

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

Quarterly Report for July 1, 2017 – September 30, 2017

Quarter Accomplishments:

- CDAT
 - Released 2.12: updated website, created release note, announcement, etc...
 - Fixed a bug in conda that was related to “features” which affected CDAT conda distribution. Any version of conda can be used again.
 - Fixed memory vcs objects leaks.
 - Mentored Kendra and helped her with statistics webpage and poster.
 - Many more Jupyter notebooks: cdms101, taylor diagrams, using symbols and equations in vcs text, masking data
 - Made use of llvm for the headless version of VCS, making it nearly as fast as regular version.
 - Fixed crossSection bug in cdms regridding.
 - Added functions in vcs to know location of each box/mesh drawn so that we can generate clickable maps.
 - Created unittest on travis/circleci for vcsaddons
 - Looked into py-idx/visus with Cameron and Denis
 - Started to look into porting cdms to dask with Zeshawn.
 - Helped new users via Github.
- E3SM
 - Installed UV-CDAT on all machines
 - Officially instituted acme-unified package which ensures all ACME needed software run fine together.
- CWT
 - Bi-weekly meetings
 - Helped Jason with design of COG integration
 - Helped Jason testing new authentication system
 - Ported PyOphidia to conda.
- PCMDI
 - Finished monsoon branch, get same results as Ken Sperber original code.
 - Fixed WK plotting package, and setup test suite for it.
 - Prototype of clickable portrait plots.
 - Jupyter notebook on how to use json classes.
- DIAGS
 - Fixed vcs object leak.
 - Working in figuring out why multiprocessing leads to random vcs crashes.
- MISC
 - Deputy meetings

- Made a basic animation for Phillip Cameron Smith need to iron out.
- Trying to resurrect polar plots.
- Helped ranking staff.
- Dealt with aftermath of Denis quitting CMOR and dropping cdms from 50% time to 40% time.
- Met with scientific staff to look at possible new visualization.
- Read and gave feedback to Dean on various proposal he sent to the team, such as E3SM Review.
- LTRAIN as necessary
- Cleaned up my office.
- Excessed old machines.
- Approved time cards.
- Fear of flying classes and council.
- Helped answer GS-CAD question about potential new hire.
- Met with Fernando Perez about Num Focus and general Python community.
- GS-CDAD interviews.
- Wrote letters of recommendations

Next Quarter's Roadmap

- UV-CDAT
 - CDAT 3.0 candidate release.
 - Port to Python 3.0
 - More Jupyter notebooks
 - Finish clean up import of pngs into vcs canvases
 - Port CDAT to lab's SPAC
 - Maybe hackathon
- CWT
 - ESGF F2F conf and presentations.
- PCMDI
 - New release of pmp code with newest branches from Peter, Ken and JiWoo and Curt diurnal cycle
 - Finish parallelize most new drivers using CDP's multiprocessing/distributed
 - Animations for Phillip and Polar animation for Ben

Resources Required to Achieve Goals

- More staff would be nice.