Interactive comment on “Building a Raspberry Pi School Magnetometer Network in the UK” by Ciarán D. Beggan and Steve R. Marple

Ciarán D. Beggan and Steve R. Marple

ciar@bgs.ac.uk

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I enjoyed reading the paper and feel it is important to share the use of low cost instruments such as the Raspberry Pi with students and researchers globally. Perhaps science centres and museums would also be willing to host a few of these instruments. The science presented in this paper is sound, well-structured, and acceptable for publication after minor revisions. It may be good to indicate the rough cost of building one of these magnetometers.

Response: Thank you for the review. The plans are freely available to the public through me and are easy enough to follow with some soldering skills, so are open to science centres for example should they be interested. The cost I have added to the
text on the recommendation of yourself and the other reviews. It costs around 150GBP at 2018 prices for all the parts.

Below are a few minor comments on the text: page 2 line 29 - seasonal* dependence or seasonally dependent* Response: corrected

Page 3 line 12 - The geomagnetic field can be measured with an instrument generically (I would delete "generically" as it is not really necessary) known as a magnetometer. There are several types of instruments that can be used to* make a measurement...

Response: OK – sentences have been modified

page 3 line 33 - causing large electrical currents to flow. Flow where? Response: added ‘in the upper atmosphere’

Page 5 line 7 – the brackets need to be closed (H... Response: brackets closed

Page 7 line 28 – use a dash between the time for consistency Response: added a dash 12:00â–‡18:00

Page 8 line 19 - there* is no Response: Changed to ‘there are no easy ways to ...’

Spell out all acronyms such as GDAS Response: added in (Geomagnetic Digital Acquisition System or GDAS). This is an in-house BGS system.

Where possible try not to end sentences with prepositions such as ‘to’ or ‘in’ etc Response: I have changed the sentences where I found this.