



Please send all reports and observations to jacook@jacook.plus.com

BAA Radio Astronomy Section.

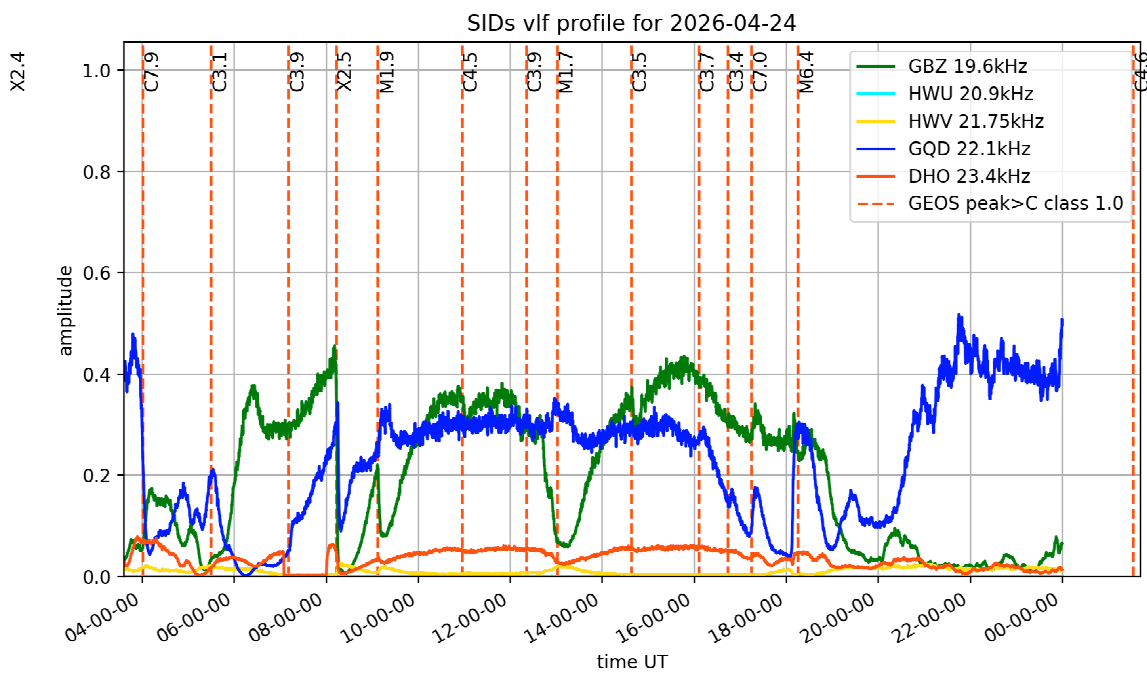
Director Paul Hearn.

RADIO SKY NEWS

2026 APRIL.

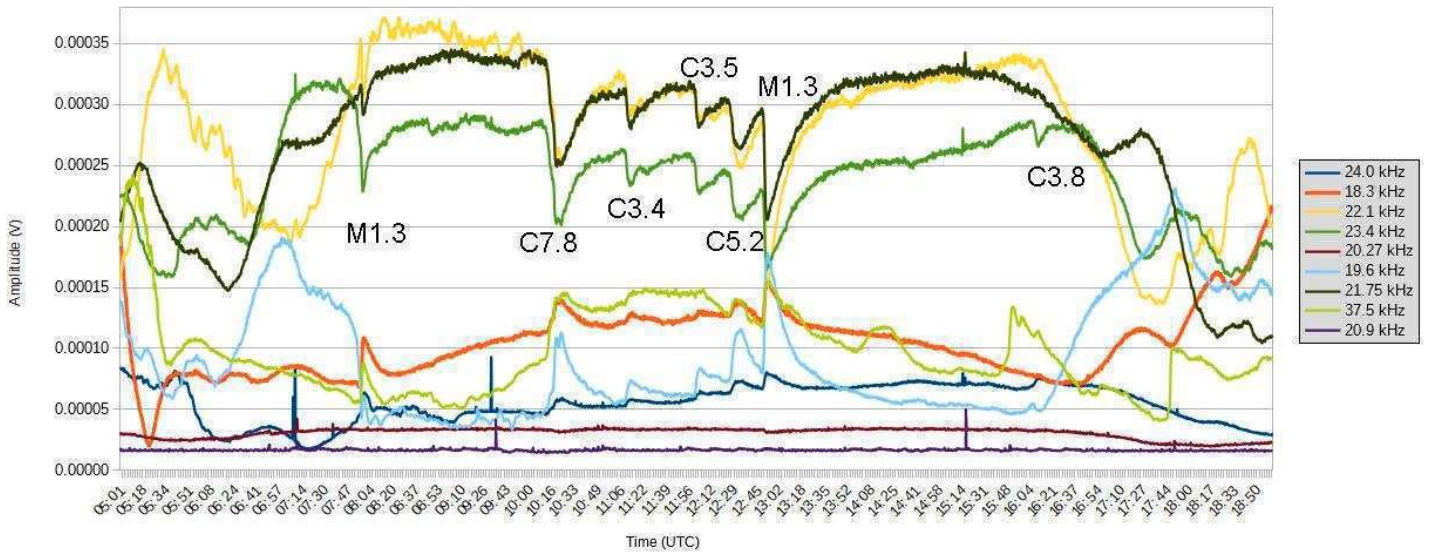
VLF SID OBSERVATIONS.

Solar flaring increased significantly in April, with 69 classified flares recorded as SIDs. This is the highest total since May last year. There was a single X-flare recorded early in the morning of the 24th, but well recorded. Unfortunately I had a short power cut on the 24th, losing the full day's data. Mark Edwards also had a system failure mid-month, so losing most of the month's activity. The first three weeks of April were very quiet, the majority of the activity from the 23rd to 28th.



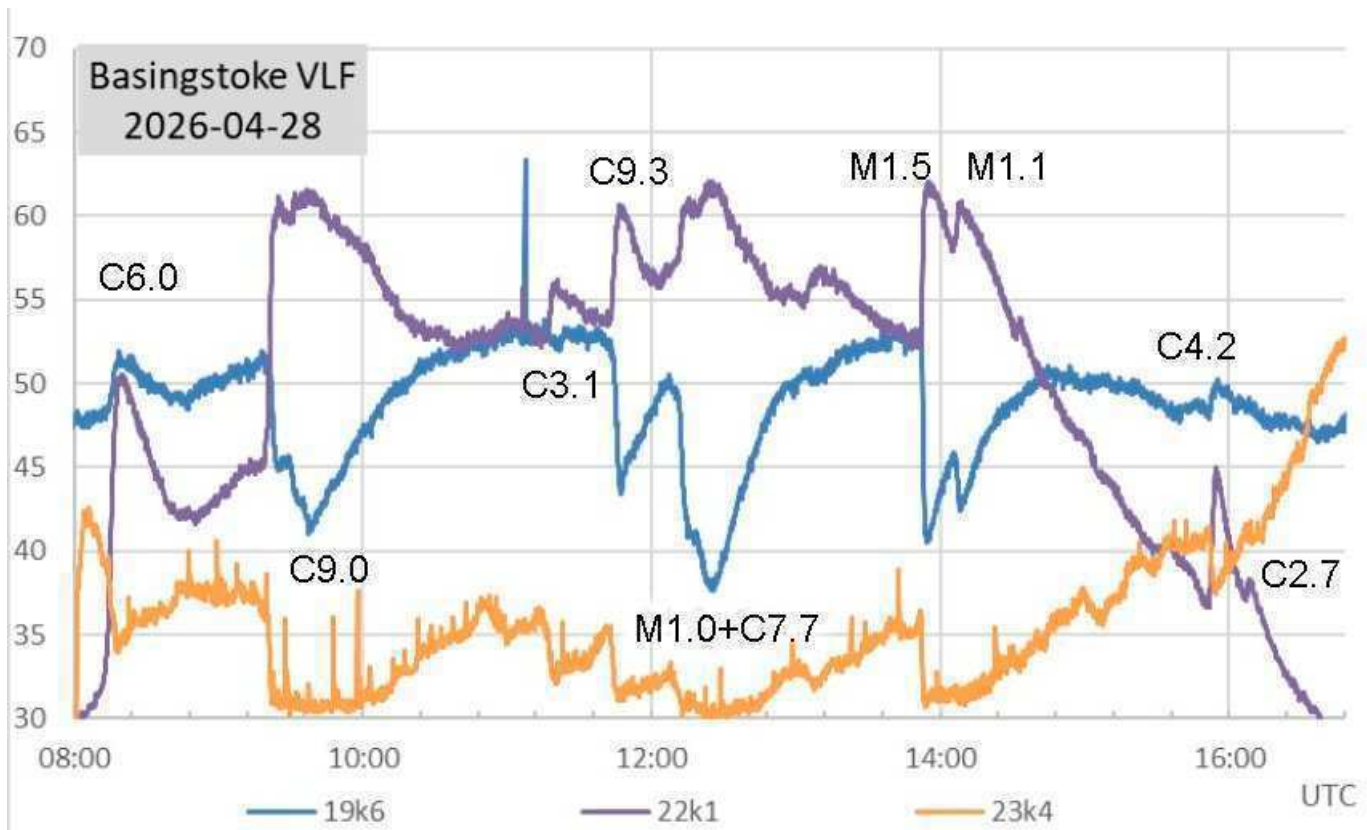
Mark Prescott's recording from the 24th shows the X2.5 flare along with the rest of the day's activity. 19.6kHz and 22.1kHz both show strong SIDs from the X2.5 flare, both negative going. The M1.9 flare less than an hour later shows a positive going SID at 22.1kHz, while 19.6kHz remains negative going. We often see very different SID responses from these two signals, despite the transmitters being fairly close to each other. The SIDs after 16UT also show similar changes. Mark has also included a tag for the X2.4 flare at 01UT, far too early for us to record. These are the only X-flares in the GOES satellite lists for April.

SIDs 2026 April 3rd



The 3rd was the most active day in the first half of April, with plenty of C-flares as well as a pair of M1.3 flares. Mark Edwards' chart shows all of this activity on most of the signals recorded.

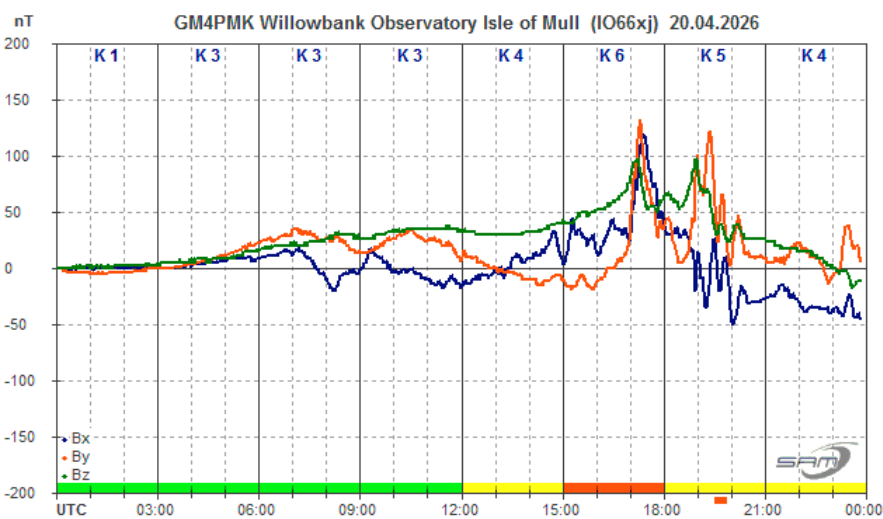
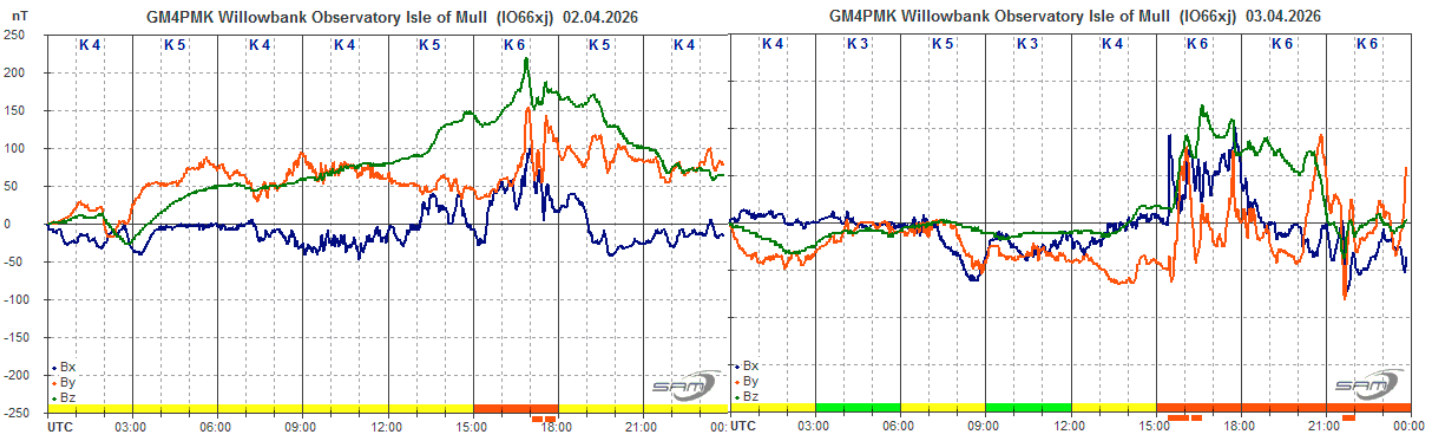
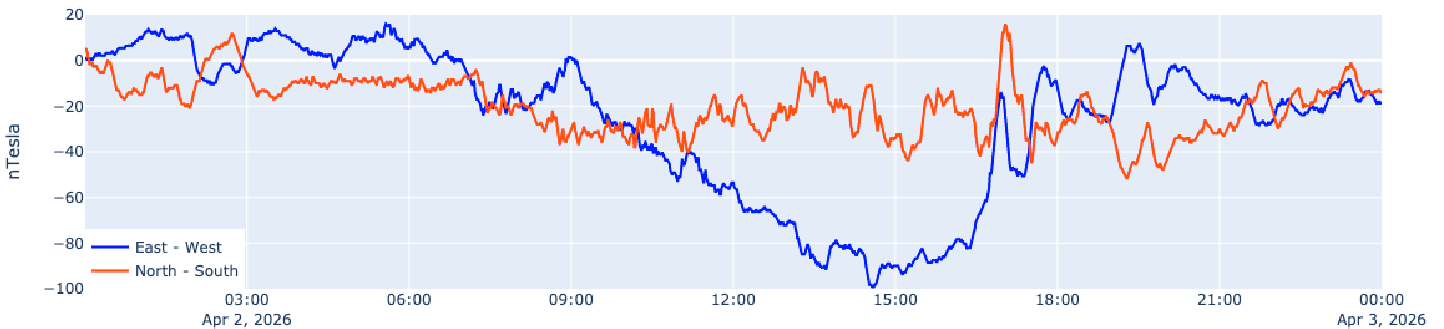
The 28th was also very active, shown in Paul Hyde's recording. The M1.0 and C7.7 flares merged into a single SID for some observers, the effect very clear in both 19.6kHz and 22.1kHz. The M1.5 and M1.1 pair also overlap, but are more easily separated. The weaker C2.7 flare is only visible at 22.1kHz, but is still within the decay phase of the C4.2. After this burst of activity, the last three days of April produced no SIDs, the satellite data showing just a few C-flares that were mostly during our night-time.



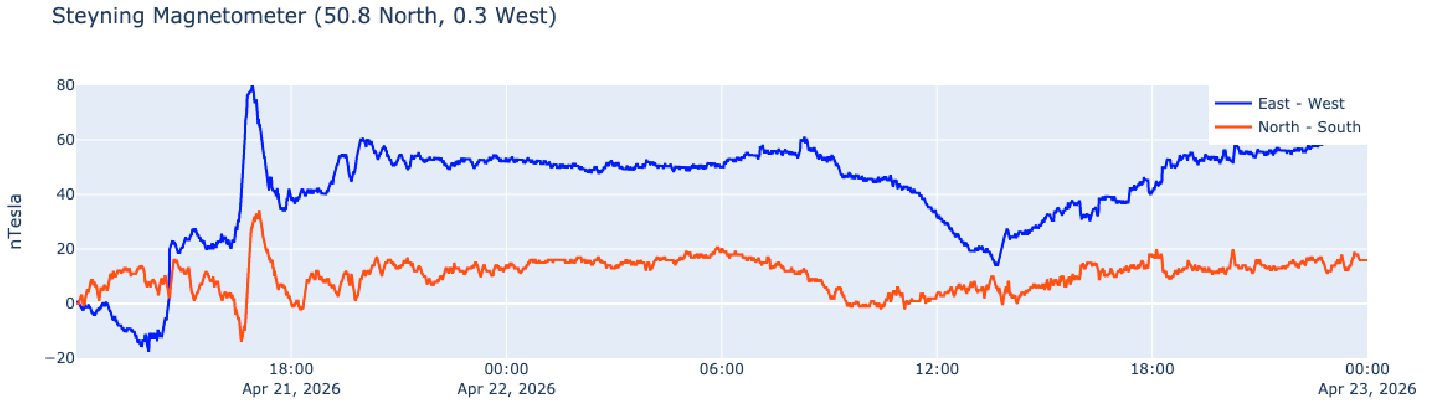
MAGNETIC OBSERVATIONS.

The strongest magnetic disturbance was recorded over the 2nd and 3rd, with a mild CME impact recorded on the 3rd. Nick Quinn's recording shows a mild disturbance all day on the 2nd, with a possible impact at about 17:00. Roger Blackwell's chart covers both days, with a stronger impact at about 15:30 on the 3rd. The STCE bulletin links this to a filament eruption late on April 1st. The disturbance faded out in the early hours of the 4th, with a very mild disturbance later in the evening.

Steyning Magnetometer (50.8 North, 0.3 West)

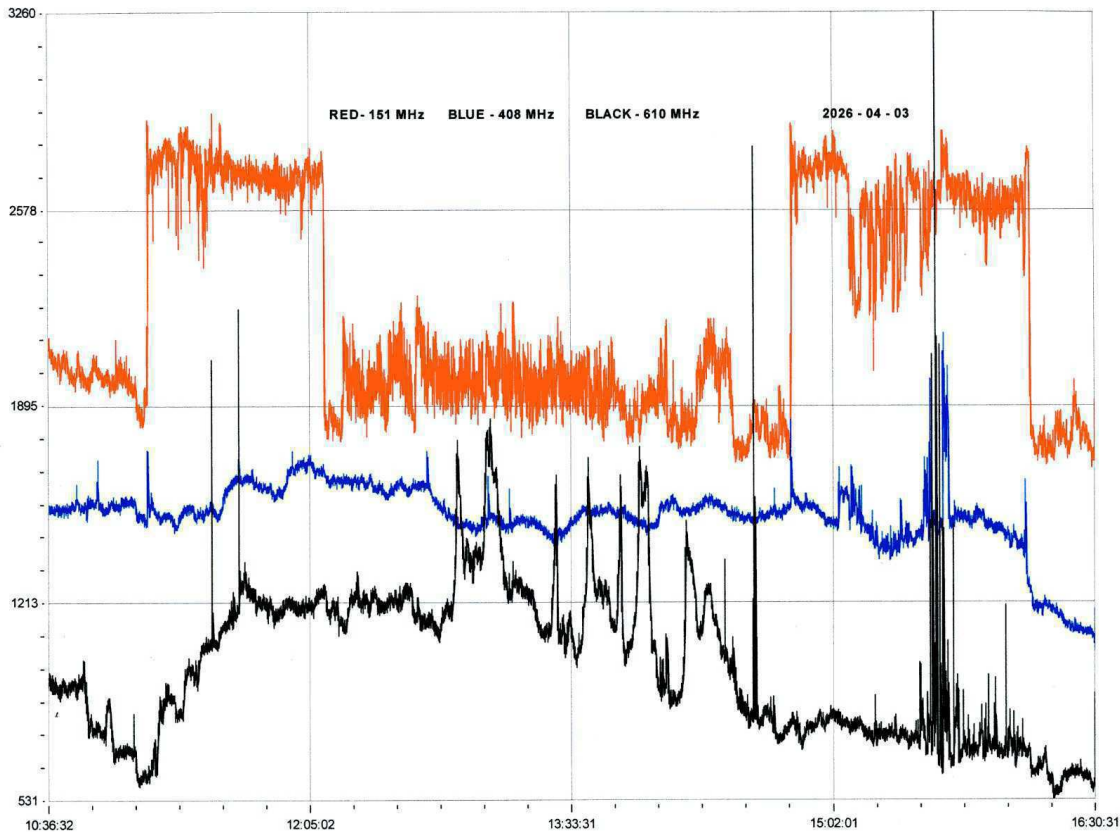


Satellite data shows that some of the stronger flares did produce CMEs, but none seem to have been Earth-directed. Roger Blackwell's chart from the 20th shows a short active period in the evening, while Nick Quinn's recording on the 21st appears to show an impact feature just before 18:00. These are all from stronger solar winds.

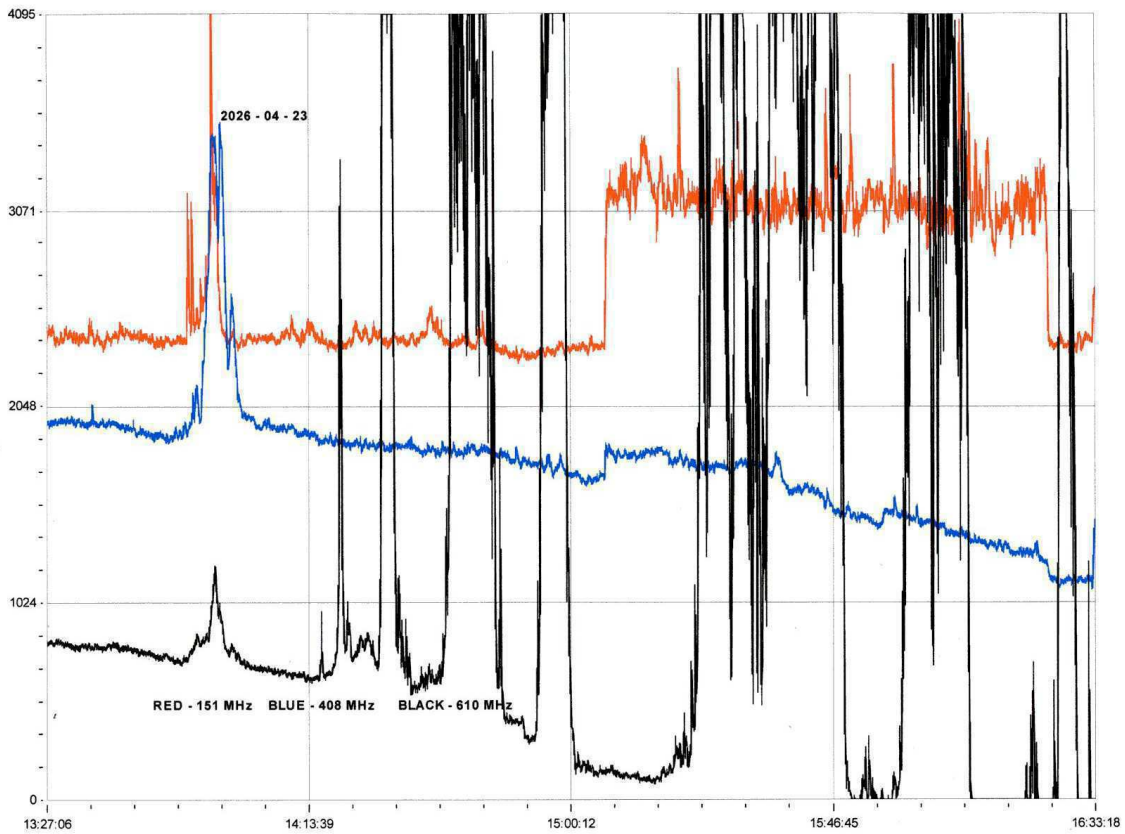


Magnetic observations received from Roger Blackwell, Nick Quinn and John Cook.

SOLAR EMISSIONS

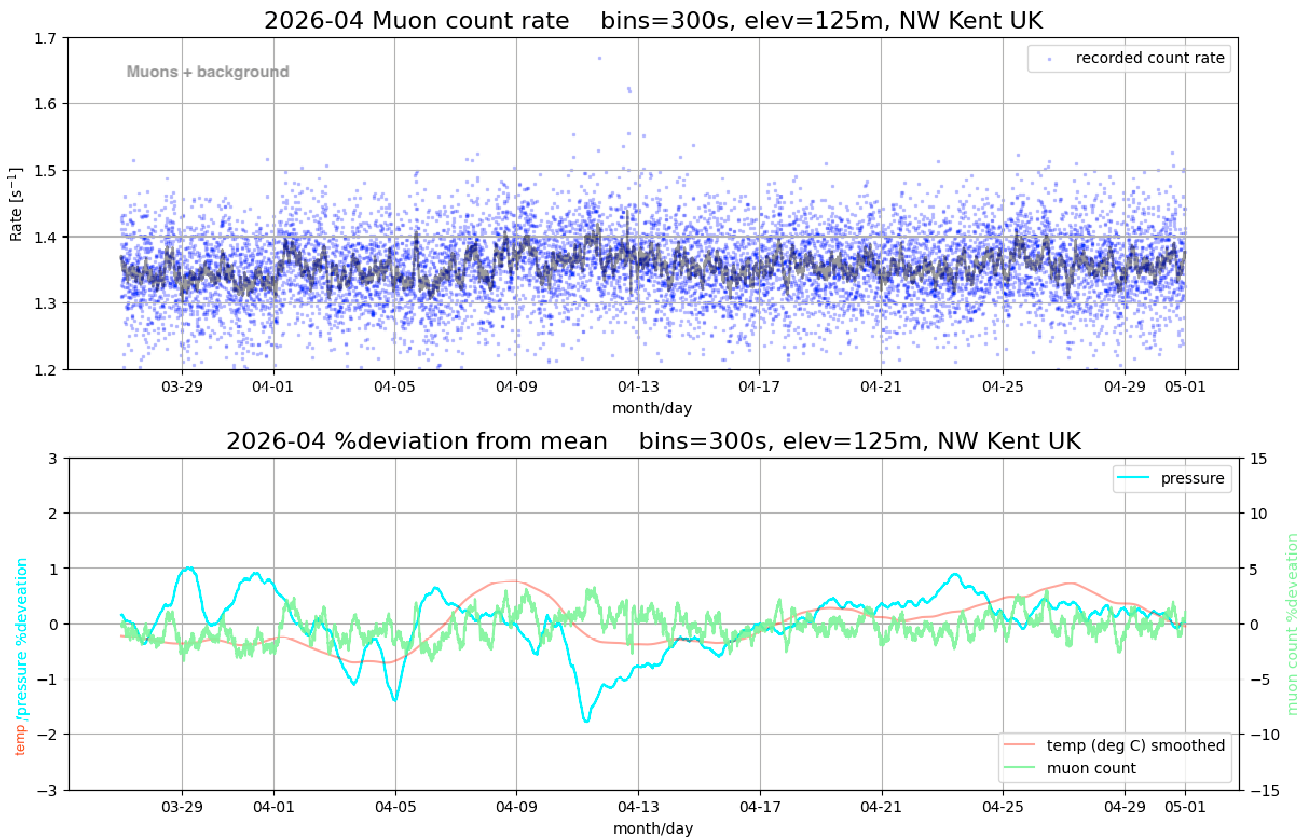


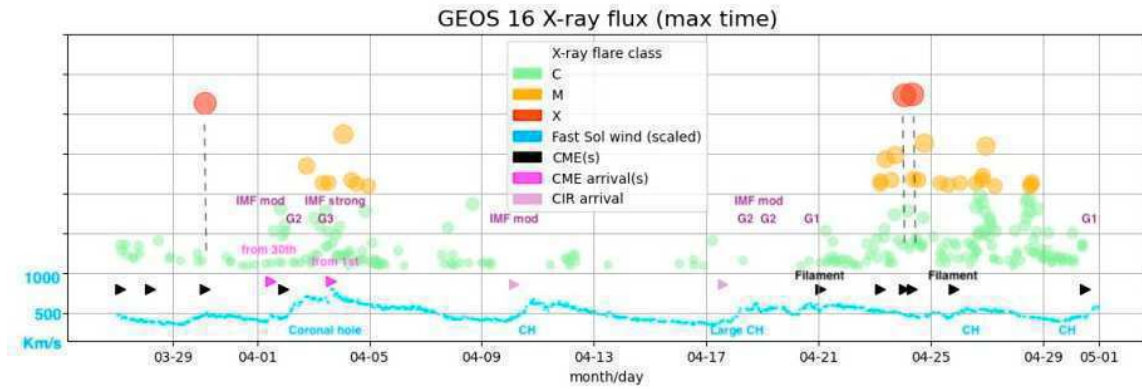
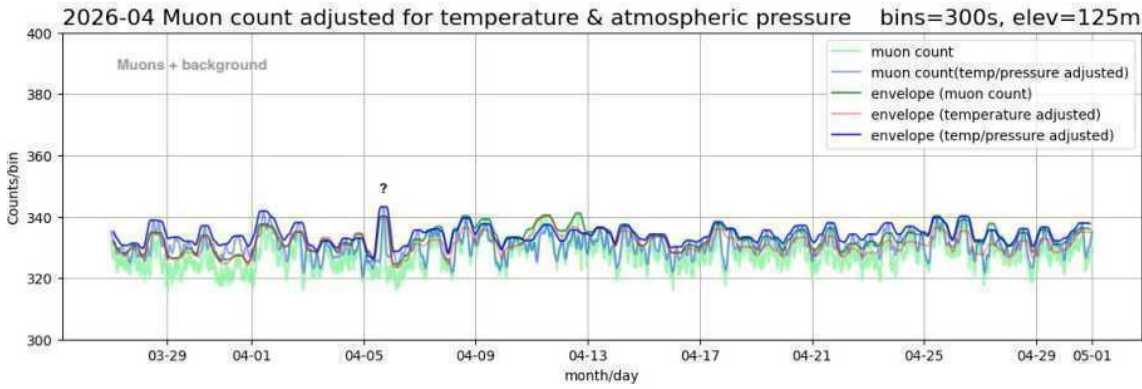
Colin Clements' VHF/UHF recording on the 3rd shows some significant activity at 610MHz (black) in the early afternoon, possibly linked to the M1.3 flare recorded at 12:52UT. There is also a very short burst around 16UT, maybe linked to the C3.8 flare. 408MHz (blue) also shows activity at this time. The 151MHz activity is harder to analyse.



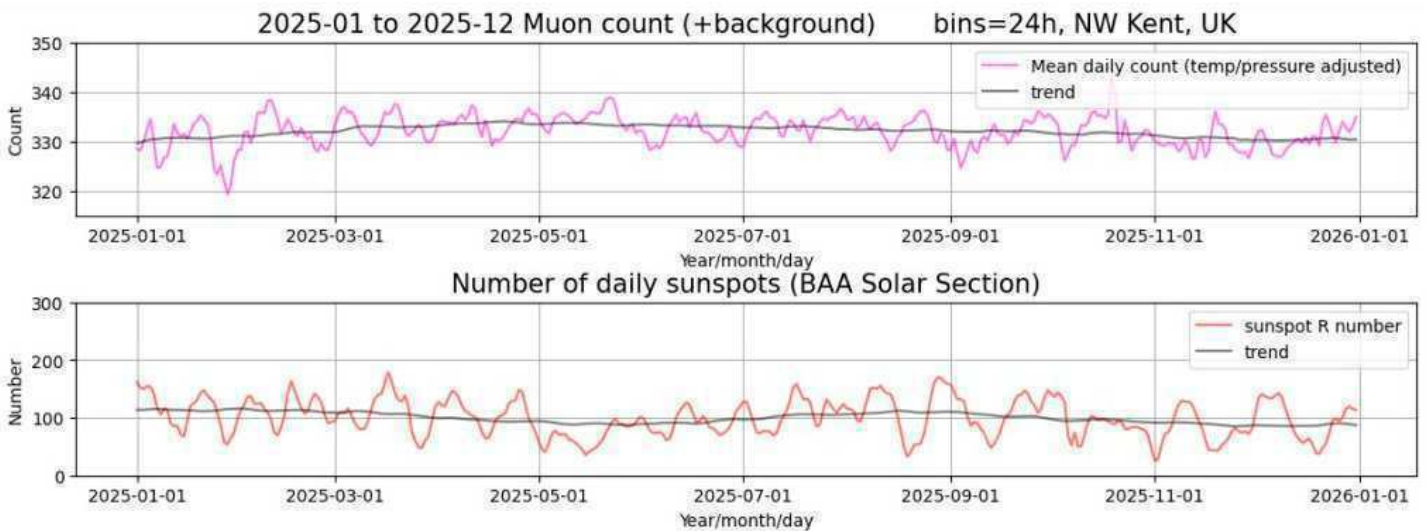
Solar emissions on the 23rd again show well at 151MHz after 14UT, following the three M-flares recorded as SIDs. All three signals show a short burst of activity at 13:56UT, well matched to the M1.7 flare.

MUONS

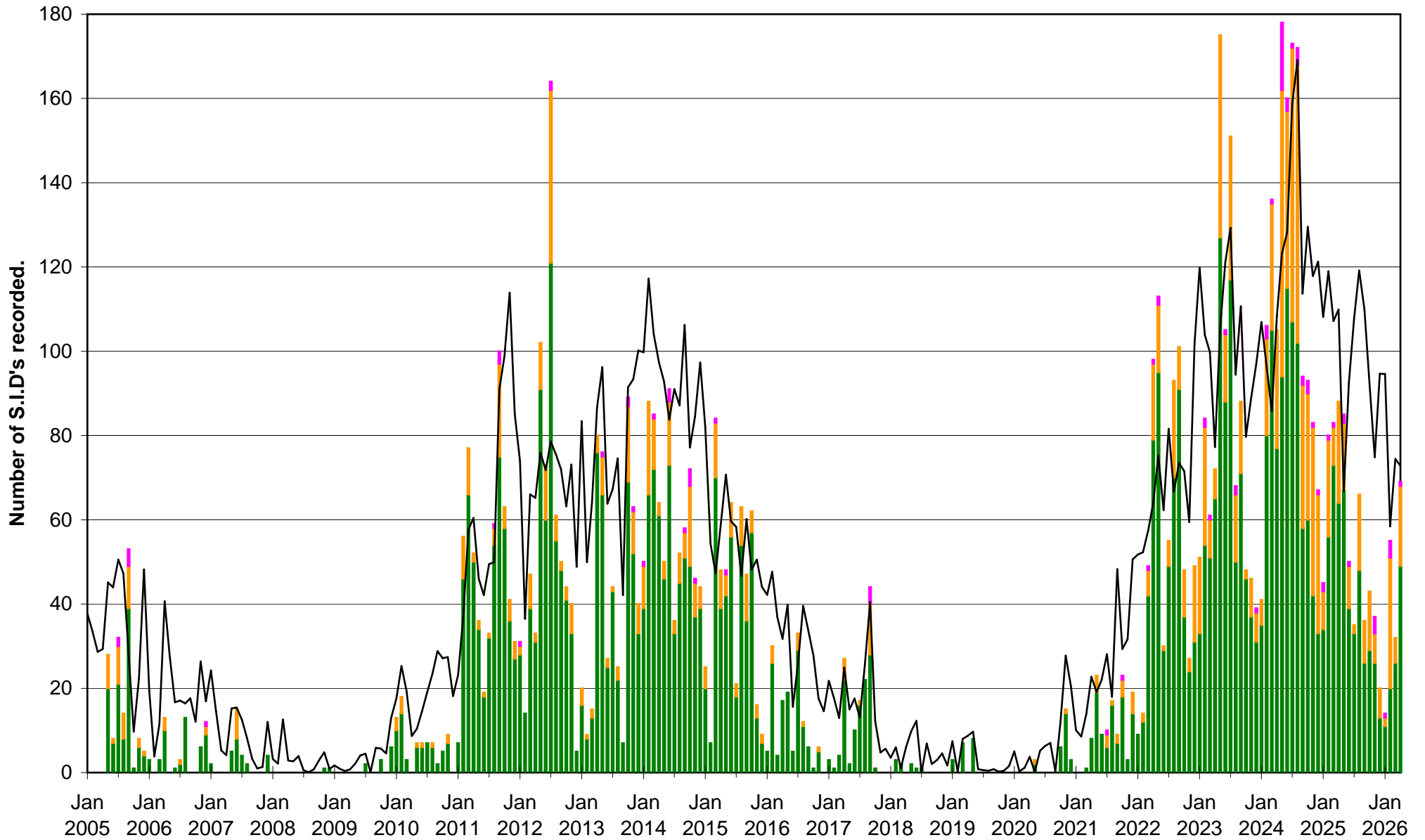
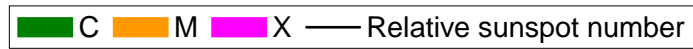




Mark Prescott's muon charts show a very stable pattern for most of April. The diurnal flux rise and fall is clear, with just a single stronger peak. The source of this is not known, as it appears just after the series of M-flares in the first few days. The solar wind speed is also falling. The activity at the end of the month has only made a very small rise in flux. The chart below shows activity through 2025. The sunspot count was lower in May June and July, with a slight increase in Muon flux. Sunspot counts were also lower from October to the end of the year, although the muon counts also seem to be slightly lower. There might also be a seasonal effect from the much shorter day length?



VLF flare activity 2005/26



BARTELS DIAGRAM

ROTATION	KEY:	DISTURBED.	ACTIVE	SFE	B, C, M, X = FLARE MAGNITUDE.	Synodic rotation start (carrington's).
2597	F	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31				2280
2598	F	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28				2281
2599	F	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26				2282
2600	F	27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22				2283
2601	F	23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19				2284
2602	F	20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15				2285
2603	F	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1 2 3 4 5 6 7 8 9 10 11 12				2286
2604	F	13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8				2287
2605	F	9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4				2288
2606	F	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1				2289
2607	F	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28				2290
2608	F	29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24				2291
2609	F	25 26 27 28 29 30 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21				2292
2610	F	22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17				2293
2611	F	18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13				2294
2612	F	14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1 2 3 4 5 6 7 8 9 10 11 12				2295
2613	F	13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8				2296
2614	F	9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1 2 3 4 5				2297
2615	F	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31				2298
2616	F	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28				2299
2617	F	29 30 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25				2300
2618	F	26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21				2301
2619	F	22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17				2302
2620	F	18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14				2303
2621	F	15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10				2304
2622	F	11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7				2305
2623	F	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3				2306
2624	F	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30				2307
2625	F	31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26				2308
2626	F	27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25				2309
2627	F	26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21				2310
2628	F	22 23 24 25 26 27 28 29 30 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18				

