8	2351	1014.3	109	0.0
4	10.36	19.0	1433	-0.3	420	53.4	95.1	519	22.3	1909	-0.59	3.67	5.6	803	2.0	2004	1020.87	1022.0	609	1019.4	1435	0.0
5	13.90	20.6	1325	8.0	341	57.0	78.9	513	37.8	1831	5.16	5.47	7.5	1212	4.5	1830	1018.74	1021.2	1	1017.2	2315	0.0
6	16.37	24.7	1416	5.6	357	54.6	91.6	359	27.2	1245	5.89	5.77	8.9	2359	4.8	1249	1014.63	1017.4	5	1012.8	1916	1.7
7	16.63	22.1	1319	12.6	432	79.8	96.9	2336	49.6	1436	12.75	9.17	11.9	950	7.6	1448	1010.68	1013.6	1	1008.6	1824	13.4
8	15.26	19.0	1420	9.1	2332	73.4	97.0	2	37.7	1531	9.99	7.74	10.3	27	5.0	1603	1013.81	1019.0	2342	1008.2	145	4.2
9	14.05	19.2	1501	8.7	322	70.2	95.4	518	40.7	1537	8.14	6.68	8.6	1255	5.2	1615	1021.27	1023.6	2357	1018.6	7	0.1
10	14.16	19.7	1310	8.4	250	68.4	95.0	456	38.7	1557	7.76	6.48	8.0	721	5.2	1557	1024.90	1026.0	2152	1023.4	213	0.0
11	12.86	17.5	1631	8.6	203	72.6	96.4	335	43.7	1539	7.67	6.47	8.1	931	5.0	2221	1023.43	1025.4	1	1021.1	1743	0.0
12	12.19	17.9	1345	6.1	433	66.4	92.6	436	36.4	1248	5.68	5.64	6.9	716	4.4	1248	1020.75	1022.7	2359	1019.8	1245	0.0
13	11.74	17.6	1518	4.0	426	67.5	96.5	449	38.2	1133	5.30	5.50	7.0	815	4.4	1133	1020.14	1022.8	142	1017.2	1738	0.0
14	11.34	16.8	1524	4.8	440	64.7	95.3	513	37.6	1409	4.38	5.15	6.2	1140	4.2	1431	1020.42	1023.7	2359	1018.5	206	0.0
15	11.58	15.1	1016	6.6	448	65.8	86.1	2346	35.7	1007	5.05	5.40	6.8	2358	3.7	1007	1025.62	1026.8	913	1023.4	25	0.0
16	14.01	19.3	1404	10.7	19	68.6	86.3	401	48.1	1349	8.11	6.65	7.9	1449	5.6	1915	1023.26	1025.2	28	1021.4	1723	0.0
17	13.91	17.6	1130	10.6	315	75.5	92.0	2055	54.5	1142	9.54	7.35	8.7	2056	6.1	12	1020.10	1022.0	0	1017.6	2354	0.0
18	13.95	19.9	1356	7.2	2359	81.2	94.5	241	57.9	1356	10.66	7.99	10.1	1616	5.9	2346	1015.11	1017.8	0	1013.1	1440	1.2
19	12.12	19.3	1516	3.9	420	66.4	97.9	543	32.8	1407	5.06	5.43	6.8	714	4.2	1321	1018.00	1019.2	656	1016.8	57	0.0
20	13.39	18.3	1622	8.3	525	62.9	83.6	2332	40.1	1106	6.17	5.84	7.0	1519	4.8	1106	1019.38	1021.9	2303	1017.7	332	0.0
21	13.84	20.9	1413	4.6	422	62.8	96.0	440	37.9	1256	6.22	5.86	7.3	1249	4.9	432	1018.75	1022.0	223	1013.6	2357	0.0
22	13.66	18.6	1406	9.1	2336	61.5	90.2	344	32.9	1408	5.81	5.77	8.1	342	4.1	1346	1016.70	1023.1	2343	1011.4	313	0.7
23	12.32	17.5	1041	7.8	2357	72.0	86.3	1757	52.8	1042	7.29	6.32	7.5	1701	5.0	2357	1020.00	1023.0	2	1016.8	1652	0.0
24	12.23	18.4	1437	6.4	2336	54.7	85.5	324	30.1	1705	2.47	4.50	5.6	634	3.0	1951	1026.09	1029.2	2138	1021.1	3	0.0
25	13.12	20.0	1515	3.2	400	56.6	93.8	451	22.9	1412	3.52	4.87	6.2	653	3.2	1412	1021.32	1028.9	7	1010.4	2352	0.0
26	12.66	16.9	1241	10.0	423	73.2	87.4	1352	62.5	721	7.98	6.72	9.2	1431	5.3	2356	1008.43	1014.0	2356	1005.1	1114	4.7
27	12.01	16.2	1701	9.0	2358	63.4	77.7	558	41.1	1702	5.09	5.43	6.4	1014	4.6	1816	1017.76	1019.7	1342	1013.8	8	0.0
28	12.51	16.0	1655	8.3	212	74.7	91.1	2208	56.2	1704	8.05	6.71	8.4	1609	5.3	7	1014.38	1018.3	5	1012.2	2348	0.1
29	15.51	19.6	1433	12.6	1	74.5	89.6	2359	60.2	1502	10.90	8.10	9.4	1432	7.2	808	1012.05	1013.6	2127	1011.0	404	0.0
30	12.94	17.9	1110	8.5	2336	87.6	93.7	2146	67.5	1111	10.89	8.13	9.6	951	6.0	2334	1011.05	1013.6	2358	1009.3	1243	1.7
31	11.84	18.0	1600	5.8	407	64.0	93.5	411	31.0	1524	4.39	5.18	6.5	1048	3.8	1315	1020.89	1028.6	2358	1013.4	0	0.1
Total																						27.9
Mean	13.09	18.71		7.28		66.3	90.25		40.33		6.26	6.04	7.68		4.62		1017.97	1021.02		1015.02		
Max	16.63	24.69		12.55		87.6	97.90		67.53		12.75	9.17	11.90		7.55		1026.09	1029.24		1023.45		
Min	9.22	15.10		-0.31		51.7	69.16		15.34		-0.95	3.64	5.34		1.63		1008.43	1011.63		1005.11		

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
 Rtot = 00-24 GMT rainfall total from AWS tipping bucket raingauge, mm
 Time = hours and minutes in GMT of extreme values

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 2011

Temperature (°C)

Rank in the past 130 years

Mean maximum	16.8	(+2.5)	2 nd highest
Mean minimum	5.3	(+0.3)	15 th highest
Daily mean	11.1	(+1.5)	* Highest *
Rainfall total (mm)	41.8	(29 %)	3 rd lowest
Sunshine total (hours)	588.2	(127 %)	
N ^o of: Dry days	79 (+27)	Wet days	8 (-20)
Days with: Air frost	10 (-1)	Ground frost	32 (-3)
		Snow falling	0 (-4)
		Snow lying	0 (0)
Thunder	2 (-3)	Hail ≥5mm	0 (-2)
		Small hail/ice	0 (-5)
		Fog @09 GMT	1 (0)
		Nil sun	5 (-4)
Air pressure MSL : Mean @09 GMT (mbar)	1020.5		(+4.9)

Departure from 1981 to 2010 average shown in brackets.

Notes:

Very Mild.

Very Dry.

Very Sunny.

Temperature: This has been a record breaking spring season, with the highest mean temperature in the past 130 years, exceeding the previous highest in 2007 by 0.2°. The mean maximum is second highest after 1893, with 2007 3rd highest, 0.6° lower than this year. The mean minimum is the odd one out, ranking only 15th highest, 1.0° below the record set in 1998, indicating a spring with less cloud and wind than average at night. The highest max was 26.6°, 1.2° above the median and occurred on a rather early 23rd April. The lowest max was 4.4° on the 3rd March, exactly equal to the median. The highest min was 13.9° on the 8th May, 1.4° above the median, and the lowest min -5.6° on the 8th March is 1.3° below the median. The mean daily temperature range of 11.5° is a new high in the past 36 years. The mean grass min, 2.0°, is 0.4° above average, and the lowest grass min was -10.4° on the 8th March. The mean earth temperature at 30 cm depth, 11.2°, is 1.0° above average, and the 10.7° at 1 m depth is about half that. The duration of air frost was 53.2 hours, very close to average. **Rainfall:** This has been a very dry spring season, with less than one third of the average rainfall. It is driest since 1990, with 1893 the only other year to have less in the past 130 years. None of the season's months had anything like average rainfall, May being the wettest with 58 %, while April had only 1.4 mm, just 3 % of average. The number of dry days is 27 above average and the most since before 1905, and is also 10 more than the next lowest. Also the number of days with 1 mm or more is 20 below average and lowest since before 1912. The wettest day was the 7th May with 13.0 mm. There were several dry spells, one of 11 days ending on the 11th March, 11 days on the 29th March, 31 days on the 5th May and 9 days on the 16th May. Thunder was heard on the 23rd April and the 7th May, but there was no hail. The highest rain rate was 123 mm/hr on the 26th May. **Sunshine:** This has been a very sunny spring, with the highest total since 1997, and well within the top 10 sunniest in the past century. Each of the spring months had above average sunshine, with April coming off best with 144 %, and May the worst with 112 %. Also the total of 231.8 hours for April is 18.1 hours more than we recorded in May. Overall there were 28 days with <3 hours, 44 with =>6 hours, 34 with =>9 hours and 14 with =>12 hours. **Wind:** The mean wind speed of 6.4 mph is 0.7 mph below average. The windiest day was the 10th March, 13.2 mph, but the highest gust of 40 mph was on the 23rd May. The least windy day was 2.3 mph on the 25th March, and there were 2618 minutes of calm, speed of 0.5 mph or less. Daily mean direction/number of days: N,7 NE,24 E,4 SE,4 S,9 SW,30 W,11 NW,3. Compared with average, winds from both NE and SW were 7 % more frequent, at the expense of N and NW combined, down 8 %, S down 4 %, and E down 2 %. **Humidity:** The overall mean relative humidity was 71.1 % and the lowest value recorded was 15 % on the 3rd May, and unusually low figure. The mean water vapour content per kg of air was 5.9 g at 0900 GMT and 5.6 g at 1500 GMT. **Pressure:** The mean pressure is highest since 1997. The highest value was 1042.3 mbar on the 23rd March, highest since 1998, and the lowest was 996.3 mbar on the 13th March, highest since 1990.

March: Very dry, sunny, mean temperature near average. Anomalies for mean max and mean min were +1.3° and -1.3° resp., giving the 2nd highest daily mean temperature range in 36 years. Driest since 1990.

April: A record breaking month, very warm, very dry and very sunny. New highest records set for mean max and mean temperature, with the mean min 2nd highest, all in the past 130 years. The mean temp is 1.0° above the previous highest. The highest max equal highest in 108 years and the lowest max a new high record. The lowest min 2nd highest in 108 years. The 3rd driest in 130 years, with the most dry days in 107 years. One of the sunniest Aprils in the past century.

May: Warm, dry and above normal sunshine. The least extreme of this year's spring months, however despite the mean max being 1.1° above average, it is 0.9° lower than April's. The lowest max is highest since 1940. The number of dry days is equal highest since 1991. Sunniest since 1998.

Month	Mean Max	Anom	Mean Min	Anom	Rain mm	Anom	Sun hrs	Anom	Wind Mn mph	Max gust	Mean pressure	Anom
March	12.5°	+1.3°	1.9°	-1.3°	11.4	25 %	142.7	128 %	6.0	39	1023.1	+7.2
April	19.5	+5.5°	6.3°	+1.9°	1.4	3 %	231.8	144 %	5.9	31	1020.3	+5.3
May	18.6°	+1.1°	7.8°	+0.3°	29.0	58 %	213.7	112 %	7.6	40	1018.2	+2.3

B J Burton FRMetS.

Hon. Met. Officer to Wokingham Town Council.

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 1971 to 2000. This will be next updated in 2010. 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 1971 to 2000 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/www1.html>

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Month: Calendar month.

Season: Spring, March to May.

Summer, June to August

Autumn, September to November

Winter, December to February.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Appendix 2.

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

VV : Visibility.

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

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

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

Code figure 89 = visibility above 70 km.

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

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

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

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

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

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

RH : Relative humidity at 1.2m, %.

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

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

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

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

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

1 = Increasing then steady or increasing more slowly

2 = Increasing steadily or unsteadily

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

4 = Steady, pressure the same as 3 hours ago

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

6 = Decreasing then steady or decreasing more slowly

7 = Decreasing steadily or unsteadily

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

ppp : 3 hour pressure tendency in tenths of a millibar

ww : Present weather code figures, 00 to 99.

Present weather decode:

00 = Cloud development not observed or not observable

01 = Clouds generally dissolving or becoming less developed

02 = State of sky on the whole unchanged

03 = Clouds generally increasing or becoming more developed

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Hail includes large hail, small hail and snow pellets.

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

Code figures:

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

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

Cl : Type of low cloud

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

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

Cm : Type of medium cloud.

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

Ch : Type of high cloud

0 = No high cloud

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

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

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

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

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

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

7 = Veil of Cirrostratus covering the celestial dome.

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

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

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

8 Groups

N = Amount of cloud reported by C, okta.

C = Type of cloud

0 = Cirrus (Ci)

1 = Cirrocumulus (Cc)

2 = Cirrostratus (Cs)

3 = Altocumulus (Ac)

4 = Altostratus (As)

5 = Nimbostratus (Ns)

6 = Stratocumulus (Sc)

7 = Stratus (St)

8 = Cumulus (Cu)

9 = Cumulonimbus (Cb)

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

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

00 to 50 = Height in hundreds of feet

51 to 55 Not used

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

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