January started quietly with a Class flare on the 1st and 2nd. C1's on the 3rd and a C2 on the 6th during our night. There was nothing on the 7th, with only a few Class events in the days to follow. 23.4kHz was off from the 24th to 28th.

### Observers

- **Mark Horn** (23.4kHz)
  - Tuned radio frequency receiver, 0.58m frame aerial.

- **Peter Meadows** (23.4kHz)
  - Tuned radio frequency receiver, 0.5m frame aerial.

- **Colin Clements** (23.4kHz)
  - Own designed receiver, 1.4m loop aerial.

- **AAVSO receiver.**
  - Tuned loop aerial.

- **Roberto Battaiola** (21.75kHz)
  - Modified AAVSO receiver.

- **Paul Hyde** (22.1kHz)
  - Tuned loop aerial.

- **Mark Edwards** (24kHz)
  - Spectrum Lab / PC 2m loop aerial.

- **Mike King** (20.9kHz)
  - Gyrator MKII receiver, 1m loop aerial.

- **John Wardle** (23.4kHz)
  - AAVSO receiver, 0.76m screened loop aerial.

- **John Elliott** (18.3kHz)
  - PC sound card.

- **Gordon Fiander** (18.3kHz)
  - Gyrator receiver, shielded loop aerial.

- **Martyn Kinder** (18.2kHz)
  - Tuned radio frequency receiver, 0.5m frame aerial.

- **Bob Middlefell** (22.1kHz)
  - Gyrator receiver, shielded loop aerial.

- **Nigel Curtis** (23.4kHz)
  - Spectrum Lab / PC 2m loop aerial.

- **Peter King** (20.9kHz)
  - Own designed receiver, 1.4m loop aerial.

- **John Cook** (23.4kHz)
  - Tuned radio frequency receiver, 0.58m frame aerial.

- **AAVSO receiver.**
  - Tuned loop aerial.
VLF flare activity 2005/11.

Number of S.I.D's recorded.
Magnetic data 2010/11.

The Radio Group committee have asked me to start including magnetic data along with the SIDs in the monthly summary. I have been using a magnetometer for many years, recording results in the form of a Bartel diagram. I have modified the format to include the SIDs that we record for comparison, starting in 2010.

Magnetic measurements are usually made using the K–index. This requires calibration with other observers, something that I have been unable to do. Apart from the solar disturbances that we are interested in, I suffer disturbance from local road traffic as well as metal objects moving around the house. The British Geological Survey magnetic station at Eskdalemuir is buried in a hillside to avoid these problems, an option not available to us. I therefore simply grade conditions as 'quiet', ‘disturbed’, or ‘active’. Quiet covers the normal diurnal variation, while disturbed covers periods when there is some disturbance to this pattern that is clearly not from local interference (shown in green on the chart). Active periods are those where the disturbance is far more rapid or energetic (shown in red). These categories are based on experience of the magnetometer and its local environment over a period of time.

The disturbance that any one observer records will depend on their geomagnetic latitude, as well as longitude, and so we will all see something slightly different. Using American observatories for the K–index can also cause problems due to the longitude difference from Europe. The start of a magnetic event can hit the Earth at any longitude, and thus be recorded with differing magnitudes in different places.

In recording this information, the intention is to identify those magnetic events that relate to flares that we have recorded as SIDs. Accurate timing can allow the solar wind speed to be determined. Anyone who is already making magnetic measurements would be most welcome to include them along with the SID timings, and I will try to incorporate all of the data into the chart. I would also welcome any ideas for better ways of displaying the data, and other general comments or queries.

Please remember that the Aurora section may also be interested in your observations.
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<th>KEY</th>
<th>DISTURBED</th>
<th>ACTIVE</th>
<th>B, C, M, X = FLARE MAGNITUDE</th>
<th>Synodic rotation start (carrington’s)</th>
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B, C, M, X = FLARE MAGNITUDE. Synodic rotation start (carrington’s). ACTIVE DISTURBED.