

# Weekly Report for July 27th

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## 1 Time Profiles

This past week I have been able to create space averaged time profiles of Jupiter for all four sites on at least five different dates. As mentioned before I have created a more robust code to handle the data that is missing large chunks. This code seems to work at all but the most troublesome of data. At this point, any data that the code cannot handle I will consider unusable unless absolutely necessary, and then some tweaks may have to be made. However, the profiles of Jupiter should be enough to compare the different sites imaging capabilities.

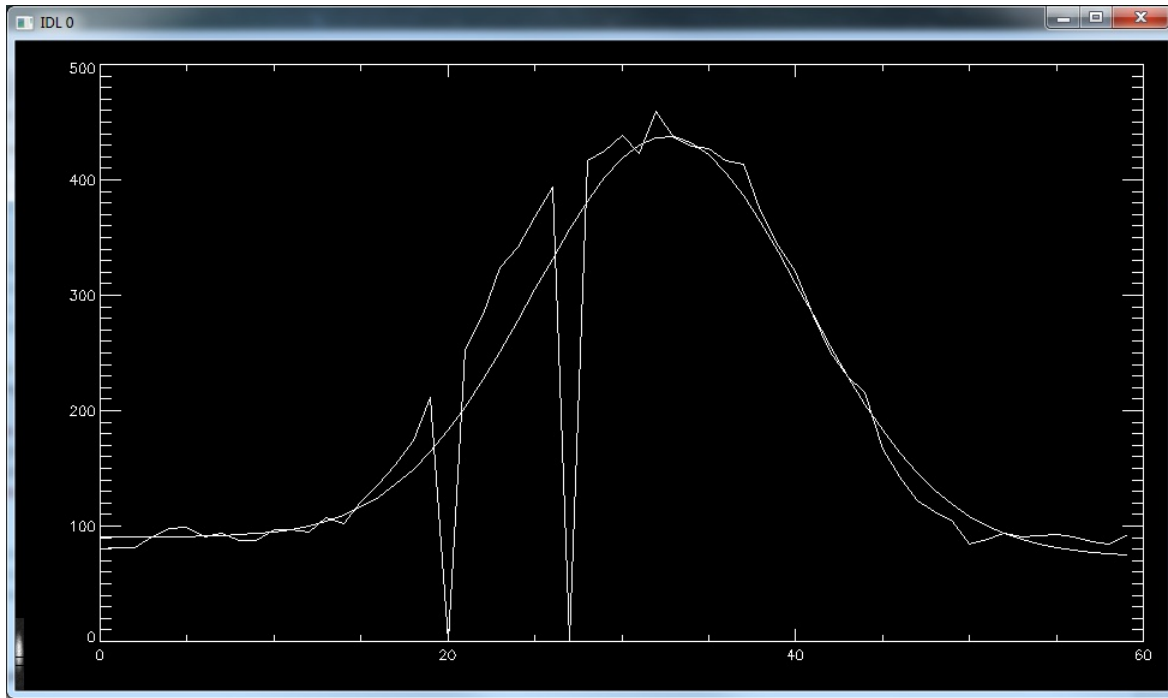


Figure 1: An example of the Gillam data that was filled in. The plot is of the image in the bottom left. The fit looks alright but it is definitely being influence by the two gaps. As discussed I am going to work on getting the Gaussfit to ignore these missing gaps, which should produce better results. As of right now it is hard to determine how much those dips influence the shape of the curve beyond the fact that they do.

## 2 Future Considerations

There are several things I need to do in the coming weeks. First, I want to compare the sites filter by filter. However, I have a feeling that I will need to compile some weather data, as weather conditions can drastically change the light entering the camera. As well, I want to get space profiles for Jupiter over the course of a much larger timespan than the time profiles. It will take some work, but I should be able to calibrate what direction the camera is looking at if I can gather enough data. Next week, however, will mostly be focused on comparing the Gaussian features of Jupiter from the various sites.