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Supported Projects: (ESGF, UV-CDAT, ACME, PCMDI)

Quarterly Report for Octoberl 1, 2016 – December 31, 2016

Quarter Accomplishments:
- UV-CDAT
    - Version 2.8 was released on November 4th.
    - Numpy was finally switched from version 1.9 to 1.11 while also supporting older versions 1.9 and 1.10
    - UV-CDAT is no longer a gigantic repository it has been split into separate repositories for each components, this allows for easier distribution, maintenance and update of uv-cdat sub-components
    - The split to individual repositories led to the beginning of moving the UV-CDAT test suite into each repositories. The UV-CDAT repository itself keeps running the test suite other all components, making sure that changes in one component does not break compatibility with the other components.
    - cdms was the first repository to have its own test suite
    - once a repository has its own test suite, we implemented a mechanism that let the Travis continuous integration automatically push nightlies conda distribution if master test suite passes.
    - worked with Celine Bonfils to clarify pattern issues and helped trsting Kitware solutions
    - The parallel coordinates graphic method has been officially released as part of 2.8.
    - template objects now have a function to plot line/marker legends. i.e. given the template-defined area for the legend, this function optimally fits it with the lines and markers.
    - installed uvcdat and uvcdat nox (the version that does not require an X server) at various sites.
    - Wrote several iPython notebooks as tutorials: basic vcs, parallel coordinate, string constructors, putting axes and metadata back on variables. See: http://uvcdat.llnl.gov/tutorials.html
- Compute Working Team
    - Presented at the ESGF Face to Face meeting in DC. I presented the status of the Compute Working Team, the ESGF end-user API wrote with Jason Boutte and participated in the Compute Panel.
    - Presented CDAT, CWT end-user API, CDP posters at ESGF F2F.
    - Layed out work forward with the rest of international CWT team.
    - With Jason Boutte, worked on docker distribution of the CWT toy server work.
    - Designed End-user API with Jason Boutte.
    - Led CWT's General, and Server-side Meetings
- PCMDI metrics

- o Reviewed and merged various pull requests for new statistics and analysis wrote by the other PMP developers
  - o Made several tweaks to the conda recipe, such as building a NO-X compatible version, and easier nightly builds
  - o Generalized the JSON class to allow it to read json-based output produced by various drivers of the PMP package.
- Diagnostics
  - o Updated travis so that it is compatible with the new install procedure of uv-cdat 2.8. The UV-CDAT 2.8 release was crucial to this packages because it is using features of UV-CDAT that are post 2.6, hence it required a "nightly" build to work.
- Deputy work
  - o ANL proposal
  - o White paper Jay
  - o Helped Kitware laying out their statement of work
- Misc
  - o Participated in several candidate interviews for GS-CAD, ACME and AIMS.
  - o Time keeper.
- Time off: 1 Week in November, 1 Week in December, 2 Weeks mostly FSL after F2F.

Next Quarter's Roadmap
- Finish patterns work that is currently going well with Kitware
- UV-CDAT paper
- Move test suite into their own repos.
- Num Focus integration work
- Finish patterns fix

Resources Required to Achieve Goals
- Mac laptops are getting old, but I will wait for the new mac powerbook to come out