

**Jill Chengzhu Zhang**  
**Supported Projects: ACME ARM**

**Quarterly Report for July 1, 2017 – Sep 30, 2017**

**Quarter Accomplishments:**

- Released the v1.0.0 of E3SM diagnostics package and v1.0.0 documentation
- Released the v1 of ARM Diagnostics package with basic metrics and diagnostics
- Attended Gordon Research Conference to present ARM diagnostics work and promote E3SM diagnostics package.
- Attended CESM work should for CESM software tutorial
- Attend UVCDAT to coordinate the development of E3SM diags and CDAT

**Next Quarter's Roadmap**

- Expand the E3SM diagnostics according to our Roadmap (see attached plan for next 6 months)
- Expand ARM diagnostics by including process oriented metrics
- Create a central place to host all the observational datasets for E3SM

**Resources Required to Achieve Goals**

- Support from CDAT is important.

**For the next 6 months, our plan:**

- Add New Diags sets
  - Pressure-longitude map (AMWG set 4a)
  - Table (AMWG set 1)
  - Taylor Diagram (AMWG set 14)
  - Selected Stations (for ARM diags and AMWG 12,15,16)
- Add Obs/Reanalysis Datasets
  - Maintain an observational data repo which does version control, mirror to multiple machines.
  - Create new datasets and new variables
- Maintain production quality of software
  - Documentation: tutorial, examples
  - User support
  - Test suite
  - Provenance capture
  - Improve Viewer
- Optional: Accommodate CMIP data