February 2024

A slow moving cold front lying along the Channel early on the 1st led to a grey, misty start to the month with patchy drizzle and hill fog. As that front dropped to the south of us by late morning, conditions improved with clearer visibility and a reasonable amount of afternoon sunshine. Clearing skies and light winds that evening saw temperatures fall away to just +0.3°C on the grass as a temporary ridge built in behind this clearance but cloud thickened once more overnight as that front waved back in to the Southwest Approaches. Mist thickened in to fog with patchy drizzle through the morning of the 2nd before gradually improving for the afternoon.

With high pressure established over France and Biscay, and extensive low pressure to the north of Scotland, the islands fell under the influence of a mild but rather cloudy, westerly flow with any frontal activity now largely to the north of us over central and northern parts of the UK. Patchy drizzle, mist and occasional hill fog kept sunshine totals well down over the next few days with 4 sunless days noted in the first week of the month.

That high to the south started to lose its identity by the 7th, allowing a series of more active fronts to sweep in from the west. Early rain that morning quickly turned to drizzle as cloud lowered across the islands with thick fog lasting pretty much all day and overnight in to the 8th. A succession of fronts crossed the islands through the day as complex low pressure centred off the southwest coast of Ireland covered much of the UK. Rain, drizzle, mist and hill fog plagued us until late afternoon before clearing to just a few isolated showers overnight. The 9th dawned fairly bright but an active trough within the circulation of that low off Ireland stretched in to the Channel that afternoon with a several hours of moderate to heavy showers which cleared just before dusk. Temperatures continued on the mild side for February, comfortably reaching double figures with the average at this point of the month some 3°C above normal.

Following the clearance of those heavy showers the skies cleared for the morning of the 10th before clouding over once more with showers packing later that afternoon and evening as that low drifted slowly southeast to be over Land's End by midnight. Freshening northwesterly winds overnight eased down through the next day but still with a scattering of showers across the islands although not as heavy as the last few days. The 12th finally started to see an improvement, albeit brief, as a transient ridge built in from the southwest with a clearer flow with just the odd fleeting shower. Some 8.4 hours of sunshine was recorded, the sunniest day of the year so far.



Excellent visibility with sunshine & showers on the 12th producing this stunning rainbow at the airport. *Cumulus* with *Stratocumulus* is evident. Photo credit James Wilson

Whilst the 12th was very pleasant with outstanding visibility and a mix of sunshine and showers, the charts continued to show a rather unsettled picture with a series of low pressure systems influencing the North Atlantic and European weather. That ridge we enjoyed fell away to the east overnight in to the 13th as a warm front rolled

in from the west with rain arriving just before dawn. This reintroduction of mild and damp Tropical air brought extensive low cloud, rain, drizzle, mist and hill fog through the day before drying out by late afternoon.

This airflow persisted for the next few days with mostly cloudy conditions, albeit with a few brighter spells, occasional mist and hill fog together with some patchy rain or drizzle. Temperatures remained on the very mild side though and by the 16^{th} our mean temperature for the month was standing at 10.0° C, some 3.1° C above the long term average. The 16^{th} also saw a rather neat statistic in that both sunshine and rainfall totals for the month stood at 34.4 (hours & mm).

A series of fronts in association with Atlantic low pressure continued to drape themselves across the British Isles with high pressure to the south of us just too far away to bring us any respite. By the 21st winds strengthened from just west of south as yet another system swept in with persistent rain through the morning that turned to drizzle shortly after noon with mist thickening to fog at times. The clearing cold front went through late morning the following day with a much cooler, unstable Polar Maritime airflow replacing that mild, dank Tropical Maritime that had been with us so much of late. Temperatures dropped from 11.0°C at 1000hrs that morning to just 6.8°C by noon with a rash of rain showers, occasionally heavy and with hail thrown in for good measure as those winds veered in to the west.

This bright and breezy, showery flow stayed with us only until the small hours of the 25th by which time we started to see another low out to the west develop and move in to be off the southwest tip of Southern Ireland by dawn. This feature then slowed its progress eastward as it came up against a blocking high over Central Europe. Locally the 25th saw pretty miserable conditions across the islands as that low produced some 18.8mm of rain through the day with mist, low cloud and hill fog interspersed with periods of heavy rain. As the centre of this low passed over the islands, our winds started out from the southeast fresh, increasing strong to gale force before becoming light and variable through the afternoon. As it cleared away to the southeast, winds locally veered smartly in to the northeast later that evening, increasing just after midnight to a rather spicy F7 with a maximum gust noted at 0625hrs on the 26th of 54mph. A number of trees came down due to the rather unusual direction of these strong winds as well as the very sodden ground from recent heavy rainfall.

Those very strong north-to-northeasterly winds continued through the morning with all ferry sailings cancelled down at the harbour and most flights cancelled up at the airport. It wasn't until early afternoon that we started to see a moderation in the winds and so by dawn on the 27th we were down to a light F3 but cooler than of late at just 4.9°C. Pressure built swiftly from the southwest following that storm's departure ensuring a pleasant day across the Bailiwick with bright skies, light winds and excellent visibility.

Unfortunately that ridge lasted only until dusk as a weak frontal system dropped in from the west later that evening with drizzle, mist and fog descending over the islands by day's end. A complex series of fronts overnight saw that rain, drizzle and fog clear in the small hours of the 28th only to return by late morning before clearing once more late evening. The next cold front allied with a deepening low off the northwest coast of Scotland dropped in to the Channel late morning on the 29th with a brief return to misty and drizzly conditions but a developing wave on that front stalled its progress eastward as well as enhancing its rainfall development. Drizzle turned to rain by noon and became persistent through the afternoon before clearing just before dusk to leave a few residual showers to close out the month.

With twice as much rain falling in the last half of the month as the first fortnight we ended up well above the long term average for February but only the wettest since 2020, and only one day in the month with no rain recorded. A predominantly west to southwest flow brought mild Tropical air across the islands for most of the month leading to the mildest February on record, some 0.4°C above the previous record. Sunshine suffered as a result of all that rain with just 53.9 hours by month's end, making it the 11th dullest since records began for sunshine back in 1894. 17 days with fog recorded provided another unwelcome record and with all those mild temperatures we saw no ground frosts, which is unusual for February and the first time that has occurred in the last 10 years. The 12 month period ending 29th February yielded some 1102.6mm of rain, the highest such total for that period since 2013.

Winter itself was much wetter than usual with all three months providing above average totals but it was only the wettest since 2021. Sunshine suffered as a result of the unsettled weather, although January did see above average totals but this was more than offset by the other two months, ending up the dullest winter since 2013. Despite January being cooler than usual we saw the mean winter temperature at 8.7°C, the 4th equal mildest on record being 1.4°C above the long term average, aided and abetted in no small way by that record breaking mild February.

FEBRUARY 2024

DAY	DATE	TE BAROMETER TEMPERATURE deg C						WIND			RAIN	SUN			
		hPa		AIR	GRASS		s	SOIL		DIR'N S		SPEED(knots)			WEATHER
		at 9a.m.	MAX	MIN	MEAN	MIN	30cm	100cm	9a.m.	9a.m.	MEAN	MAX	mm	hrs	
Thu	1	1035.1	11.1	5.3	8.2	8.2	8.8	<u>9.2</u>	360	08	<u>7.5</u>	23	0.5	4.6	Cldy with early drz & fog, bec fair
Fri	2	<u>1035.6</u>	10.7	4.8	7.8	0.3	8.5	9.3	260	14	11.7	21	0.2	NIL	Cldy with drz & fog am to early pm
Sat	3	1033.0	10.8	9.3	10.1	8.3	9.1	9.3	270	10	12.4	22	0.3	0.1	Cldy with rain or drizzle and mist
Sun	4	1031.5	11.0	9.3	10.2	8.2	9.4	9.3	250	14	14.1	24	0.3	NIL	Cldy with occn drz am
Mon	5	1027.0	10.4	8.2	9.3	7.9	9.3	9.5	220	15	15.1	25	0.6	0.1	Cldy with drz, occn hvy, fog & mist am, clrng to occn drz pm
Tue	6	1017.8	11.7	10.2	11.0	8.8	9.6	9.6	230	17	19.4	33	1.9	NIL	Cldy with patchy rain late eve
Wed	7	1005.6	11.7	10.7	11.2	<u>10.5</u>	10.0	9.6	230	15	14.4	33	5.7	NIL	Overcast with early rain bec drz & fog from dawn
Thu	8	993.1	11.4	9.8	10.6	10.4	10.3	9.8	200	15	15.7	34	4.8	NIL	Cldy with fog, mist, rain and drz clrng late pm. Isol shwrs eve
Fri	9	<u>980.8</u>	12.5	9.5	11.0	9.1	10.3	9.8	200	17	13.6	30	7.4	4.6	Fair bec cldy with showers pm, occn hvy. Fair eve
Sat	10	983.7	11.4	7.8	9.6	5.6	9.8	10.0	210	12	12.0	26	1.9	5.8	Cldy, isol shwrs bec fair/fine by dawn. Cldy by mid pmwith isol shwrs
Sun	11	992.5	10.7	6.5	8.6	7.4	9.7	10.0	300	18	15.2	36	0.7	4.5	Fair with sct shw rs
Mon	12	1006.3	9.9	5.8	7.9	2.3	9.0	10.1	320	<u>07</u>	8.0	19	1.2	<u>8.4</u>	Cldy with isol shwrs soon bec fair then fine. Cldy by midnight
Tue	13	1013.5	11.6	7.2	9.4	2.3	9.0	10.1	180	16	13.7	26	4.2	NIL	Cldy with rain by dawn, drz, mist & occn fog ptches
Wed	14	1016.3	<u>13.3</u>	<u>11.0</u>	12.2	10.4	9.5	10.0	220	14	12.1	26	4.6	0.5	Cldy with rain, drz & mist. Fog early am
Thu	15	1009.3	12.9	10.5	11.7	9.2	10.3	10.0	150	10	10.5	20	0.1	3.0	Fair to cldy. Fog & drz by midninght
Fri	16	1018.2	12.9	9.3	11.1	7.2	10.4	10.1	280	10	10.4	19	TR	2.8	Fair to cldy with a few light showers am
Sat	17	1031.6	11.7	9.7	10.7	7.2	10.4	10.2	200	10	11.5	21	13.1	NIL	Cldy with light drz am, rain from mid eve
Sun	18	1027.9	11.8	9.8	10.8	9.9	<u>10.7</u>	10.3	250	16	13.0	26	1.1	0.2	Cldy with rain drz & hill fog am, clrng early pm to fair/fine. Cldy eve
Mon	19	1034.0	11.1	8.9	10.0	7.9	10.7	10.3	260	15	11.2	26	0.3	0.1	Cldy with occn light rain, drz, mist and fog late am to early pm
Tue	20	1031.5	10.6	8.2	9.4	5.5	10.1	<u>10.4</u>	230	12	12.8	24	2.5	NIL	Cldy. Drz, mist and fog from daw n clrng early pm
Wed	21	1012.3	11.4	8.9	10.2	7.9	10.0	10.4	190	18	16.0	33	16.8	NIL	Cldy with rain from daw n. Rain, drz & fog ptches pm & eve
Thu	22	986.0	11.8	5.3	8.6	9.2	10.3	10.4	210	15	18.7	<u>47</u>	12.3	2.8	Cldy, rain, drz, mist & fog clrng mid am to rain/hail shw rs occn hvy
Fri	23	990.6	<u>8.4</u>	4.1	6.3	4.0	9.1	10.4	250	18	14.8	34	4.6	2.8	Cldy with front rain/hail shwrs am, fair pm/eve with sct shwrs
Sat	24	995.2	10.3	4.2	7.3	1.5	8.9	10.4	250	12	10.7	32	1.1	5.9	Cldy with sct rain/hail shwrs am, fair/fine pm & eve with isol shwrs
Sun	25	990.8	10.1	5.8	8.0	0.5	8.6	10.2	130	20	11.2	35	18.8	NIL	Cldy with rain & drz, occn hvy, with fog for a time mid pm
Mon	26	1004.2	8.7	6.0	7.4	4.5	8.6	10.1	010	<u>27</u>	22.2	<u>47</u>	NIL	5.0	Cldy. Rain am clrng to fair pm, fine eve. Strong & gusty N'ly winds
Tue	27	1023.9	9.1	4.8	7.0	2.2	7.9	10.0	340	08	9.3	28	0.4	2.7	Fair/fine bec cldy mid am. Drz, mist & fog late eve
Wed	28	1021.7	10.7	6.4	8.6	3.5	8.8	9.9	230	10	11.2	24	3.7	NIL	Cldy with rain, drz & fog
Thu	29	1006.8	10.6	6.2	8.4	8.3	9.3	9.9	330	08	11.3	26	14.3	NIL	Cldy with rain & drz. Rain bec prstnt pmclrng to shwrs late pm
	MEAN	1012.3	11.0	7.7	9.4	6.5	9.5	10.0	SW	13.8	13.1	TOTAL	123.4	53.9	
3	0 YEAR AVG														
	1991-2020	1017.8	8.8	4.9	6.9	2.5	7.0	8.0	SW	12.5	12.6	/////	75.8	87.0	
	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	
	BOLD TYPE	WITH	26	18	0	3	0	0	0	0	17	5	0	12	TOTALS FOR YEAR TO DATE
RECORDS FROM JANUARY 1947 RAINFALL 223.2 mm SUNSHINE												RAINFALL 223.2 mm SUNSHINE 130.3 hrs			
WE	TTEST DAY	59.0mm DRIEST MONTH			4.8mm					RMEST MNTH 9.4°0		SUNNIEST MNTH 1		150.5	RAIN DAYS 44 SUNLESS 1 19
		18th/1978		YEAR	1965			21st/'48,7th	ı	YEAR			YEAR	2019	WET DAYS 32
							EST MNTH		1						
	YEAR			DAY/YEAR				12th/1978		YEAR			YEAR		
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