

## July 2021

After a rather disappointing June, the new month struggled to get off to a decent start with thick fog blanketing the islands for most of the morning of the 1<sup>st</sup>, only burning back to the coasts through the afternoon. A slack pressure gradient covered much of the UK and France, with only a gentle westerly drift along the Channel. Warm, moist air over a still relatively cool sea led to extensive sea fog around the Bailiwick, encroaching inland at times, restricting air temperatures to the mid to high teens for the most part.

Towards the end of the 2<sup>nd</sup> low pressure out in the near Atlantic was extending a series of fronts into the western Channel, with outbreaks of rain together with mist and hill fog patches affecting the islands overnight in to the 3<sup>rd</sup>. These fronts cleared through by noon allowing for improved conditions for the afternoon, but a series of troughs following the clearance rolled in overnight with some lively showers at times in the small hours of the 4<sup>th</sup>, mostly clearing later that morning.

The charts were now showing low pressure very much the dominant player across much of Europe, with the next system rolling in from the southwest late evening on the 4<sup>th</sup>, again clearing during the early hours of the 5<sup>th</sup>, followed by a dry morning. The next system out to the southwest was already deepening and moving swiftly into the mouth of the Channel though, bringing rain to our shores that afternoon. That rain became persistent and heavy for a time before clearing later that evening. The centre of this low tracked up the Channel just off the south coast of the UK with gales recorded at the Channel Light Vessel, Brest and Alderney Airport. Our highest mean speed was 31 knots (36 mph) just before 0300 on the 6<sup>th</sup>, just falling short of a full gale, but we did record a maximum gust of 45.5 knots (52 mph), the highest July gust since 1983.

By dawn on the 6<sup>th</sup> this low was starting to lose coherence and slowing its progress eastward, leaving us with a bright and breezy day in the islands, with just the odd shower lurking in the wings. Pressure was now starting to show signs of building following this clearance with winds easing but still with patchy rain or showers at times. A period of fog and drizzle around dawn on the 7<sup>th</sup> cleared to leave a mostly cloudy day in the islands, with only the odd glimpse of blue sky that afternoon.

Ridge conditions for the 8<sup>th</sup> provided a bit more in the way of sunshine but with temperatures still struggling in the mid teens and a damp, mainly westerly flow across the islands, it really didn't feel very much like summer. As that ridge collapsed to the southeast the next series of fronts were pushing in from the west with a cloudy day on the 9<sup>th</sup> with rain arriving early on the 10<sup>th</sup>, together with mist and hill fog across the islands. The fronts cleared through that afternoon, but it remained cloudy for the most part with just a glimpse of sunshine by day's end. Unfortunately the next system was already nearing our shores with the first few spots of rain late morning on the 11<sup>th</sup>. The afternoon proved a livelier affair though, with an active thundery trough breaking away from the Brittany Coast and rolling up over the Bailiwick later that afternoon. The first thunder was noted around 1700hrs with multiple flashes around the island. The storms lasted around 90 minutes but with the airport just missing out on any of the heavier bursts of rain, recording just 1.8mm of rain.

Low pressure continued its influence across the islands, now centred over Kent, with a cloudy northwesterly flow through the 12<sup>th</sup> with periods of rain, drizzle, mist and fog patches, clearing just before dusk. A daytime maximum temperature of just 15.4°C on the 12<sup>th</sup> was the lowest such figure recorded since 2013.

Coming up to the half way point of the month with sunshine totals only just over half the 30 year average, and rainfall around twice that same average made for disappointing reading, but by dawn on the 13<sup>th</sup> however, pressure was starting to build from the southwest bringing with it the promise of something warmer and more settled in the days to come, as that low moved slowly off in to Central Europe.

High pressure building out to the southwest over the Azores was at last starting to influence our weather, as it drifted northeast to be centred to the west of Ireland by the 14<sup>th</sup>. Dry, warm and settled conditions then prevailed across the islands with light to moderate mostly east to southeasterly winds and air temperature

moving smartly up in to the high 20's. The 7 days from the 13<sup>th</sup> to the 19<sup>th</sup> yielded just under 100 hours of sunshine, over twice the total for the first 12 days of the month. Our maximum daytime temperature for the month was reached during the early afternoon of the 21<sup>st</sup> at 28.1°C, but the 4 days 19<sup>th</sup>-22<sup>nd</sup> (inc) each topped over 25°C making for a rather warm spell in the islands.

Gradually though, that high drifted away to the north and east as thundery low pressure edged up from the near continent through the 23<sup>rd</sup>. Thickening high and medium level cloud during the morning heralded a rash of quite intense thunderstorms across all the islands later that afternoon with reports of 8mm sized hail stones in St Peter Port together with frequent flashes of lightning. Initially we recorded very little rainfall up at the airport that afternoon, but a second thundery trough that evening yielded some 6.5mm of rain in just over an hour just before midnight.



One of many intense lightning flashes seen during the late afternoon of the 23<sup>rd</sup>. Photo credit Kevin Butt

These troughs continued their progress northward to impact the south coast of the UK during the 24<sup>th</sup> with reports of property damage and flash flooding across many southern parts. Locally though, we started with a dry morning following the previous night's storms, with a welcome 10° drop in temperatures to a more bearable 17°C. However further showers in association with this slow moving thundery low pressure rolled in over the islands that afternoon, becoming heavy and persistent before clearing mid evening.

Increasing moisture levels within this unsettled air flow gave rise to mist and hill fog patches at times over the next couple of days, but not too much in the way of rainfall.

Slow moving low pressure continued to influence the UK weather over the next few days, centred just off the east coast of Scotland. A separate low pressure, deepening and moving swiftly in from the near Atlantic started to show up on our charts by the 29<sup>th</sup>, with a predicted eastward track just off the north coast of Cornwall, over Oxford and into Lincolnshire. This low was named Storm '*Evert*' and brought gale force winds and periods of heavy rain across southern parts of the UK. This was only the 4<sup>th</sup> named summer storm, after 2 in 2020 and 1 in 2018. Thankfully '*Evert*' was reasonably localised across southern areas of the UK with only a few light showers noted at here at the airport, although our winds became quite strong and gusty through the morning of the 30<sup>th</sup> before easing off that afternoon.

Duller, wetter and slightly warmer than the long term average, July was probably rescued by that warm, dry and sunny 10 day spell mid month following a cool unsettled first 12 days. Despite a gust of 46 knots on the 6<sup>th</sup> and Storm 'Evert' on the 30<sup>th</sup> we ended up with a lower mean monthly wind speed than average. The 11<sup>th</sup> & 23<sup>rd</sup> saw some feisty late afternoon thunderstorms and there was an above average 13 days when fog was noted.

July 2021

DAY	DATE	TEMPERATURE deg C											RAIN	SUN	WEATHER		
		BAROMETER		AIR				GRASS		SOIL		WIND					
		mb	AIR			GRASS	SOIL		DIR'N	SPEED(knots)						mm	hrs
at 9a.m.	MAX	MIN	MEAN	MIN	30cm	100cm	9a.m.	9a.m.	MEAN	MAX	mm	hrs					
Thu	1	1019.4	18.1	13.2	15.7	11.9	18.3	15.8	250	06	7.7	15	TR(dew)	7.0	Thick fog am, fair pm with haze		
Fri	2	1017.6	19.9	12.4	16.2	9.8	18.2	16.0	270	02	4.5	13	1.1	5.5	Fair bec cloudy with rain eve. Sea & coastal fog		
Sat	3	1013.3	19.6	14.4	17.0	13.8	18.5	16.1	220	10	9.1	20	4.4	5.2	Rain, drz, mist & fog am clng to bec fair		
Sun	4	1008.3	17.6	14.4	16.0	15.1	18.5	16.3	230	15	12.9	29	2.7	6.4	Cldy w/ith shw rs, occn hvy, & fog ptchs am. Fine pm bec cldy, rain eve		
Mon	5	1007.9	16.6	12.5	14.6	11.6	18.0	16.4	230	09	10.0	32	8.9	0.4	Cloud thickened during morning w/ith rain from mid-afternoon		
Tue	6	1004.4	16.5	12.6	14.6	12.0	17.5	16.4	250	17	17.0	46	0.4	7.7	Cldy & wndy w/ith shw rs ovnt, clng to fair w/ith odd shw r early pm		
Wed	7	1013.2	17.5	12.7	15.1	11.9	17.2	16.4	240	16	12.2	21	NIL	3.5	Drz & brief period of fog early am, then mainly cldy occn fair pm		
Thu	8	1021.8	17.5	13.7	15.6	14.4	17.4	16.3	250	09	10.5	19	TR	6.3	Cldy, early mist & fog, light shw r am. Fine pm, cldy eve		
Fri	9	1023.8	16.4	12.6	14.5	12.1	17.6	16.3	200	06	6.2	12	10.5	1.1	Mainly cloudy		
Sat	10	1015.7	16.2	12.2	14.2	13.3	17.6	16.3	160	07	6.5	13	0.9	0.3	Cldy w/ith rain early, occn hvy, clng mid pm. Fog & mist am		
Sun	11	1016.3	18.3	11.6	15.0	10.3	17.3	16.4	190	07	6.8	13	2.7	2.7	Cldy w/ith mist & fog early. T/storms 1609-1730z		
Mon	12	1010.4	15.7	13.1	14.4	13.9	17.5	16.3	300	08	8.3	18	0.1	0.1	Cloudy w/ith periods of rain & drizzle, mist & fog patches		
Tue	13	1016.0	19.7	14.0	16.9	13.9	17.2	16.3	340	11	9.1	18	NIL	11.2	Few spots rain early, became fine by late morning		
Wed	14	1020.9	19.2	14.1	16.7	13.8	17.9	16.3	330	09	9.8	20	NIL	13.3	Fine, occn fair spells		
Thu	15	1023.7	21.3	14.0	17.7	13.3	18.3	16.4	330	06	5.9	12	NIL	13.5	Fine, bec cldy mid pm & late eve		
Fri	16	1027.2	19.8	13.7	16.8	9.9	18.7	16.5	060	08	5.5	17	NIL	14.8	Fine		
Sat	17	1028.1	21.3	14.9	18.1	10.6	18.9	16.7	050	11	8.5	22	NIL	14.7	Shallow fog early. Fine		
Sun	18	1025.7	23.0	13.9	18.5	10.1	19.1	16.8	070	07	7.3	18	NIL	14.4	Fine, occn patches of high cloud pm		
Mon	19	1021.8	27.1	16.3	21.7	13.0	19.7	17.0	110	04	6.5	13	NIL	14.6	Fine		
Tue	20	1020.0	28.0	18.4	23.2	14.1	20.2	17.2	140	06	6.2	15	NIL	14.2	Fine, dry air		
Wed	21	1022.4	28.1	17.5	22.8	12.3	20.7	17.4	100	05	4.9	10	NIL	14.3	Fine, dry air		
Thu	22	1021.7	26.7	16.6	21.7	13.8	20.9	17.6	090	08	8.8	22	NIL	13.4	Fine, occn patches of high cloud pm		
Fri	23	1013.5	19.5	15.9	17.7	15.4	20.8	17.8	060	13	13.7	34	7.3	4.0	Fine bec cldy. Shw rs late pm. T/storms 1602-1801z & 2100-2330z		
Sat	24	1005.8	20.1	15.4	17.8	14.0	19.7	17.9	140	12	9.0	23	6.9	1.6	Cldy w/ith sct shw rs am prsnt & occn hvy pm. Misty eve, fog ptchs		
Sun	25	1008.1	19.6	14.9	17.3	14.8	19.2	17.8	340	07	7.3	16	NIL	2.9	Occn fair, otherwise cloudy w/ith mist or fog patches at times		
Mon	26	1012.6	19.7	15.4	17.6	12.9	19.2	17.8	250	10	10.5	20	TR	7.3	Cloudy w/ith fog clng am. Haze at times pm, rain by eve		
Tue	27	1010.4	19.6	15.1	17.4	15.5	19.3	17.8	220	10	12.7	25	NIL	7.8	Cldy am w/ith fog, mist & light rain, clearing by early pm to fine		
Wed	28	1011.9	18.6	14.5	16.6	12.5	18.9	17.8	230	15	16.2	30	TR	9.2	Fair		
Thu	29	1014.6	18.9	14.2	16.6	12.2	18.5	17.7	230	13	10.5	23	0.2	4.2	Fair, became cloudy during evening		
Fri	30	1007.0	18.3	14.1	16.2	11.9	18.5	17.7	250	23	19.8	38	NIL	6.7	Fair to cloudy w/ith occn show ers am		
Sat	31	1012.9	18.6	14.0	16.3	14.1	18.5	17.6	270	11	11.4	21	TR	9.9	Cloudy bec fair to fine mid afternoon		
MEAN	1016.0	19.9	14.3	17.1	12.8	18.6	16.9	SW to W	9.7	9.5	TOTAL	46.1	238.2				
30 YEAR AVG	1017.3	19.6	13.8	16.7	11.5	17.9	16.4	W	10.1	9.8	////	43.2	253.3				
Diff from prev Avg	-0.3mb	+0.1°C	+0.2°C	+0.2°C	+0.3°C	+0.1°C	+0.1°C	W	-0.4Kt	-0.4Kt		+1.1mm	+2.6hrs				
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.	9a.m.	SUN	SUN				
BOLD TYPE	WITH	11	8	0	1	2	2	0	0	13	2	0	0				
RECORDS FROM JANUARY 1947														RAINFALL	448.8 mm	SUNSHINE	1239.6 hrs
WETTEST DAY	62.5mm	DRIEST MONTH	3.9mm	LOWEST MIN	8.3°C	WARMEST MNTH	19.4°C	SUNNIEST MNTH	340.5								
DAY/YEAR	7th/2004	YEAR	1999	DAY/YEAR	8th/1954	YEAR	1983	YEAR	2018								
WETTEST MNTH	120.2mm	HIGHEST MAX	32.6°C	LOWEST GRASS	1.0°C	COLDEST MNTH	13.8°C	DULLEST MNTH	167.7hrs								
YEAR	1960	DAY/YEAR	19th/2016	DAY/YEAR	7th/1996	YEAR	1954	YEAR	1972								