

**Zeshawn Shaheen**  
**Supported Projects: PCMDI, ACME**

**Quarterly Report for October 1, 2017 – December 30, 2017**

**Quarter Accomplishments:**

- ACME
  - When a variable is missing from the reference or test data, the diagnostics run no longer halts. (October 2017)
  - Added systems test to plot on of each plot set with both backends. (October 2017)
  - Released v1.0.1 of ACME Diagnostics. (October 2017)
  - Added debug parameter to stop diagnostics run when there's even a single error. (November 2017)
  - Working with Jill, implemented the table to summarize the metrics for each season, which is a part of the latitude-longitude set. (November 2017)
  - Released v1.1.0 of ACME Diagnostics. (December 2017)
  
- CDP
  - Finished CDP paper. Waiting for Dean to come back, and for Charles and Jill to finish their parts then. (October 2017)
  - Added both Python 2 and 3 support to CDP. (November 2017)
  
- Miscellaneous
  - Interviewed various people. (October – November 2017)
  - Got Q-Clearance. (November 2017)
  - Wrote a whitepaper with Soo, Jill, Ji-woo and Sasha for some ACME proposal thing. (December 2017)
  - Went to ESGF F2F 2017 and presented. (December 2017)

**Next Quarter's Roadmap**

- Continue working on getting Xarray/Dask integrated into CDMS. (January – March 2018)
- Dockerize ACME Diagnostics to make installation and running easier. This might also lead-in to the containerization of all parts of the E3SM Workflow. (January-February 2018)
- Make more progress on ACME Diagnostics roadmap (March 2018)

**Resources Required to Achieve Goals**

- Help with testing of ACME Diagnostics. For the ACME Diagnostics, we'd only need Lina's help for about 2-3 weeks to get Jenkins up and running.

- By helping us test ACME Diagnostics, Lina will be able to get a high-level overview of how all of the AIMS software works together, CDMS, VCS, etc.
- This project is quite simple, but Lina doesn't even need to understand the inner-workings, just how to setup Jenkins to test large runs.
- There's an actual end goal for this and it's not endless: just setup Jenkins for ACME Diagnostics
- By doing this, Lina will also get accounts and her environments setup on the machines that we use.