July 2024

A weak ridge stretching up from the Azores together with a series of fronts moving slowly south over the UK led to a fair to cloudy start to the month, but as those fronts dropped into the Channel early on the 2^{nd} we saw a few spots of rain, although nothing measurable. Conditions improved following the clearance southward of that front but extensive high cloud through the day made the sunshine hazy and pegged air temperatures back to just 17.1°C in a rather cool northwesterly flow.

Further weak fronts made progress in from the Atlantic through the morning of the 3rd, leading to cloud thickening and lowering across the islands with mist, drizzle and patchy hill fog that afternoon and evening. Again, conditions improved following the clearance eastward of those fronts later that evening as a brisk northwesterly flow followed on behind.

Low pressure remained the driving force across the British Isles, centred off the northwest coast of Scotland, with bands of showers running across the country. Down in the Channel we managed to avoid the bulk of those showers, but an open wave depression developing out in the near Atlantic brought renewed outbreaks of rain and drizzle together with mist overnight into the 5^{th} , and whilst conditions improved that afternoon, late evening saw some heavier bursts of rain for a time before clearing through the early hours of the 6^{th} . Indeed, clear skies by dawn and a brisk but clear northwesterly airflow across the islands led to some 13.9 hours of sunshine, albeit with a rather disappointing 17.4°C top temperature at the airport.

As our winds backed into a more westerly direction late on the 6th so the longer sea track led to a scattering of showers building and running up the Channel overnight and through much of the morning of the 7th. We faired better that afternoon though as the winds backed further into the southwest allowing those showers to ease off, but it was a rather brief respite as a low pressure system developing in Biscay made slow but steady progress northeast towards us, with rain arriving mid evening. That rain became persistent overnight and into the morning of the 8th before turning heavier later that afternoon with mist and hill fog patches at times. The low responsible just held off out to the west into the 9th as well, feeding in bands of rain up the Channel before gradually easing away northeast over Wales and the Midlands. Locally the associated rain became patchy and lighter, still with a few mist patches over higher ground through the 9th before generally drying out by evening, although it remained mostly cloudy.

With low pressure still very much the dominant presence over the UK, now centred over the North Sea and with fronts lying out in Biscay and France, it was no real surprise to see further rain by mid morning on the 10th, although the afternoon brightened up slowly to become fine by the evening. With fronts lying to the north and to south of the islands, we actually enjoyed a largely dry and quiet day on the 12th with light winds, but extensive medium and high cloud through the day made the sunshine hazy and kept temperatures several degrees below the mid July average. Slack pressure greeted us by dawn on the 13th with just the odd rogue shower around the islands. Those light winds and deep convection led to the formation of a good sized water spout, sighted off the northeast coast in Belle Greve bay around mid morning.

That low maintained its presence in the North Sea and coupled with a belt of more settled high pressure out in the North Atlantic we enjoyed a quiet weekend across the islands, with light winds and plenty of sunshine. It was all change for the 15th however, as a rather unremarkable looking low out to the southwest introduced an active cold front to our shores with rain shortly after dawn that became persistent and heavy for a time through the morning before clearing early afternoon. The respite was brief however, as a further band of more organised showers rolled in later that evening and overnight.

At the halfway point of the month rainfall was already some 12mm above the average <u>total</u> for July, sunshine was rather lacking and the mean temperature was a whole degree below the long term average.

After a brief early shower, the 16th brightened up nicely for the Royal Visit, although a brisk westerly wind kept temperatures from reaching 20°C. High pressure was also making a rare visit to the Bailiwick as it stretched up from Biscay bringing warmer and more settled conditions to the islands for a few days. Temperatures peaked at

24.8°C on the 18^{th} before slightly cooler, more Atlantic themed air began to encroach from the west by the end of the 19^{th} .

Approaching fronts overnight brought rain, occasionally heavy, drizzle, mist and hill fog throughout the 20th as those fronts edged only slowly eastward as they ran into an extensive blocking high over Eastern Europe. The fronts did finally clear during the small hours of the 21st with dawn seeing brighter and drier conditions as a temporary ridge spilled across the UK. It was only a brief respite however, as our rather mobile flow delivered yet another low across central parts of the UK, with the first spots of drizzle arriving just before sunrise on the 22nd. Cloud thickened and lowered into fog by mid morning before clearing just before noon as the warm front responsible edged away to the south. Unfortunately this feature waved back into the Channel later in the afternoon with a return to damp, misty conditions which rapidly thickened into fog across the higher parishes for the rest of the evening.

A weak Atlantic cold front improved matters overnight with a mix of sun and cloud through the 23rd, although that westerly breeze pegged air temperatures back to the high teens. Further fronts pushing in from the west ensued a cloudy day on the 24th with some light patchy rain for a time that afternoon, but it wasn't until overnight that we started to see a more active low pressure system off the south coast of Iceland introduce a series of quite vigorous fronts across the UK. Rain, persistent and occasionally heavy, drizzle and mist from just before sunrise progressively worsened, with fog from mid morning which plagued the islands for much of the day. We did see a clearance just after 9pm that evening but with 17.1mm of rain and no sunshine it certainly wasn't a day worth writing home about.



A gentle sunset under clear skies on the 27th from Rocquaine. Photo credit B Bonnefin.

As that low continued its progress east, the associated fronts cleared all parts of the UK by mid morning on the 26^{th} , allowing pressure to build slowly from the southwest. Drier, brighter and more settled weather finally arrived thereafter and we also started to see temperatures start to climb, reaching 25.5° C on the 29^{th} as we at last started to enjoy some belated summer weather. Another warm, sunny day on the 30^{th} but as that high started to just drift away to the north, thundery low pressure over Spain began to introduce some heavy showers over France with particularly heavy thunderstorms with hail over Paris that evening. We noted a few light showers through the morning of the 31^{st} but it wasn't until later that evening that a more organised band of heavier showers rolled in from the southwest with a solitary flash and a bang in the last hour of the month.

Wet and dull but with the last 2 weeks of warmer temperatures offsetting a cooler first half of the month, the mid-summer month was rather disappointing, with over twice the average rainfall leading to the wettest July in 20 years. Ten days with fog noted and 4 days with no sunshine, the most since 1978, led to the dullest July since 1998. The last 6 days of the month saw arguably the best of the weather with a warmer run of temperatures, little rain and averaging over 10 hours of sunshine a day.

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DAY	DATE	BAROMETER TEMPERATURE					Ĭ			WIND			RAIN	SUN	
		hPa		AIR		GRASS	SOIL		DIR'N	SPEED(knot		ts)			WEATHER
		at 9a.m.	MAX	MIN	MEAN	MIN	30cm	100cm	9a.m.	n. 9a.m.	MEAN	MAX	mm	hrs	
Mon	1	1021.0	18.4	13.5	16.0	12.0	17.5	16.2	310	10	10.2	21	TR	4.9	Cldy occn fair with light shw r late pm
Tue	2	1021.0	17.1	13.3	15.2	13.6	17.7	16.2	350	12	8.2	20	TR	5.0	Cldy occn fair with ptchy rain am
Wed	3	1012.9	18.9	12.9	15.9	10.7	17.3	16.2	240	16	13.0	26	TR	0.4	Cldy with drz & mist from late am. Fog late pm, clrng mid eve
Thu	4	1015.0	18.2	13.7	16.0	11.2	16.9	16.3	300	08	13.9	25	1.7	12.7	Cldy am with early shw r, bec fine pm with dry air. Cldy late eve
Fri	5	1010.8	18.1	13.4	15.8	13.4	17.1	16.2	230	18	15.0	26	8.0	NIL	Cldy with mist, rain & drz am, dry pm. Hvy rain, drz & fog late eve
Sat	6	1007.7	17.4	12.5	15.0	11.1	17.1	16.2	280	<u>20</u>	<u>17.8</u>	<u>31</u>	5.6	13.9	Cldy with rain & fog soon bec fair/fine. Shw rs eve
Sun	7	1012.0	17.6	11.7	<u>14.7</u>	11.3	<u>16.5</u>	16.1	230	16	11.9	25	6.2	3.6	Cldy with frqnt shw rs occn hvy am. Fair pm. Cldy with rain eve
Mon	8	1015.0	<u>16.2</u>	13.3	14.8	13.0	<u>16.5</u>	16.1	140	08	9.7	23	16.7	NIL	Cldy with long periods of rain, occn hvy clrng late eve
Tue	9	1009.5	17.9	15.4	16.7	14.9	16.8	<u>16.0</u>	170	08	11.2	22	0.2	0.1	Cldy with patchy rain, mist and hill fog am. Slight improvement pm
Wed	10	1015.2	19.1	14.2	16.7	14.1	17.0	<u>16.0</u>	230	12	11.1	21	1.3	6.7	Cldy with rain, mist & fog patches, bec fine late pm
Thu	11	1019.6	18.3	12.7	15.5	9.3	16.7	<u>16.0</u>	280	04	5.3	12	NIL	7.6	Fine with early shallow fog, xntsv med/high cloud
Fri	12	1016.8	18.0	12.9	15.5	9.9	16.9	<u>16.0</u>	310	09	6.7	19	TR	4.0	Mainly cldy occn fair. Light shw r early pm
Sat	13	1015.5	18.7	11.7	15.2	9.7	17.0	16.1	190	06	5.3	15	NIL	10.4	Cldy until late am, funnel cloud off NE coast, bec fair then fine pm
Sun	14	1013.4	19.2	<u>11.3</u>	15.3	<u>8.2</u>	17.7	16.1	260	<u>01</u>	<u>3.8</u>	12	6.3	8.8	Cldy bec fine with early shallow fog
Mon	15	<u>1006.6</u>	19.4	13.3	16.4	12.4	17.5	16.2	120	08	9.9	22	9.2	2.9	Cldy. Rain occn hvy, drz & fog ptches am clrng to fair/fine, isol shw rs pm/e
Tue	16	1013.0	19.2	14.6	16.9	13.5	17.5	16.3	270	15	13.4	24	NIL	9.7	Cldy with shwrs early am bec fair/fine with xtnsv high cld from mid pm
Wed	17	1022.1	20.2	13.7	17.0	11.6	17.9	16.3	240	05	5.1	12	NIL	10.0	Cldy early am soon bec fair with xtnsv high cloud
Thu	18	1019.8	24.8	15.3	20.1	14.7	18.6	16.4	150	09	6.6	15	NIL	7.6	Xtnsv high cloud am gradually thinning to bec fair then fine
Fri	19	1017.4	21.4	15.9	18.7	14.5	19.5	16.5	290	07	5.8	14	TR	13.8	Fair/fine am bec cldy pm w ith drz late eve
Sat	20	1009.7	19.8	16.5	18.2	<u>17.1</u>	19.6	16.7	160	11	7.8	22	16.1	0.2	Cldy. Drz/mist/fog ptchs clrng am. Rain/drz from noon oc hvy. Mist/fog eve
Sun	21	1013.0	18.8	14.8	16.8	14.5	19.0	16.9	300	12	10.6	21	TR	7.3	Cldy with mist, fog, rain & hvy drz clrng by daw n. Occn fair pm
Mon	22	1017.8	18.9	15.6	17.3	15.0	18.6	17.0	230	14	14.3	24	1.4	NIL	Cldy with rain, drz & hill fog am, returning eve
Tue	23	1020.8	19.0	15.4	17.2	15.3	18.2	17.0	290	13	10.8	22	NIL	7.9	Cldy with early light shw rs bec fair or fine
Wed	24	1023.3	18.3	13.6	16.0	11.1	18.9	17.0	240	06	5.6	14	2.2	0.7	Cldy with early shallow fog. Occ light rain pm. Good viz
Thu	25	1014.0	17.6	15.0	16.3	15.3	18.2	17.0	190	12	11.3	24	<u>17.1</u>	NIL	Overcast with rain & drz, occn hvy, mist & xtnsv fog, clrng late eve
Fri	26	1013.7	19.1	13.8	16.5	11.9	17.8	16.9	320	04	5.2	11	NIL	7.1	Cldy with a couple of light show ers am, clrng to fine from mid pm
Sat	27	1016.3	18.6	13.0	15.8	9.5	17.9	16.9	300	05	5.7	15	NIL	12.7	Occ cldy am bec fair/fine with high cloud at times
Sun	28	<u>1026.0</u>	21.8	13.2	17.5	9.4	18.1	16.9	140	05	5.9	18	NIL	13.3	Cldy bec fair then fine. Early shallow fog
Mon	29	1019.4	25.5	16.6	21.1	14.4	18.9	17.0	090	06	6.1	17	NIL	<u>14.3</u>	Fine w ith occn dry air pm
Tue	30	1017.2	23.8	16.0	19.9	14.7	<u>20.2</u>	17.0	020	10	6.8	15	NIL	8.4	Fair/fine am bec cldy pm, fine late eve
Wed	31	1013.1	<u>26.6</u>	<u>17.8</u>	<u>22.2</u>	16.5	19.7	<u>17.2</u>	040	04	4.6	13	0.3	8.7	Cldy bec fair then fine pm, cldy eve. Light shw rs am. T&L 2303z
	MEAN	1015.8	19.5	14.1	16.8	12.7	17.9	16.5	SW	9.5	9.0	TOTAL	92.3	202.7	16th - King's Visit
:	30 YEAR AVG														
	1991-2020	1017.3	19.6	13.8	16.7	11.5	17.9	16.4	W	10.1	9.8		43.2	253.3	4
	EXTREMES	NUMBER	RAIN	WET	SNOW/	HAIL	THNDER	LGHTNG	AIR	GROUND	FOG	FOG	GALE	NO	
	ARE IN	OF DAYS	≥0.2mm	≥1.0mm	SLEET				FROST	FROST		9a.m.		SUN	J
	BOLD TYPE	WITH	14	12	0	0	1	1	0	0	10	2	0	4	TOTALS FOR YEAR TO DATE
						RECORDS	FROM JAN	UARY 1947							RAINFALL 490.6 mm SUNSHINE 1220.9 hrs
W	ETTEST DAY	62.5mm	DRIE	EST MONTH	1.4	LC	OWEST MIN	8.3°C	WARI	MEST MNTH	19.4°C	SUNN	IIEST MNTH	340.5	RAIN DAYS 102 SUNLESS 32
		7th/2004				DAY/YEAR			_		1983			2018	WET DAYS 78
WE	TTEST MNTH	-		GHEST MAX		LOWE	EST GRASS		COLI	DEST MNTH	13.8°C	DULI	YEAR LEST MNTH		1
	YEAR				18th/2022		DAY/YEAR			YEAR	1954		YEAR		