Week of April 4th – Update on Microreactor progress

For the remainder of the Microreactor project my focus is on determining the heat in the different areas of the reactor and safety analysis. This week for the safety analysis I did a slip and tip analysis, the reactor will tip at 114,450 Newtons and slip at 79,657.2 Newtons. I also did a PIRT analysis of heat removal concerns as can be seen in the table below. I also wrote up a thorough description of each of the scenarios. Future work includes doing a parametric study with Stephen surrounding how environmental conditions effect the heat removal. I will also determine the temperatures in the different parts of the fuel once we know the power density of the core. Thanks!

