Review of paper "Building a Raspberry Pi School Magnetometer Network in the UK" by Ciarán D. Beggan and Steve R. Marple.

Availability of low-cost electronics and spread of internet raise the possibility of filling up the spatial gaps in the environmental sensing. Add citizen science to this mix, and we get an exciting new way to collect data and to engage the public in science experiments at the same time. The authors describe development, testing and validation of a low-cost, easy-to-use vector magnetometer. They then deploy the magnetometer in 10 schools in the UK. They discuss the data collected during a geomagnetic storm and the lessons learned while working with the teachers and students. This paper is written clearly and it is easy to understand. I recommend publication of this paper in the "Geoscience Communication". I have only a few minor suggestions/questions on this paper.

1. Page 3: 1-5: Authors may also want to mention the geomagnetic substorm, which occurs almost on a daily basis at polar regions.
2. Page 5 Lines 5-10: Where did you place the magnetometer during your initial measurements? Do you have a recommendation for keeping the magnetometer in residential/school environments?
3. Page 5 Lines 25-30: You mention that the updated magnetometer also collects temperature data. Are you using the temperature data to calibrate the fluxgate outputs? It would be great if you can write a few lines about this.
4. How do you deal with power outages? Can the system work off a battery?
5. Page 6 Lines 10:15. How did you orient the magnetometer properly in your school deployments? Did you face challenges with students/teachers misaligning the magnetometers?
6. Page 6 Lines 15:20. Can the students access the data locally?
7. Page 7 Lines 10:15. Regarding the quiet-day signal removal. Did you use a model to remove the Sq variations?
8. How was the long-term performance of the magnetometer systems? Did you face issues with sensor/components going bad?
9. Page 8 Lessons Learned. You mentioned the challenges encountered during the long-term deployment in the school. A part of the issue is that the teachers have very little time to devote to this experiment. This is a common problem faced by many citizen science projects. Is paying teachers/students is an option ?