Below is a template for the peer review. You may copy this into a new document and delete the blue text to edit.

Do not include your name on your peer review!

The peer review will be returned to original authors. Be polite and professional, but be thorough. You will be graded on how thoughtfully you assess their work.

Overview

This group analyzed a class C7 flare from March 12, 2015. In the first step, the group converted units of the flare from W/m^2 to ergs/s. Then they graphed the total flare. The next step was baseline correction. They subtracted the baseline using an average of the local minimums found in the graph using the code **min_locs = np.asarray(argrelextrema(array, np.less))** and **array[numin_locs].mean().** The group then described their reasoning and graphed the flare with the baseline removed.
Before calculating the total energy of the flare, this group had to subtract the energy from a second smaller flare from the data. This was done by finding the local minimum around the second flare and subtracting the energy using the equation y = mx + b. They then determined the start point and end point by finding where the energy equals zero and graphed the flare at these two points. Finally, they integrated the flare and found the total energy to be approximately 1.24 * 10^28 ergs.

Merits

The creative name, 'Thin Mint Flare' and picture of solar flare made the introduction a lot more enjoyable and aesthetically pleasing which is important for effective scientific communication. You also did a good job communicating the time and values for your flare. Your group did a great job commenting your code throughout the document.
The graph you made showing the baseline removed is excellent. It is easy to read and understand. All of the other graphs are also very well done. The stars, x's, and different colors really helped understand what I was looking at.
Your group did a spectacular job using a clear and replicable procedure for determining the baseline, start point, and end point for the flare and explained it very well.
Finally, all of your integration code and values makes sense for your flare.

Critiques

The writing in the introduction was a little hard to read because of a couple run-on sentences and some passive voice. However, you guys did a nice job succinctly communicating the date and peak irradiance.
The first graph is the only one that does not include a title which could be something to add for future revisions.
My group used a different method for determining the baseline, start point, and end point so I have a couple clarifying questions. First, if the baseline value was calculated using the averages of the local minimum, did it include the local minimum from the second smaller flare because this would through of the value significantly. Second, if you decided the start point and end point by measuring where the energy equals zero, but the local minimum at this point was not equal to the baseline, would this throw off your total energy because all of the flare isn't included.
Great work overall. Your explanations are easy to understand and the code is efficient and easy to follow. The graphs look great and very helpful. Nice job!

Overall Recommendation

☐	No revisions are needed
X	Needs minor revisions
☐	Needs major revisions

Conclusions

Great work on your project so far. You did a great job writing your code and explaining your reasoning throughout this project. The visuals helped out your project too. I think you did a good job accounting for the second flare and all of your values and equations look correct to me. I think if you guys can explain your reasoning on the local minimum, start point, and end point your project is in great shape. Well done!