

ReSC Multiglobe Quick Start Guide

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1 Introduction

ReSC Multiglobe is software for visualising multiple environmental datasets simultaneously. It comes packaged with sample data from NOAA for you to explore. Whilst still in development it is fully-functional and can be used to explore and visualise large datasets.

It was designed for use on large touchscreen video walls, but can be run on a desktop machine. This guide gives a brief overview of the features and usage of the ReSC Multiglobe software.

Note that there is currently no menu option to close the software. Instead, you should Alt-Tab to the desktop and close the program from the task bar if running in fullscreen (otherwise just click the close button). To change fullscreen and other settings, modify the file: `config/resc_worldwind.xml`

2 Adding/Removing Panels



Figure 1: The ReSC Multiglobe start screen.

Panels can be added or removed using the + and – buttons at the right and bottom edges of the screen. New panels will be added or removed from the screen edge where the button was clicked.

3 Loading Data

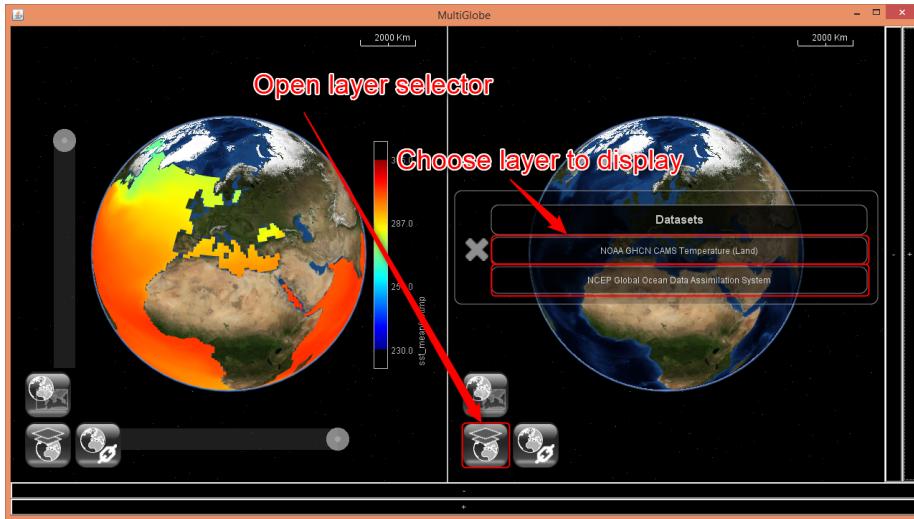


Figure 2: Loading data onto globes

To load data, click the layer selector button. A menu containing all configured datasets will appear. Navigate this by clicking the individual dataset/layer names and the back/close button on the left. Selecting a viewable layer will load it onto the current globe panel.

4 Navigating the Maps

To rotate the globe, click and drag the globe. Use the mouse wheel or the keyboard + and – buttons to zoom in and out of the map. Note that when navigating, all globes will move synchronously. To change this behaviour, see section 4.1 below. Clicking the button indicated in figure 3 will toggle the display between a globe and a flat map.

4.1 Linking globes

Using the buttons shown in figure 4, different link states can be selected. These are:

1. Linked. All linked globes will move synchronously with other linked globes.
2. Opposite hemisphere linked. All such linked globes will always display the opposite hemisphere to normal linked globes.

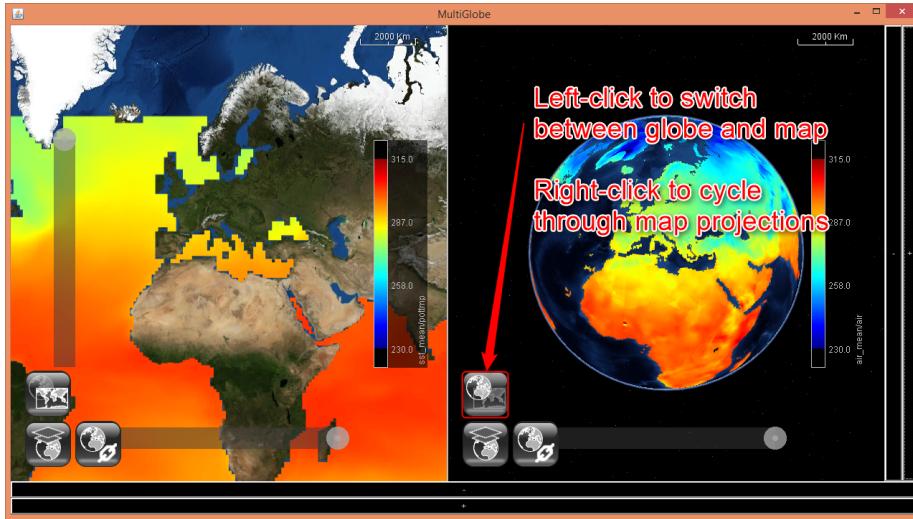


Figure 3: Changing between a globe and a flat map

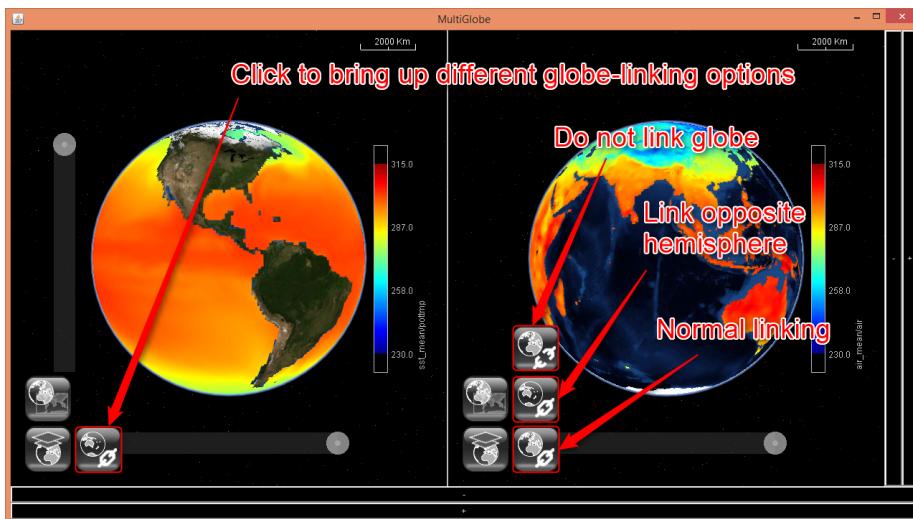


Figure 4: Changing the link state of globes

3. Unlinked. Unlinked globes can be moved individually of all other globes.

5 Changing the time/depth dimension

To change the depth value of the data displayed, click and drag on the depth slider (indicated in figure 5). Note that any globes showing data with the same depth range will have their depths adjusted simultaneously. To change the time value of the data displayed, click and drag on the time slider (indicated in figure

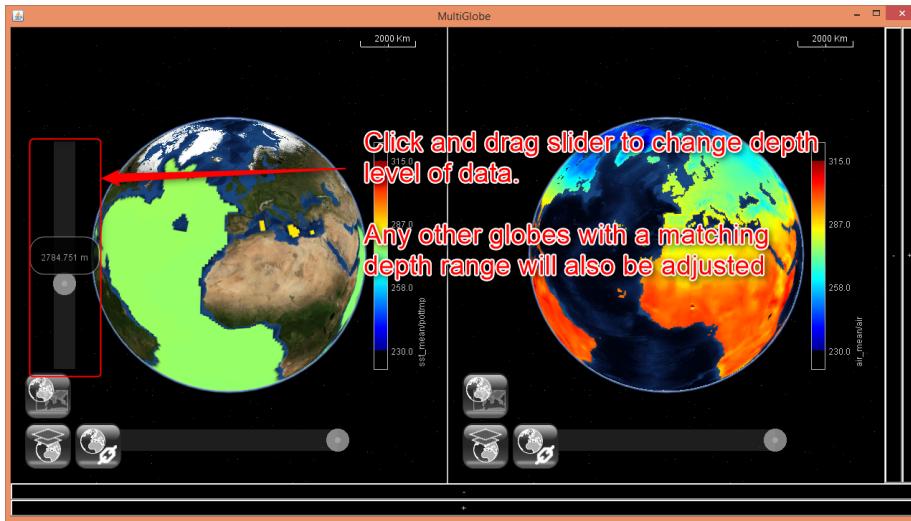


Figure 5: Adjusting the depth value

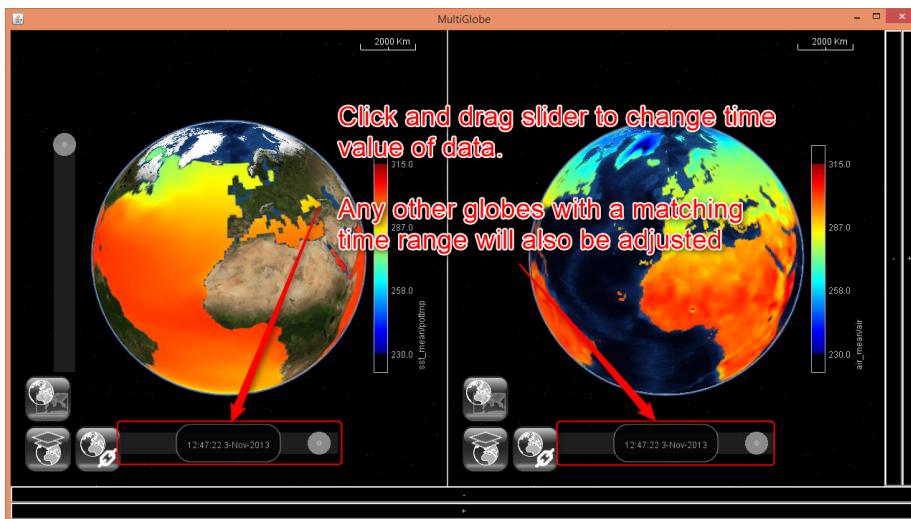


Figure 6: Adjusting the time value

6). Note that any globes showing data with the same time range will have their times adjusted simultaneously.

6 Changing the colour scale

To change the colour scale, click the colour legend on the right-hand side of the globe panel. Settings can be adjusted as shown in figure 7

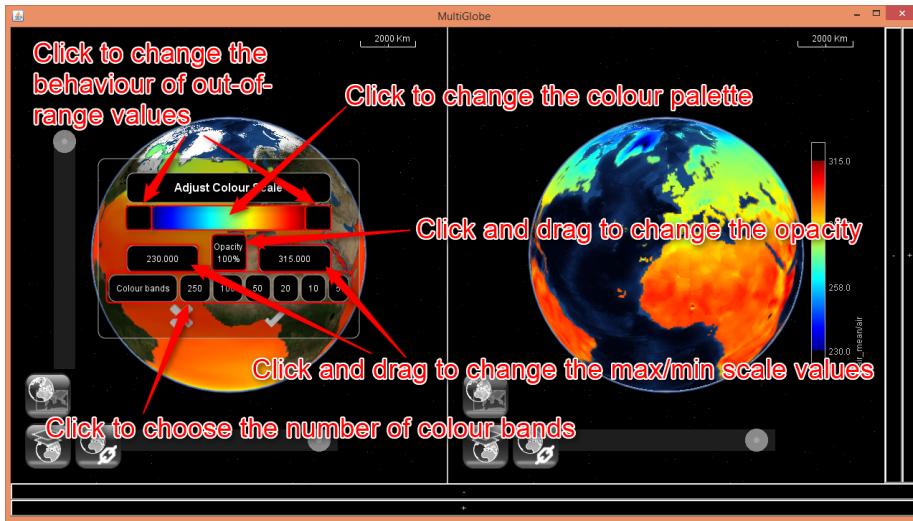


Figure 7: Changing the colour scale used

7 Querying data

To query data, simply click on the point you wish to know more information about. A balloon will appear with more information about the clicked location and the value of the data at that point. If the data layer has time or depth information, appropriate graphs will be generated. To see a larger version of these, simply click them.

8 Adding more datasets

Currently there is no graphical method for adding datasets to ReSC Multiglobe. To do this, close the software and edit the data configuration file (with the sample data this is located in `data/config.xml`). To add a new dataset, simply add a line of the form:

```
<dataset id="{ID}" title="{Title}" location="{Location on disk}"/>
```

where the items in curly braces should be substituted for the appropriate values. The location field should point to a CF-compliant NetCDF file or files. Wildcards (*) are permitted. Once the software has been run once after this, the remainder of the information will be filled-in automatically (i.e. the `{variable}` tags seen for the sample datasets). Variable titles and colour scale ranges can then be edited in the XML.