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Viewing NetCDF: Ncview and Ncbrowse

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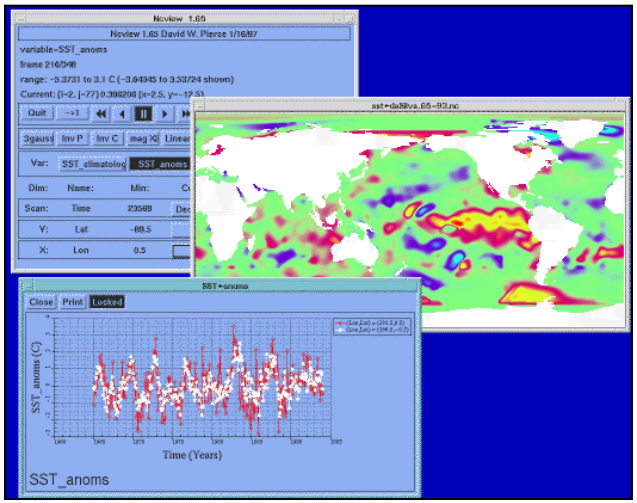
Tools, tools, tools

- NetCDF is such a popular format that there are thousands of tools that can read it.
- Here are a couple that allow you to quickly plot and view the contents of a NetCDF file.
- They both allow selection and quick view/plotting functionality that can be useful when working with data.

ncview

ncview:

- Visual browser for netCDF
- View simple animations along various dimensions
- Change look of graphs/maps



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Ncview – getting started

- To run ncview type:

```
$ ncview <data_file>
```

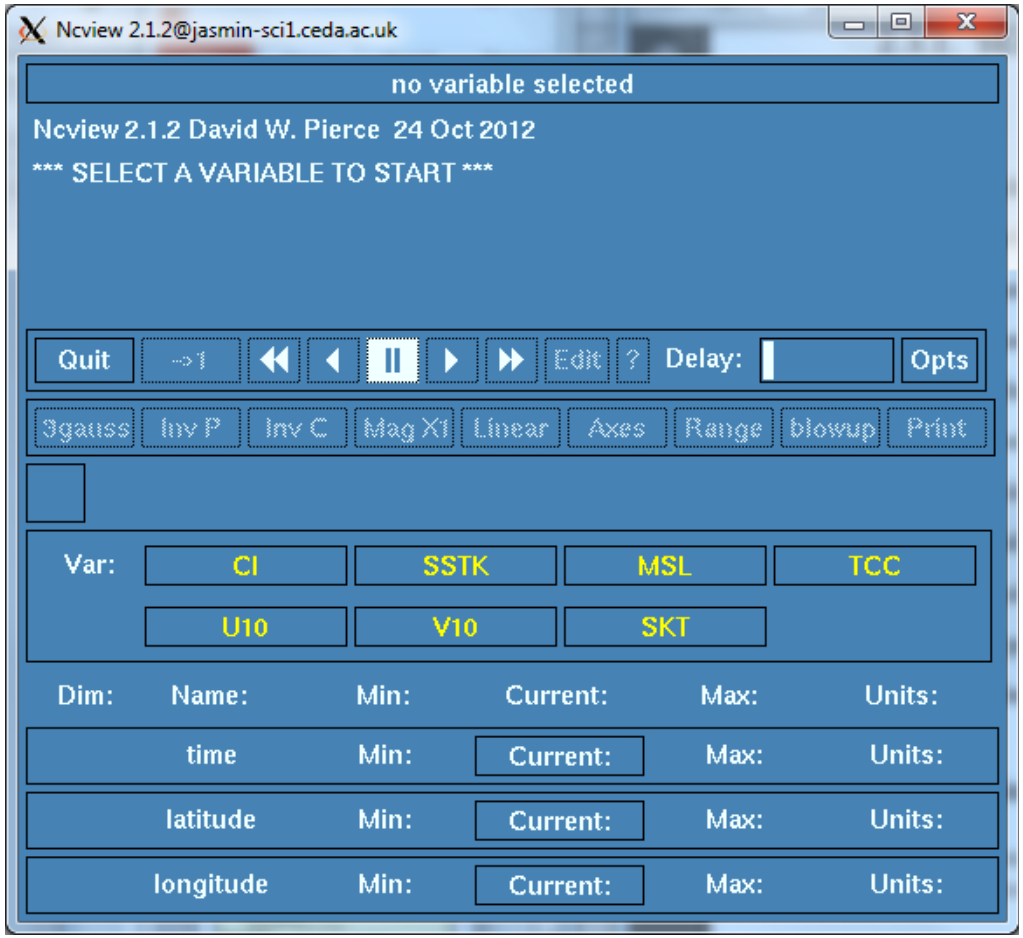
- E.g.:

```
$ ncview example_data/ggas2014121200_00-18.nc &
```

ncview – getting started

You are presented with:

- An information panel
- A control panel for visualization
- A variable selection panel
- Details of dimensions for the selected variable

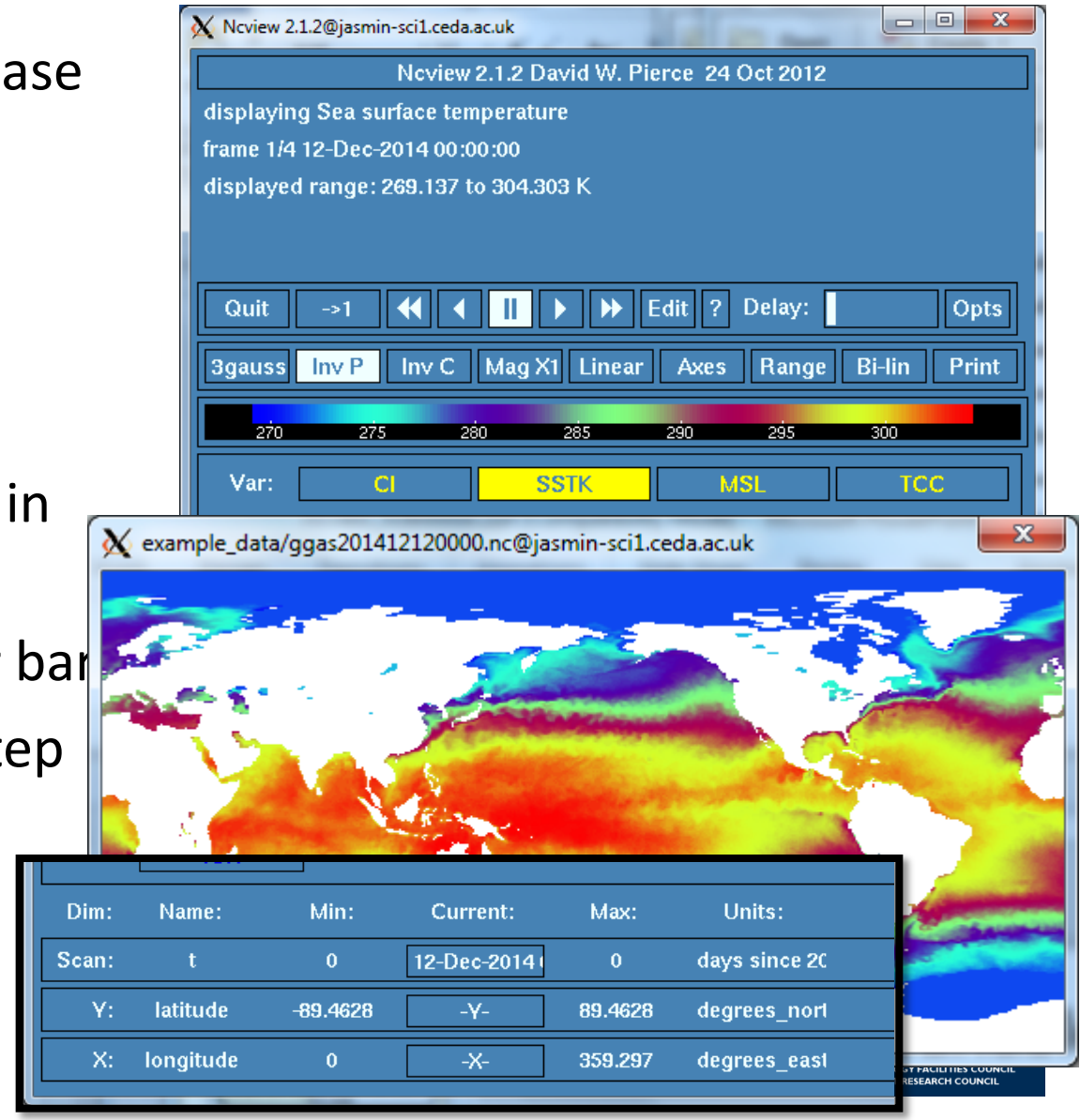


ncview – select variable

Select variable: in this case we have selected Sea Surface Temperature ("SSTK").

Ncview:

- displays information in the top panel
- Populates the colour bar
- Plots the first time step of the variable
- Displays information about dimensions



ncview – animate

Use the animation panel to click through time steps or animate the plot.

Press the button to run the animation. Adjust the "Delay" to slow it down.

ncview – other options

The plotting panel has a range of useful functions that are best investigated by manually testing each.

E.g.: **3gauss**: click to select a different colour scale

Inv P: Invert the plot.

Inv C: Invert the colour scale

Mag X1: right/left click to zoom in/out

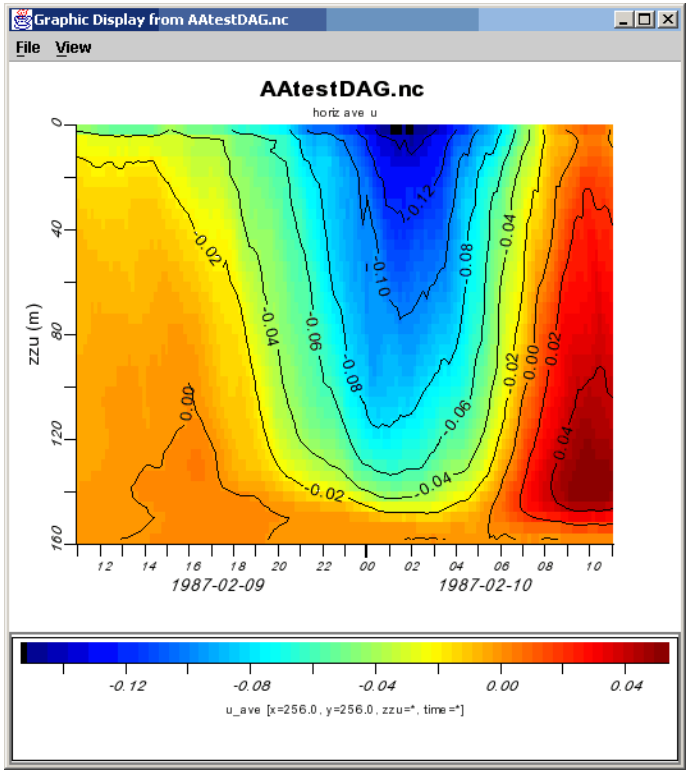
Axes: modify axes of plot

Print: print to a file or printer

ncBrowse

ncBrowse:

- Visual browser for netCDF
- View/select contents of files
- Tree View of file contents
- Various plotting options



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ncBrowse – getting started

- To run ncBrowse type:

```
$ ncBrowse <data_file>
```

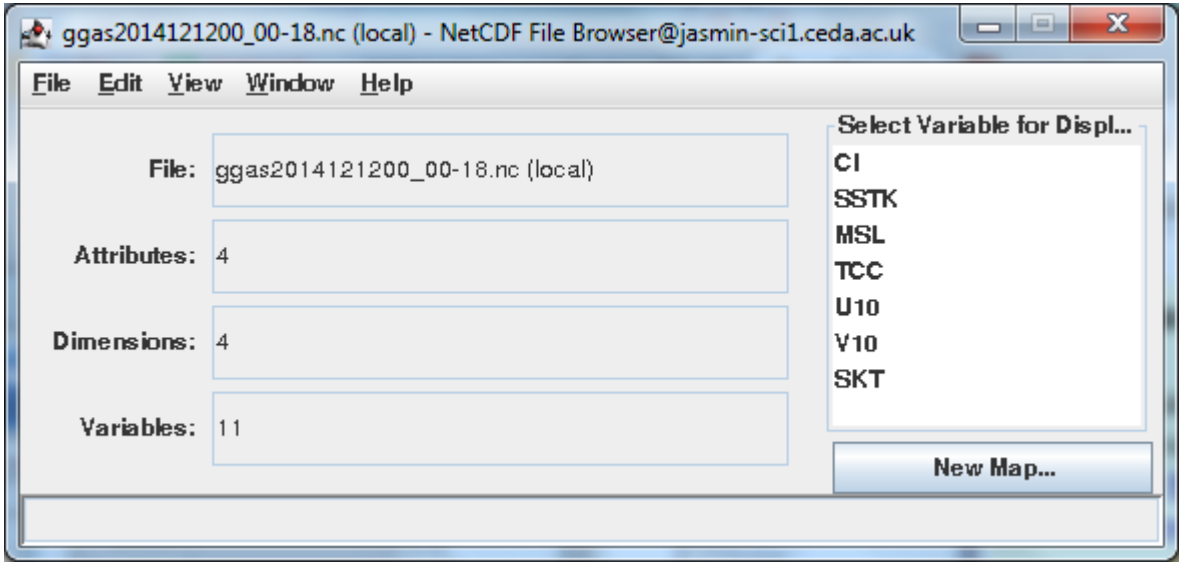
- E.g.:

```
$ ncBrowse example_data/ggas2014121200_00-18.nc &
```

ncBrowse – getting started

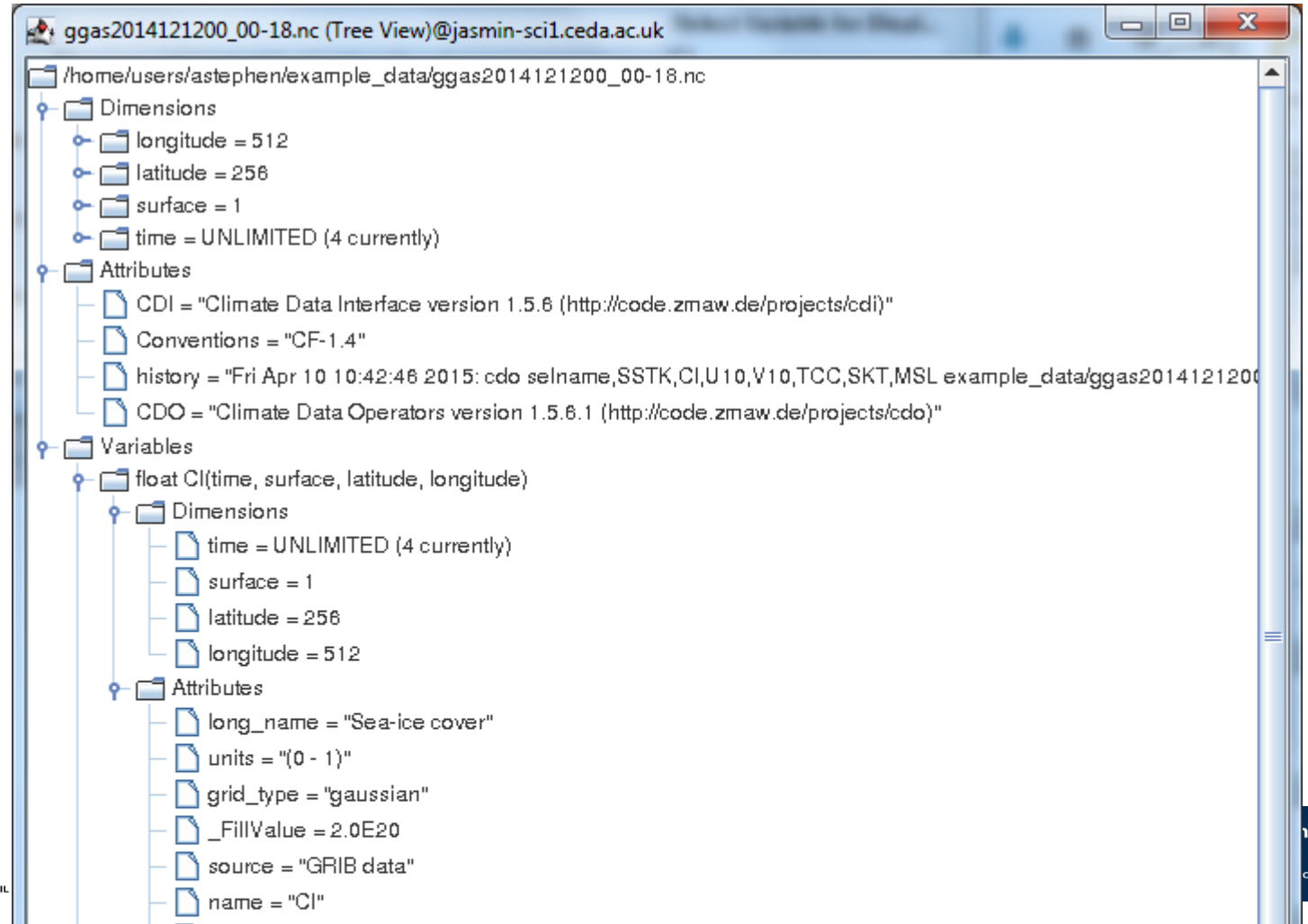
You are presented with:

- Basic file information
- A variable selection panel



ncBrowse – view file as Tree

Click View →As Tree:



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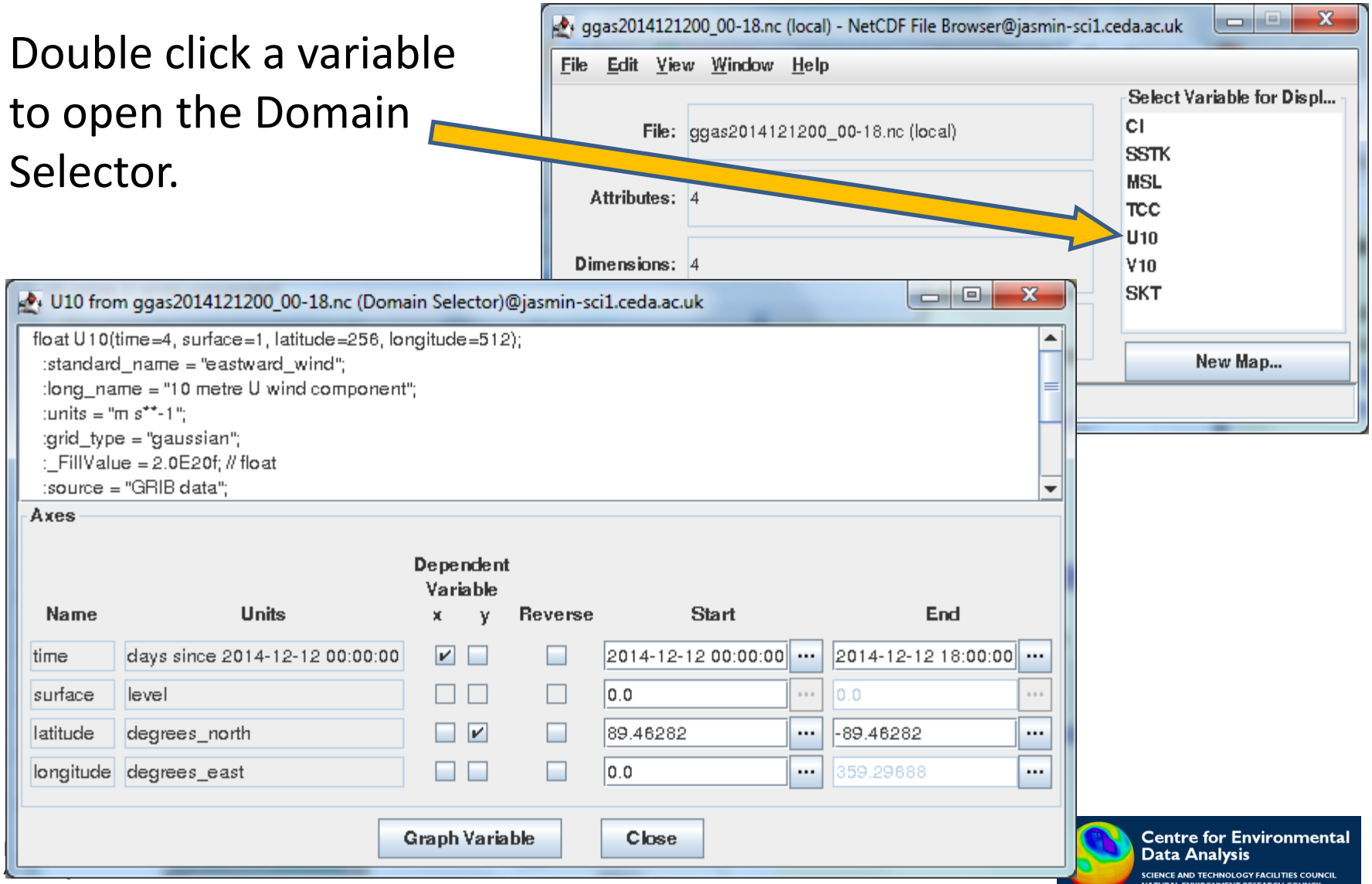
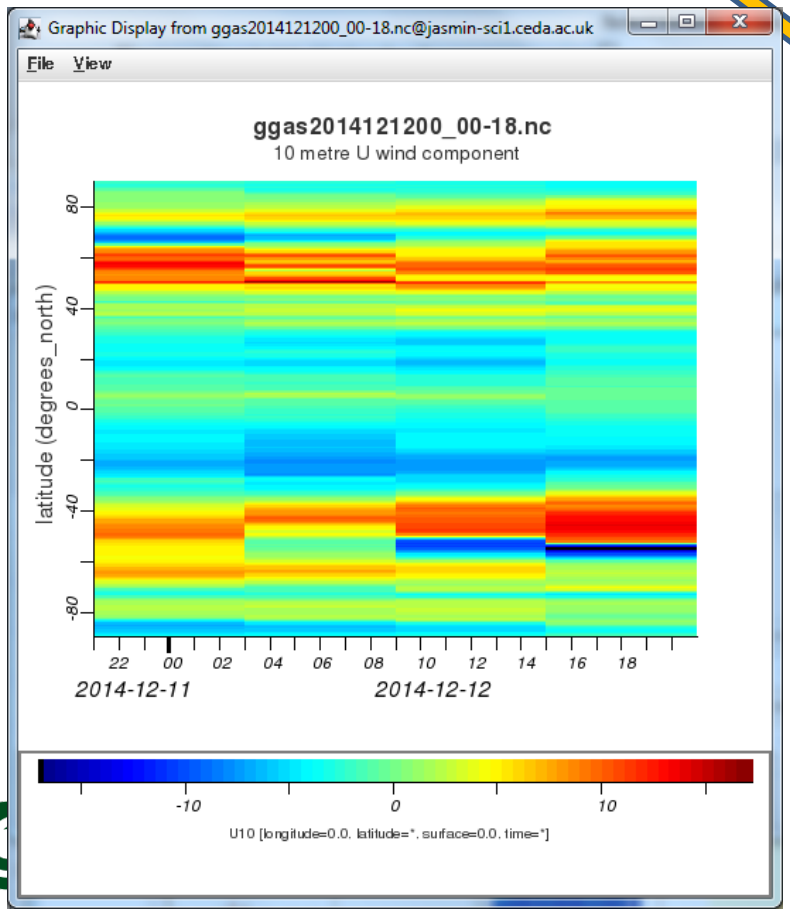
ncBrowse – examine a variable

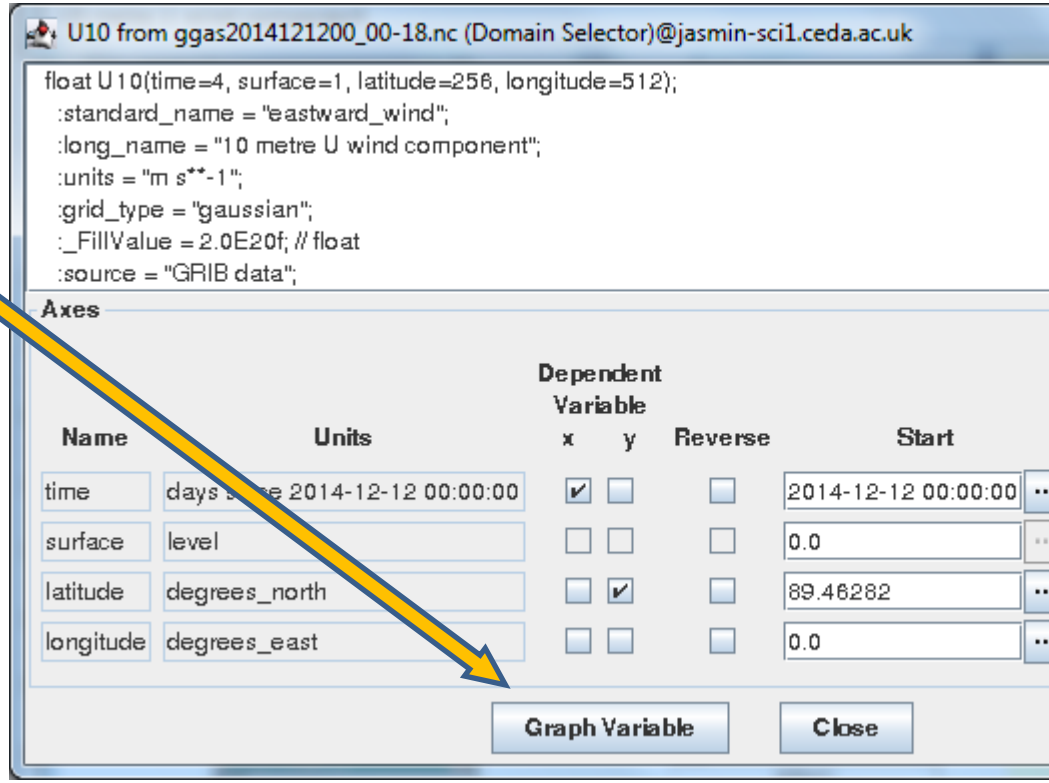
Double click a variable to open the Domain Selector.



ncBrowse – plot a variable

Click "Graph Variable" to plot





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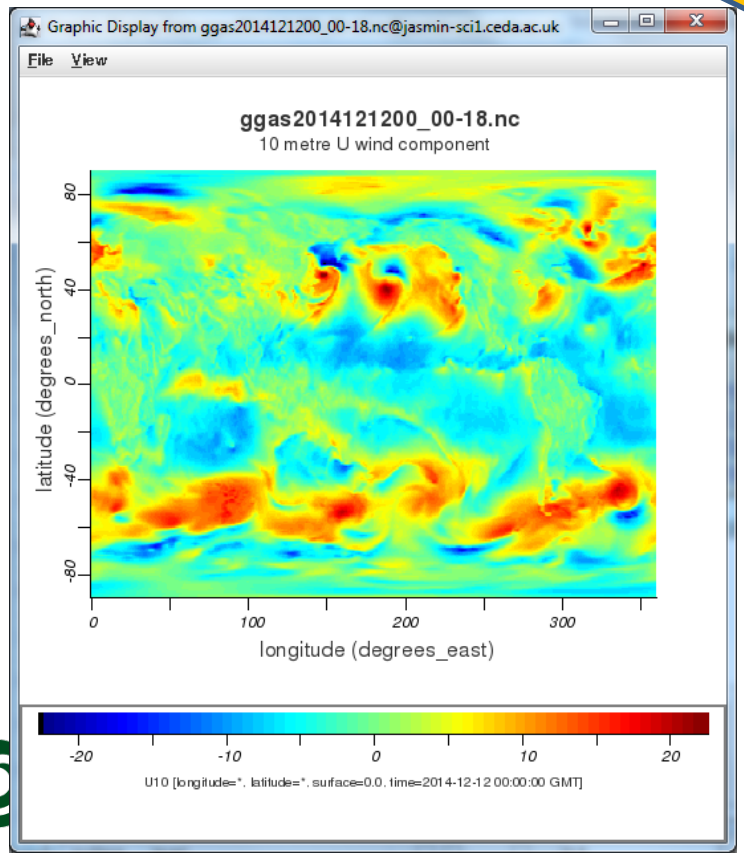
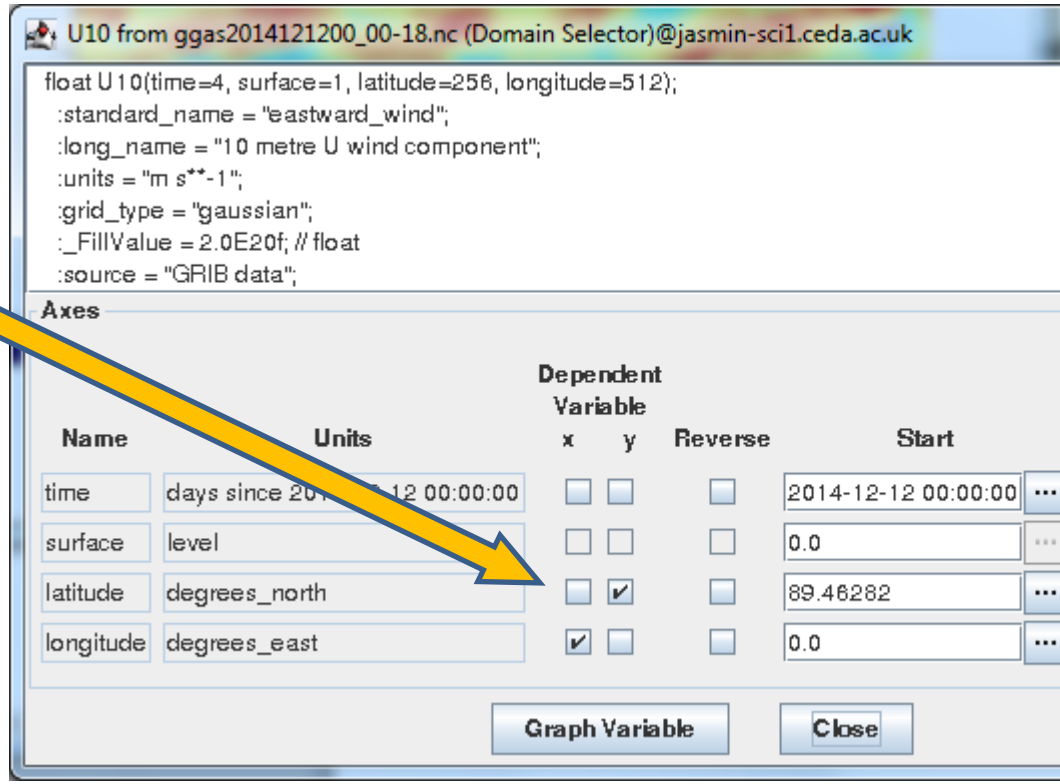
ncBrowse – plot a variable (2)

Modify the axes selected and click "Graph Variable"





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Further reading

- ncview:

  http://meteora.ucsd.edu/~pierce/ncview_home_page.html

- ncBrowse:

  http://www.epic.noaa.gov/java/ncBrowse/