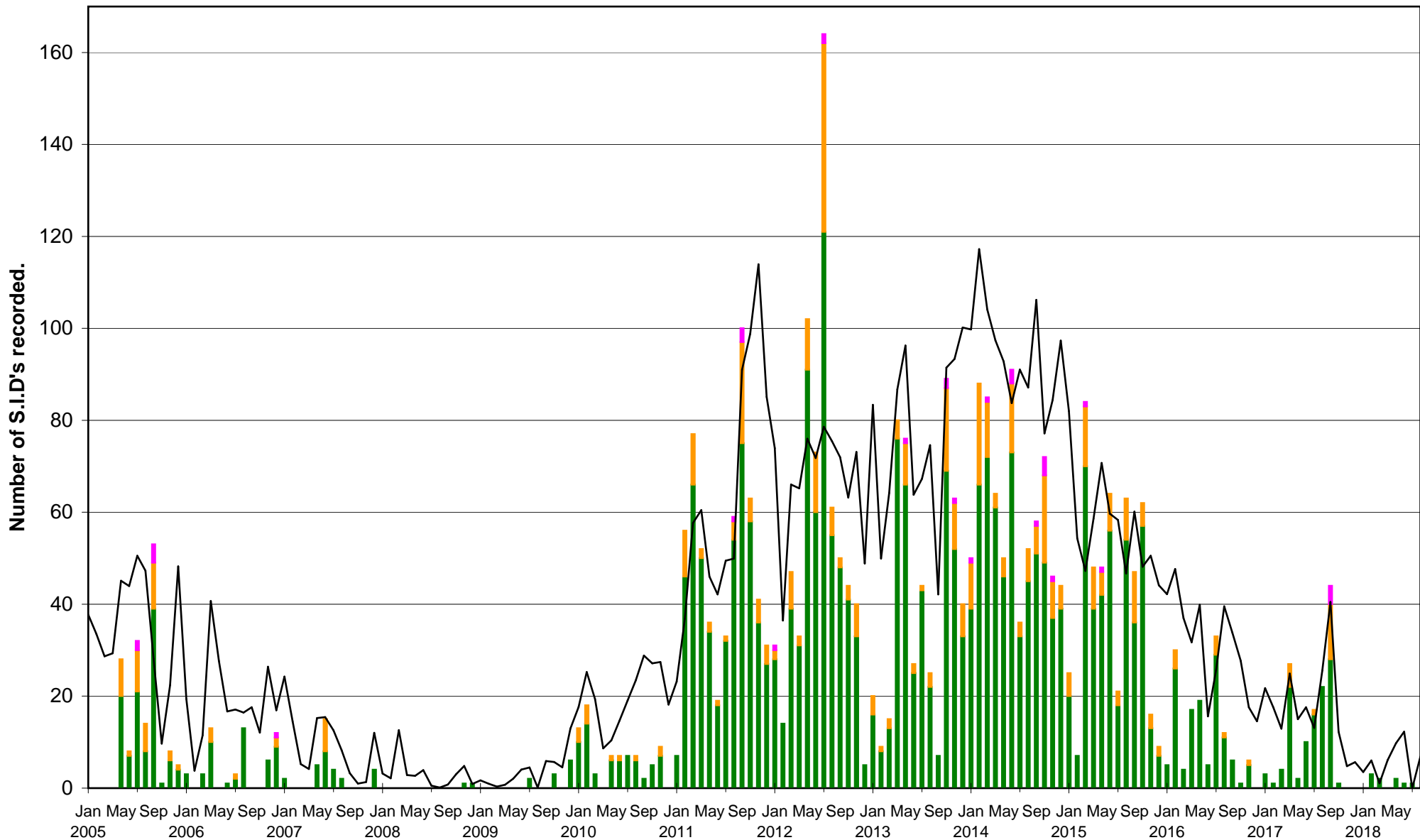
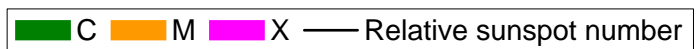


	Xray class	Observers	John Cook (23.4kHz/22.1kHz)	Roberto Battaiola (18.3kHz)	Paul Hyde (22.1kHz/24kHz)	Mark Edwards (24.0kHz)	Colin Clements (23.4kHz/18.3kHz)
			Tuned radio frequency receiver, 0.58m frame aerial.	Modified AAVSO receiver.	Spectrum Lab / PC 1.5m frame aerial.	Spectrum Lab / PC 2m loop aerial.	Tuned Radio Frequency receivers, 0.76m screened loop aerial.
DAY		0	START PEAK END (UT)	START PEAK END (UT)	START PEAK END (UT)	START PEAK END (UT)	START PEAK END (UT)

	Xray class		Steve Parkinson (Various)	Andrew Thomas (23.4kHz)	Phil Rourke (23.4kHz)	Jim Barber	John Elliott (18.3kHz)
			Tuned radio frequency receiver, frame aeriels.	Tuned radio frequency receiver, 0.6m frame aerial.	Spectrum Lab, 0.6m frame aerial.	Spectrum Lab, 0.6m frame 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)

	Xray class		Colin Briden (22.1kHz)				
			Spectrum Lab / PC, 1.2m frame aerial.				
DAY			START PEAK END (UT)	START PEAK END (UT)	START PEAK END (UT)	START PEAK END (UT)	START PEAK END (UT)

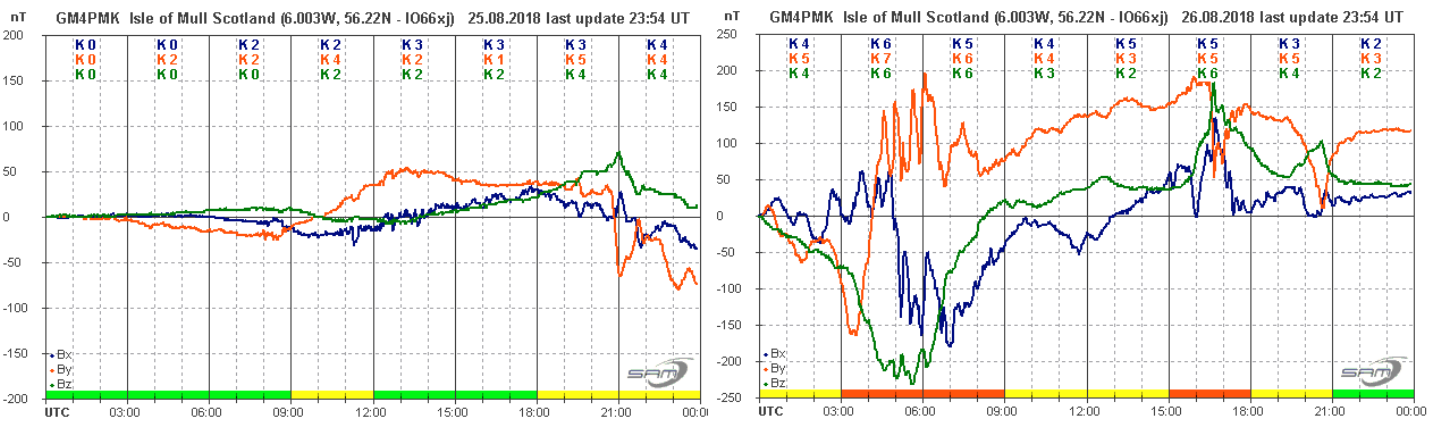
VLF flare activity 2005/18.



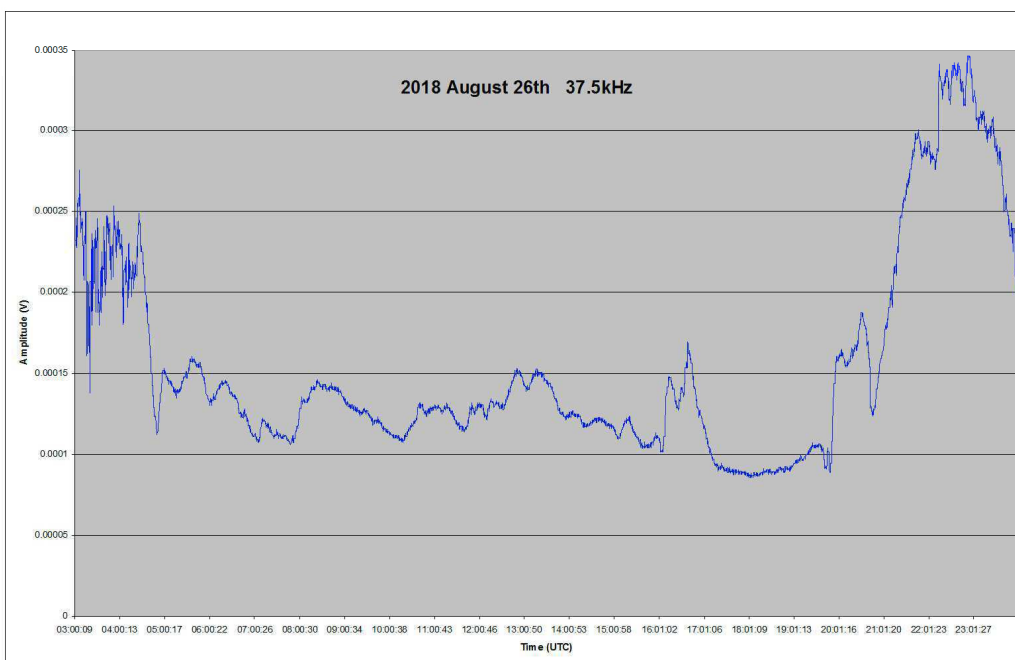
Once again there are blank reports all round this month. The GOES X-ray data showed very little activity, with a background level at or below A1 for most of the time. There was a brief increase on the 24th–26th with the presence of AR12720. This was a very small active region and produced a B4.1 flare on the 25th. The SWPC bulletins list several A1 flares in the first half of August, barely discernible above the background, and certainly not candidates for producing SIDs.

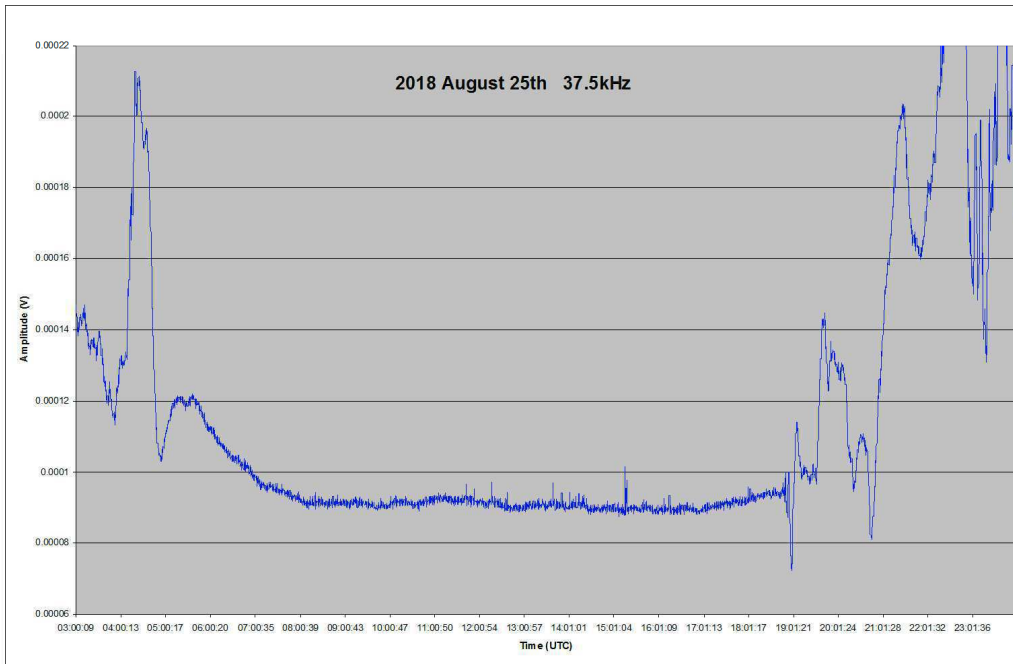
MAGNETIC OBSERVATIONS.

Magnetic disturbances have been the main feature in August, with a very active period recorded over the 26th and 27th. According to the STCE bulletin a filament eruption on the 20th caused a slow moving CME directed towards Earth, arriving on the 25th. There was also a northern hemisphere coronal hole present, creating a high speed wind that added to the CME on the 26th producing some very active conditions. The effects can be seen in the charts recorded by Roger Blackwell:

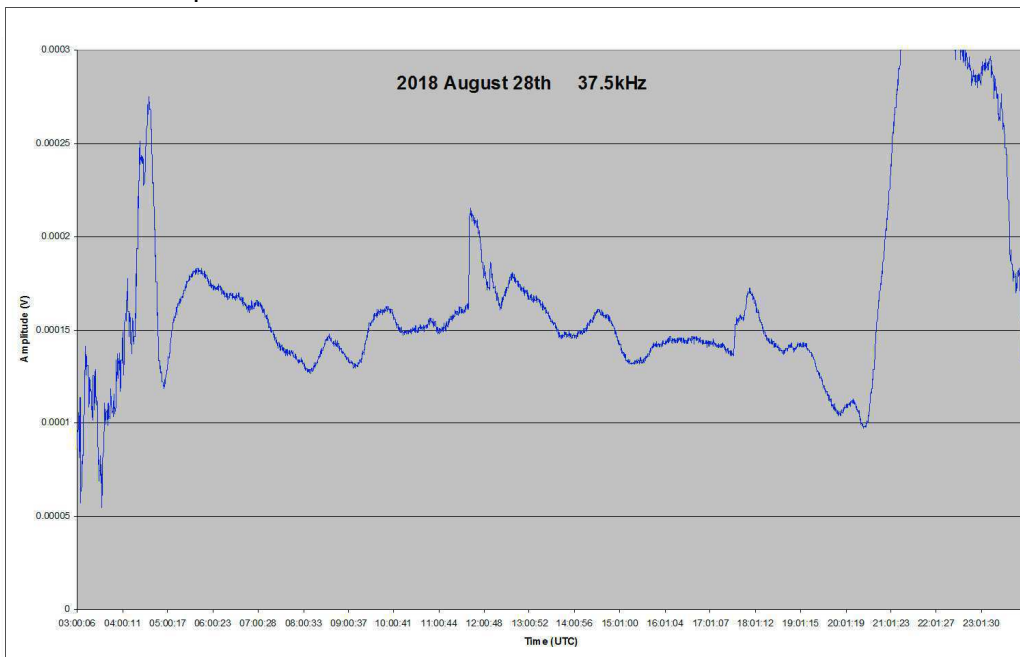


Note the change in vertical scale on the 26th. Conditions were much quieter for a while on the 27th, but were again disturbed during the evening. As might be expected, the 37.5kHz signal from Grindavic responded to this activity, as shown in Mark Edward's recording from the 26th:





Mark's plot from the 25th (above) shows that the 21:00 magnetic transient is lost in the sunset, but there are VLF transients present in the 2 hours before this.



Similar 37.5kHz effects were seen on the 27th as the magnetic disturbance weakened. There were also disturbances on the 28th, shown in Mark's recording, although there were no magnetic disturbances on the 28th. GOES particle data does however show very strong and rapid changes in particle flux around midday on the 28th, matching well with the VLF transient. Significant particle flux changes were also present on the 26th and 27th.

There were periods of much less active magnetic disturbance between the 15th and 21st August. These were all due to high speed wind streams from a number of smaller coronal holes. These were all confined to ± 60 nT on Roger's recordings, compared to ± 250 nT on the 27th. Similar very mild disturbances were recorded on the 1st, 7th, and 11th, all due to CHSS effects.

Magnetic observations received from Roger Blackwell, Colin Clements and John Cook.

BARTELS DIAGRAM

ROTATION	KEY:	DISTURBED.	ACTIVE	SFE	B, C, M, X = FLARE MAGNITUDE.	Synodic rotation start (carrington's).																							
2485	F	25 C	26 CMCC	27 MCMC	28 MMCM	29 MMCM	30 CMCM	2015 October 1 CCM	2 CCMM	3 CCCC	2169 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
2486	F	22 C	23	24	25	26 C	27 C	28 C	29 CC	30 CCCC	31 CCCM	2015 November 1 CCCC	2 CCCC	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
2487	F	18	19	20	21 C	22	23	24	25	26	27	2015 December 28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2488	F	15	16	17	18	19	20	21	22	23	24	2016 January 25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	
2489	F	11	12	13	14	15	16	17	18	19	20	21	2016 February 22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	
2490	F	7	8	9	10	11	12	13	14	15	16	17	2016 March 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2491	F	5	6	7	8	9	10	11	12	13	14	15	2016 April 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2492	F	1	2	3	4	5	6	7	8	9	10	11	2016 May 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2493	F	28	29	30	1	2	3	4	5	6	7	8	9	2016 June 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2494	F	25	26	27	28	29	30	31	1	2	3	4	5	2016 July 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2495	F	21	22	23	24	25	26	27	28	29	30	1	2	2016 August 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2496	F	18	19	20	21	22	23	24	25	26	27	28	29	30	2016 September 1	2	3	4	5	6	7	8	9	10	11	12	13		
2497	F	14	15	16	17	18	19	20	21	22	23	24	25	26	2016 October 1	2	3	4	5	6	7	8	9	10	11	12	13		
2498	F	10	11	12	13	14	15	16	17	18	19	20	21	22	2016 November 1	2	3	4	5	6	7	8	9	10	11	12	13		
2499	F	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	2	
2500	F	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	29	
2501	F	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	26	
2502	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	
2503	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	
2504	F	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	
2505	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	
2506	F	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	10
2507	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	
2508	F	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	2	3
2509	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	
2510	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	
2511	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	
2512	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
2513	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	
2514	F	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	11	12
2515	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	
2516	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	
2517	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	31	
2518	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	
2519	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	
2520	F	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	22	23	
2521	F	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	
2522	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	
2523	F	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	11	12	
2524	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	