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BAA Radio Astronomy Section.

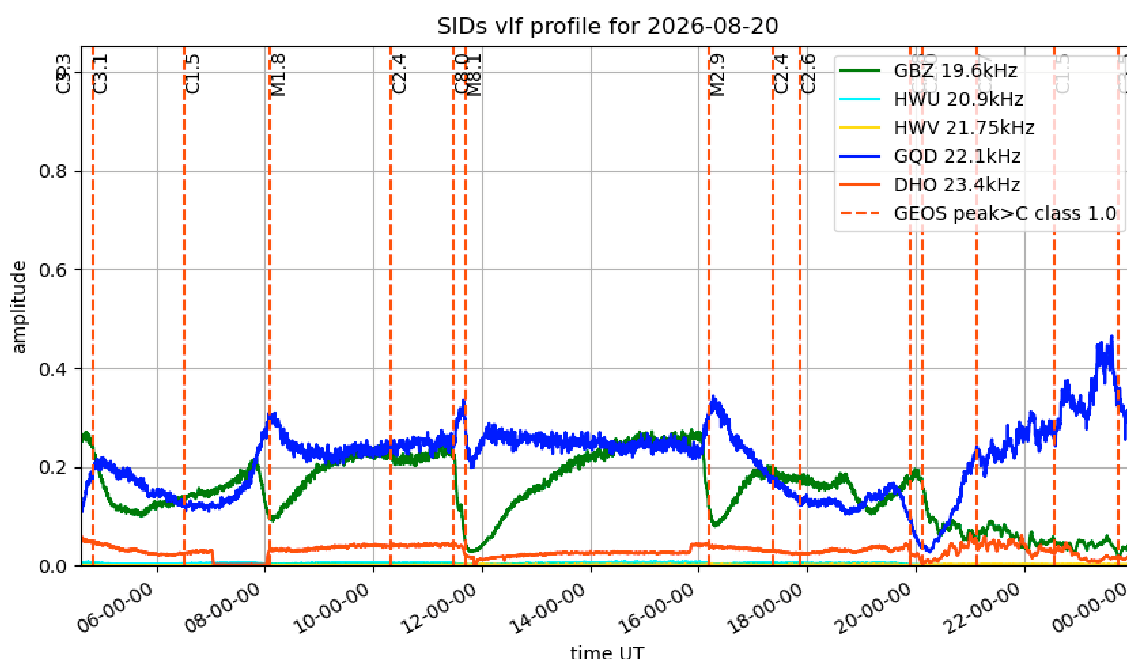
Director Paul Hearn.

RADIO SKY NEWS

2026 AUGUST.

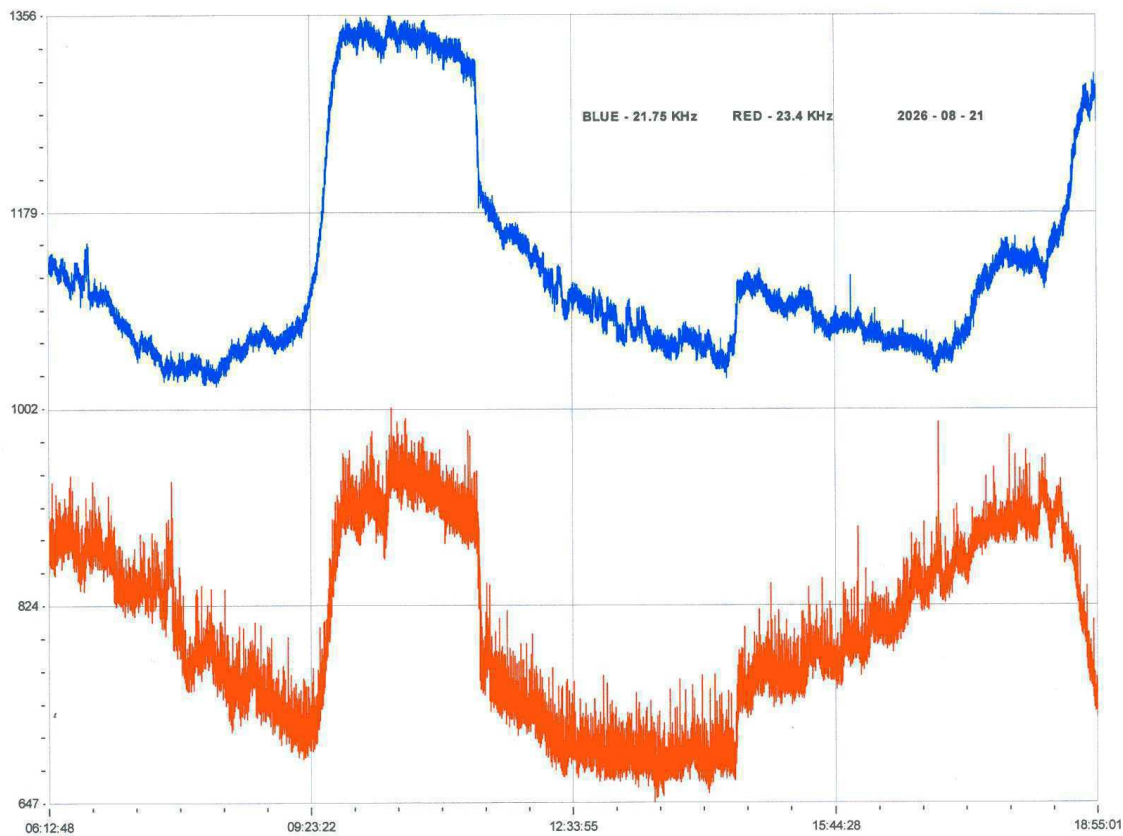
VLF SID OBSERVATIONS.

Flaring activity in August fell to the lowest level that we have recorded since January, with 13 C-class and 8 M-class flares. The satellite data shows plenty of B-class flares, but none of these were recorded as SIDs. Most of the activity was recorded in the second half of the month, the 20th showing some strong M-flares in Mark Prescott's recording:

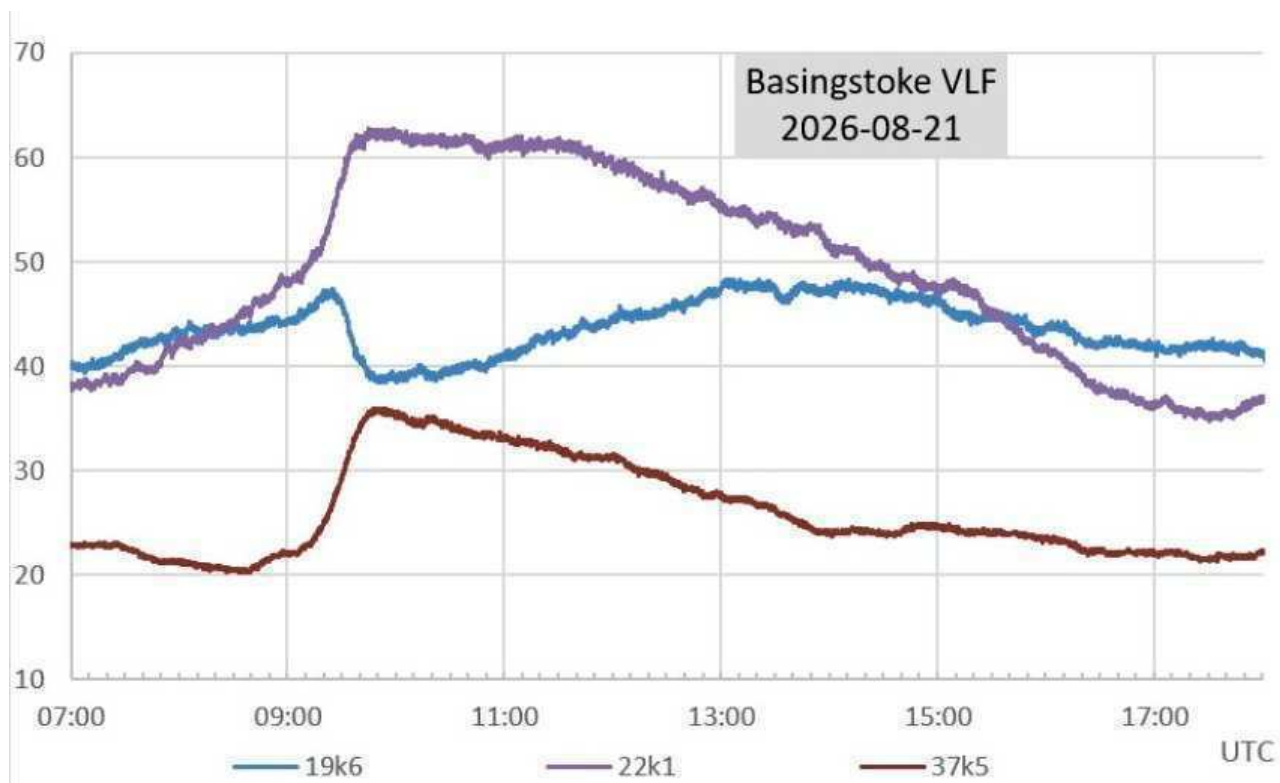


The M8.1 at 11:47UT looks fairly weak at 22.1kHz, but has produced a 'spike and wave' SID that makes it look a lot smaller. 19.6kHz shows a stronger negative-going SID. It also clearly shows the effect of the C8.0 flare 10 minutes earlier, hidden in the 22.1kHz SID. The source of the C8.0 flare is not shown in the satellite data. The weaker C-class flares have not produced any clear SIDs.

An M1.6 flare on the 21st produced some very unusual SIDs. The satellite data shows a long duration flare from AR 14507 along with a pair of unclassified flares from AR14513 shortly afterwards. Colin Clements' recording shows almost rectangular SIDs at both 23.4kHz and 21.75kHz:

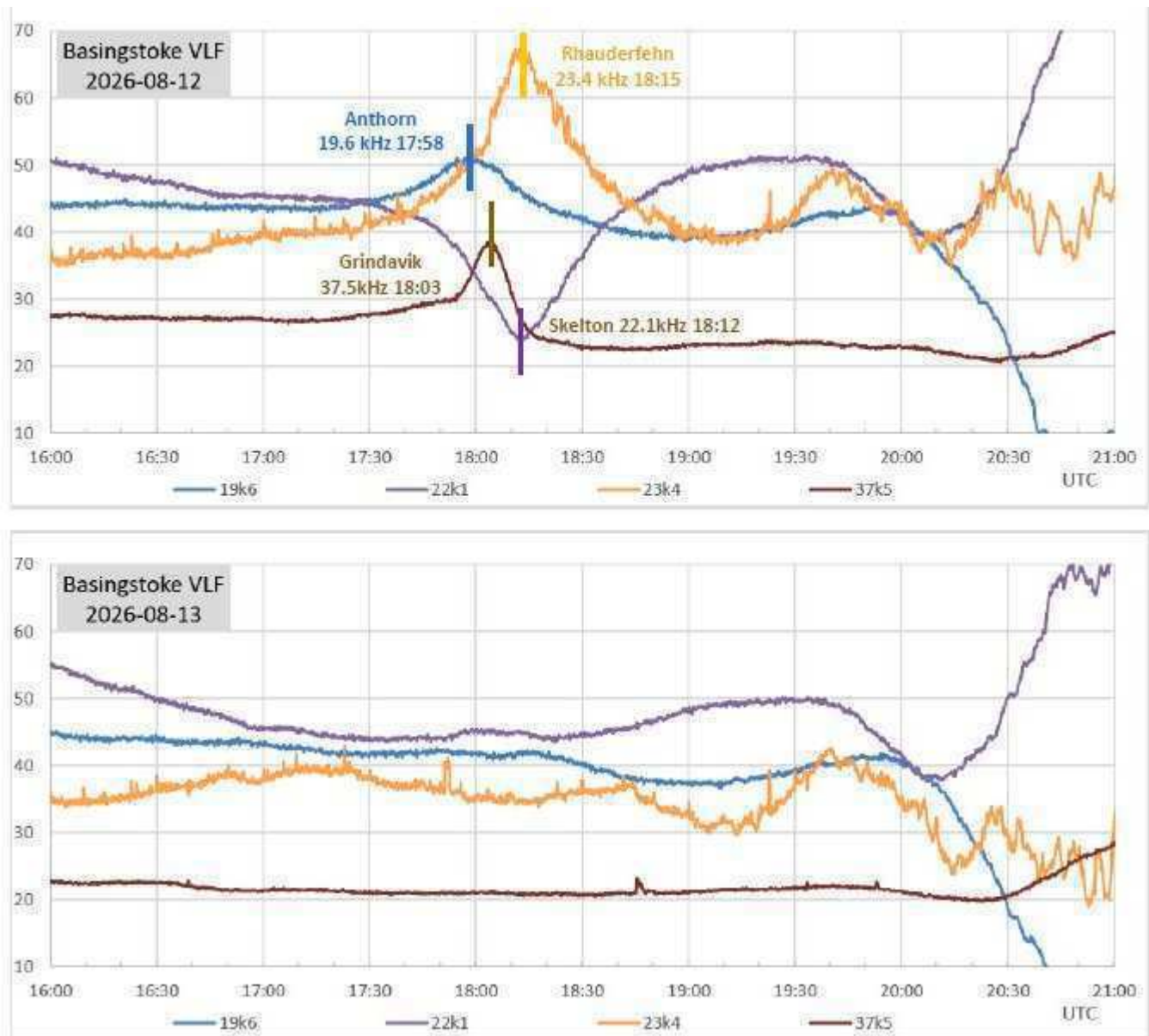


Paul Hyde's recording shows a more normal shape, but lasting almost all day:



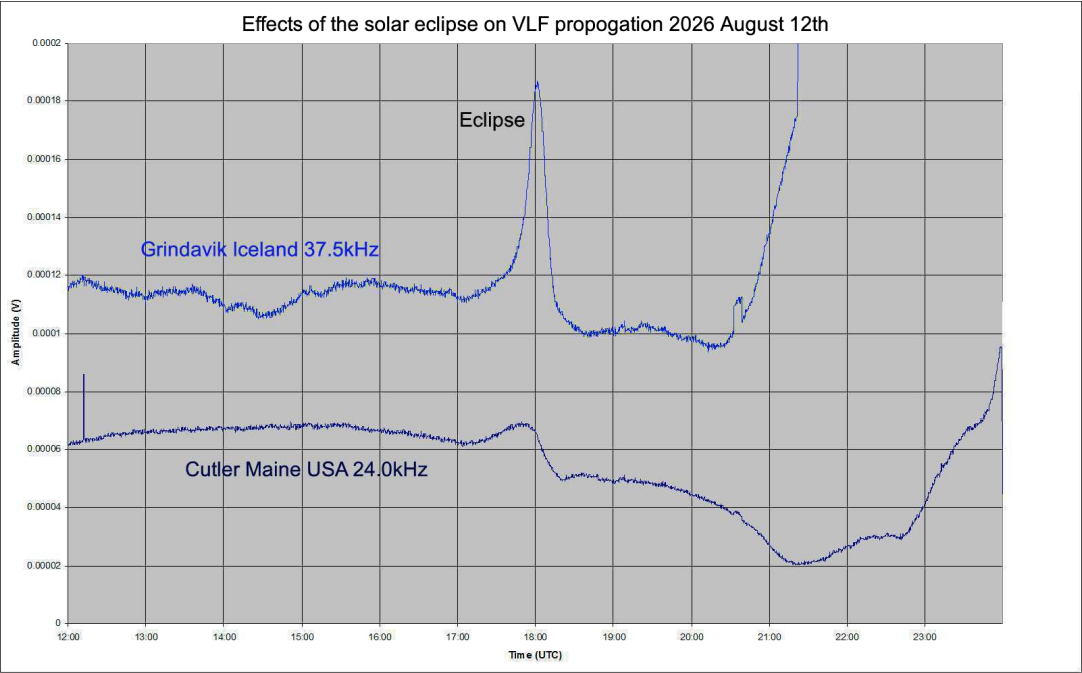
22.1 kHz shows the longest decay period, ending around 17UT. 19.6 kHz appears to show a 'spike-and-wave' SID, but very hard to interpret. There were a few more strong flares over the next few days, fading out towards the end of the month.

The main event in August was the partial eclipse on the 12th. This was very close to sunset, but has produced some well defined VLF effects.

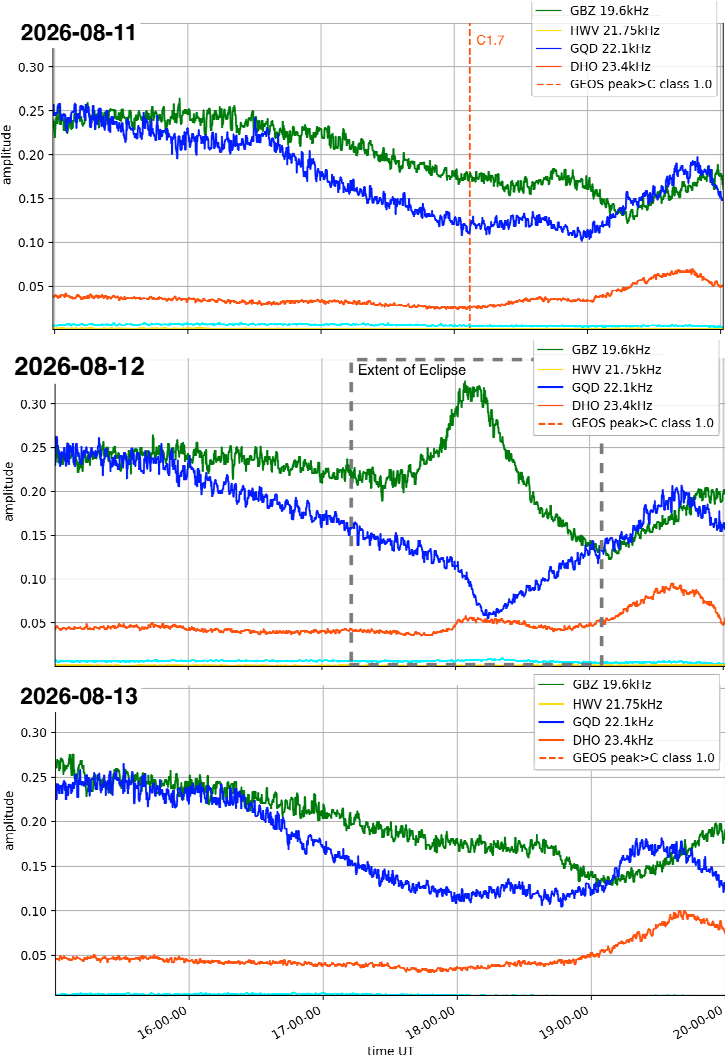


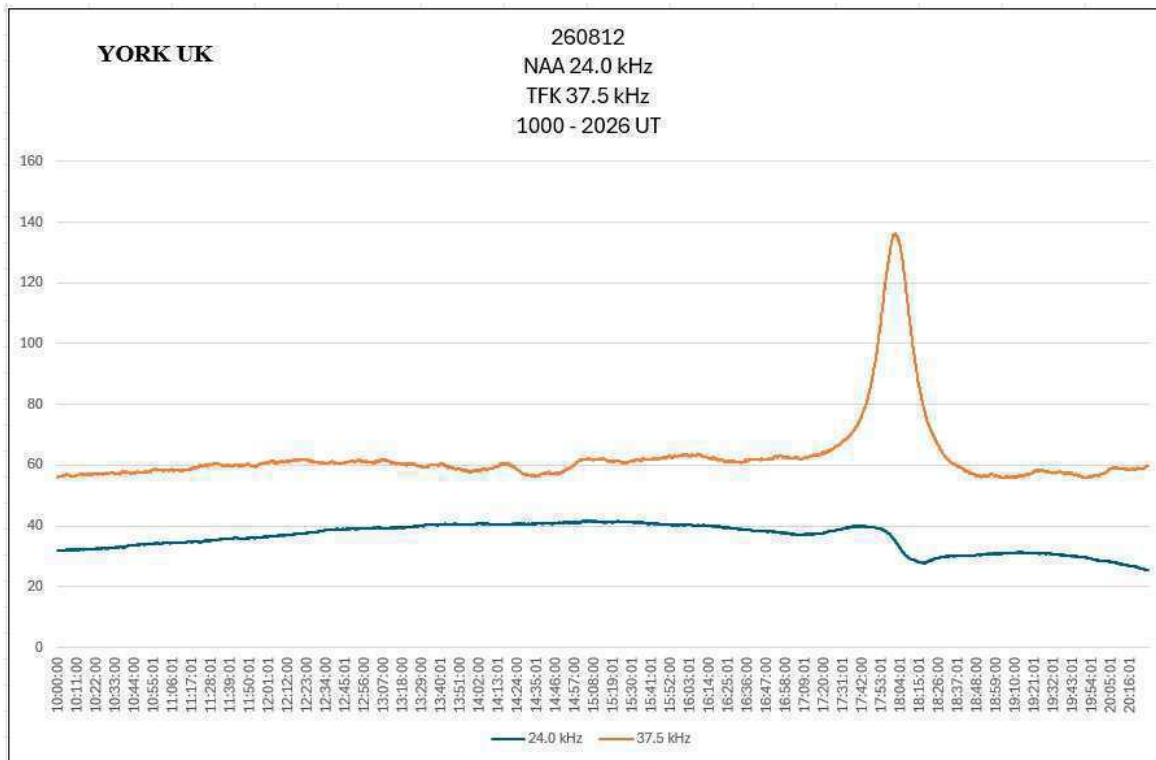
Paul Hyde's recording shows how the path of the eclipse moved through the Atlantic, affecting the signals at different times. It is interesting how the peak at 37.5kHz (Grindavik, Iceland) lies between those from the UK signals, Anthorn and Skelton. Grindavik itself was on the edge of the path of totality, but the ionospheric reflection point would be much closer to the UK. Rhauderfen is much further east, and has the later peak timing. The lower chart is from the next day, showing a normal sunset effect. For full details of the eclipse path, there is an article by Peter Macdonald in the 2025 October copy of the BAA journal.

Mark Edwards and Mark Prescott have also made similar observations, shown on the next page. The first one, from Mark Edwards, includes the 24kHz signal from Cutler, Maine with a slightly earlier peak timing compared with Grindavik. Mark Prescott's compares 19.6kHz (green) with 22.1kHz (blue). The peak eclipse at 19.6kHz occurs slightly ahead of 22.1kHz, the same as seen in Paul Hyde's recording. Charts from the 11th and 13th are also included.

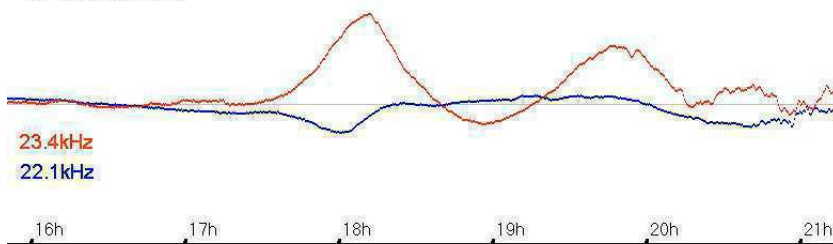


2026-08-12 Partial Solar Eclipse 17:17-19:06 UTC (NW Kent UK)





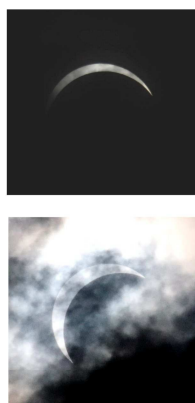
2026 August 12th



Colin Briden also recorded the eclipse at 24kHz and 37.5kHz. 24kHz shows the same peak and trough shape, similar to Mark Edwards'. The lower chart is my own recording at 23.4kHz and 22.1kHz, again showing the timing difference.



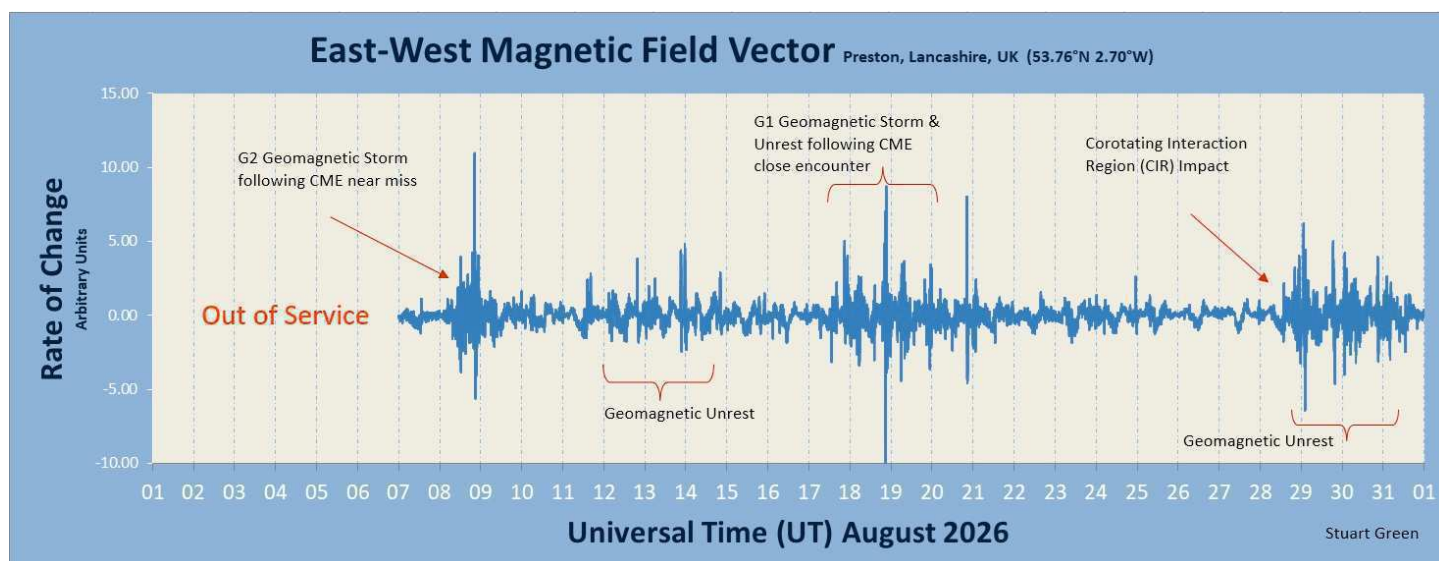
John Cook



Colin Clements

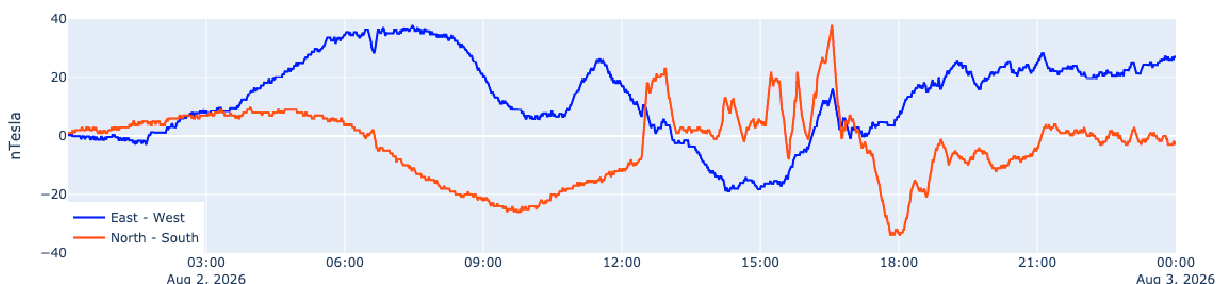
My set-up for observing the eclipse, picture taken by a neighbour who was watching with me. On the right are images of the eclipse taken by Colin Clements in Northern Ireland.

MAGNETIC OBSERVATIONS.

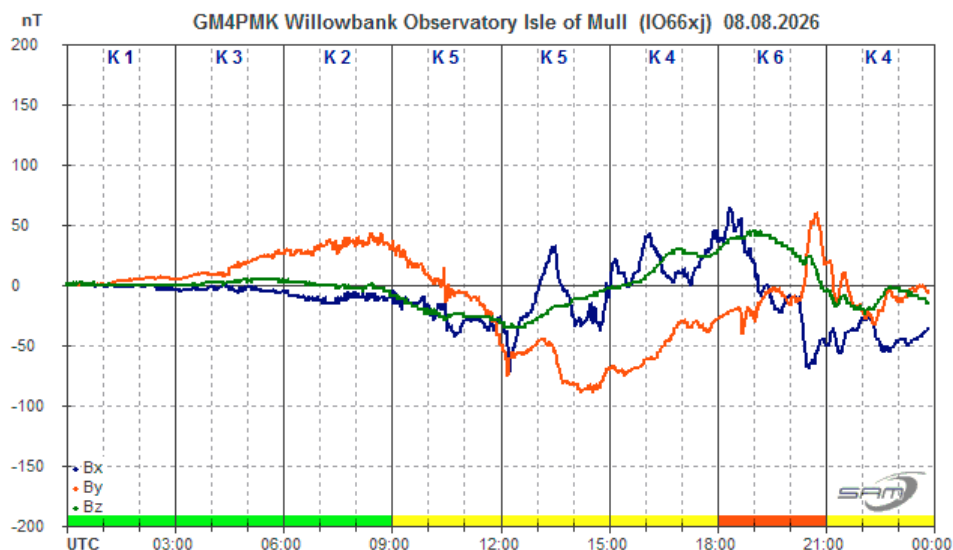


Stuart Green's summary of magnetic activity in August shows some periods of stronger disturbance in a mostly quiet month. The gap during the first week missed a small CME impact on the 2nd, seen here recorded by Nick Quinn:

Steining Magnetometer (50.8 North, 0.3 West)



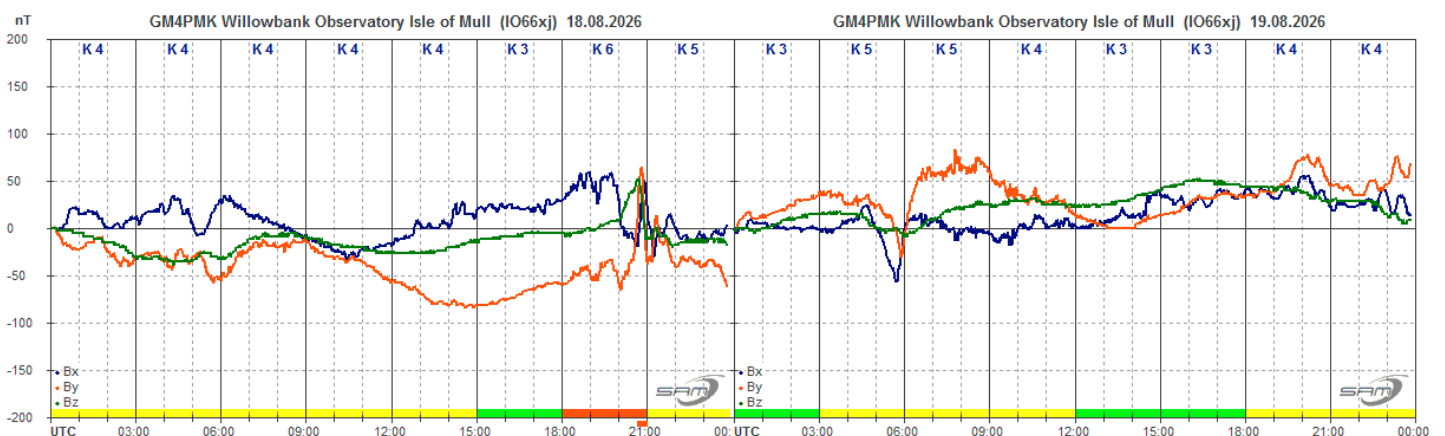
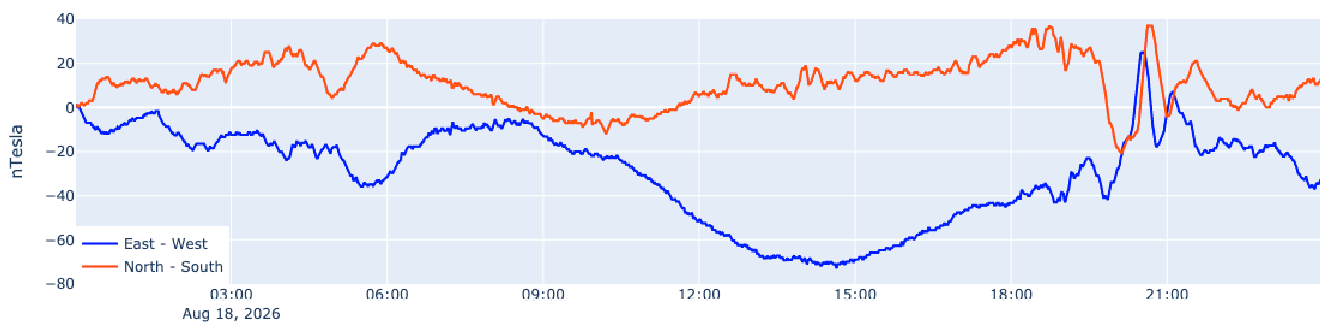
The main disturbance starts around midday, continuing into the 3rd and fading out early in the morning of the 4th. There is a very small pulse at about 06:30UT, also recorded by other observers. It may be an impact feature, although the satellite data gives a CME arrival time of 11:29UT.



There was a glancing blow from another CME on the 8th, shown in the recording by Roger Blackwell. There is a small impact visible at about 10:30, also recorded by Nick Quinn. This one was very short, fading out overnight.

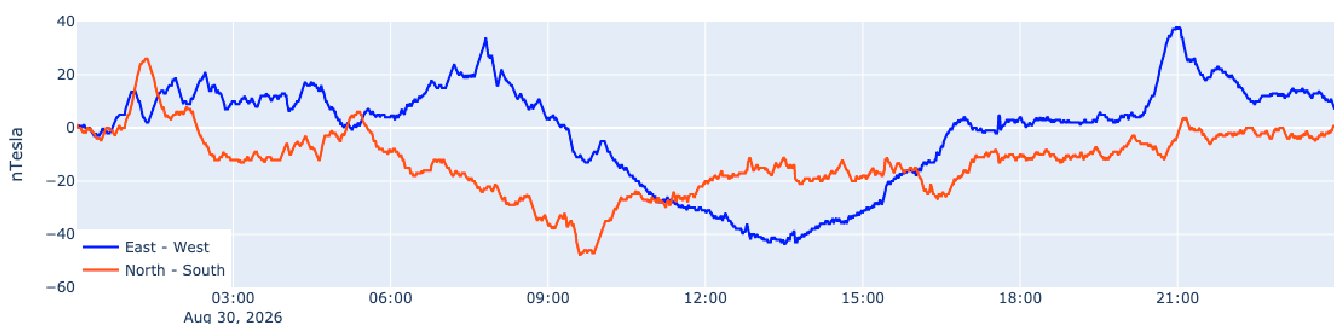
Coronal hole solar winds produced some mild disturbance over the 11th to 15th, before the arrival of a much stronger solar wind on the 18th and 19th. Nick Quinn's recording shows mild pulsing activity for most of the 18th, becoming much more active after 18UT. Roger Blackwell's recording shows this continuing through the 19th. There were some very mild disturbances over the next few days.

Steyning Magnetometer (50.8 North, 0.3 West)



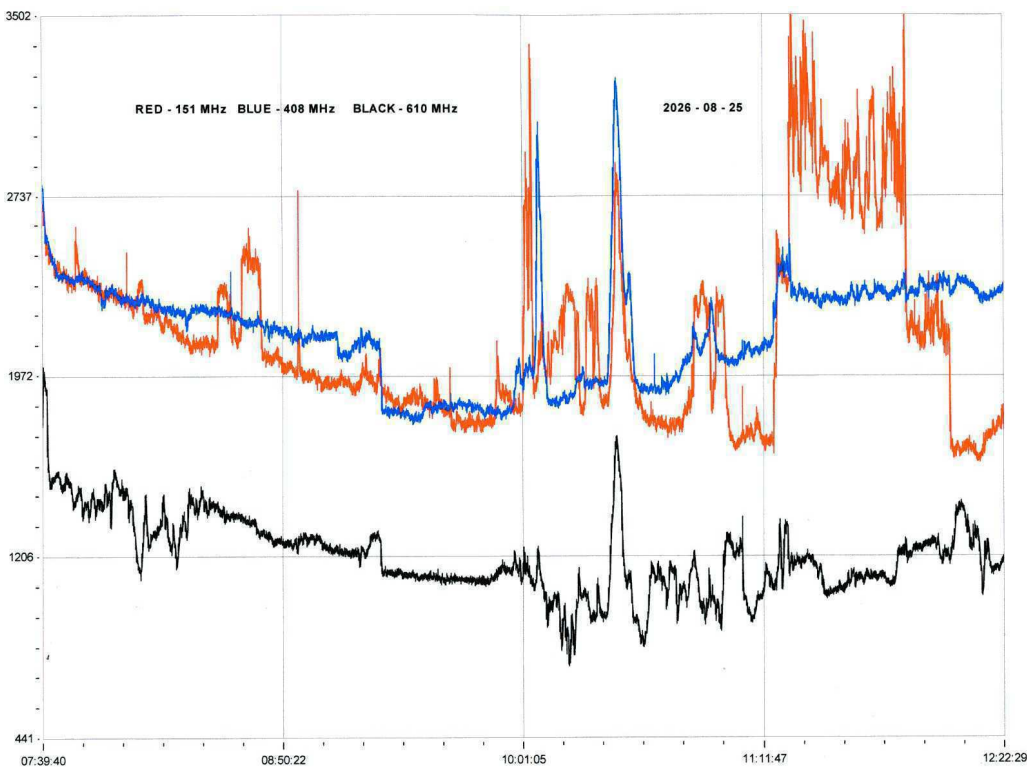
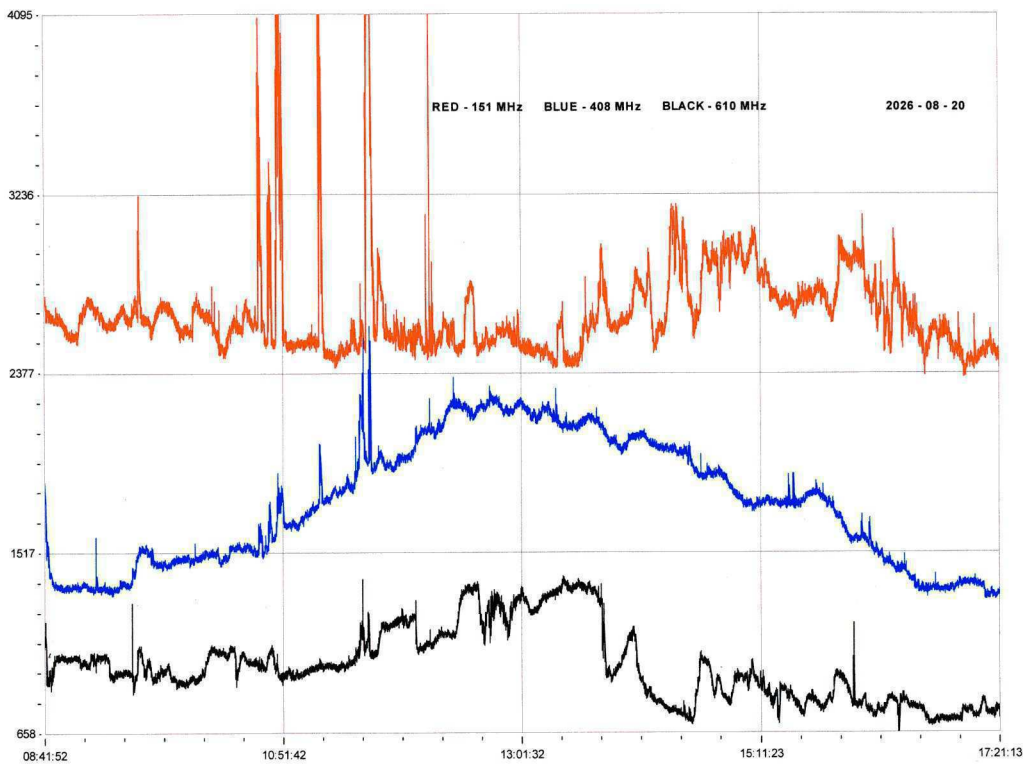
The stronger solar wind produced more disturbance in the last few days of August, Nick Quinn's recording from the 30th showing some of this:

Steyning Magnetometer (50.8 North, 0.3 West)



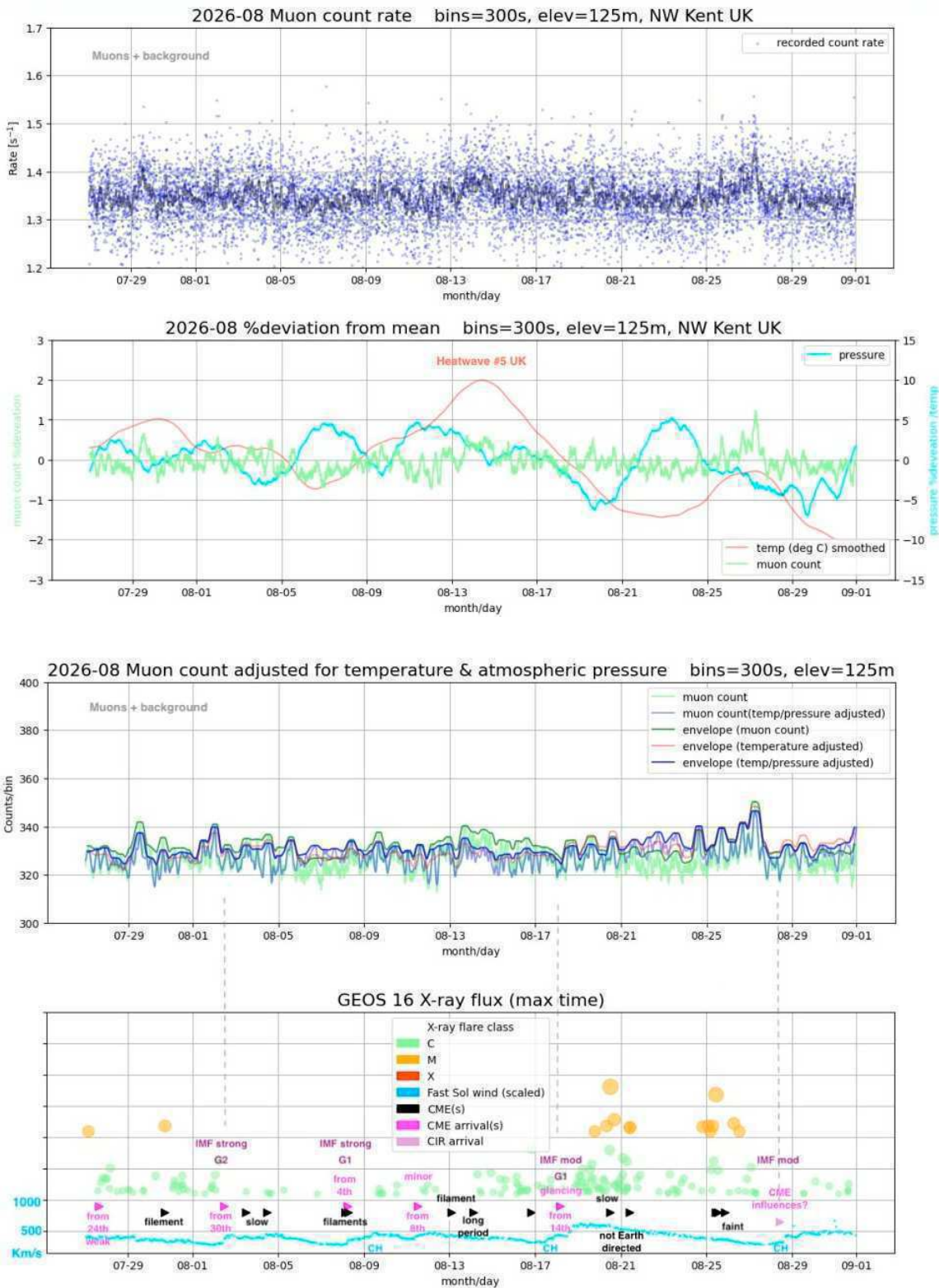
Magnetic observations received from Roger Blackwell, Stuart Green, Nick Quinn and John Cook.

SOLAR EMISSIONS



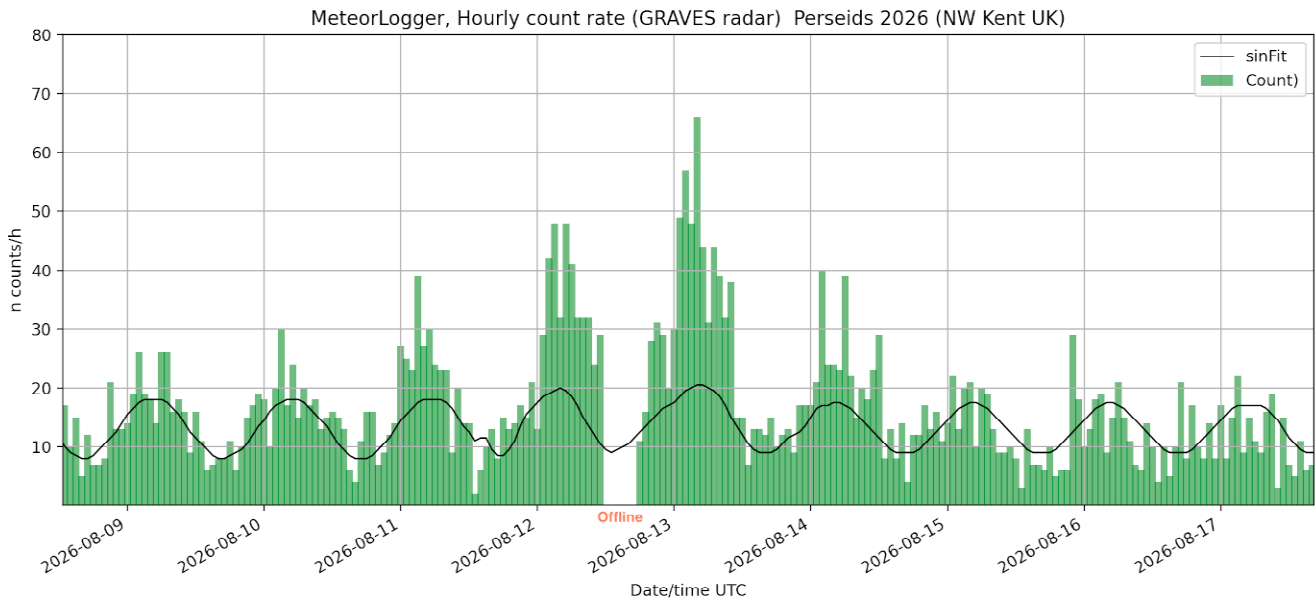
Colin Clements recorded strong VHF/UHF emissions on the 20th and 25th. The close pair of C8.0 and M8.1 flares on the 20th showed strongly at 151MHz (red trace, top image), while the M6.9 flare on the 25th showed well on all three frequencies. There is activity on both days that does not tie-in directly to flares that we have recorded, but the SWPC bulletins do give radio emission alerts. There were plenty of minor flares that did not produce SIDs that added to this activity.

MUONS

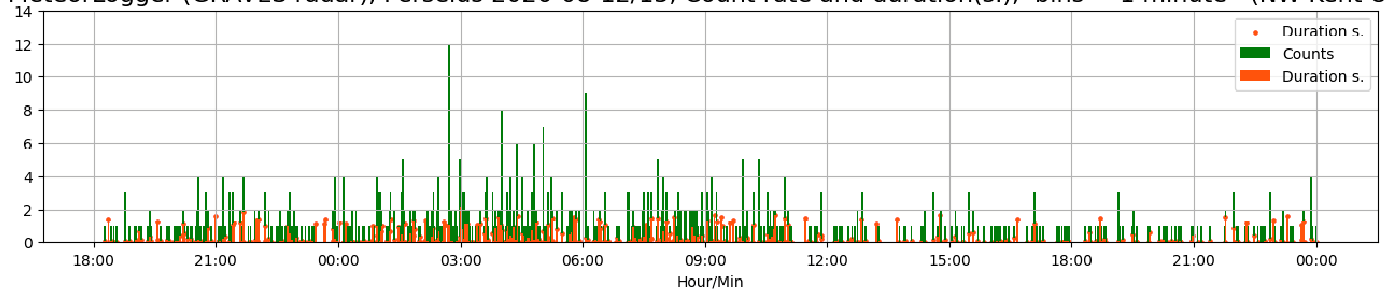


Nark Prescott's Muon charts show a mostly flat flux, with just a few peaks. The raw data in the top chart does show the effect of the heatwave mid-month, with just a mild effect in the corrected data (lower chart). Strong solar winds at the end of July and the CME on the 2nd have produced distinct activity peaks. There is also a rise in Muon flux from the 21st to 28th, matching the solar winds shown in the magnetic data. The glancing CME on the 8th has not had much effect on the data, although there is a small rise over the 12th to 14th from the solar wind.

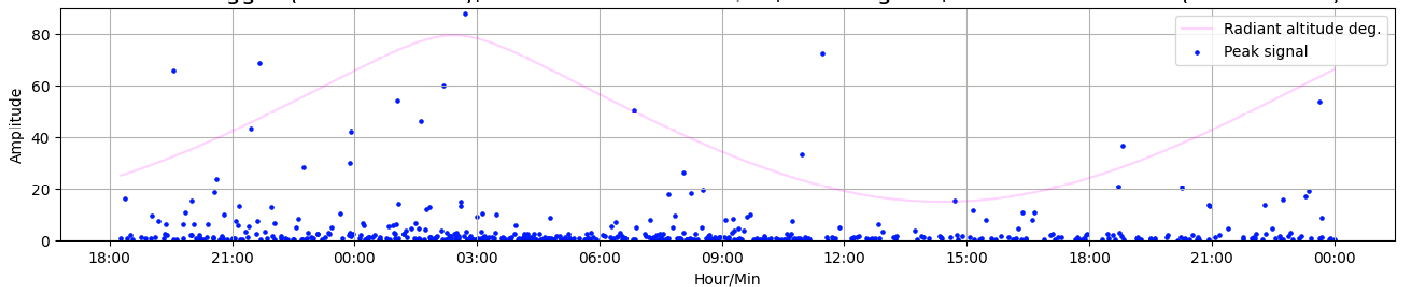
PERSEIDS



MeteorLogger (GRAVES radar), Perseids 2026-08-12/13, Count rate and duration(s.), bins = 1 minute (NW Kent UK)



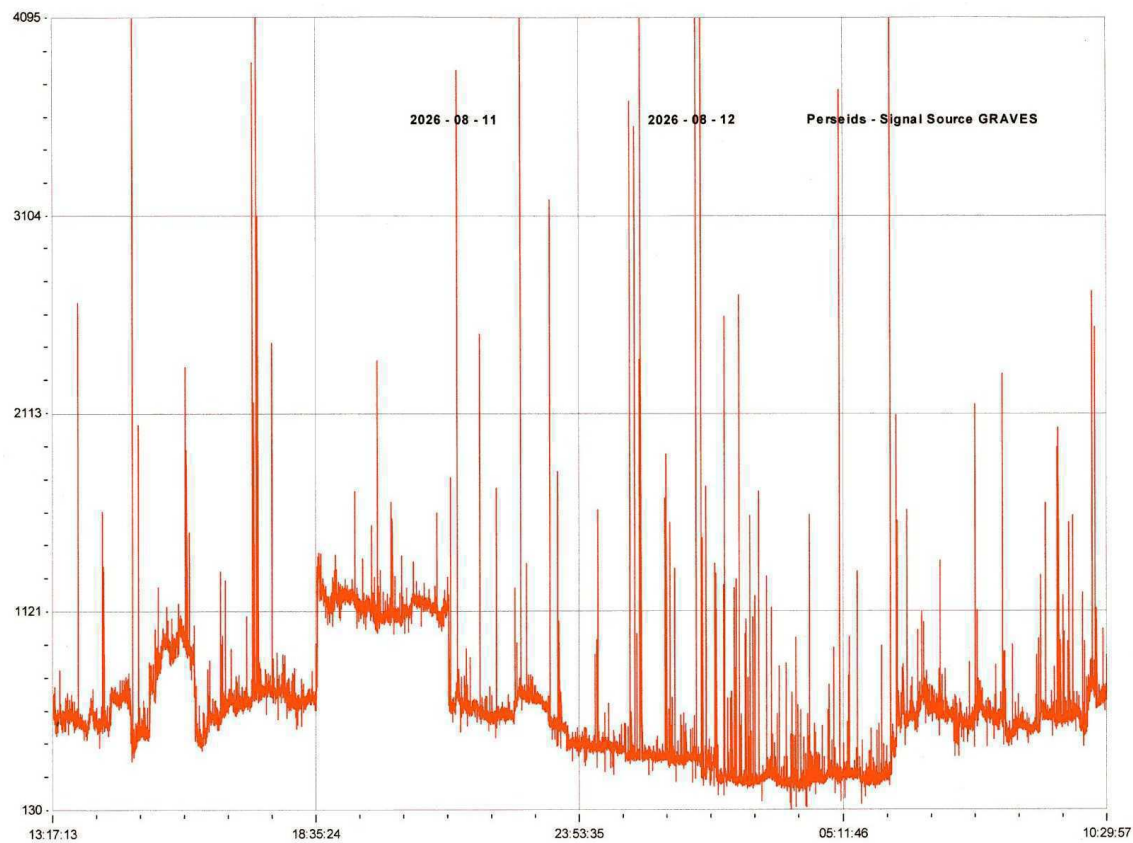
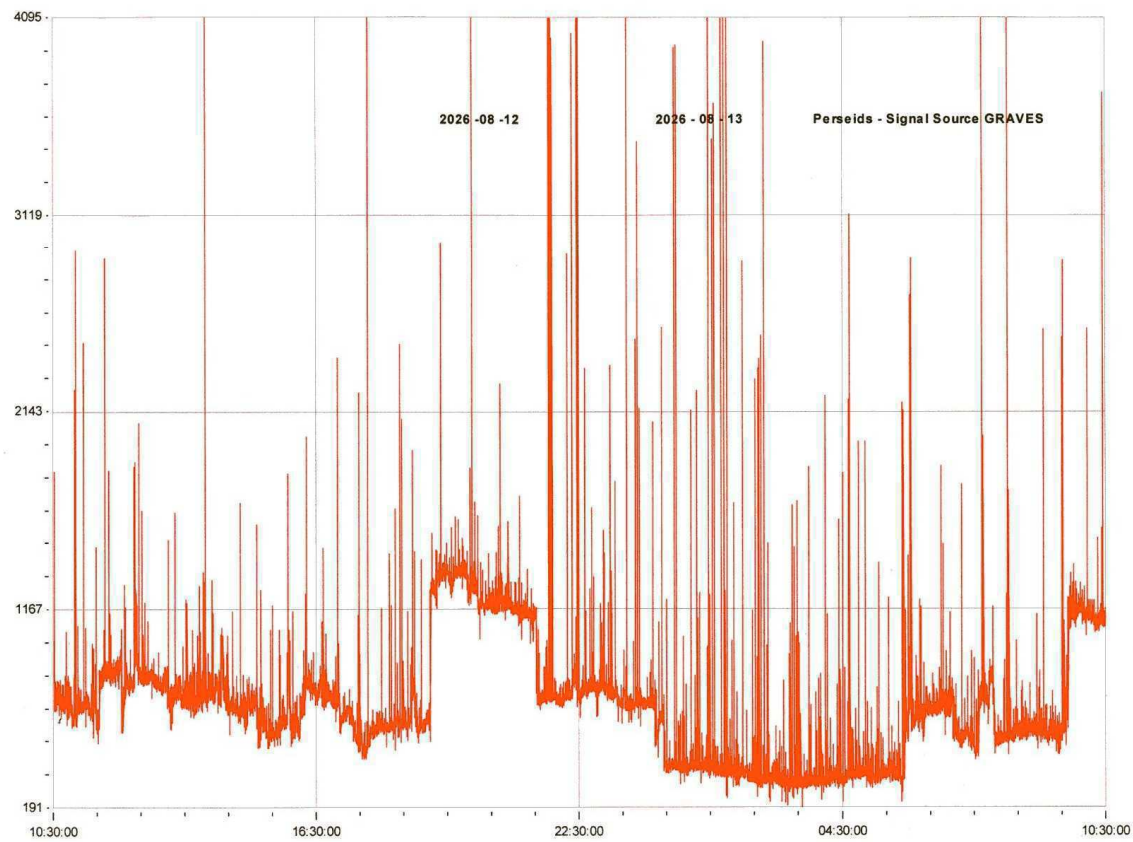
MeteorLogger (GRAVES radar), Perseids 2026-08-12/13, Peak Signals, bins = 1 minute (NW Kent UK)



Mark Prescott also recorded Perseid meteors using the GRAVES signal. The top chart shows activity over nine days, showing the rise and fall in the hourly counts. The lower chart shows the activity peak from 18UT on the 12th to midnight on the 13th. The highest levels were recorded between 03UT and 06UT on the 13th. This was also during the August heatwave, providing an excellent excuse to sit outside and make a visual watch of meteors. The lower chart also shows that his recorded peak was very close to the maximum radiant altitude.

Colin Clements also used GRAVES to make his Perseid counts. Much of the recorded activity has gone over the top of the chart, so a distinct peak is hard to see. The highest density of meteors is easier to see,

around 22UT on the 12th to roughly 06UT on the 13th. His chart for the 11th and 12th shows lower activity, with a smaller peak in the early morning of the 12th.



BAA Radio Astronomy Section.

2026 AUGUST.

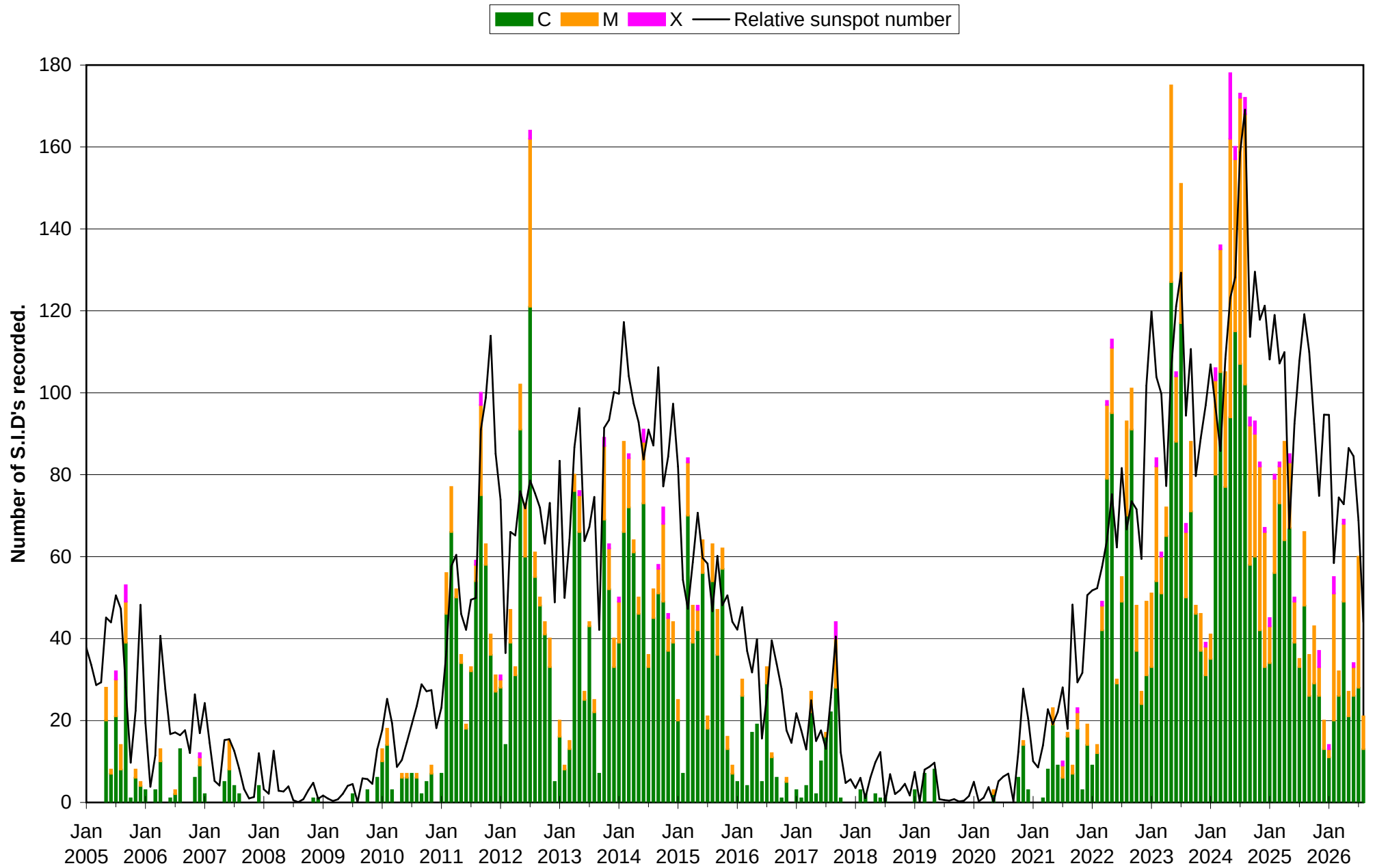
	Xray class	Observers	John Cook (23.4kHz/22.1kHz)	Roberto Battaiola 20.3kHz	Paul Hyde (22.1kHz/24kHz)	Mark Edwards (24.0/18.3/37.5kHz)	Colin Clements (21.75kHz)
			Tuned radio frequency receiver, 0.58m frame aerial.	Modified AAVSO receiver.	Spectrum Lab / PC 1.5m frame aerial.	Spectrum Lab / PC 2m loop aerial.	Tuned Radio Frequency receivers, 0.76m screened loop aerial.
DAY			START PEAK END (UT)	START PEAK END (UT)	START PEAK END (UT)	START PEAK END (UT)	START PEAK END (UT)
12	C1.7	1					
15	C3.3	2	08:17 08:21 08:35 1-		08:17 08:20 08:46 1+		
15	C3.2	4	14:45 14:50 15:22 2		14:44 14:58 16:23 3		
16	C1.7	1	14:49 14:56 15:07 1-				
19	C2.7	2			08:37 08:46 09:19 2		
19	C4.9	4	13:36 13:42 13:55 1		13:36 13:43 ? -		
19	C3.6	2			14:05 14:10 14:29 1		
19	C5.7	4	15:16 15:18 15:32 1-		15:14 15:19 16:00 2+		
19	C2.5	1					
20	M1.8	5	07:42 07:53 08:49 2+		07:40 08:03 09:19 3		07:45 08:07 09:10 2+
20	C8.0	4	11:27 11:31 ? -		11:25 11:30 ? -		
20	M8.1	6	11:35 11:44 13:12 3	11:18 11:43 12:19 2+	11:34 11:39 14:41 3+		11:28 11:41 13:45 3+
20	M2.9	5	16:01 16:17 17:07 2+		16:00 16:15 17:43 3		15:57 16:17 17:24 3
21	C6.2	2	06:31 06:37 06:57 1+				
21	M1.6	5	09:24 09:57 11:55 3+		09:17 09:38 13:32 3+		09:00 10:24 14:25 3+
25	M1.8	4	06:39 06:45 07:16 2	06:26 06:36 06:43 1-			
25	C6.2	4	07:28 07:32 07:43 1-		07:26 07:31 08:11 2		
25	M6.9	6	09:56 10:02 10:52 2+	09:54 10:02 10:34 2	09:34 09:59 11:12 3		09:37 10:01 11:56 3+
25	C4.7	2			12:47 12:56 13:21 2		12:47 13:01 14:05 2+
26	M2.2	4	06:33 06:38 07:04 1+	06:29 06:34 06:57 1+	06:31 06:39 07:14 2		
26	M1.0	5	12:13 12:19 13:01 2+		12:11 12:17 13:32 2+		12:13 12:21 13:55 3
29	?	1			18:56 19:03 ? -		

BAA Radio Astronomy Section.

2026 AUGUST.

	Xray class		Steve Parkinson (Various)	Colin Briden	Phil Rourke (23.4kHz)	Mark Prescott (19.6kHz/22.1kHz)	John Elliott (18.3kHz)
			Tuned radio frequency receiver, frame aerals.		Spectrum Lab, 0.6m frame aerial.	SpetrumLab/Starbase, Active mini-whip aerial.	Tuned radio frequency receiver, 0.5m frame aerial.
DAY			START PEAK END (UT)	START PEAK END (UT)	START PEAK END (UT)	START PEAK END (UT)	START PEAK END (UT)
12	C1.7			07:30 07:35 07:41 1-			
15	C3.3						
15	C3.2			14:45 14:51 15:01 1-		14:51 15:01 15:30 2	
16	C1.7						
19	C2.7			08:39 08:49 09:02 1			
19	C4.9			13:36 13:43 13:51 1-		13:41 13:46 ? -	
19	C3.6			14:07 14:09 14:15 1-			
19	C5.7			15:15 15:19 15:30 1-		15:19 15:22 ? -	
19	C2.5			18:03 18:07 18:10 1-			
20	M1.8			07:48 08:03 08:28 2		07:53 08:06 09:10 2+	
20	C8.0			11:23 11:31 ? -		11:30 11:35 ? -	
20	M8.1			11:39 12:27 ? -		11:37 11:47 13:08 3	
20	M2.9			16:00 16:15 16:43 2		16:05 16:18 17:02 2+	
21	C6.2			06:31 06:39 06:43 1-			
21	M1.6			09:22 09:41 11:51 3+		09:28 09:49 13:05 3+	
25	M1.8			06:37 06:46 07:15 2		06:42 06:51 07:21 2	
25	C6.2			07:27 07:33 07:44 1-		07:30 07:39 08:05 2	
25	M6.9			09:29 09:59 11:02 3		09:39 10:08 11:44 3	
25	C4.7						
26	M2.2			06:32 06:39 07:06 2			
26	M1.0			12:13 12:19 12:43 1+		12:16 12:23 13:10 2+	
29	?						

VLF flare activity 2005/26



BARTELS DIAGRAM

ROTATION	KEY:	DISTURBED.	ACTIVE	SFE	B, C, M, X = FLARE MAGNITUDE.										Synodic rotation start (carrington's).												
2597	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	1
	F	C	CC		CM	CCM	C		CC					C	CCC	C	CM	MM	CCC	CCC			CCC	CCC	C	C	CC
2598	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
	F	CCCC	CCCC	MMMM	CC	CC	CCM	MM	CCM	MM	CCM	CC	CCCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC
2599	29	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
	F		CCC		C	CC	C	CCCC	C		CM	CC	CCCC														
2600	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
	F	MCCC	MMMX	CCCC	CCCC																						
2601	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	19
	F	MCCM	CCMC	CCMC	CC	MC	CC	CCC	CCMM	MC	CCCM	CMCC	MMCM	MXMX	MXMX	MXMX	MXMM	MXMM	MXMM	MXMM	MXMM	MXMM	MXMM	MXMM	MXMM	MXMM	MXMM
2602	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
	F	CCCM	CM	CCMM	MCCC	C	CCCC	XCC	CCCC	MMMX	CM	CMCX	XCXM	CMCC													
2603	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
	F	CCCC	MMMX	CCMC	MCCC	CMCC	CCCC	CCCC	MMMX	MMMX	MMMX	MMMX	MMMX	MMMX	MMMX	MMMX	MMMX	MMMX	MMMX	MMMX	MMMX	MMMX	MMMX	MMMX	MMMX	MMMX	MMMX
2604	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
	F	MMMM	MCCM	MMCC	MCXM	MMMM	MMCC	CMCM	MCCM	MCCM	MCXM	CM	MCXM	CCM	MCC												
2605	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
	F	MMMM	CCMM	MCCM	MC	CCCM	MXMX	CCCC	CMC	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM
2606	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
	F	MMMX	CCCC	MCCC	M	MMMM	CMC	MMMM	MXMX	MMMM	MCX	CC	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
2607	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
	F	CCMC	MXM	MC	MMCC	CMM	C	MCC	CCX	CCMC	CCMM	C	MC	MCCM	MCM												
2608	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
	F	CM	CC	CCMM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM
2609	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
	F	MC	CC	CCCM		CC	C		MC		MMC	MCC	CCM	XCCM	C	MCM	MCCM	CCM	MCM								
2610	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
	F	CM	M	MC	C	M	MM	MM	MM	MM		C	C	X	CCX	MM											
2611	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
	F	CCCC	CC	CC	M	MC	CC	CCC																			
2612	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	9
	F	MC	C	C	CCMC	CC	C	CCMC	C	MMMX	MCC	M	CCC	C	CCC	CCCC	C										
2613	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
	F	CC	CCCC	CC	C	CCCC	C	CC	C	M	C	CCC	CC	CC	MCCC	CCC	CCM	CCCC									
2614	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
	F	CCC	CCC	CCCM	MMMM	MMMM	MMCC	CMCM	C	CCC																	
2615	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	1
	F	CCCC	CCCC	CCCC	C	CC	CCCC	CC	CX	MXMM	CM																
2616	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
	F	MC	M		CC	CC	CC	C	C	CCCC	C	C	CCM	MMCM	CCMM	CX	CCCC	CCCC									
2617	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
	F			C																							
2618	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
	F	C					C	C	CMC	C	M	CCCM	CMC	C	CCC	CCMM	CM	CCMM	CCCC								
2619	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
	F		C	CM	MCMM	CM	CC	CCM	C	CCM		C		M		C	CCCC										
2620	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
	F	C			C	M	MC	C		MCC	MCCC	MMMC	CCM	CM	C	CCM											
2621	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
	F	MCCM	CCCC	CCMM	MCM	CC	C																				
2622	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
	F	MCX		C	X	M																					
2623	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
	F	M	CC	CC	C	C																					
2624	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
	F																										
2625	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
	F	CCCC	MXMM	MXMM	MXMM	MXMM	CC		MMMC																		
2626	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
	F	C	CCC		C	CCC	C																				
2627	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
	F	MCCC	CC	C			C	CCM	MCCM	MMCC		CC	C	M													
2628	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
	F		CCMM	MXMM	MCCM	CMCC	MC	CCMM																			
2629	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
	F			CCC	M	C		CC	C																		
2630	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
	F		C	C		M	M			CCC	CCC	CCC	C		CCC	MCCC	MMMM	CM	MCMM	MMMM	MMMM						
2631	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
	F	CM		CC	C			MC	CCCM	MCC					CM												
2632	8	9	10	11	12	13	14	15	16	17	18	19	20	21													