

## **Shallow Water Equations on a Sphere (working title)**

- **Abstract**
  - Overall Summary
- **Introduction**
  - Describe volcanic eruption
  - Discuss Lamb waves and Shallow Water equations
  - Describe previous work
- **Data**
  - Discuss data used in previous work and how we use it
- **Numerical Methods**
  - Discuss Forestclaw
    - Discuss AMR
      - Discuss resolution of our model
  - Discuss our assumptions and initial conditions
  - Discuss implementation
- **Results**
  - Discuss timing and error of simulation
  - Compare our results to previous work
- **Future Work**
  - Discuss how to improve our results in Future
- **Citations**