

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

Quarterly Report for January 1, 2017 – March 31, 2017

Quarter Accomplishments:

- UV-CDAT
 - Ported vcs test suite from cmake (script based) to unittest (class-based)
 - Create a generic run_test script to run in parallel all unbittest and swap in/out conda components on the fly for testing puproses
 - Re-used this code to port cdutil and genutil from cmake to unittest
 - Modernized “cdat_info” as our general cross cdat module, for example it contains the usage database pinger and a general script to download test/sample data. Each repo now downloads only its necessary data
 - Travis ci was too slow so I ported all the repos to build on circleci as well. Contacted circleci to give us the free mac builds.
 - Travis CI is running Ubuntu, nightlies cannot be built on Ubuntu as binaries wouldn't be backward compatible with RedHat6 so I setup travis to start a docker CentOS to build nightlies.
 - Got all repos to automatically upload master to conda nightly channel if test suite passes.
 - Together with Denis we ported the first batch of packages to be hosted by conda-forge. Most externals are now in there.
 - Helped Dan Lipsa getting streamlines graphic method right
 - Helped Denis debugging and testing esmpy integration into cdms
 - Helped Celine and Sankhesh get useful patterns plots in vcs/vtk
 - Helped Paul durack with plotting data on top of an image in vcs (blue marble background)
 - Discussed moving CDAT to NumFocus with Fernando Perez when he came to the lab.
 - Started to help interns with cdat/vcs/vcdat since Sam left.
 - Helped Ken with making sure his and Anna VERY old vcs “.scr” scripts were still readable.
 - Fixed a bug in cdutil where climatology tools were not preserving all attributes
 - Fixed a bug in cdutil where wrong calendar was passed in some case.
- ACME-CARE
 - Wrote proposal as co-PI for ACME care, would be in charge of visualization and provenance pieces. Among other things we are proposing in-situ viz and diagnostics
- CWT
 - Help Jason making decision when needed while rewriting our server to use Tom's stuff and also for O-Auth.
 - Held bi-monthly telecos, trying to keep team in sync

- Held meeting with Ophidia team to prepare for their new release
- Helped Jason for his demos.
- PCMDI
 - Reviewing branches implemented by other scientists (monsoon precipitation indices)
 - Helped Celine by regenerating all possible splices xml (historical to rcps) on crunchy.
- DIAGS
 - Helped Zeshawn and Jill with their vcs questions
 - Helped Zeshawn and Jill for udunits questions
 - Helped Zeshawn and Jill with cdms/regridder questions
 - Helped Jim with vcs questions
 - Helped Sterling figure out correct sequence of arguments for installing metrics.
- MISC
 - Q-Clearance investigation and aftermaths dealings
 - Interviewed intern, offered internship but eventually intern took another position
 - Helping Organize PyData Seattle
 - Helped Soo at the beginning to set up tensor flow
 - Deputy meetings
 - Did a code review for Peggy Lee
 - Migrated to Office 2016
 - Got new laptop (MacBook Pro) and desktop (Linux), spent some time getting gthem ready
 - Read and gave feedback to Dean on various proposal he sent to the team, such as ESGF F2F and ESGF tri-annual documents
 - Entered task in roadmap documents
 - Misc acme confluence inputs when necessary.
 - Explored possibility to do a change of station for a year or two. Decided against it for the time being.
 - LTRAIN as necessary
 - Approved time cards.

Next Quarter's Roadmap

- UV-CDAT
 - Official release of 2.10
 - Jupyter notebooks
 - Clean up import of pngs into vcs canvases
- PCMDI
 - New release of pmp code with newest branches from Peter, Ken and JiWoo
 - Help document transition to CDP
 - Help parallelize some of it using CDP's improvements

Resources Required to Achieve Goals

- More staff would be nice.