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Supported Projects: PCMDI, ACME

Quarterly Report for July 1, 2017 – September 30, 2017

Quarter Accomplishments:

- ACME
 - Added more features of viewer like custom images, custom ordering of pages, etc. (July – August 2017)
 - Using CDP, diags can now be ran in serial or parallel (multi-processing or distributedly) (August 2017)
 - Added a bunch of documentation and examples. Documentation website is here [https://acme-climate.github.io/acme_diags] (August – September 2017)
 - Users can modify the colormaps based off .rgb files (August – September 2017)
 - Refactored VCS plotting scripts (August – September 2017)
 - Updated and tested dependencies so it now so v1.0.0 releases with CDAT 2.12. (August 2017 – September 2017)
 - Fixed CI issues so now nightlies are now begin created again (September 2017)
 - Released v1.0.0 of ACME Diagnostics. Support for AMWG sets 3, 4, 5, 7, 13. (September 2017)
 - Jill and I presented our work to some people from PNNL (September 2017)

- CDP
 - Implemented serial and parallel (using multi-processing or distributed computing) running of diagnostics into CDP. This was then implemented into ACME Diagnostics. (July-August 2017)
 - Added cdp-distrb command line tool, which lets users query a cluster to view the status of the workers, jobs ran, etc. (July-August 2017)
 - Added support for input parsing via JSON/CFG files. Does all that ACME Diagnostics used to do. (August 2017)
 - Released v1.1.0 of CDP, which supports the aforementioned features. (September 2017)

- Miscellaneous
 - Fixed issue with unified ACME env with others. (July 2017)
 - Worked with Charles on improving the performance of VCS. (July – September 2017)
 - Tested performance of CDMS and VCS 2.12 compared to 2.10. (August-September 2017)

Next Quarter's Roadmap

- Finish CDP paper (October 2017)
- Begin to implement Dask to CDMS (October-November 2017)
- Work on more projects: BASEJumper, CDMS, data archiving for ACME. (October – December 2017)
- Get about ½ through the 6 month roadmap for ACME Diagnostics. (October – December 2017)

Resources Required to Achieve Goals

- Access on NERSC and other machines for BASEJumper work