

Complications

Weekly Report 1/3/17 to 1/7/17

In my last report, I had mentioned some of the problems that have arose while working on my original work and my process of working through one of them. This week was mostly about resolving through my problem of computer memory.

I began with asking my computer science teacher for help, as he has much background in the area. Although he believed that my project was very ambitious, he recommended that I scale back my program quite a bit. Essentially, he said that I was limited to two options. For one, I could utilize some sort of online super computer, such as AWS, and run my program off of that. However, he stated that it would be quite expensive to do so and it would be simpler if I just increased the scale of my model.

So, this week was mostly spent on revising my process of deciding what steps to consider when predicting habitability and how to represent that through my program. To do so, I started off on a clean state by creating a new program and just transferred over some of my old code over when needed. In hindsight, I should've made my original program a little less intertwined with itself so that if I did have to take it apart, it would be a lot easier. To adopt this advice into my new code, I separated each part of the predictability into separate modules, one for the mass of the planet, one for radiation, etc. Even though it may seem like a lot of superfluous work, my new approach to organizing and structuring my work to be more module oriented has been quite beneficial as I can easily change and update new variables.

Although this week may seem like I took a step back on my journey to create my original work as I basically started my entire program again, I believe it is more like a leap forward. All

projects come with problems, and my original work is no different. But facing problems is life.

No matter what I work on or with whom I work with, I know that I will face complications, and by resolving them, I will grow, both as a human and as a professional.

Until next week,

Sahil Jain