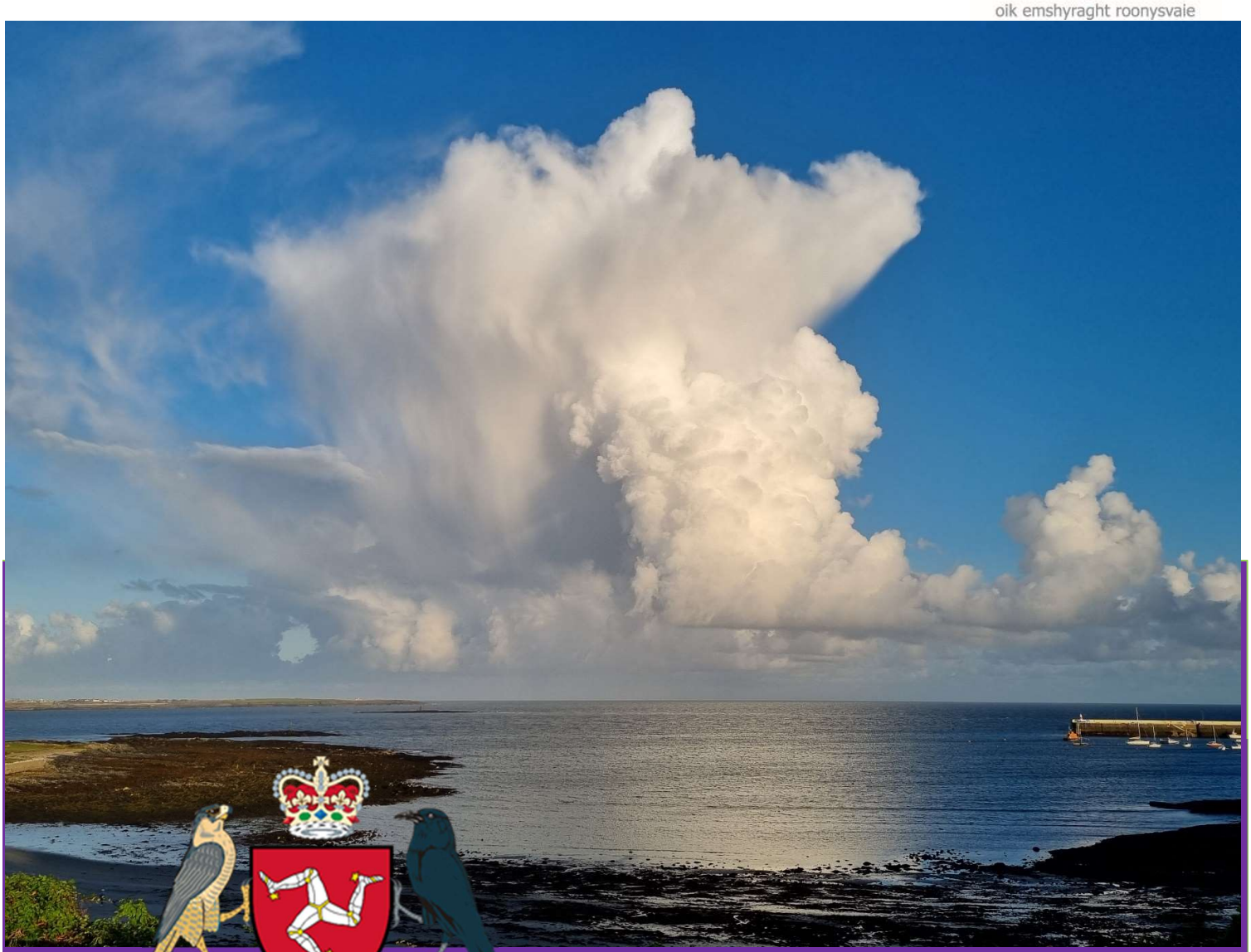
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Ronaldsway MET. Office Annual Observations Report 2025

Published 08-JAN-2026

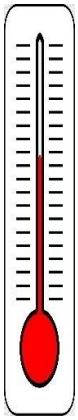
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2025 – One of The Warmest on Record

This report from Ronaldsway MET. Office gives an overview of the weather conditions measured during 2025, looking at how temperatures, rainfall, sunshine and wind compare to the long term averages.

The year got off to a wintry start with January slightly colder than average, and indeed some snow for many parts of the island, and of course the named storm "Eowyn" on the 24th caused significant damage and tree fall. The gusts over 80mph were the strongest of the year.
February brought a change to a more settled anticyclonic pattern – sometimes cold and windy, but dry. That drier set up lasted right through the spring, indeed March was the driest since 1953, April was warm and sunny, and May the warmest and sunniest on record. Collectively the 3 months of spring were the warmest and sunniest on record here at Ronaldsway, and 3rd driest. Of course, whilst for most that was very enjoyable, the low rainfall was presenting difficulties for agriculture.
June was the start of summer, but it felt like it was already over, with the first half of the month being wet and sometimes unusually windy. It turned out to be just a blip though, and summer returned, indeed with July and August both being warm and dry, the 3 summer months turned out to be the warmest summer on record, with a 24 hour mean of 16°C, beating the previous record of 15.9°C from 1995. This was more as a result of consistently warm temperatures, rather than extreme peaks, assisted by unusually high sea temperatures keeping night time temperatures up, and reducing the cooling from sea breezes.
There was then a complete change of pattern for the autumn period, with unsettled wet and windy conditions prevailing. Temperatures though, remained near or above average. It wasn't until the Christmas period that the rain finally eased, and temperatures returned to the more seasonal average.

Temperatures



AVERAGE 24 HOUR MEAN TEMPERATURE:

11.27°c(↑0.87°c)

The 24 hour mean temperature across the whole year came to 11.27°C which is well above the 30 year 1991-2020 average of 10.41°C. That puts 2025 into 2nd warmest, behind 2023, based on the 24 hour mean daily temperature. Right up until Christmas it was looking like it would be the warmest, but a change to cooler conditions in the last week brought the average down into 2nd place. Looking at the daily maxima across the year; that came to 13.79°C, which is the highest on record. The spring period in particular saw consistently warm temperatures, and indeed was the warmest spring on record at Ronaldsway. The summer was also consistently warm, and it wasn't until September that temperatures returned closer to average. January was the only month of the year that was cooler than average by any margin. The warmest day of the year was the 12th July with a maximum of 26.7°C, and the lowest air temperature recorded was -2.1°C on the morning of the 10th of January. There were just 6 days with an air frost across the year, and 31 days with a temperature of 20°C or more achieved at Ronaldsway.

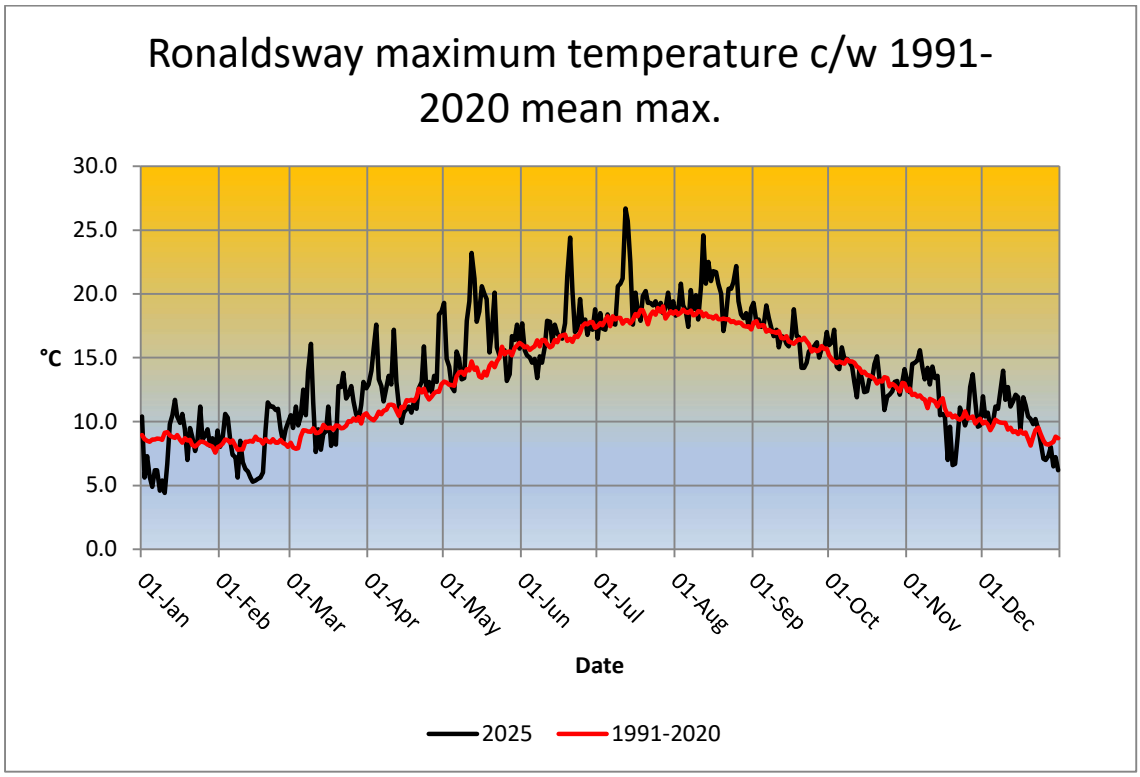
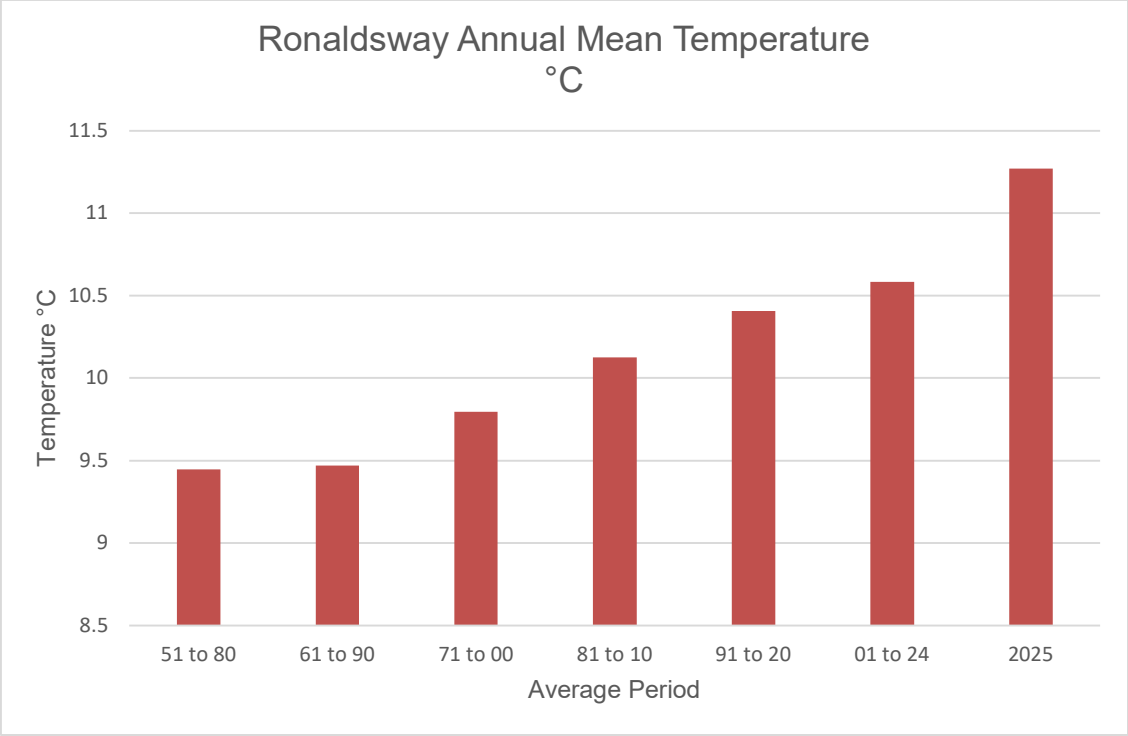


Figure 1- Daily maximum temperature 2025, compared to 1991-2020 mean. Figure 2 (below) long term average temperature periods, 1951-on.



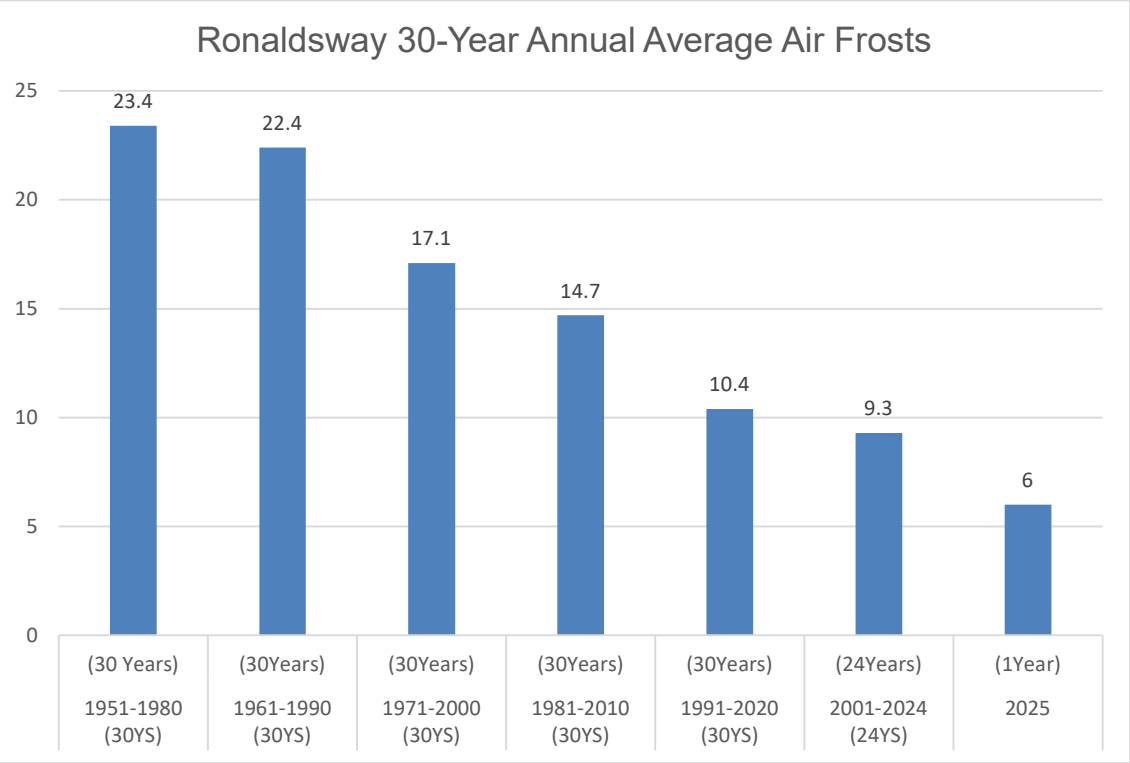


Figure 3 - Ronaldsway average annual days with an air frost, long term average periods, and 2025..

Figure 2 compares 2025 with previous 30 year average periods. The average daily 24 hour mean temperature has steadily increased by around 1 degree between the 1951-1980 value of 9.45°C, to the currently used 1991-2020 value of 10.41°C.
The 2025 mean of 11.27°C is almost another degree on top of that. The top 10 warmest years on record at Ronaldsway have all occurred since 2000.
The warming trend has caused a corresponding reduction in the number of days with an air frost (temperature falling below zero), as shown in figure 3.

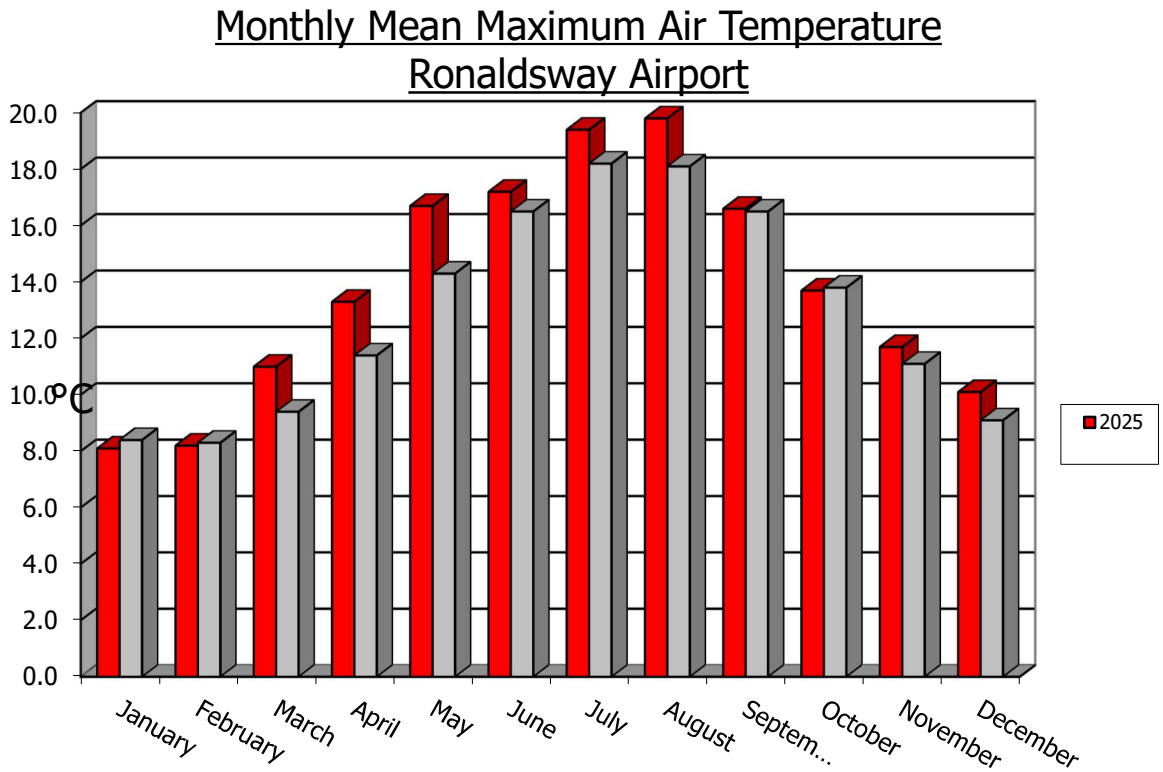
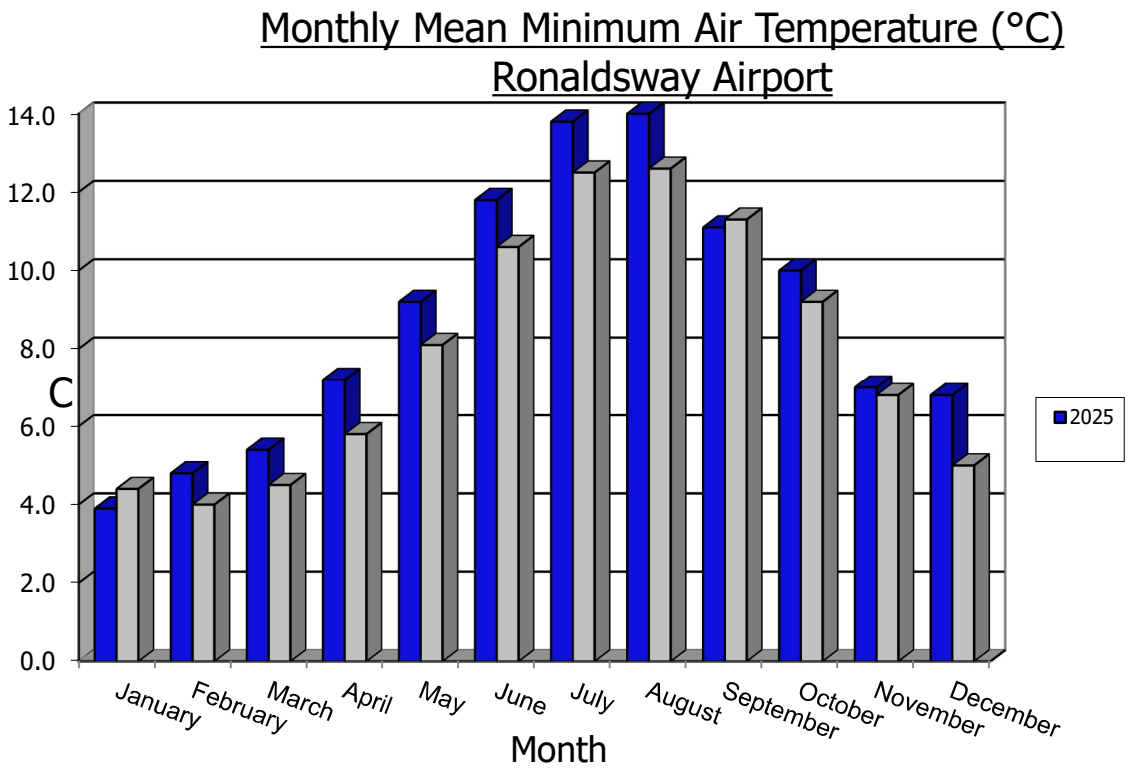


Figure 4 & 5- Ronaldsway monthly mean maximum & minimum temperature 2025, compared with long term average periods.



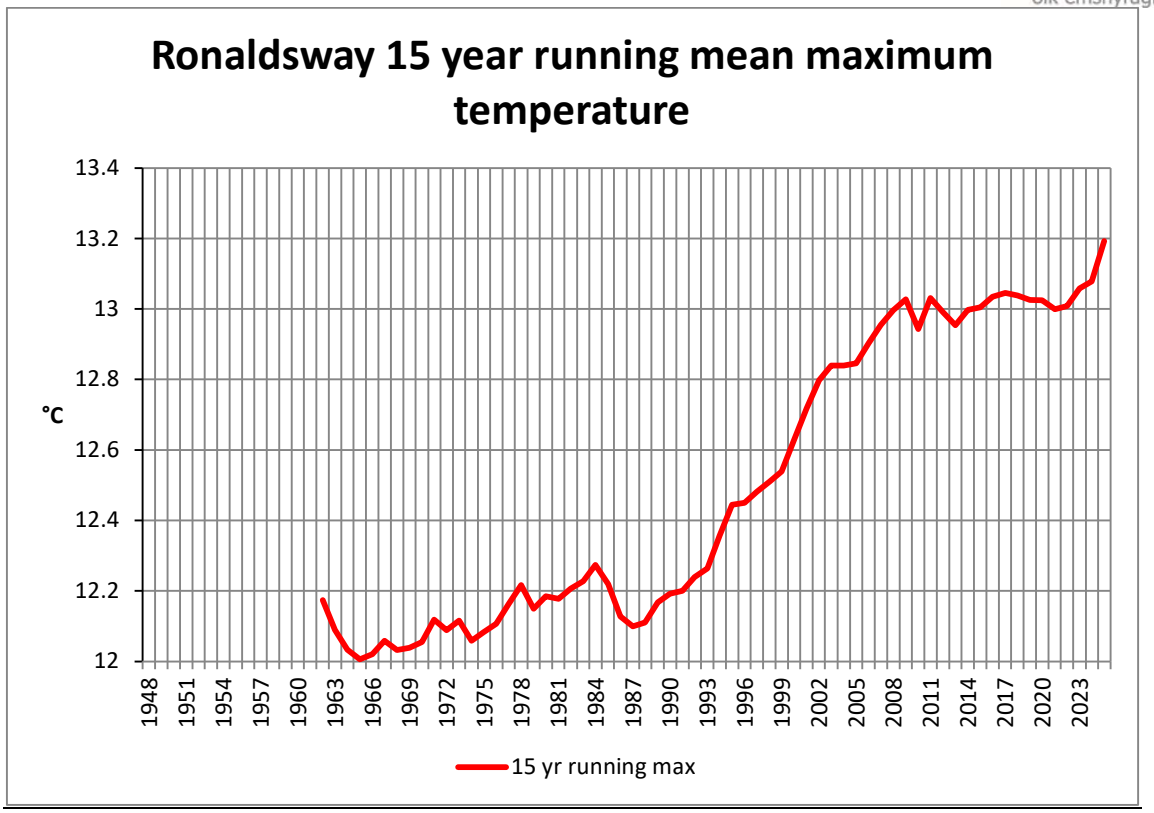
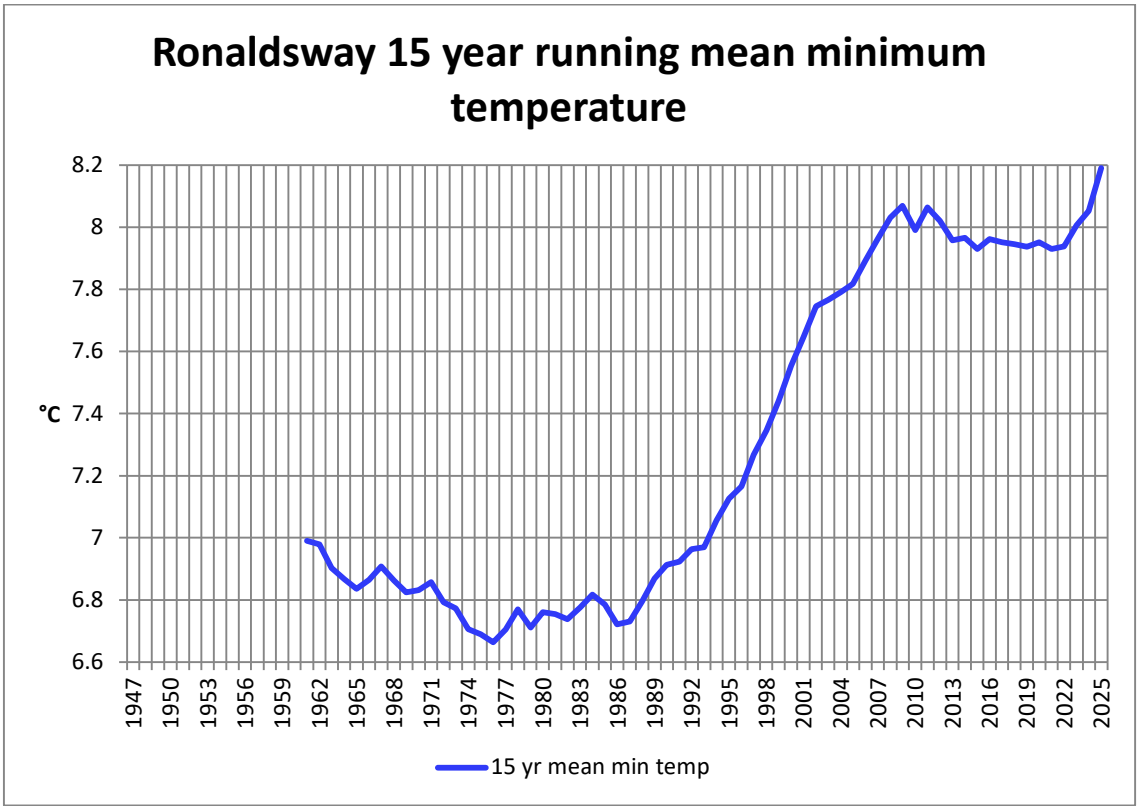


Figure 6 & 7- Ronaldsway 15 year running mean maximum & minimum temperature.



Rainfall

920.6MM (↑4%)

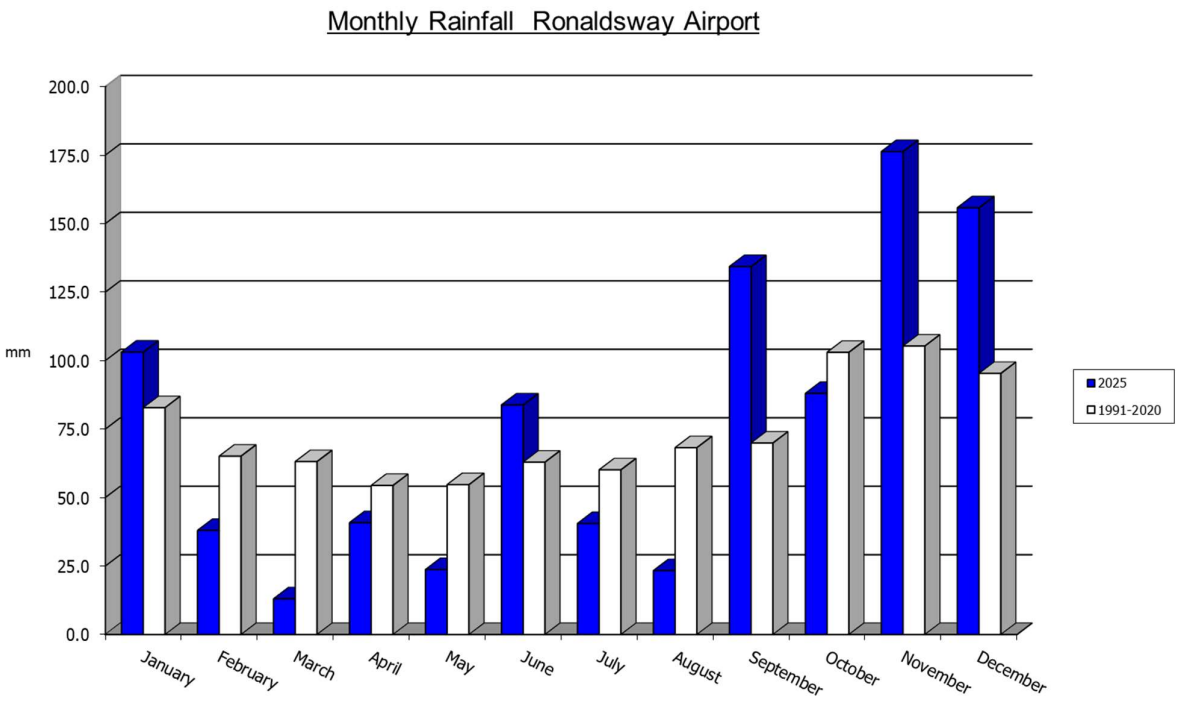


Figure 8: Ronaldsway 2025 monthly rainfall, compared to 1991-2020 average.

Total rainfall across 2025 came to 920.6mm which is just a little above the 30 year average. There was quite a large distribution though, across the seasons. The spring was the 3rd driest on record, with March in particular recording only 13mm. This was countered by an autumn which was wetter than the average; September and November in particular were significantly wetter. Even early December saw over 100mm of rain in the first part of the month. There has on average been an increase in autumn rainfall in recent years, for instance, the average November rainfall from 1961-1990 was 93mm, and from 1991-2020 it had risen to 105mm.

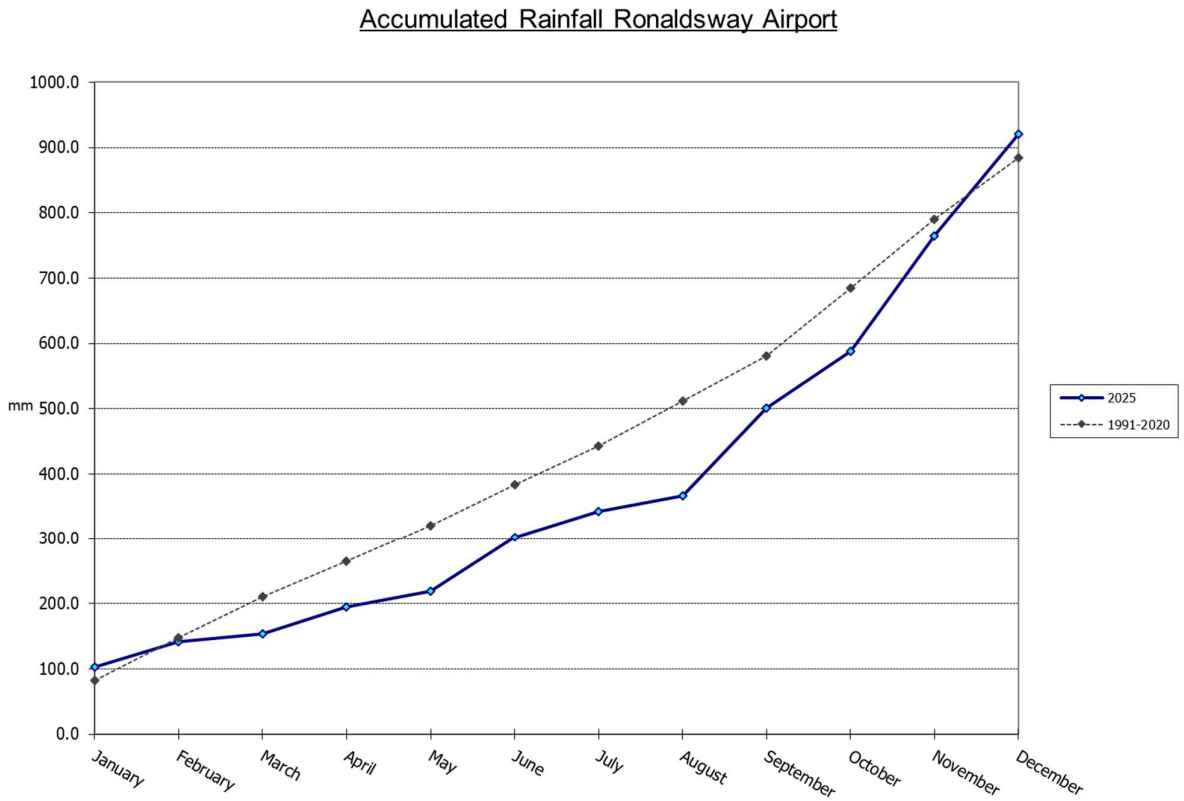


Figure 9: Ronaldsway 2025 rainfall accumulation.

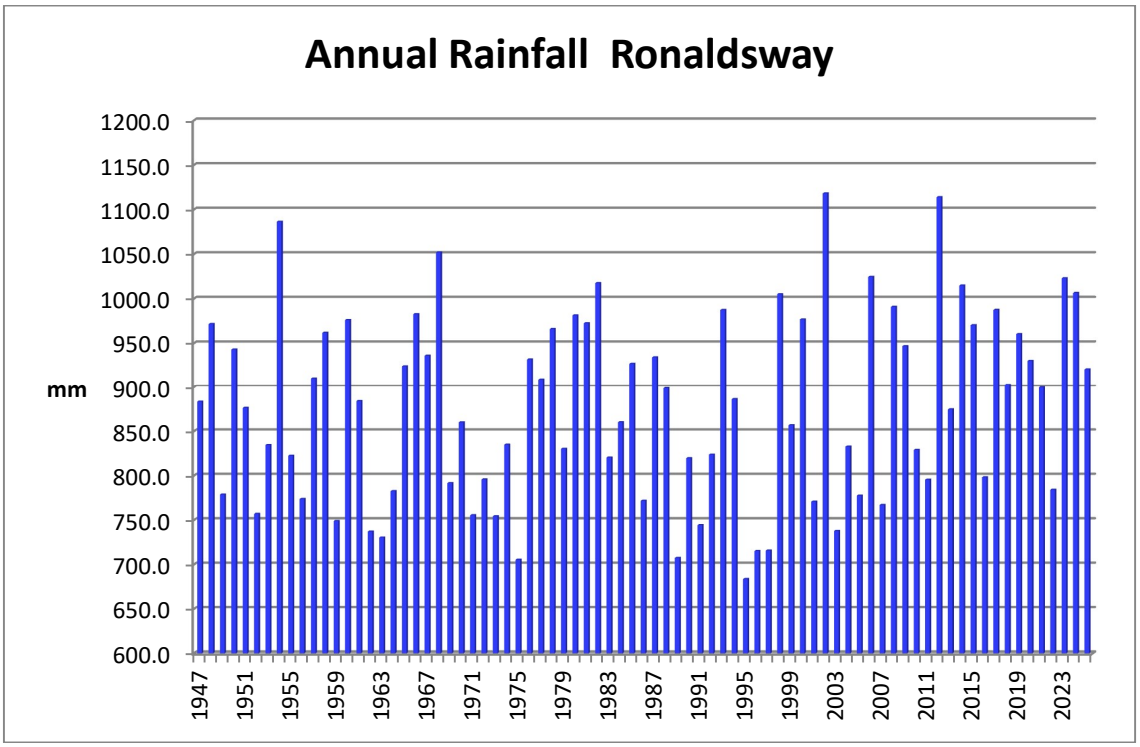


Figure 10: Ronaldsway annual rainfall 1947-2025

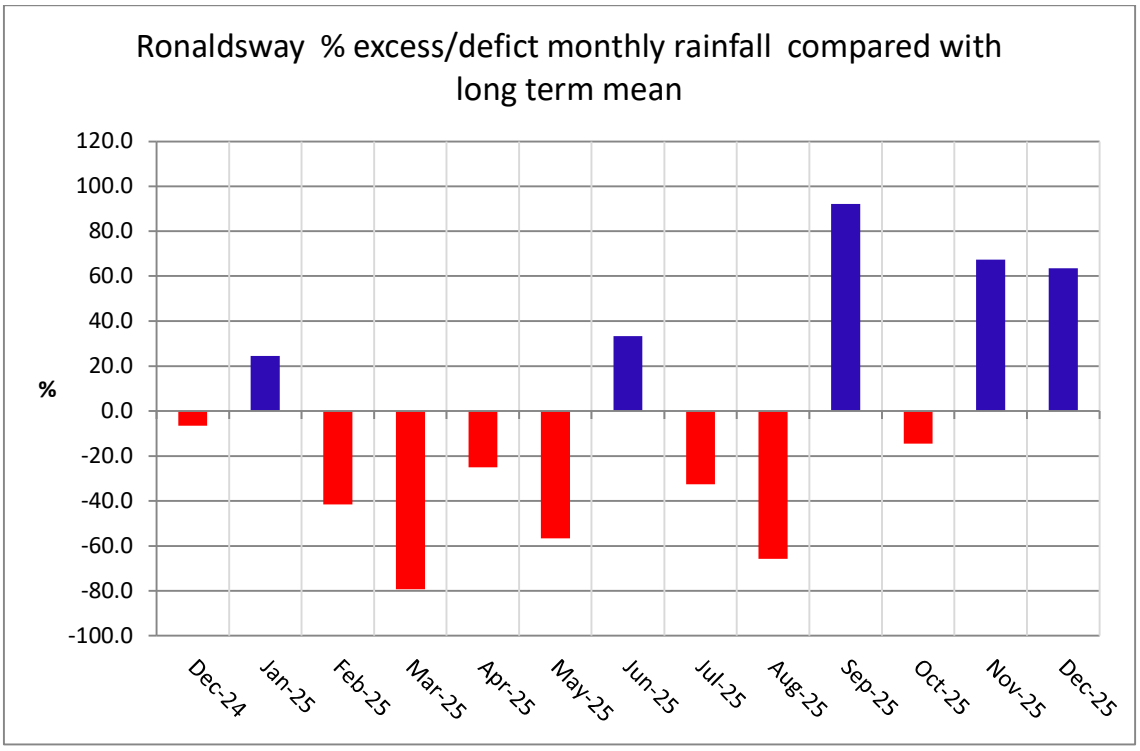


Figure 11: Percentage excess/deficit monthly rainfall.

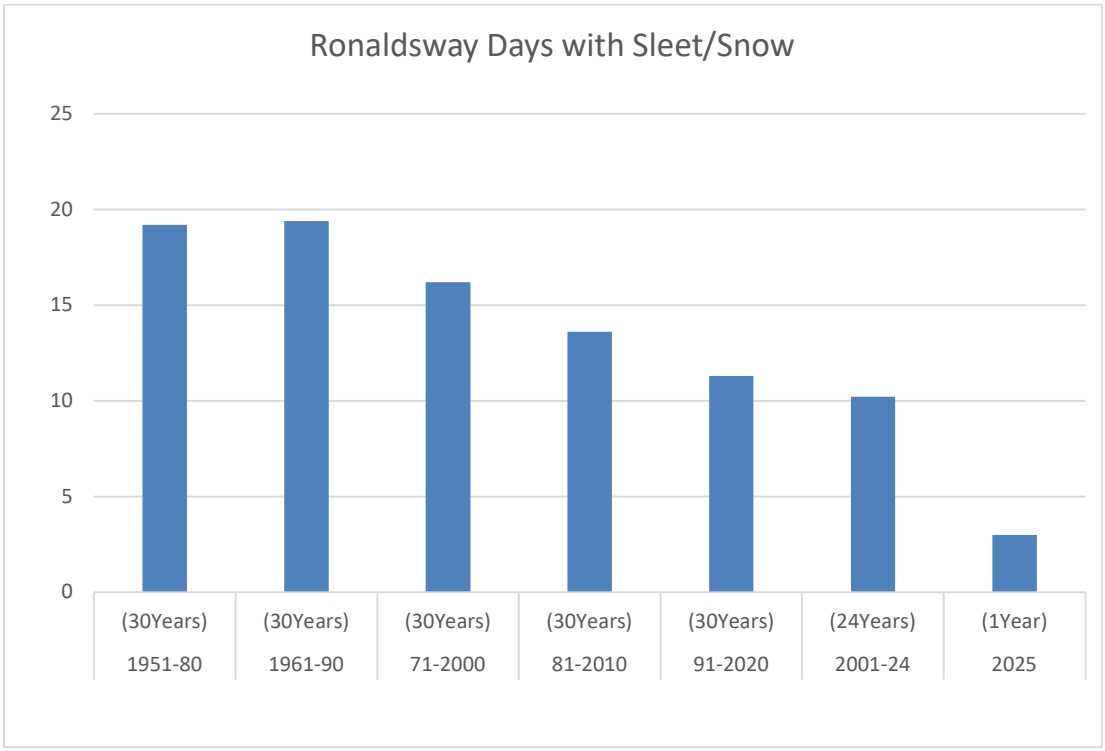


Figure 12: Average annual days with sleet/snow observed

Sunshine

1762 hours (↑8%)

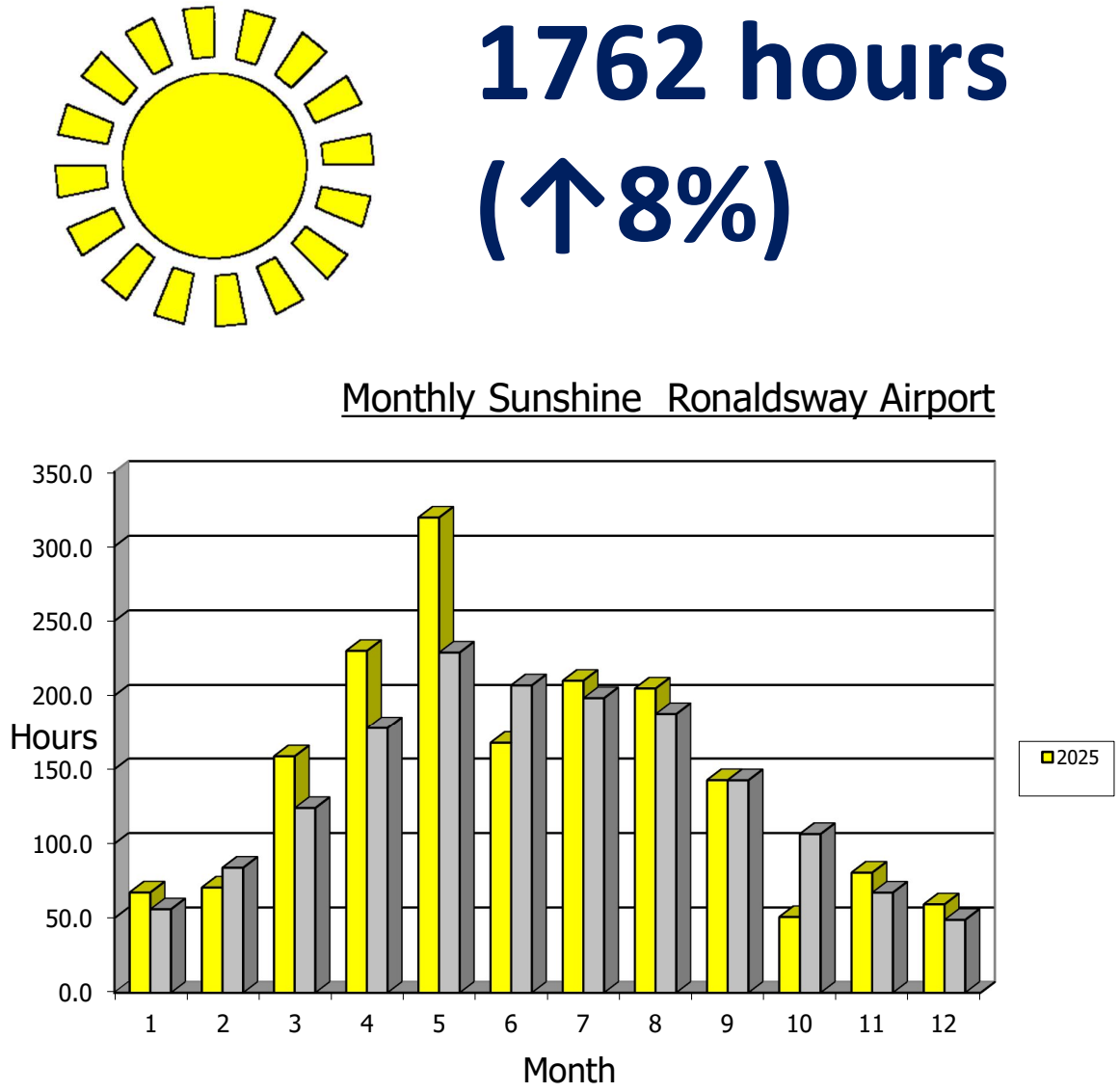


Figure 13: Ronaldsway 2025 monthly sunshine hours (Campbell-Stokes), compared with 1991-2020 average.

1762 hours of sunshine were burned onto the cards, which is over 100 hours more than the 1991-2020 average, and the 8th sunniest on record. The spring period was exceptional, with over 700 hours, and the sunniest spring we've recorded. Conversely, October was the dullest on record, with only 50.8 hours.

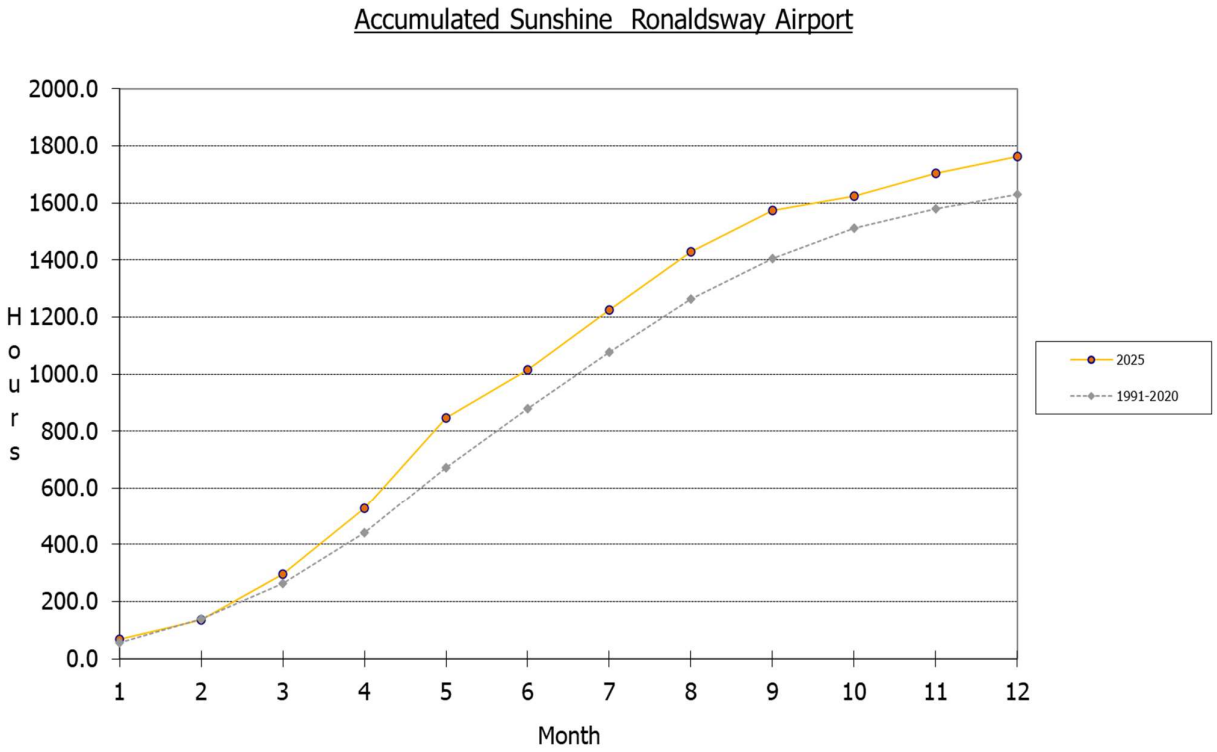


Figure 14: Ronaldsway 2025 Sunshine accumulation.

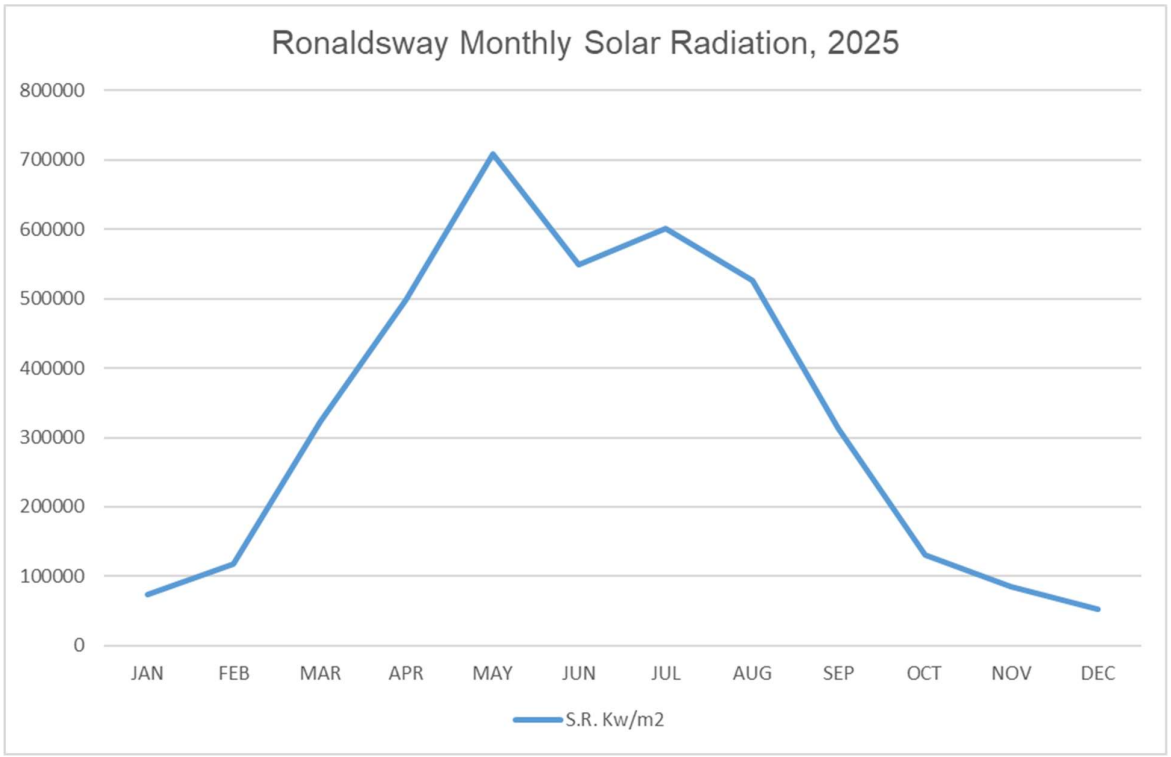


Figure 15: Ronaldsway 2025 monthly solar radiation, Kw/m2.

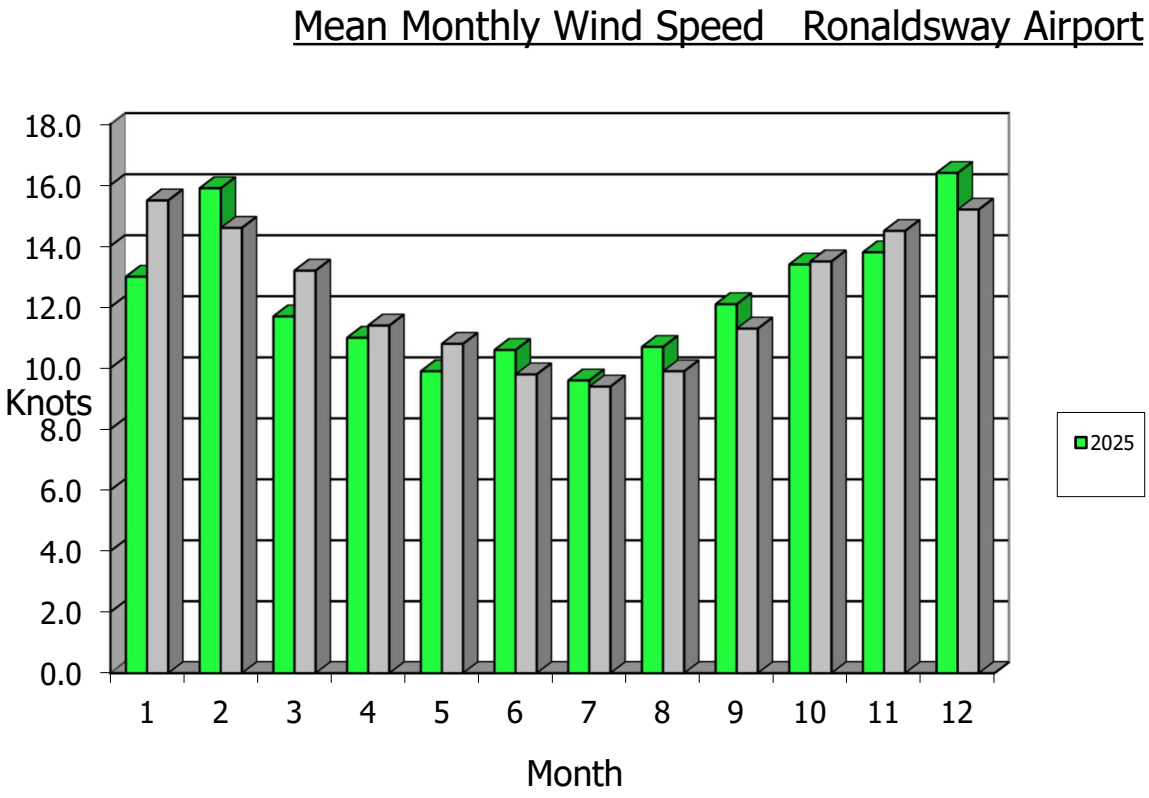
Wind

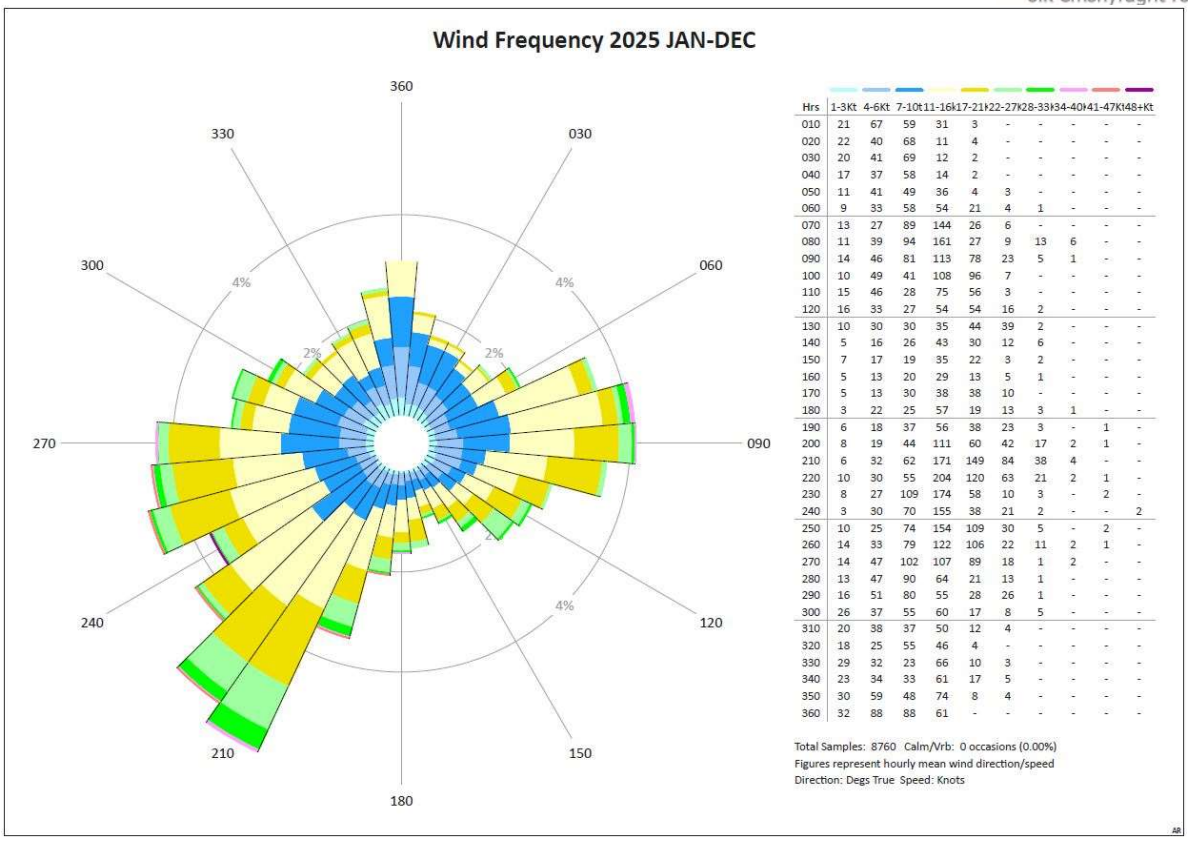


MEAN SPEED 12.3 KNOTS (=Av.)

MAX GUST 70 KNOTS, 24th January

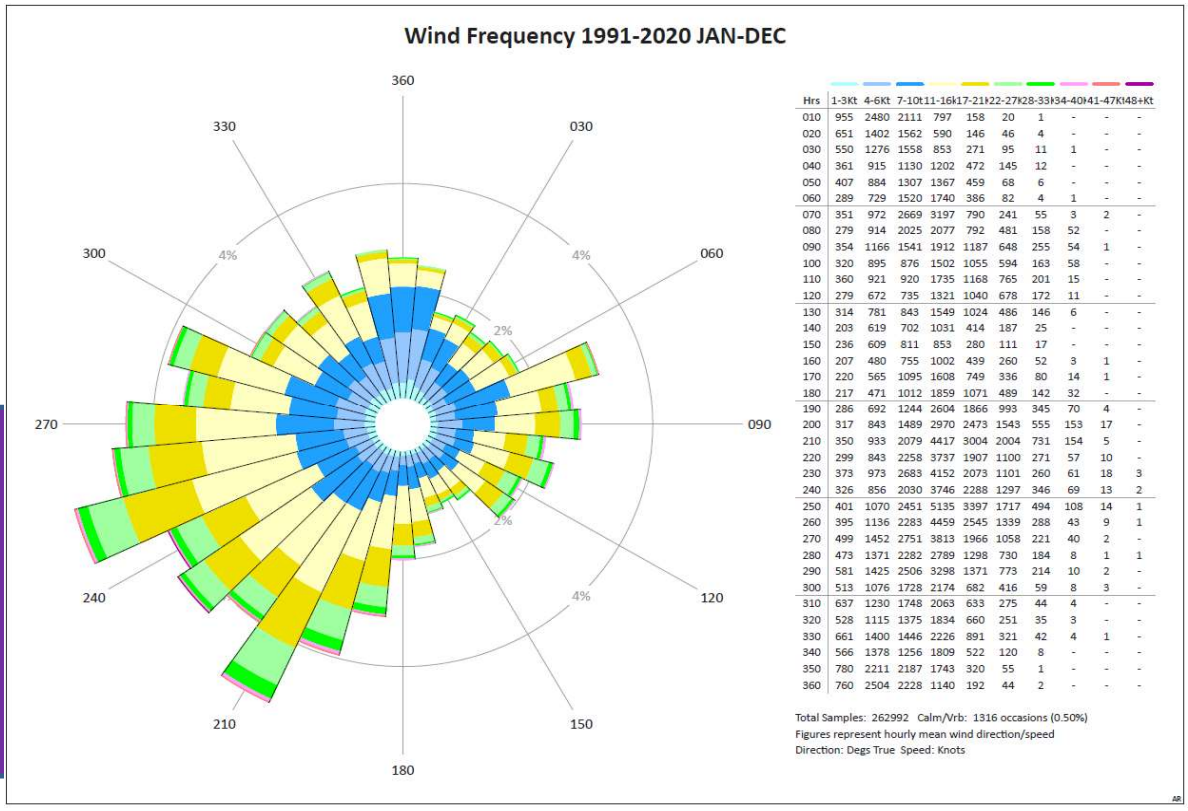
The mean wind speed across the year came to 12.3 knots, which is close to the long term average. The spring was very good, but February and December had stronger winds, evening out the average. The main named wind storms during the year were "Eowyn" on the 24th January, with gusts to 70 knots, which prompted a rare red warning and caused serious damage around the island, and storms "Amy" and "Bram" in October and December.





Hrs	1-3Kt	4-6Kt	7-10Kt	11-16Kt	17-21Kt	22-27Kt	28-33Kt	34-40Kt	41-47Kt	48+Kt
010	21	67	59	31	3	-	-	-	-	-
020	22	40	68	11	4	-	-	-	-	-
030	20	41	69	12	2	-	-	-	-	-
040	17	37	58	14	2	-	-	-	-	-
050	11	41	49	36	4	3	-	-	-	-
060	9	33	58	54	21	4	1	-	-	-
070	13	27	89	144	26	6	-	-	-	-
080	11	39	94	161	27	9	13	6	-	-
090	14	46	81	113	78	23	5	1	-	-
100	10	49	41	108	96	7	-	-	-	-
110	15	46	28	75	56	3	-	-	-	-
120	16	33	27	54	54	16	2	-	-	-
130	10	30	30	35	44	39	2	-	-	-
140	5	16	26	43	30	12	6	-	-	-
150	7	17	19	35	22	3	2	-	-	-
160	5	13	20	29	13	5	1	-	-	-
170	5	13	30	38	38	10	-	-	-	-
180	3	22	25	57	19	13	3	1	-	-
190	6	18	37	56	38	23	3	-	1	-
200	8	19	44	111	60	42	17	2	1	-
210	6	32	62	171	149	84	38	4	-	-
220	10	30	55	204	120	63	21	2	1	-
230	8	27	109	174	58	10	3	-	2	-
240	3	30	70	155	38	21	2	-	-	2
250	10	25	74	154	109	30	5	-	2	-
260	14	33	79	122	106	22	11	2	1	-
270	14	47	102	107	89	18	1	2	-	-
280	13	47	90	64	21	13	1	-	-	-
290	16	51	80	55	28	26	1	-	-	-
300	26	37	55	60	17	8	5	-	-	-
310	20	38	37	50	12	4	-	-	-	-
320	18	25	55	46	4	-	-	-	-	-
330	29	32	23	66	10	3	-	-	-	-
340	23	34	33	61	17	5	-	-	-	-
350	30	59	48	74	8	4	-	-	-	-
360	32	88	88	61	-	-	-	-	-	-

Figure 17&18- Ronaldsway Runway 26 anemometer wind frequency plot, January-December 2025 & 1991-2020. Note higher frequency of easterly direction in 2025.



Hrs	1-3Kt	4-6Kt	7-10Kt	11-16Kt	17-21Kt	22-27Kt	28-33Kt	34-40Kt	41-47Kt	48+Kt
010	955	2480	2111	797	158	20	1	-	-	-
020	651	1402	1562	590	146	46	4	-	-	-
030	550	1276	1558	853	271	95	11	1	-	-
040	361	915	1130	1202	472	145	12	-	-	-
050	407	884	1307	1367	459	68	6	-	-	-
060	289	729	1520	1740	386	82	4	1	-	-
070	351	972	2669	3197	790	241	55	3	2	-
080	279	914	2025	2077	792	481	158	52	-	-
090	354	1166	1541	1912	1187	648	255	54	1	-
100	320	895	876	1502	1055	594	163	58	-	-
110	360	921	920	1735	1168	765	201	15	-	-
120	279	672	735	1321	1040	678	172	11	-	-
130	314	781	843	1549	1024	486	146	6	-	-
140	203	619	702	1031	414	187	25	-	-	-
150	236	609	811	853	280	111	17	-	-	-
160	207	480	755	1002	439	260	52	3	1	-
170	220	565	1095	1608	749	336	80	14	1	-
180	217	471	1012	1859	1071	489	142	32	-	-
190	286	692	1244	2604	1866	993	345	70	4	-
200	317	843	1489	2970	2473	1543	555	153	17	-
210	350	933	2079	4417	3004	2004	731	154	5	-
220	299	843	2258	3737	1907	1100	271	57	10	-
230	373	973	2683	4152	2073	1101	260	61	18	3
240	326	856	2030	3746	2288	1297	346	69	13	2
250	401	1070	2451	5135	3397	1717	494	108	14	1
260	395	1136	2283	4459	2545	1339	288	43	9	1
270	499	1452	2751	3813	1966	1058	221	40	2	-
280	473	1371	2282	2789	1298	730	184	8	1	1
290	581	1425	2506	3298	1371	773	214	10	2	-
300	513	1076	1728	2174	682	416	59	8	3	-
310	637	1230	1748	2063	633	275	44	4	-	-
320	528	1115	1375	1834	660	251	35	3	-	-
330	661	1400	1446	2226	891	321	42	4	1	-
340	566	1378	1256	1809	522	120	8	-	-	-
350	780	2211	2187	1743	320	55	1	-	-	-
360	760	2504	2228	1140	192	44	2	-	-	-

Broader Context

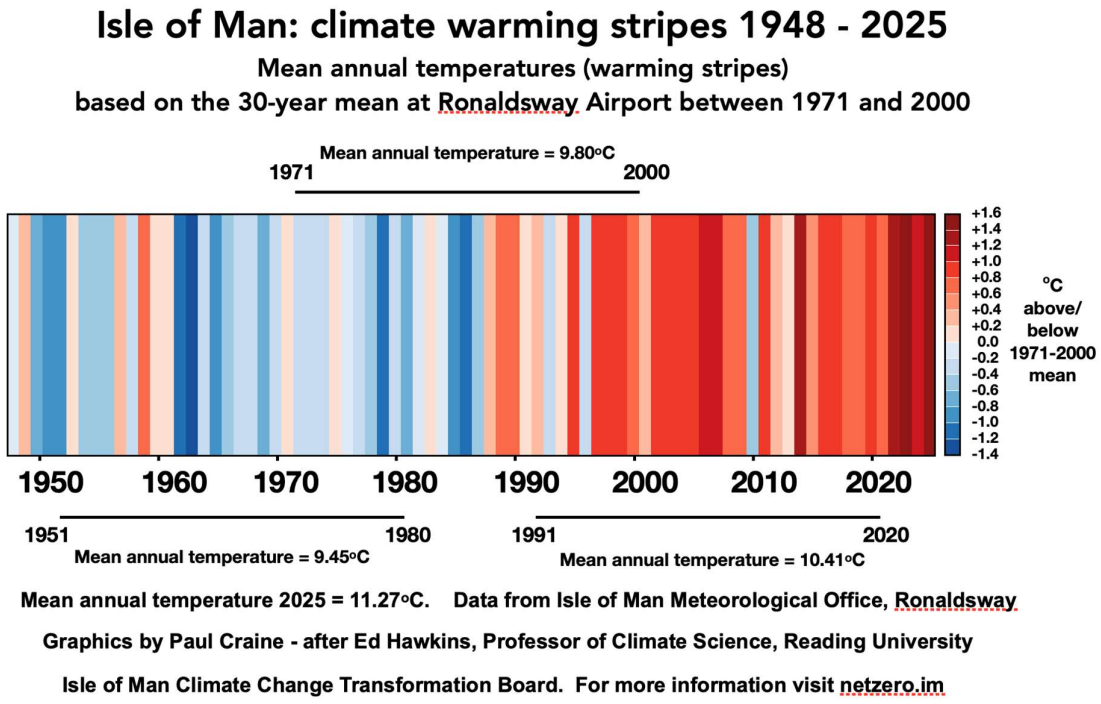


Figure 19: "Climate Stripes" graphic showing anomaly from 1971-2000 mean temperature of 9.80°C

Looking more broadly, the Copernicus Climate Service reports that 2025 was *globally* the 3rd warmest on record, with a mean +1.47°C above the pre-industrial (1850-1900) average – behind 2024 and 2023. In the UK, the Met Office have reported that 2025 was the warmest, and sunniest, recorded in a data series since 1884, and also warmest in the Central England series, which dates back to 1659 and is the worlds longest instrumental temperature record. Dr Mark McCarthy of the UK Met Office said,

"This very warm year is in line with expected consequences of human-induced climate change. Although it doesn't mean every year will be the warmest on record, it is clear from our weather observations and climate models that human-induced global warming is impacting the UK's climate."

These data from Ronaldsway show that changes in our climate are real and measurable right here on the Isle of Man.

All measurements taken at Ronaldsway Met Office. Measurements began in 1947. The instrumentation, exposure, siting and calibration etc are independently inspected annually to ensure compliance with World Meteorological Organisation criteria for climate sites. Routine instrument checks are carried out daily.

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