

2010 MAY

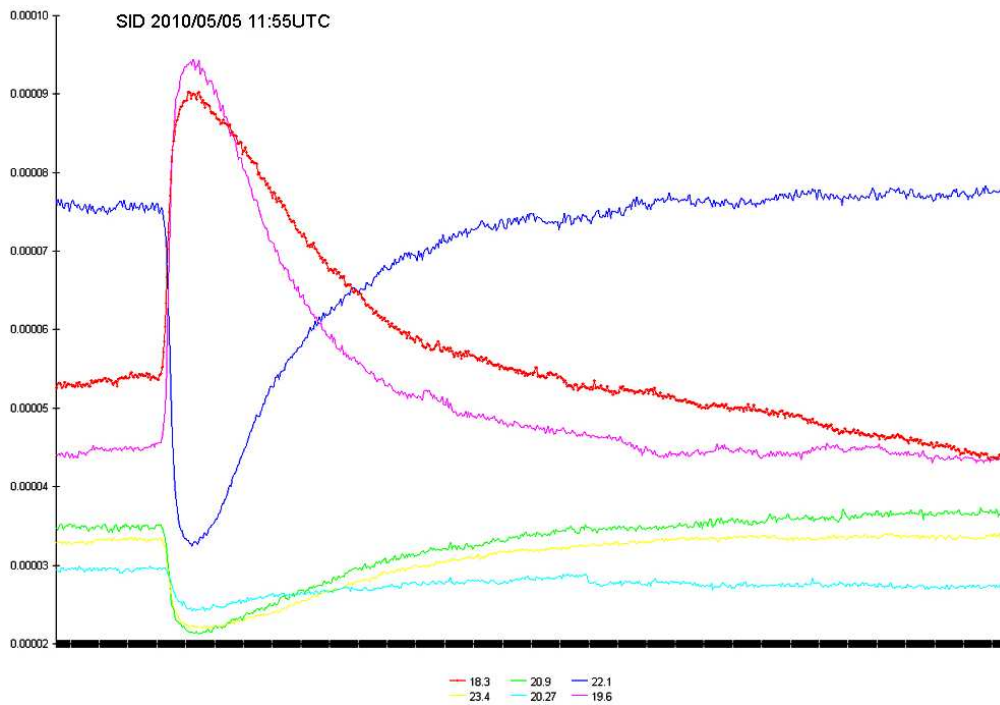
DAY	Xray class	Observers	John Cook (23.4kHz)		Roberto Battaiola (18.3kHz)		Nigel Curtis (23.4kHz)		Bob Middlefell (22.1kHz)		Mark Edwards (18.3kHz)			
			Tuned radio frequency receiver, 0.58m frame aerial.	START PEAK END (UT)	Modified AAVSO receiver.	START PEAK END (UT)	Gyrator receiver, shielded loop aerial.	START PEAK END (UT)	Tuned radio frequency receiver, 0.5m frame aerial.	START PEAK END (UT)	Spectrum Lab / PC 2m loop aerial.	START PEAK END (UT)		
4	C3.6	6	16:25	16:29	16:37	1-	16:20	16:30	16:51	1+	16:21	16:32	16:53	1+
5	C2.3	5	07:13	07:17	?	-	07:07	07:16	07:28	1	07:12	17:18	07:30	1-
5	C8.8	7	11:49	11:56	12:45	2+	11:44	11:51	12:31	2+	11:48	11:54	13:09	2+
5	M1.2	7	17:16	17:20	?	-	17:13	17:19	17:29	1-	17:17	17:21	18:10	2+
7	C2.0	3					07:32	07:54	08:09	2				
8	C9.3	2					04:51	04:59	05:05	1-				
8	C1.8	5	11:45	11:52	12:05	1	11:42	11:50	12:01	1				

DAY	Xray class	Observers	Colin Clements (23.4kHz)		Karen Holland (19.5kHz)		Mike King (20.9kHz)		John Wardle (23.4kHz)		Peter King (16kHz)			
			AAVSO receiver, 0.76m screened loop aerial.	START PEAK END (UT)	Tuned radio frequency receiver, 0.58m frame aerial.	START PEAK END (UT)	AAVSO receiver. Tuned loop aerial.	START PEAK END (UT)	Gyrator MKII receiver, 1m loop aerial.	START PEAK END (UT)	Own designed receiver, 1.4m loop aerial.	START PEAK END (UT)		
4	C3.6										16:15	16:15	16:35	1
5	C2.3										11:40	11:55	12:00	1
5	C8.8		11:51	11:56	12:32	2					17:15	17:20	17:25	1-
5	M1.2		17:18	17:20	?									
7	C2.0													
8	C9.3													
8	C1.8										11:40	11:50	11:55	1-

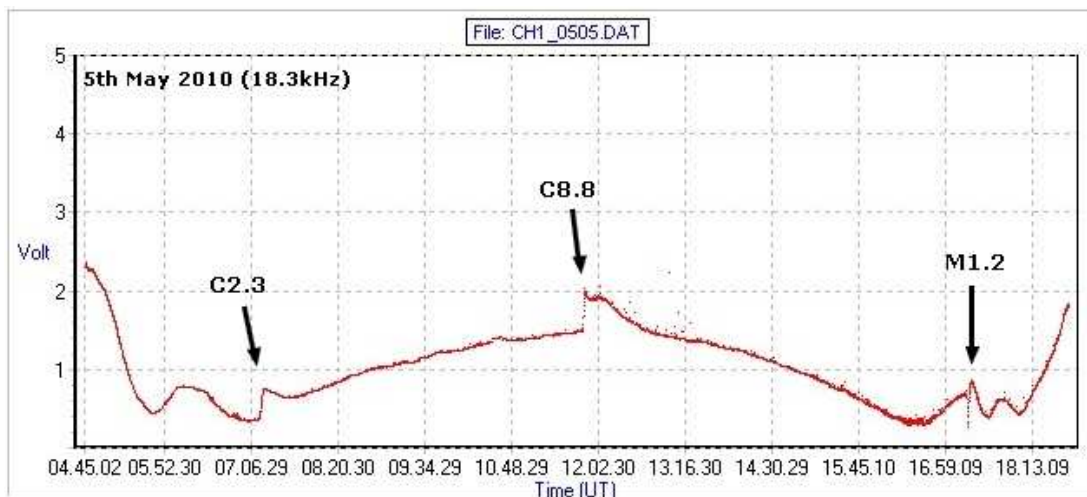
DAY	Xray class	Observers	Paul Hyde (22.1kHz)		Gordon Fiander (18.3kHz)		John Elliott (18.3kHz)		Martyn Kinder (18.2kHz)				
			Tuned radio frequency receiver, 0.96m frame aerial.	START PEAK END (UT)	PC sound card.	START PEAK END (UT)	Tuned radio frequency receiver, 0.5m frame aerial.	START PEAK END (UT)	Tuned radio frequency receiver, 0.58m frame aerial.	START PEAK END (UT)			
4	C3.6		16:22	16:30	?	-				16:22	16:32	17:07	2
5	C2.3		07:12	07:18	07:39	1+				07:09	07:20	07:55	2+
5	C8.8		11:49	11:55	12:42	2+				11:50	11:55	12:35	2
5	M1.2		17:16	17:21	18:18	2+				17:15	17:23	17:57	2
7	C2.0		07:35	07:54	08:11	2				07:35	07:55	08:20	2
8	C9.3		04:57	05:00	05:10	1-							
8	C1.8		11:44	11:53	12:20	2				11:46	11:54	12:01	1-

May started in sparkling fashion with the SIDs listed above. The 9th to 13th produced some smaller B-class flares, and the 14th to 21st remained blank. A few further B-class flares occurred over the 22nd to 25th, and a single B1.4 on the 27th. The 26th, and 28th to 31st were again blank.

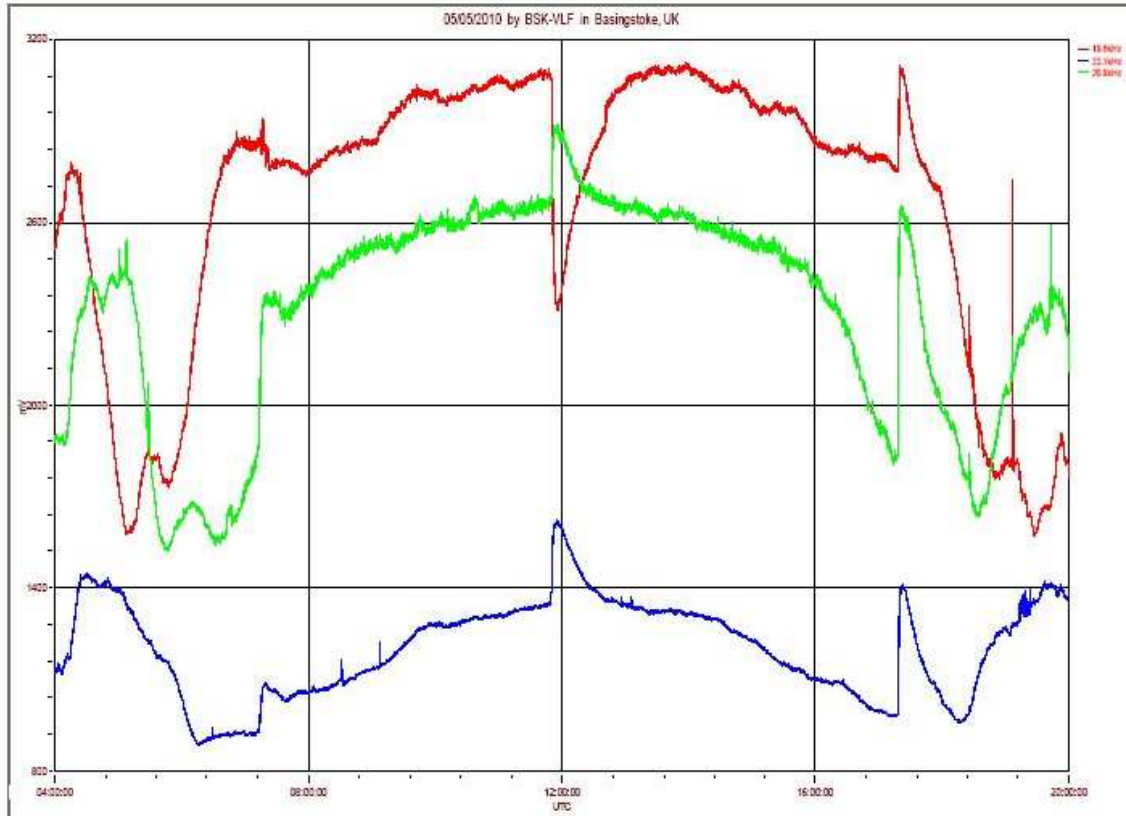
May Observations.



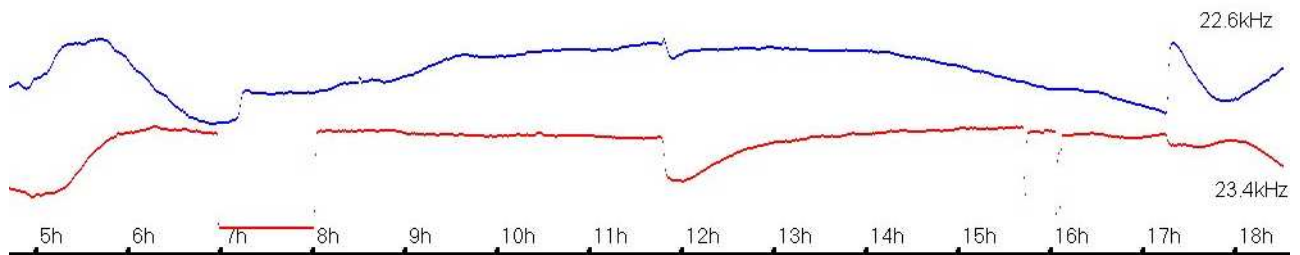
This chart from Mark Edwards shows the C8.8 flare of May 5th. The normal and inverted responses at various frequencies show well. Mark has been working towards modelling the reaction of the ionosphere to solar flares by the disturbances that they cause. He calculates that this event pushed the D-layer downwards by about 4km.



Roberto Battaiola shows all three flares in this chart. It is interesting to note that they all produce a similar change in signal strength, despite the difference in flare magnitude.



Paul Hyde has a 3 channel receiver, showing the C8.8 flare giving an inverted SID on 19.6kHz, while the M1.2 flare gives the same polarity at each frequency. The path at 19.6kHz (North from Basingstoke) also gives a longer period between dawn and dusk compared to the southerly path to France at 20.9kHz. Although the path at 22.1kHz is also to the north, day length is the same as 20.9kHz.



My own chart shows 23.4kHz and 22.6kHz.