

X-ray class	Observers	John Cook (23.4kHz)	John Cook (20.9kHz)	Mike King (20.9kHz)	Bob Middlefell (22.1kHz)	Roberto Battaiola (21.75kHz)
DAY		START PEAK END (UT)	START PEAK END (UT)	AAVSO receiver.	Tuned radio frequency receiver, 0.58m frame aerial.	Tuned radio frequency receiver, 0.5m frame aerial.
3	C1.8	3 12:02	12:04	12:20	1-	
5	C2.6	4 13:05	13:10	13:40	2	
5	C8.1	5 15:18	15:22	16:00	2	
6	M1.4	1				
7	C9.7	4				
22	C2.6	1				
26	C1.7	2				
26	C7.7	5				
26	C9.1	4				
26	M1.3	5				
27	M7.9	6				
29	C2.3	1				
30	C1.8	1				

X-ray class	Observers	Colin Clements (23.4kHz)	Karen Holland (19.5kHz)	Giuseppe Miceli (16.8kHz)	John Wardle (20.9kHz)
DAY		START PEAK END (UT)	START PEAK END (UT)	AAVSO receiver, 0.76m screened loop aerial.	Gyrorator MKII receiver, 0.56m loop aerial.
3		12:02	12:04	12:13	1-
5		13:06	13:09	13:46	2
5		15:18	15:23	16:19	2+
6					
7		08:00	08:04	08:22	1
22					
26		13:43	13:57	14:27	2
26		14:43	14:52	15:33	2+
26		16:55	17:03	17:22	1+
27		15:44	15:52	16:49	2+
29					
30					

April has seen the greatest level of activity so far this year, with a number of M-class flares. There were no flares on the 12th., 14th., and 18th. Apart from those days noted above, the rest of the month saw low level B-class events.

This Chart was provided by Alan Melia, G3NYK, and shows the flares of April 26th. It records the signal strength of the DCF39 transmitter on 138kHz as received by CT1DRP in Portugal. The effects are rather less than at 15..30kHz, but the M1.3 event is particularly well defined. The time axis is not too clear, as some of the digits are missing. Midnight is towards the right, where strength is high. Alan has also supplied 2 links of interest:-

<http://toga.sheffield.ac.uk/%7Esferix/vlf.png> shows the current strength of VLF signals in Sheffield, and is ideal to use when tuning in a new receiver to check which signals are active.

<http://www.weaksignals.com/> is a soundcard software-radio system called WINRADIO by I2PHD. I have not tried this myself yet, but it sounds interesting. Observers might also be interested in looking at the activities of the Italian solar group at <http://grupposole.astrofili.org> (also in English) and [www.iaragroup.org/sole/index.htm](http://iaragroup.org/sole/index.htm) Thanks to Roberto Battaiola for providing these links. Remember also to check our own website at www.britastro.org/radio where the latest circular can now be found.

