

Overview:

This group analyzed a C4 flare from February 10th, 2018. The flare began at 7:38 and ended at 17:22 p.m. UTC. At hour 13, minute 21, the flare reached it's peak of $4.619\text{E-}6 \text{ W/m}^2$ and has thus been classified as a C4 flare. The flare was relatively isolated with no major peaks before or after the specified flare.

This group chose to utilize the median method of baseline correction and used the according specific python code (`med_baseline = solar_data.iloc[300:513,1].median()`). For method of integration, this group applied the trapezoidal method (`a=integrate.trapz(solar_data_bltremov[513:620])`). Using these appropriate methods, the group reported a total energy of $3.696\text{E+}26$ ergs.

Merits:

This group performed to the standard expected and required. The report was easy to interpret and well-organized. There was ample justification and description of the methods used. I commend them for their clarity and accuracy. The code was thoroughly annotated, and the descriptive paragraphs were detailed and accurate. The reported total energy matched what would be expected of a C4 flare with a value close to $4\text{E-}6$ ergs. Similarly, the date and time of the flare were reported with accuracy.

Critiques:

I noticed that there remains direction commentary on the code from the initial given template: language such as 'you will need' and 'write your code here'. I would recommend replacing these with descriptive commentary. For example, in the first coding cell I would change the comment '#you will need to change the file name' to '#changes file name'. This will permit a clearer descriptive read for the reviewer.

Overall Recommendation:

<input type="checkbox"/>	No revisions are needed
<input checked="" type="checkbox"/>	Needs minor revisions
<input type="checkbox"/>	Needs major revisions

Conclusion:

Overall, the report met the requirements and expectations given. The code and reported values were accurate and easy to read. The one revision I would recommend is to go through the report and personalize the commentary and remove any remaining directions from the initial Google Collab template. Great job!