Advanced Data Access.

What if the dashboard can't do what you want? Well, this little tute will show you a method for access the ereefs data in your own way using freely available tools.

This is almost entirely a live demo and so these notes are a bit sparse.

Key outcomes: If you get nothing else out of this brief session i hope you will understand that:

- there are alternative ways to access the eReefs satellite datasets.
- you will have a basic overview of the thredds catalog and folder structure.
- you will be able to use the Panoply software to do advanced data interrogation.

Exploring Thredds and opendap

Live web based exporation.

Panoply

A good manual can be found here:

 $http://www.meteor.iastate.edu/classes/mt452/EdGCM/Documentation/EdGCM_Panoply.pdf$

A copy of this is included in the media folder here:

 $EdGCM_Panoply.pdf$

Load a dataset

Datasets can be loaded from local sources on your computer, or accessed via the world wide web.

Accessing a Local Dataset

• Demo how to download a file from the mwq dashboard and open it in Panoply.

Accessing the eReefs THREDDS Data Server Connect to the thredds data sever and show the structure and how similar it looks to the web version.

- 1. "File"/"Open Remote Catalog"/:
- 2. Paste in the THREDDS Data Server Catalog:

http://ereeftds.bom.gov.au/ereefs/tds/catalog.html

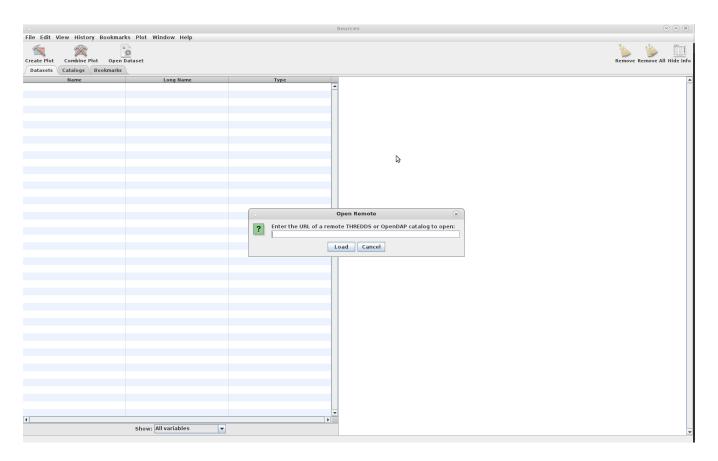


Figure 1: panoply_2.png

3. You can now navigate through the THREDDS catalog in the "Catalogs" Tab:

N.B: The Folder names refer to periods of time that the data have been aggregated over: P1D = Period one day, P6M = Period 6 months.

- 4. Once you've found the file you're interested in you can click on the "Open Dataset" button in the toolbar:
- 5. You can now inspect the file and the datasets it contains using the "Datasets" tab:

Plotting that data. To make a plot of the dataset you just selected (see above) you click on the "Create Plot" button in the toolbar:

Exercise

The excersise will be the same as Jamie's dashboard example but using the panoply software. Panoply Challenge:

1. Connect to the eReefs THREDDS Data Server Catalog.

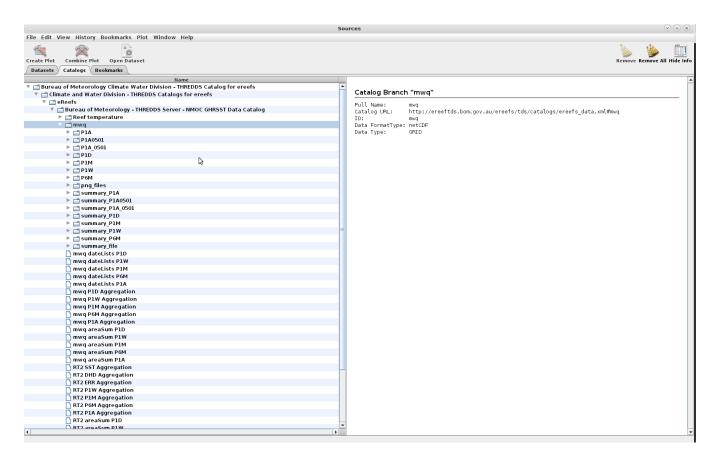


Figure 2: panoply_3.png

2. Plot the last DHD image from the summer.

Extra:

3. Plot last months maximum Chlorophyll values.

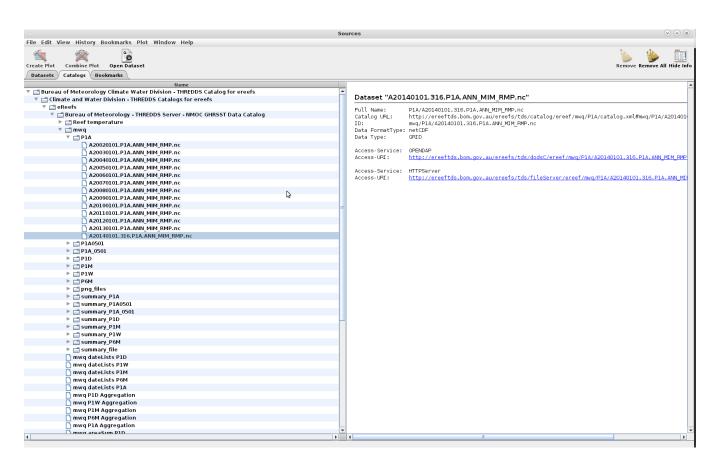


Figure 3: panoply_4.png

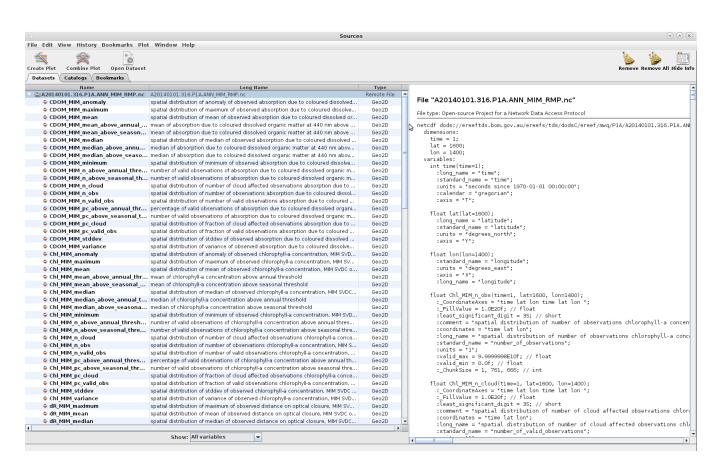


Figure 4: panoply_5.png

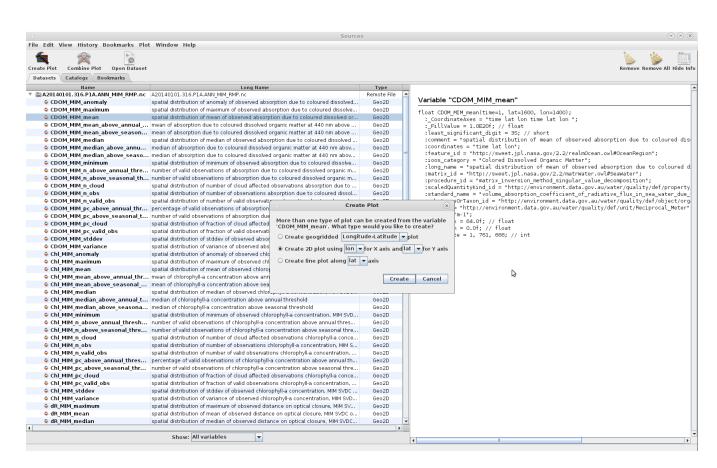


Figure 5: panoply_6.png

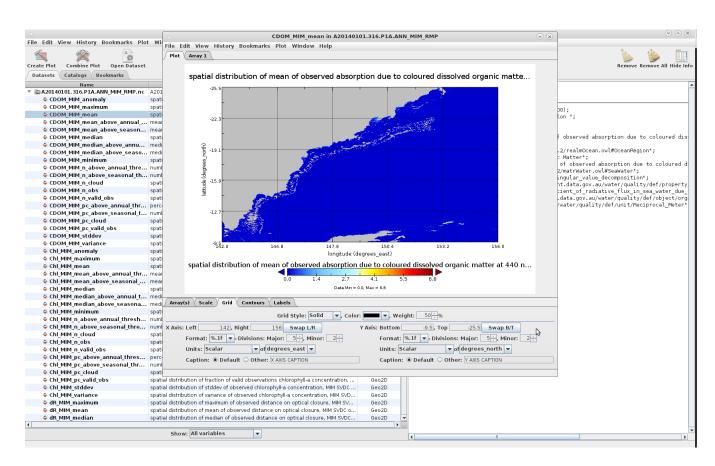


Figure 6: panoply_7.png