

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

Quarterly Report for Jul 1, 2016 – September 30, 2016

Quarter Accomplishments:

- UV-CDAT
 - I reviewed other developers pull requests on github
 - I split most of UV-CDAT packages (vcs, cdms, vcsaddons, cutil, genutil, etc...) into their own repos. This allows for easier maintainability and distribution of individual packages.
 - Switched default colormap to Viridis a colorblind (and printer) compatible colormap, see:
<https://www.youtube.com/watch?v=xAoljeRj3IU>
 - I implemented a new graphic method: “parallel coordinates”, it was brought to our attention as part of the PMP work.
 - Added capability of drawing a custom logo, exactly where a user wants it. This work improved and fixed the existing capability of putting a background png.
 - Maintained nightlies on conda, i.e. make sure that significant bug fixes and improvement that go into master can be found via conda on a special “nightly” conda channel.
 - Ported gfortran to conda for macs so that users do not require any externals on their system.
 - Worked with Kitware to make sure that vector format output were indeed vectors, not just bitmaps.
 - Made vcdat install compatible with conda.
 - Created an “offscreen” version of uvcdat on conda, so that users can run it on super computer or remote computers with no or poor X forwarding.
- Compute Working Team
 - Python End-User API is out and has a github repo
 - Toy server up and running and conforms to web-server API
 - Ophidia can be connected to web server via API, using UV-CDAT offscreen version.
 - Worked with Ouranos to have their work being compatible with ours
 - Led CWT’s General, API and Server-side Meetings (3 total per months)
- PCMDI metrics
 - Version 1.1.1 released.
 - JSON class to read in pcmdi_drive rgenerated json files, complete with versioning in it.
 - Helped Zeshawn with design of CDP.
 - Made a demo mode, so that user can go through sample parameter files line by line and understand how they work.

- Diagnostics
 - Version 2.0 and 2.1 released. The later one seems to have most of Chris Golaz requirements satisfied to his liking.
 - Developed a script for Jerry so I can install his own conda version with various vcs/cdms/metrics branches merged into it. This allows him to test development branches before they go public
 - Made vcs legend arrows more customizable. (length, line, etc..)
- Deputy work
 - Wrote white paper for the Community Data management System
 - Wrote white paper for porting UV-CDAT to windows
 - Regular meetings
 - Updated time cards reporting for each aims person
- Misc
 - Participated in several candidate interviews for GS-CAD, ACME and AIMS.
 - Time keeper.
 - Presented UV-CDAT at PyData San Francisco
 - 1 on 1 with John Fisher
 - Wrote my PA
 - Wrote input for others Pas
 - Presentation to Earth Science Federation Partners (ESIP) Interoperability and Technology Tech Dive
 - Helped Paul Durack organize some of his in-house tools so he can distribute them via conda.

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

Resources Required to Achieve Goals

- Need to discuss with community x,y,z capabilities before moving forward.
- Mac laptops are getting old, but I will wait for the new mac powerbook to come out
- Jay Hnilo wants us to be reachable at any time any day of the week so I might need a lap owned cell phone.