

Jeffrey Painter
Supported Projects: ESGF, CF Conventions

Quarterly Report for April 2017 – June 2017 (Q3, FY17)

Note that I am working part-time this year, and in the future.

This quarter's accomplishments:

- Continued work on the CF Conventions document and its conformance document: implemented revisions, reviewed Tanya's revisions, and so forth. We finished all changes originally planned for release 1.7; however some more last-minute work has been added to support CMIP-6.
- With help from Tanya, converted our old conformance document, in Plone-generated HTML, to our new AsciiDoc format.
- Set up the CF Conventions repositories on Github to include the AsciiDoc sources for the conformance document and automatically generate the document itself whenever the sources are changed. And I updated the CF Conventions web site to link to this automatically generated document, so the community can easily see it as it is updated.
- Continued to test data replication in ESGF, and debug problems. By the middle of the quarter, things were working decently, so I moved on.
- Converted to SQLite, the database used by new ESGF software, the output of Jason's script to identify status of datasets in ESGF; and the Postgres database used by our old CMIP-5 replication scripts (by Estani Gonzalez and others).
- Wrote a script based on the above databases, and file system information, to identify those datasets which we have and are publishable (complete, good checksums, and latest version).
- Extended the above script to one which classifies all datasets we have – publishable, published but obsolete, and several other categories of that nature. It still has room for improvement, notably in describing datasets which have some good data and some missing data. I have not yet decided whether it is better to make such improvements or to simply download duplicate data.

Plans for next quarter:

- Experiment with full end-to-end replication, i.e. with automated publishing
- Replicate missing CMIP-5 data, especially that needed at PCMDI.
- As needed, support other data management activities.
- Finish the last few bits of CF Conventions 1.7 development. Some low-level CF support may be needed indefinitely.