

What's new with the Madrigal database?

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Outline

- NSF funded development
- Open source development with Jicamarca
- Example of working with us to load new data source - SSI FPI data

NSF funded development for next release

- Transition of CEDAR database to Madrigal platform
 - Ability of Madrigal to automatically import data from other Madrigal sites
 - Importing of existing non-Madrigal data into Madrigal
- Ability to extend Madrigal with external hard drives

Next release development, continued

- Work with Jicamarca to integrate new UI into Madrigal
- Users can register interest in experiment
- Experiment PI, analyst now shared metadata
- IDL API added to Matlab, python

Following release (Madrigal 3.0)

- Conversion of CEDAR format to CEDAR HDF5/NetCDF4 format
 - Parameter definitions/data model unchanged
 - Each file will be self-describing
 - No more scale factors, integer storage
 - No more duplicate parameters with different ranges
 - Madrigal derivation engine will interface with it

Madrigal 3.0 continued

- Conversion of CEDAR format to CEDAR HDF5/NetCDF4 format
 - Conversion will be automatic using script
 - To create new CEDAR format
 - Create file old way, run convert script
 - Using python API, change one line of code
- Community standard
 - Interface to download latest standard, request new parameters

Open source development with Jicamarca

- Project is one of 3 based on Oct 2010 meeting
- Development of
 - New simple web UI
 - Export HDF5 format
- Modern open source project
 - Shared access to source control (Subversion)
- Millstone responsible for final testing, release, support

Example of working with us to load new data source - SSI FPI

- Defined new CEDAR parameters
- SSI provided
 - Sample data, plots
 - Documentation
- Worked on data quality indicators
- Loaded sample data - feedback
- Loading data now fully automated