

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

**Quarterly Report for April 1, 2017 – June 30, 2017**

**Quarter Accomplishments:**

- CDAT
  - Released 2.10: updated website, created release note, announcement, etc...
  - Updated release notes generating software to look across all of our repos since we now split the repositories.
  - Created yaml files to easily re-install older uvcdat version.
  - Updated website to show new/additional ways to install CDAT
  - Changed logo in VCS from UV-CDAT to CDAT
  - Discovered a bug in conda that is related to “features” which affects CDAT conda distribution. Updated website to warn users not to use latest version of conda.
  - Ported more packages to conda-forge channel
  - Window port of UV-CDAT via Windows Linux Subsystem. Created a page to document this.
  - Fixed memory in vcs resizing
  - Added test to vcs to make sure there are no slow down or known memory leaks.
  - Added a feature to auto-suggest name of attributes for vcs objects.
  - Mentored Kendra and helped her with statistics webpage.
  - Helped Sandi as much as I could. We wrote the conda packaging for VCDAT.
  - Unsuccessfully tried to setup vgl/turbovnc on RH6. Awaiting help from Kitware on this.
  - Make sure nightlies are produced with correct new version schema. i.e 2.10.YYYY.MM.DD.mm.{{GIT\_HASH}} that way nightlies will be updated when a newer version comes out. Previously they were of format YYYY.MM which means new stable release would look as lower version number.
  - Demoed “old” VCDAT GUI to Matthew and interns.
- ACME
  - Developed “ci-bots” a tool to run test suite automatically on HPC systems from a git repo and send reports to it;
  - Ci-bots poster for all-hands meeting.
  - QR.
  - Installed UV-CDAT on all machines
  - Created acme-unified package which contains both uvcdat and all extra packages needed by ACME teams.
- CWT
  - Bi-weekly meetings

- Helped Jason with design of COG integration
- Helped Jason with cdms side of aggregation.
- PCMDI
  - Pmp 1.1.2 release with newer (2.10) vcdat.
  - Cleanup monsoon branch.
  - Helped GFDL understand why their code wasn't giving the same answer as CDP (it was a bug on their side)
  - Helped Gemma understand what region selector in cdutil really does
  - Figured out why Mac and Linux were giving slightly different answers: it's due to esmf regridding when generating land/sea masks.
  - Created a pmp yml environment file.
  - Migrated nightlies to newer nightlies format.
- DIAGS
  - Helped optimize set3 by fixing a bug in vcs with 1D plot and optimizing their plot functions.
- MISC
  - ESGF Review presentation
  - One on one with Bruce
  - Applied for a team award for lab operations.
  - Hosted Aashish Chaudhary when he came for a visit.
  - Helping Organize PyData Seattle
  - Deputy meetings
  - Helped in decisions for critical personal in the light of worst case scenario budget.
  - Went with Dean to let some staff know about their situation change.
  - Read and gave feedback to Dean on various proposal he sent to the team, such as ESGF Review and ACME SFA documents
  - Entered task in roadmap documents
  - Misc acme confluence inputs when necessary.
  - LTRAIN as necessary
  - Approved time cards.
  - Fear of flying classes and council.
  - A/C outage broke both my Linux boxes.
  - Met with Stephanie Labasan for a viz project at the lab. Provided data to her team.
  - Tried to keep team relaxed in the wake of "worst-case-scenario" cuts

### **Next Quarter's Roadmap**

- UV-CDAT
  - Official release of 2.12, maybe 3.0
  - Port to Python 3.0
  - Jupyter notebooks
  - Finish lean up import of pngs into vcs canvases
- PCMDI
  - New release of pmp code with newest branches from Peter, Ken and JiWoo

- Restore WK plots.
- Help document transition to CDP
- Help parallelize some of it using CDP's improvements

**Resources Required to Achieve Goals**

- More staff would be nice.
- Fix my Linux boxes.