

# Daily Research Report

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## **1 Current Research Direction**

The goal here is to stop running SWIRL on Tuesday, June 14th. All the data that will be needed for the thesis needs to be final.

## **2 Research Performed**

All the MMS test cases have been ran and modules containing the input flow for the test cases have been created. The naming convention allows the user to go back to the code after run time and do data analysis.

## **3 Issues and Concerns**

The only concern I have is the number of grid points I chose for my study. How could I reach convergence faster and more efficiently?

The ZZGGEV gives segment faults for certain cases that have large matrices. My suspicion is that there is conversions that are not uniform between data types.

## **4 Planned Research**

Wrap up SWIRL to the best of my ability and provide a list of features that have been added. My commit history has been keeping track of the bugs that were removed.