

December 2023

A cool northeasterly breeze ushered in the last month of the year as decaying low pressure over Central Europe pulled in a gentle, showery airflow with excellent visibility around the islands. The mercury topped out at just 6.9°C by the end of the 1st with a scattering of showers overnight in to the 2nd, some of which contained hail. By dawn we were down at just 2.2°C but grass temperatures fell away sharply just after sunrise as the overnight cloud cleared, with a hoar frost widely reported around the island.

As the day wore on a weak front nudged in to the Southwest Approaches as our winds backed in to the south with cloud thickening and lowering through the afternoon. Overnight showers became heavier for a time with a brief but heavy hail shower around 0430hrs along the south coast but by dawn temperatures had picked as a fresher southerly feed established itself in from the Atlantic. A deepening low out to the west was stretching its fronts in across the UK with rain arriving later that afternoon and associated winds increasing fresh to strong. That rain became persistent and at times heavy overnight and through the morning of the 4th before clearing to showers shortly before midday.

The centre of this low was over the Isle of Wight by now, progressing slowly east with rain and more organised bands of showers within the general circulation. Winds locally veered west then northwest by day's end as our rainfall totals steadily mounted up. This low continued to drift east over the Low Countries allowing us a break from those showers by evening on the 5th as a temporary ridge of high pressure built in from the south for the 6th. It was a brief respite however as the next deep low swung in from the near Atlantic with thickening cloud during the afternoon heralding the warm front arrival with the first splashes of rain falling around mid evening. With a complex series of fronts now crossing the UK the 7th remained dull with rain, drizzle and mist together with strong southerly winds until late in the day when the passage of the clearing cold front veered those winds into the west with a rash of showers overnight in to the 8th.

It was still a very unsettled look to the charts, although air temperatures had recovered from the start of the month, now making low teens by day and just dipping into single digits overnight. A continuation of those blustery showers later on the 8th turned to rain and drizzle overnight, occasionally heavy, and it became misty with hill fog patches through the morning of the 9th as yet another system swept in from the west, again clearing to the east with a scattering of showers that afternoon. The next series of fronts was right on the coat-tails of that last one however, and by late morning on the 10th we were once again back under leaden skies with rain, drizzle and mist patches. These fronts whistled through quite smartly by early afternoon but it remained mostly cloudy, still with those strong winds coming in off the Atlantic.

A slower moving depression off the west coast of Ireland was now looking to play a greater part in our weather, still with mostly cloudy conditions with periods of rain and drizzle clearing to blustery showers, occasionally with hail later on the 12th. After a brief respite from those strong southwesters, the winds picked up once more gusting to 47mph around noon on the 12th. As that low continued its progress slowly east across central and southern parts of the UK, those showers started to ease off. Locally our winds veered into the northwest with a cooler feed now dropping down in to the Channel. A brief ridge late on the 13th led to clear skies for a time overnight in to the 14th with air temperatures dipping briefly to 5.9°C before cloud spilled in by dawn in advance of the next warm front out to the west.

This advancing front brought the first splashes of rain in time for the morning commute, mixing with drizzle later in the morning before mist and hill fog rolled in by midday. The worst of this weather cleared fairly swiftly thereafter to leave us with a mainly cloudy afternoon with just the odd bright spell. That rain returned briefly later in the evening before clearing around midnight as the winds veered in to the northwest and eased down to light and variable by dawn on the 15th. A broad belt of high pressure was now starting to push up from the southwest with the promise of more settled weather across southern parts of the UK for a few days.

Patchy light drizzle due to a passing weak warm front in the early hours of the 16th gave way to a cloudy but dry morning for the 16th and this cloud shield broke up shortly after lunch providing us with a pleasant sunny afternoon with light southwesterly winds and temperatures in to the low double figures.

High pressure now stretched across much of mainland Europe with a moderate southwesterly flow covering the Channel. A rather long sea track for this particular wind direction unfortunately led to cloud filling in early on the 17th but we enjoyed a dry but mostly dull couple of days, again with temperatures just on the mild side of average.

As that European high slipped slowly east, a series of fronts dropped down across the UK overnight in to the 19th with patchy rain and drizzle arriving in the Channel by mid morning. Cloud thickened and lowered in to mist and hill fog for a time before clearing shortly after midday as those fronts edged away southeast with the winds veering sharply in to the northwest. It wasn't until after dusk that skies cleared though, with a fresher feel to the air together with a scattering of light showers overnight as high pressure once again built in from the Azores.

This high centred just to the north of the Azores was now extending its influence right the way from the east coast of North America to Spain and Portugal, with a series of low pressure systems running around its northern periphery. A fresh to strong westerly flow, with a long sea track in from the Atlantic prevailed for the next few days with mainly cloudy but rather mild conditions for the islands, with patchy rain or drizzle at times. Despite temperatures being well above average, sunshine totals were rather disappointing with less than an hour a day on average over the last week or so.

By the 24th a couple of more active fronts made progress south over the UK with patchy rain and drizzle through the day across the islands, becoming more persistent that evening together with mist thickening in to fog. Those fronts stalled their southward progress along the south coast of the UK with the islands sitting under a blanket of thick cloud with outbreaks of rain, drizzle, mist and fog throughout Christmas Day, with strong southwesterly winds. Boxing Day dawned drier, although still cloudy as those fronts briefly cleared to the south but returned later that afternoon with more rain, drizzle, mist and fog to close out a rather gloomy, damp and windy festive break.

This returning front heralded the arrival of the next named storm for the winter, Storm 'Gerrit', and this particular system deepened rapidly as it approached the UK overnight in to the 27th bringing very strong winds and heavy rain to large parts of the country, and snow to the Highlands of Scotland. Locally we escaped the worst of this stormy weather although strong to gale force southerly winds forced cross Channel sailing cancellations and disrupted flights to Alderney. The clearing cold front from 'Gerrit' arrived in the Southwest Approaches around midday on the 27th with a few hours of rain and drizzle that afternoon before clearing just before sunset. Some heavier bursts of rain were noted on this clearance due to segmented line convection.



Clearing cold front from Storm 'Gerrit' showing segmented line convection (in red) to the north and south of the island. Radar imagery courtesy of Jersey Met Office

Following this clearance a strong southwesterly flow set across the Bailiwick with a scattering of light showers during the morning of the 28th, these becoming more widespread and heavier through the afternoon and evening but still with temperatures topping out around 13°C.

This storm became slow moving over the North Sea and Scandinavia, with an unsettled showery westerly flow covering most of the southern half of the UK for the next couple of days. We managed some brighter intervals at times but another Atlantic low swept in for the 30th with a rash of heavier showers that evening, occasionally with hail. The winds ramped up for the 31st, with squally showers of rain and hail and even a few flashes of lightning noted that morning. The month's highest gust was reported at 51 knots (59mph) at 0827 as we enjoyed a few hours of gale force southwesterly winds to close out the year.

After a short cool snap to start the month, December was predominately about strong but mild southwest or westerly winds with resulting air temperatures well above average. With a mean temperature of 9.9°C it was the warmest December for 8 years and the 5th warmest since our records began in 1843. Sunshine came in well below average making it the dullest for 5 years and all that rain led to the 2nd wettest for 10 years. With a mean speed of 15.6 knots it was also the windiest December since 2015.

DAY	DATE	BAROMETER		TEMPERATURE deg C				WIND				RAIN	SUN	WEATHER			
		hPa	AIR			GRASS	SOIL		DIR'N	SPEED(knots)							
		at 9a.m.	MAX	MIN	MEAN	MIN	30cm	100cm	9a.m.	9a.m.	MEAN	MAX	mm		hrs		
Fri	1	1005.4	<u>6.9</u>	3.5	5.2	2.4	8.4	<u>11.8</u>	070	08	8.9	21	4.3	4.2	Fair w ith sct shw rs am & w ith hail eve. Xlnt viz & dry air		
Sat	2	1016.5	7.0	<u>2.2</u>	<u>4.6</u>	<u>-1.1</u>	<u>7.5</u>	11.7	110	<u>03</u>	9.0	30	9.0	2.6	Fair/fine am, hoar frost. Cldy pm. Isol rain/hail shw rs, xlnt viz & dry air pm		
Sun	3	1012.9	10.8	6.3	8.6	2.1	7.9	11.4	210	16	17.9	41	13.8	1.7	Fair w ith sct shw rs to mid am, occn hvy. Cldy pm w ith rain late pm		
Mon	4	<u>991.9</u>	11.2	8.4	9.8	8.0	8.6	11.3	190	09	17.7	40	6.5	NIL	Cldy w ith rain, occn hvy, & drz am clrng to shw rs pm		
Tue	5	1009.9	9.2	6.5	7.9	6.0	8.8	11.1	310	16	13.2	36	1.7	0.3	Cldy w ith shw rs to mid pm. Occn fair eve		
Wed	6	1017.2	9.5	3.8	6.7	-0.1	7.9	11.0	160	10	10.6	30	4.0	1.5	Fair/fine w ith xlnt viz bec cldy w ith rain by eve, occn hvy		
Thu	7	1006.4	12.2	7.2	9.7	6.5	8.5	10.9	150	22	18.3	35	7.1	NIL	Cldy w ith rain & drz until late pm		
Fri	8	1007.8	12.7	8.9	10.8	7.4	8.9	10.9	260	14	14.8	30	<u>20.2</u>	<u>5.5</u>	Fair bec cldy w ith shw rs early am & pm/eve		
Sat	9	997.0	13.4	9.7	11.6	6.9	9.7	<u>10.8</u>	250	22	21.2	41	0.5	2.8	Cldy. Rain occn hvy, drz, mist & fog ptchs clrng to fair/fine pm, isol shw rs		
Sun	10	1007.3	<u>13.5</u>	10.2	<u>11.9</u>	7.3	9.7	<u>10.8</u>	180	17	19.8	37	0.2	0.1	Cldy w ith drz am fair periods pm		
Mon	11	1008.6	12.6	10.9	11.8	8.7	10.0	10.9	260	12	12.1	30	5.0	NIL	Fair am bec cldy w ith mist & drz pm then shw rs eve		
Tue	12	1001.0	12.5	8.9	10.7	10.0	10.6	11.0	210	14	16.2	41	9.1	1.1	Mainly cldy occn fair/fine w ith frqnt shw rs occn hvy w ith hail		
Wed	13	1003.2	10.9	7.3	9.1	7.2	10.0	11.0	340	10	12.6	30	0.7	0.7	Mainly cldy, shw rs am		
Thu	14	1023.2	11.9	5.9	8.9	2.3	9.0	11.0	260	10	8.1	19	1.1	0.3	Cldy, rain & drz from daw n w ith fog late am clrng to dry pm, ptchy rain eve		
Fri	15	1038.6	10.9	8.0	9.5	5.8	9.3	11.0	320	<u>03</u>	<u>5.4</u>	15	TR	0.1	Cloudy		
Sat	16	<u>1042.5</u>	11.0	7.7	9.4	3.9	9.6	11.0	230	08	8.1	16	NIL	5.1	Cldy w ith light drz until late am, bec fine		
Sun	17	1037.4	10.1	7.6	8.9	4.7	8.8	10.9	210	13	10.9	20	NIL	0.3	Cloudy		
Mon	18	1033.9	11.3	9.7	10.5	8.6	9.3	10.9	230	15	14.2	24	NIL	NIL	Cloudy		
Tue	19	1023.3	12.7	8.0	10.4	8.8	10.0	10.9	220	19	15.9	31	2.9	NIL	Cldy. Rain & drz mid am. Mist & fog late am clrng early pm. Fine eve		
Wed	20	1027.2	11.6	8.4	10.0	5.6	9.5	10.9	290	14	17.2	33	TR	2.2	Cldy w ith sct shw rs. Occn fair am		
Thu	21	1017.7	12.3	<u>11.2</u>	11.8	9.3	9.9	10.9	290	20	21.0	37	0.2	NIL	Cldy w ith occn rain & drz		
Fri	22	1021.1	12.0	9.6	10.8	9.2	10.3	10.9	300	22	18.3	36	0.1	0.1	Cldy w ith occn brief light shw rs		
Sat	23	1022.1	11.3	10.0	10.7	8.2	10.0	11.0	270	19	18.5	35	0.3	2.2	Some fair intervals, otherw ise cloudy w ith patchy rain/drizzle		
Sun	24	1015.4	12.6	11.1	<u>11.9</u>	8.9	10.5	11.0	250	23	23.2	40	3.8	NIL	Cldy w ith o/breaks of rain & drz. Mist & fog late eve		
Mon	25	1014.5	12.1	11.1	11.6	<u>11.1</u>	<u>10.9</u>	11.1	240	20	20.9	34	3.6	NIL	Cloudy w ith rain & drz w ith fog during morning		
Tue	26	1018.6	12.1	9.2	10.7	6.7	<u>10.9</u>	11.1	290	05	7.4	20	1.0	0.3	Cloudy w ith rain, drz & fog pm		
Wed	27	1009.1	12.5	10.9	11.7	9.0	10.7	11.2	190	20	19.6	37	3.1	NIL	Cldy. Rain & drz from early pm clrng by dusk. Fair/fine by late eve		
Thu	28	1012.5	12.8	10.3	11.6	8.1	10.5	11.2	220	22	21.6	37	14.3	3.1	Fair/fine bec cldy w ith isol shw rs am bec sct & hvy pm & eve		
Fri	29	1011.2	12.7	10.1	11.4	9.6	10.7	11.2	240	20	18.4	36	1.2	4.4	Cldy bec fair pm. Sct shw rs am bec isol pm		
Sat	30	1009.7	12.4	9.3	10.9	6.5	10.3	11.2	200	19	17.4	39	12.2	1.6	Cldy w ith sct shw rs pm, bec frqnt & hvy eve		
Sun	31	993.8	12.1	5.9	9.0	4.5	10.4	11.2	260	<u>25</u>	<u>26.4</u>	<u>51</u>	8.7	1.5	Cldy occn fair w ith frqnt rain/hail shw rs. Gales & lightning am		
MEAN		1014.7	11.5	8.3	9.9	6.5	9.6	11.1	W	15.2	15.6	TOTAL	134.6	41.7	28th - 31st :Storm 'Gerrit'		
30 YEAR AVG 1991-2020		1016.3	9.9	6.3	8.1	3.6	8.4	10.0	SW	13.3	13.6	/////	119.3	58.3			
EXTREMES ARE IN BOLD TYPE	NUMBER OF DAYS WITH	RAIN ≥0.2mm	WET ≥1.0mm	SNOW/ SLEET	HAIL	THNDR	LGHTNG	AIR FROST	GROUND FROST	FOG	FOG 9a.m.	GALE	NO SUN	TOTALS FOR YEAR TO DATE			
		25	20	0	5	0	1	0	2	6	1	1	9				
RECORDS FROM JANUARY 1947														RAINFALL	1026.5 mm	SUNSHINE	1814.1 hrs
WETTEST DAY DAY/YEAR	42.9 4th/2010	DRIEST MONTH YEAR	27.5mm 2016	LOWEST MIN DAY/YEAR	-3.8°C 24th/1963	WARMEST MNTH YEAR	11.6°C 2015	SUNNIEST MNTH YEAR	108.9hrs 2001	RAIN DAYS	192	SUNLESS	49	WET DAYS	141		
WETTEST MNTH YEAR	249.6mm 1999	HIGHEST MAX DAY/YEAR	15.6°C 6th/1953	LOWEST GRASS	-8.9°C 29th/1964,27th/1995	COLDEST MNTH YEAR	4.4°C 2010	DULLEST MNTH YEAR	26.6hrs 1966								