

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

**Quarterly Report for October 1, 2017 - December 31, 2017**

**Quarter Accomplishments:**

- CDAT
  - Ported CDAT to Python 3
    - Cdms2 helped Denis
    - Vcs, dv3d, cdutil, genutil, vtk, dv3d
  - Wrote many jupyter notebooks for tutorials
    - CMIP3 results
    - Polar plots use
    - Animation in vcs
    - Using shading and patterns
  - Fixed polar plots bugs such as amplitude wouldn't work properly, added use of dask to speed up the process.
  - Added test suite for genutil and cdutil (in github)
  - Spent sometime trying to work around some OpenGL limitations for shading
  - Maintained travis and circleci, made sure nightly were still properly uploaded when working.
  - Checked coverage works for test suites
  - Added capability for vcs plots to generate html code to make pngs clickable from a browser, together with modal javascript plots.
  - Readthedoc for vcs, started to fix doc string and doc making
  - Poster for F2F
- VCDAT
  - Helped james with colormap editor and other vcdat questions
  - Looked into jupyterlab for vcdat -> Ian Rose
  - Autopep8 vcdat
  - Vcdat accept ports, conda fixed
  - helped VCDAT F2F poster
- E3SM
  - Acme-unified passed on to Xylar
  - Taylor diagrams improvements:
    - Better placement of standard dev name
    - Control of label on/off
- CWT
  - Helped Jason with ui design
  - Helped Jason with demo
  - Pyophtidia into conda-forge
  - F2F presentation
  - ESGF Certification White Paper
- PCMDI

- Diurnal cycle from Curt Covey integrated into PMP
- Portrait plot jupyter notebook
- Json class loading jupyter notebook
- Test suite fixed
- Nproc limit reached Paul Durack, spent quite some time figuring out what was wrong and fixing it.
- MISC
  - F2F meeting
  - F2F paper interview for LLNL article
  - Deputy meetings
  - Looked into Slack for collaboration and setup a few teams
  - Software best practice document
  - Interviews
  - Took over chunk of Dean's responsibility
  - Ed Brown and Lina Muryanto hiring
  - Fixed entrust
  - Worked with lab and Kitware to renew contract
  - NYU contract review, couldn't vouch on their work though.

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

- CDAT
  - CDAT 3.
  - More Jupyter notebooks (1D plots, templates, text object, markers, etc...)
  - Finish clean up import of pngs into vcs canvases
  - Port CDAT to lab's SPAC
  - Maybe hackathon
- VCDAT
  - Give to first nice users and help them with it
- Misc
  - Help Lina settle in.

### **Resources Required to Achieve Goals**

- More staff would be nice as always